



Research Article

Variability in Indices of Economic Hardship and Burnout Components of Primary School Teachers in Greece

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Received date: 30 October 2019; Accepted date: 10 January 2020; Published date: 28 February 2020

Academic Editor: Christos C. Frangos

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Abstract

The purpose of the present work was to evaluate burnout and economic hardship of primary school teachers in the city of Arta, Epirus, during the school year 2017-2018. Questionnaires (n=125) were collected from sixteen schools located in the city of Arta. The level of Burnout was estimated using a modified Greek version of the Maslach Burnout Inventory and the level of economic hardship was estimated using the Barrera Economic Hardship questionnaire. Teachers were grouped in three groups (Low, Medium and High) according to their scores on emotional exhaustion, depersonalization and personal accomplishment. Work experience and age were related with different levels of emotional exhaustion. Teachers with age 31-40, had 10.9% increased presence in the group of high-level emotional exhaustion. Teachers with 6-10 years of experience had 31.8% in the group of high-level emotional exhaustion. Significant correlations were observed between emotional exhaustion and depersonalisation ($r=0.321$, $P<0.01$); emotional exhaustion and personal accomplishment ($r=-0.42$, $P<0.01$); depersonalization and personal accomplishment ($r=-0.431$, $P<0.01$); depersonalization and difficulty in meeting debt obligations ($r=0.198$, $P<0.05$); depersonalization and difficulty in buying commodities ($r=0.206$, $P<0.05$). The age group of teachers which exhibited a high level of emotional exhaustion is the group which faces a long teaching career until retirement. It is alarming to see high levels of emotional exhaustion of this age group. Emotional exhaustion can reflect professional stress and be a precursor of depersonalisation. Further research and policies should be employed to counteract any negative consequences of teachers' prolonged occupational stress and economic hardship.

Keywords: School Management, Teachers Burnout, Primary Schools, Economic Hardship, Greece

Introduction

Occupation 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 low sense of professional accomplishment. Under these conditions, employees enter what is called "a professional burnout zone" which is characterized by a decrease in productivity and lack of job satisfaction (Koev *et al*, 2019). Teachers' job stress is a frequent phenomenon which can lead to *burnout*. Irrespective of their income (Chelwa *et al*, 2019), teachers can perform well but they can also be more prone to professional burnout (Luk *et al*, 2010). *Burnout* is a condition resulting from emotional exhaustion, depersonalization and reduced personal achievement (Maslach *et al.*, 1996).

The severity of the symptoms of burnout increase with the length of exposure and job demands and the severity of adverse working conditions, increasing the likelihood for the development of occupational stress among human service workers, including teachers (Jennett, Harris, & Mesibov, 2003; Rentzou, 2012) which is potentially leading to rapid employee turnover rate (Abuhashesh *et al*, 2019).

Burnout employees are characterized by high levels of exhaustion and negative attitudes toward their work, absenteeism, reduced productivity, low morale and low job satisfaction (Maslach & Leiter, 1999; Tsigilis *et al*, 2011; Fang *et al*, 2016). Long term exposure of workers to physical and psychological stress can result in physical and emotional fatigue. Symptoms of burnout include frustration, mental fatigue, and lack of motivation to perform simple tasks and socialize.

The Burnout syndrome is documented on the basis of its three dimensions (Maslach *et al*. 2001):

- 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).

Published research studies indicate that teachers' burnout is an issue of concern for the profession over the past years (Anastasiou *et al* 2015; Perrone *et al*, 2019).

There is a considerable evidence to suggest that teachers' work contributes to the academic performance of their schools (Jackson *et al*, 2014; Chetty *et al*, 2014; Chelwa *et al*, 2019). At the same time, there is substantial evidence indicating that a significant number of teachers may experience high levels of occupational stress at some stages of their career (Kamtsios, 2018; Panagopoulos *et al* 2014; Ismail *et al*, 2019; Perrone *et al*. 2019) that may affect the health and wellbeing of teachers (Solis-Soto *et al*. 2019) with negative consequences on educational outcomes and school effectiveness.

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 *et al*, 2014).

