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## **Burnout Among Special Education Teachers. The role of Digital Technologies.**

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### **Abstract**

The present study examines the levels of burnout among special educators of students with mental retardation and the relationship among gender, age, marital status, work experience, training, initial personal career prospects and the degree of burnout experienced by teachers of mental retardation students. The survey was distributed in a sample of 64 special education teachers working with mental retardation students in public schools. The data was collected by using the Maslach Burnout Inventory (M.B.I.-E.S.). The results indicated that special education teachers experience middle levels of emotional exhaustion, low levels of depersonalization and middle levels of personal achievement. Gender, marital status, training and initial personal career prospects were found to have significant correlation with special educators' burnout. In addition, the results showed that there is not significant correlation between teachers' age or work experience and the three dimensions of burnout.

**Keywords:** burnout, special educators, mental retardation, digital technologies.

### **1. Introduction**

According to Maslach and Jackson (1,2) burnout is a psychological syndrome that includes three dimensions: a) emotional exhaustion characterized by a lack of energy, low mood and feelings of mental and physical fatigue, b) depersonalization or cynicism characterized by the employee's disconnection and alienation from the people he serves and the establishment of impersonal, aggressive and cynical relationships with the recipients of his services, and c) reduced personal accomplishment or inefficiency characterized by the employee's feeling that he is unable to contribute to the projects undertaken in his workplace resulting in reduction in his performance. Regarding teachers' professional burnout, the dimension of emotional exhaustion is reflected in the feeling they experience when they cannot offer more to their students and their work, the dimension of depersonalization is expressed as a negative attitude towards their students and the dimension of reduced personal accomplishment is related to their initial professional expectations and concerns their desire to offer and help their students and their final disappointment when they realize they cannot achieve them (3,4).

Emotional exhaustion and depersonalization are both negatively correlated with teachers' health and their ability to respond successfully to their tasks (5). The dimension of emotional exhaustion seems to be a significant predictor of teachers' intention to leave their profession (6). Finally, the dimension of personal accomplishment shows a positive correlation with the teachers' motivation for achievement and their satisfaction with their chosen profession (7). The syndrome affects not only the teacher who experiences it, but the students, the school and the whole society as well, as it influences the educational process and the teacher's performance in the classroom in addition to his students' academic progress (8). Research on S.E. teachers' professional burnout in the international and domestic literature has been extremely limited, unsystematic and fragmentary. In addition, the results of the surveys regarding the

extent to which S.E. teachers experience the specific syndrome compared to their colleagues in General Education (G.E) have been both conflicting and contradictory (9,10).

## 2. Research

### 2.1. Purpose

The purpose of this empirical study was to investigate Greek teachers' burnout working in S.E. institutions with students diagnosed with Mental Retardation (M.R.). In particular, the research questions raised were the following: a) What are the levels of professional burnout of teachers employed in S.E. institutions in Greece who work with students with M.R.?, b) How are the three dimensions of burnout related to their individual characteristics such as age, gender, level of education, years of service and family background?, and c) How are the three dimensions of burnout related to their initial professional aspirations and the professional reality they themselves experience?

### 2.2. Sample

A total of 64 S.E. teachers participated in this research (12 men and 52 women) who were employed in Primary and Secondary public schools in the prefectures of Attica, Lakonia, Etoloakarnania and Cyclades and worked with students with M.R. The majority of the teachers in the sample (65.6%) worked with students with M.R. from 0 to 5 years, while 17.2% of them worked with intellectually disabled students from 6 to 10 years, 9.4% from 11 to 15 years, 4.7% from 16 to 20 years and 3.1% for more than 21 years. Finally, 39.1% of the teachers in the sample had attended an annual specialization seminar of 400 hours, 59.4% were graduates of a Postgraduate Specialization Programme in S.E. and 1.5% held a Doctoral degree in S.E.

### 2.3. Research tools

For the implementation of this research, an appropriately structured questionnaire was used, which consists of two parts.

#### Part I: Maslach Burnout Inventory – Educators' Survey

The modified version of the Maslach scale (11) was used adapted to educational settings (Maslach Burnout Inventory – Educators Survey, M.B.I.-E.S.). The questionnaire, having been translated and adapted to the Greek language, has been validated and used by several Greek researchers (12,13).

*Table 1. Professional burnout coding (M.B.I.-E.S.)*

	Low	Moderate	High
Emotional exhaustion	≤16	17-26	≥27
Depersonalization	≤8	9-13	≥14
Personal accomplishment	≥37	31-36	≤30

#### Part II: Demographic Data

It consisted of 14 short demographic questions. The first eight questions which described the characteristics of the sample included quantitative and categorical variables, such as gender, age, marital status, specialty, work experience, the school institution in which the respondent worked, his studies and the reason he engaged in the education of students with M.R. The remaining six questions checked the respondents' initial professional aspirations and expectations compared to the professional reality

they experienced. Questions were scored on a 5-point Likert scale with values ranging from "1=Strongly disagree" to "5=Strongly agree".

#### 2.4. Data collection and analysis

Data collection began in February and was completed in May 2018. In total, 70 paper questionnaires were distributed and 40 electronic questionnaires (Google Forms) were sent via e-mail.

### 3. Results

#### 3.1. Levels of S.E. teachers' professional burnout

Table 2 presents in detail the means (M.O.), standard deviations (S.D.) and range (R) of the observations separately for each one of the three dimensions of the burnout syndrome, as derived from processing the answers given to the 22 questions of the M.B.I.-E.S. questionnaire by the teachers in the sample.

Table 2. Means, Standard Deviations and Range of the observations for the three burnout dimensions

	Mean	S.D.	R
<b>Emotional exhaustion</b>	17.06	9.83	40
<b>Depersonalization</b>	4.63	5.50	31
<b>Personal accomplishment</b>	36.39	7.80	35

Based on the categorization norms of the three dimensions of the syndrome (Table 1), the teachers who participated in the research experienced medium levels of emotional exhaustion, low levels of depersonalization and medium levels of personal accomplishment.

#### 3.2. Occupational burnout and individual factors

Emotional exhaustion was statistically significantly related to the marital status ( $r=0.253$ ,  $p<0.05$ ) and the level of the studies of the respondents ( $r=0.336$ ,  $p<0.01$ ). There was also a statistically significant correlation of depersonalization with the S.E. teachers' marital status ( $r=0.075$ ,  $p<0.05$ ), and of personal accomplishment with their marital status ( $r=0.105$ ,  $p<0.05$ ) and the level of their studies ( $r=0.419$ ,  $p<0.01$ ) (Table 3).

Table 3. Correlations for age, work experience, marital status and studies with the three burnout dimensions

	Age	Work experience	Marital status	Studies
<b>Emotional exhaustion</b>	.096	-.167	<b>-.253*</b>	<b>.336**</b>
<b>Depersonalization</b>	.064	-.023	<b>-.075*</b>	.216
<b>Personal accomplishment</b>	.119	.20	<b>-.105*</b>	<b>.419**</b>

Note: \* $p<0,05$  και \*\* $p<0,01$

More specifically: a) single teachers compared to their married colleagues presented: i) higher levels of emotional exhaustion (13 out of the 14 teachers in the sample who experienced moderate emotional exhaustion were single, while 9 out of the 11 teachers who experienced high emotional exhaustion were single), ii) higher levels of depersonalization (10 out of the 11 teachers in the sample experiencing moderate depersonalization were single, while all 4 teachers experiencing high depersonalization were single), and iii) lower levels of personal accomplishment (10 out of the 17 teachers in the sample who

experienced low personal accomplishment were single, while 9 out of the 11 teachers who experienced moderate personal accomplishment were single), and b) the teachers with higher level of education compared to their colleagues who possessed less formal qualifications presented: i) higher levels of emotional exhaustion (11 out of the 14 teachers in the sample who experienced moderate emotional exhaustion held a postgraduate degree, 1 had a PhD and 2 had attended an annual specialization seminar in S.E., while 9 out of the 11 teachers who experienced high emotional exhaustion, had a postgraduate degree and 2 had attended an annual specialization seminar in S.E.) and ii) lower levels of personal accomplishment (14 out of the 17 teachers in the sample who experienced low personal accomplishment had a postgraduate degree, 1 held a PhD and 2 had attended an annual specialization seminar in S.E., while 8 out of the 11 teachers who experienced moderate personal accomplishment had a postgraduate degree and 3 had attended an annual specialization seminar in S.E.) .

As shown in Table 4, the gender of the teachers in the sample was statistically significantly correlated only to the dimension of emotional exhaustion ( $p < 0.05$ ).