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 (OECD, 2014; Anastasiou et al, 2015). These changes may have an impact on teachers' job satisfaction and stress. For example, a combination of austerity measures, taxation, reducing the gross income and *purchasing power parity of teachers may create conditions which could lead to increases in job stress (Kyriakoy 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 (Grigoriadou & Kleftras, 2017).

Since 2008 and during the long period of financial crisis, teachers' gross income in Greece has been dramatically reduced with wage cuts while they were viewed along with other public sector professionals, as non-productive (Filippidis et al, 2014). The austerity measures led to various public administration decisions including teachers' relocations after school closures, employment freezes, rising number of teacher's retirements, increased number of classrooms and the simultaneous decrease in the number of seasonally employed teachers (Panagopoulos et al, 2014). Between 2010 and 2011, for example, there had been a 12% reduction in the teaching workforce in Greece (Fillipidis et al, 2014).

Under such conditions, teachers may experience *financial disrespect* for the job they are doing (Hock, 1988) being encountered with the need to change their consumption and lifestyle *behaviour* and habits so as to adjust their spending according to lower wages and gross income to levels of reduction.

Relevant studies on *financial hardship* have included a number of measures like: lack of money or resources required to meet basic needs; debt, inability to heat one's home,

being unable to pay utility bills on time, having to sell possessions, etc (Richardson et al, 2012; Crowe et al, 016).

There is a number of studies which have emphasized that there is a link between socioeconomic variables and mental health. For example, the relationship between *financial hardship* and mental health was emphasized in a study exploring changes in the Greek population from 2008 to 2011, where the possibility of the participants in the study suffering from major depression was found to be 2.6 times bigger in 2011 (Economou et al, 2013). Relevant studies in the teaching profession between 1995 and 2015 in Greece have also shown trends in increasing levels of *emotional exhaustion* and decreasing levels of *personal achievement*; the two important parameters of *occupational exhaustion* (Panagopoulos et al, 2016).

The aim of the present work was to investigate teachers' perceptions on their economic restrains and the possible link between *financial hardship* and *burnout*.

The present work was carried out during the school year 2017-18. The aim of this work was to investigate teachers' perceptions about their economic restrains and the possible link between financial hardship and burnout.

Methodology

The sample is based on Primary School teachers in the city of Arta, NW Greece. The head teachers of 16 Primary Education Schools were informed about the aim of the present work and the survey was distributed in the schools together with a letter informing teachers about their volunteer participation. Of the 155 distributed questionnaires, 125 completed questionnaires were collected (return rate 81%%). The number of the completed questionnaires corresponds to about 23% of the total number of Primary School teachers in the region.

The distributed questionnaire included:

- (i) participants' demographic data,

(ii) the Maslach's *Burnout Inventory (MBI)* as adopted for usage in Greek language by Kantas (1996) and Kokkinos (2006) is assessing the three dimensions of the burnout syndrome: *emotional exhaustion*, *efficacy* and *depersonalization*, and (iii) the *Economic Hardship questionnaire* of Barrera *et al.* (2001) adapted for usage in the Greek language was used to investigate teachers' perceptions about their *economic hardship*.

Data was analyzed and tested for normal distribution with SPSS (version 14.01). All parameters exhibited Cronbach's' alpha coefficient ≥ 0.71 providing assurances for the internal consistency of the data. Spearman's correlation was used to estimate the association between economic hardship and burnout dimensions. A chi-square test of independence was performed to examine the effect of gender, age and teaching work experience on the percentage of teachers with *High* level of Emotional Exhaustion. A p value < 0.05 was considered statistically significant.

Results & Discussion

Teachers' largest age group (40.8%) was above 50 years old, followed by the age groups of 40-50 (33.6%), 30-40 (18.4%) and only a small fraction (7.2%) were younger than 30 years old.

Most of the teachers had more than 15 years work experience with 48% having > 21 years, followed by those with 15-20 yrs (20%), 10-15 years of work experience (16%); 5-10 (7.2%) and 8,8% with less than 5 yrs of teaching experience.