Table 4. Correlations of sex with the three burnout dimensions

	Sex		
	Value	df	p
<b>Emotional exhaustion</b>	8.169 <sup>a</sup>	2	<b>.017</b>
<b>Depersonalization</b>	1.014 <sup>a</sup>	2	.602
<b>Personal accomplishment</b>	2.045 <sup>a</sup>	2	.360

In particular, the female teachers in the sample showed higher levels of emotional exhaustion compared to their male colleagues (8 out of the 14 teachers in the sample who experienced moderate emotional exhaustion were women and 6 were men, while all 11 teachers who experienced high emotional exhaustion were women).

### 3.3. Occupational burnout and occupational aspirations

The teachers who participated in the research were asked to state the reason why they engaged in the education of students with M.R. 68.8% of the sample stated that they chose this profession because of the uncertainty in their job prospects (Table 5).

Table 5. Reason for working with M.R. students-Frequencies

Q. B8	Scientific interest		Social work		Career prospects	
	N	%	N	%	N	%
	9	14	11	17.2	44	68.8

The data analysis (Table 6) showed that the dimension of emotional exhaustion was statistically significantly related to the reason why the teachers in the sample chose to deal with the education of students with M.R. ( $p < 0.05$ ).

Table 6. Correlations of the three burnout dimensions with the reason why teachers chose intellectually disabled students' education

	Value	df	p
<b>Emotional exhaustion</b>	10.154 <sup>a</sup>	4	<b>.038</b>
<b>Depersonalization</b>	1.360 <sup>a</sup>	4	.851
<b>Personal accomplishment</b>	1.214 <sup>a</sup>	4	.876

More specifically, teachers who chose this profession because of career uncertainty showed higher levels of emotional exhaustion compared to their colleagues who made this choice for different reasons (9 out of the 14 teachers in the sample who experienced moderate emotional exhaustion chose the specific profession because of career uncertainty and 5 because of scientific interest, while 9 out of the 11 teachers who experienced high emotional exhaustion chose this profession because of career uncertainty and 2 for doing social work).

Also, the teachers who participated in the survey were asked to state whether the S.E. was their original professional goal. As can be seen in Table 7, only 37.5% of the sample answered that the S.E. was their original professional goal.

*Table 7. Frequencies-S.E. was my initial professional goal*

Q. B9	Disagree		Neither agree nor disagree		Agree	
	N	%	N	%	N	%
	26	40.6	14	21.9	24	37.5

The data analysis (Table 8) showed that personal accomplishment was statistically significantly related to the initial professional aspirations of the teachers in the sample ( $p < 0.05$ ).

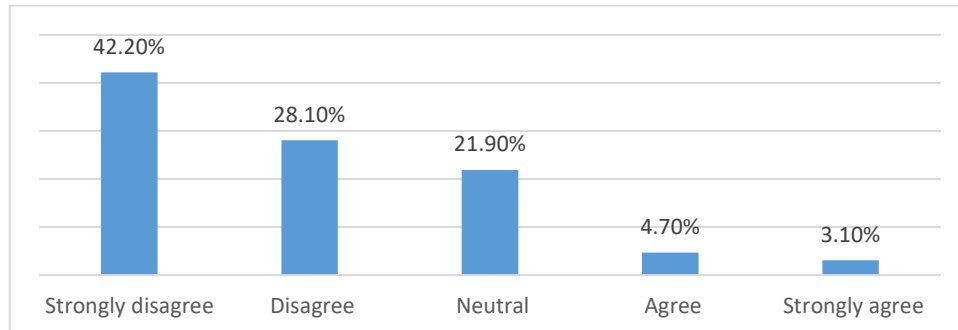
*Table 8. Correlations between the three burnout dimensions and S.E. teachers' initial professional goals*

	Value	df	p
<b>Emotional exhaustion</b>	6.419 <sup>a</sup>	4	.170
<b>Depersonalization</b>	3.644 <sup>a</sup>	4	.456
<b>Personal accomplishment</b>	12.849 <sup>a</sup>	4	<b>.012</b>

In particular, the teachers whose initial professional goal was not to work with students with M.R. presented low levels of personal accomplishment (only 11 out of the 28 teachers in the sample who experienced low or moderate personal accomplishment stated that their initial professional goal was working with intellectually disabled students).