The mean values of MBI *Emotional Exhaustion*, *Depersonalization* and *Personal Accomplishment* are presented in Table 1 with the scores of each dimension grouped in scores of: low, medium and high-level groups (Maslach & Leiter, 1999). These values are similar with previously reported results from teachers in Greece. Research

in Greece and in other countries show teachers to have been holding on the positive aspects of their job and maintaining high levels of *personal accomplishment* and not to exhibit high levels of *depersonalization* and *emotional exhaustion* (Anastasiou, & Papakonstantinou, 2014; Panagopoulos *et al.* 2015; Skaalvik *et al.*, 2010). In the present work, most teachers exhibited medium / low *emotional exhaustion*, low *depersonalization* and high *personal accomplishment*. These values can be interpreted as a reflection of low burnout of those who participated in the present work. Yet, a small percentage (9.8%) of teachers exhibits high scores of emotional exhaustion. A chi-square test of independence was performed to examine the relation between gender and the percentage of teachers with *High* level of Emotional Exhaustion (Table 2). The relation between these variables was significant ($X^2= 4.88$, $df=1$, $p=0.027$). Men were more likely than women to exhibit high level of emotional exhaustion.

Further analysis of the data indicated that work experience (Figure 1) and age (Figure 2) were related with different levels of emotional exhaustion, whereas there was no difference in the scores of *depersonalization* and high *personal accomplishment*.

Economic hardship can be described as psychological distress caused by financial difficulties (Barrera *et al.*, 2001). In this respect, teachers who face financial difficulties may also experience stressful situations in their professional life. For example, a combination of economic difficulties and professional stress can result in *emotional exhaustion* and can initiate an onset of a cascade of the psychological steps which in turn can lead to *depersonalisation* (Elit *et al.*, 2004).

Table 1: Average score and level of burnout in primary school teachers in Arta, Greece

Burnout dimensions (Average score \pm S.D.)		Count	Frequency
	Low	45	36
<i>Emotional Exhaustion</i> (22.58 \pm 1.28)	Medium	41	32.8
	High	39	31.2
<i>Depersonalization</i> (3.7 \pm 0.48)	Low	115	92
	Medium	5	4
	High	5	4
<i>Personal Accomplishment</i> (41.31 \pm 0.72)	Low	7	5.6
	Medium	24	19.2
	High	94	75.2

A Pearson correlation analysis between the dimensions of emotional exhaustion and indices of economic hardship: Significant correlations were observed between *depersonalisation* and *emotional exhaustion* and between *depersonalisation* and the difficulty in meeting their financial obligations or buying commodities (Table 4). There was no significant correlation between *Economic hardship* and the dimensions of *emotional exhaustion* or *personal accomplishment*. The absence of a significant correlation between these mentioned burnout dimensions and financial hardship may reflect the low levels of hardship of the sample and the contribution of other parameters which may affect the possible negative effect of hardship on the dimensions of burnout. For example, job satisfaction and emotional intelligence may have a "protective" effect on teachers facing unfavourable working conditions (Anastasiou, 2020) with teachers getting their rewards from the teaching rather than their salaries, a

situation historically present in Greece (Anastasiou, & Papakonstantinou, 2014) which results in low *burnout* levels of teachers in Greece (Kourmoussi & Alexopoulos, 2016).

Yet, a significant portion of the teachers exhibited high level of *emotional exhaustion* according to age and work experience. Compared to younger teachers, those with age >30 yrs old exhibited increased levels with a peak in the age group 30-40.

Work experience also had an impact on *emotional exhaustion* with a peak in the group with work experience 5-10 yrs. *Emotional exhaustion* can reflect professional stress and be a precursor of *depersonalisation*. 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 *et al.*, 2011).

Table 2: Frequency distribution of low, medium and high levels of *emotional exhaustion* of Primary School teachers in Arta, Greece

	Level of Emotional Exhaustion	Low%	Medium%	High%
<i>Gender</i>	♂	36.70	55	8.30*
	♀	25.40	63.10	1.50

*Analysis of data with chi-square test indicated a significant gender effect in the group of High emotional exhaustion, but there was no significant gender effect in the groups of Low and Medium level of emotional Exhaustion. Men were more likely than women to exhibit high level of emotional exhaustion ($X^2= 4.88$, $df=1$, $p=0.027$).

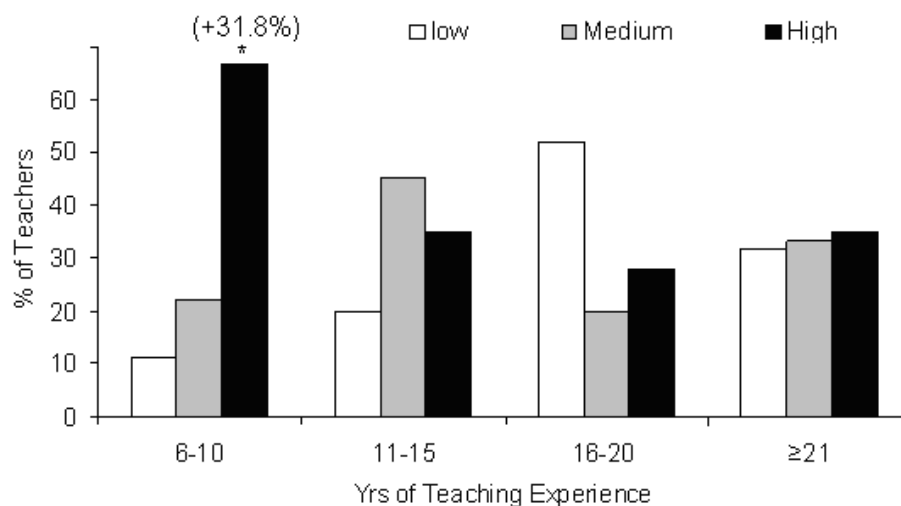


Fig. 1: The influence of teaching experience on the frequency distribution of low, medium and high levels of *emotional exhaustion* of Primary School teachers in Arta, Greece. Teachers with 6-10 years of experience, had 31.8% increased presence in the group of *high level*.

In spite of historically established professional values of teachers and school leaders which shield them against occupational stress (Anastasiou & Papakonstantinou, 2015), some signs of frustration and limited capacity to keep going as before could be the root of high levels of emotional exhaustion exhibited by a group of teachers who participated in the present work.

In Greece, a steady income and job security were historically contributing factors for pursuing a teaching career. The consequences of economic hardship may generate a cascade of events which can

lead to decreased job satisfaction and burnout. For example, a reduction in income may have an effect on the job satisfaction of teachers as it affects their perceptions about the recognition of their work (Koutouzis & Malliara, 2017). Consequently, job satisfaction can suffer in the periods of economic recession, rising taxation and salary cuts experienced by teachers in Greece.

Due to the relative small number of teachers and the only one sample, these results should be viewed with caution, nevertheless, further research is required to ensure the initiation of school management actions by school leaders in

employing positive actions (Ismail *et al.*, 2019), and if possible financial incentives (Chetty *et al.*, 2014) which could counteract stressful professional conditions and increase the feeling of teachers' *personal accomplishment*. The results of the present work provide evidence for the need to monitor the level of burnout in primary school teachers in Greece and if possible explore the possibilities for proactive measures according to modern human resource practices. Further research and policies should be employed to counteract any negative consequences of teachers' prolonged occupational stress and economic hardship. For example, initiative which can increase the level of teacher's

emotional intelligence may have a protective effect on teachers who are exposed to adverse professional conditions (Fernández-Berrocal *et al.* 2017; Platsidou, 2010).

Proactive Human resource initiatives and leadership style can also prevent the development of conditions which can lead to burnout (Kruger & Roets, 2013). School leadership can also have a mediating role on the development of burnout syndrome, by making provisions for the needs of teachers and increasing commitment (Ford *et al.* 2019; Helou *et al.* 2016).

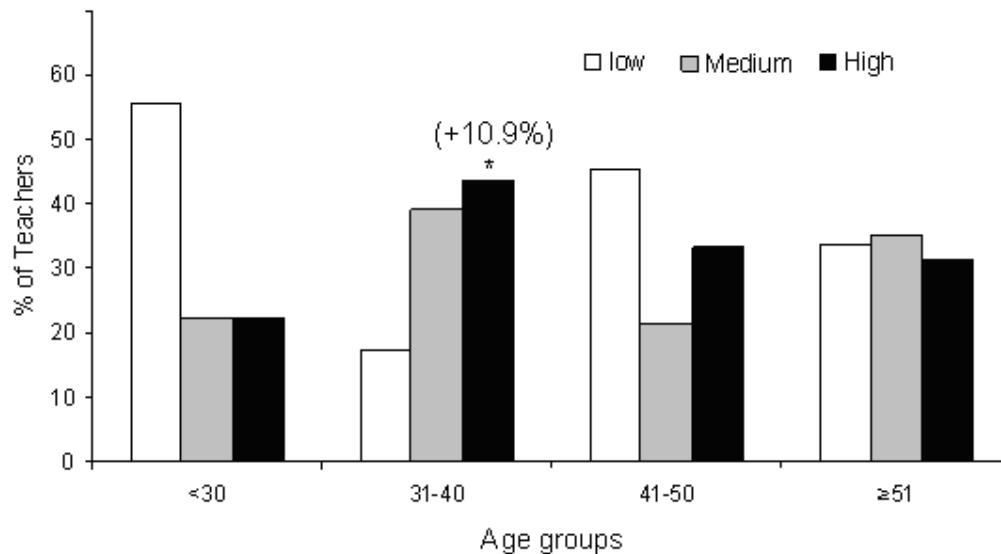


Fig. 2: The influence of age on the frequency distribution of low, medium and high levels of emotional exhaustion of Primary School teachers in Arta, Greece. Teachers with age 31-40, had 10.9% increased presence in the group of high level.

Irrespective of any potential benefits expected by management initiatives, school leaders in Greece are unable to modulate the salaries of their teachers or even have a saying on the recruitment and the selection of their teaching staff. School leaders may have already utilised to the maximum of their potential any available human resources management tools to encourage and reward their teachers and create positive atmosphere in their schools. Teachers in Greece experienced ten

difficult years with dramatic reduction of their income and challenging working conditions (OECD, 2017) with school merges, changing educational systems, social and technological changes which require commitment and mental and physical resources.

So far, teachers in Greece have been holding on the positive aspects of their job and maintaining high levels of *personal accomplishment* even when they experience unforeseen financial difficulties

which required significant changes and adjustments. The results of a long term financial crisis experienced by public servants in Greece may have created long term consequences. 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. *Emotional exhaustion* can reflect professional stress and be a precursor of *depersonalisation*.

Table 3: Indices of Economic hardship of primary school teachers in Arta, Greece

Variable	n	Mean	sd
Overall <i>Financial strain</i> (Barrera <i>et al.</i> , 2001)	125	1.68	1.06
Difficulty in saving money	125	3.96	0.96
Difficulty in covering the cost of vacations	125	3.89	1.06
Difficulty in buying housing appliances	125	3.64	1.20
Difficulty in meeting debt obligations	125	3.516	1.18
Difficulty in covering the cost of motor vehicle services and maintenance	125	3.18	1.12
Difficulty in buying commodities	125	3.086	1.25
Difficulty in paying bills	125	3.07	1.22
Difficulty in buying cloths	125	2.97	1.22
Difficulty in having appropriate housing	125	2.86	1.20
Difficulty in covering medical expences	125	2.72	1.21
Difficulty in buying food	125	2.34	1.08

Table 4: Spearman correlation between burnout dimensions and indices of economic hardship of Teachers in Greece. Only significant correlations are displayed in this table. Asterisks indicate the level of significance of the correlation (*P≤0.05, **P≤0.001)

	1. Emotional Exhaustion	2. Depersonalization	3. Personal Accomplishment	4. Financial strain
1. Emotional Exhaustion	1	0.321**	-0.42**	
2. Depersonalization	0.321**	1	-0.431**	
3. Personal Accomplishment	-0.42**	-0.431**	1	
4. Financial strain				1
5. Difficulty in meeting debt obligations		0.198*		-0.378**

6. Difficulty in buying commodities		0.206*		-0.386**
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The age group of teachers which exhibited high level of emotional exhaustion is the group which faces a long teaching career until retirement. It is alarming to see high levels of emotional exhaustion of this age group. *Emotional exhaustion* can reflect professional stress and be a precursor of *depersonalisation*. Further research and policies should be employed to counteract any negative consequences of teachers' prolonged occupational stress and economic hardship.

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