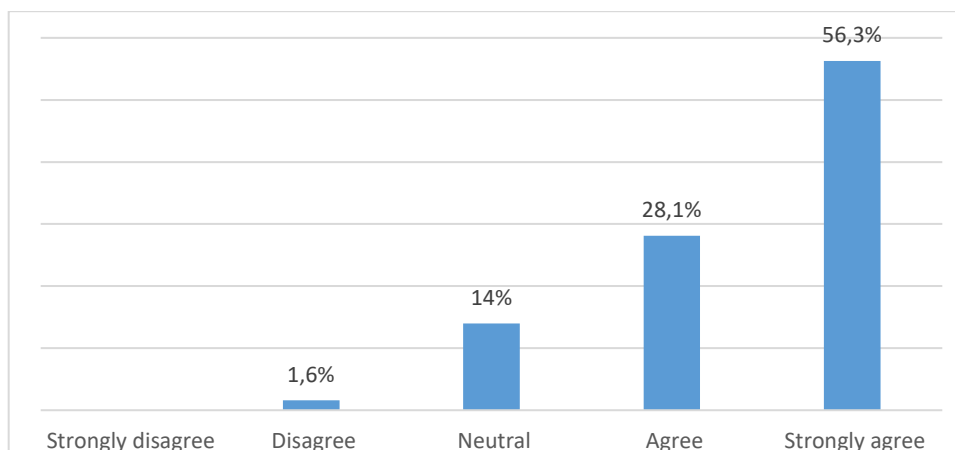
In addition, the teachers in the sample were asked to answer to what extent they agreed with the statement: "If I were given the opportunity, I would change my field of work". The majority of teachers (70.3%), regardless of the burnout syndrome degree they experienced, stated that they would not change their field of work, while only 7.8% of respondents expressed the opposite desire (Figure 1).

Figure 1. "If I were given the opportunity, I would change my field of work"



Finally, as shown in Figure 2, 84.4% of the teachers who participated in the survey stated that working with students with M.R. made them feel that they were doing social work.

Figure 2. "My job makes me feel I do social work"



#### 4. Conclusions and Discussion

Concluding we have to underline the positive role of the digital technologies in education domain and the emotional situation of teachers as well as of the burnout conditions. The digital technologies are very productive and successful, facilitates and improves the assessment, the intervention and the educational procedures and in parallel they construct environments and procedures that improve the emotional states of the educators, and meanwhile bridge the communication gaps between teachers and students. The aforementioned catalysing impact and consequences of digital technologies on Teachers are brought into educational play, via Mobiles which brings educational activities everywhere [27-39], various ICTs applications which are the core supporters of education [40-73], AI, STEM & ROBOTICS which raise educational procedures into new levers of performance [74-87], and games which transforms the education in a very friendly and enjoyable interaction [88-95] for both students and teachers. Additionally the enhancement and combination of ICTs with theories and models of metacognition, mindfulness, meditation and emotional intelligence cultivation [96-142] as well as with environmental factors and nutrition [23-26], accelerates and improves more over the educational practices and results, as well as the mental and emotional condition for both teachers and students.

More specifically, focusing on the burnout phenomenon, the results of this research showed that the Greek S.E. teachers who worked with students with M.R. experienced moderate emotional exhaustion, low depersonalization, and moderate personal accomplishment. An increasing trend was observed in the dimension of emotional exhaustion and a decreasing trend in the dimension of personal accomplishment, which could be explained by the changes that have occurred and the problems that have been created in Greek schools in the last decade due to the economic crisis (increase in the number of students per class, lack of infrastructure, non-recruitment of permanent teachers, etc.).

It is worth noting that the findings of this study agree with the results of previous research (14,15) and demonstrate that the Greek S.E. teachers show lower levels of burnout compared to their colleagues who live and work in Northern European and North American countries (16,17). This result can probably be explained by the existing cultural differences and the different educational systems implemented in these countries. Regarding the teachers' family status and the way it is related to the burnout syndrome, the research showed a statistically significant correlation with all three dimensions of the syndrome. A possible interpretation that can be given is that the married teachers' family environment works supportively by reducing the levels of stress and burnout that they themselves experience in their workplace. However, these findings contradict the research results (18,15) according to which the burnout syndrome is not related to the teachers' family status.

Regarding the level of education of S.E. teachers who work with students with M.R. the results showed a statistically significant correlation of the level of studies with both emotional exhaustion and personal accomplishment. The highly educated teachers in the sample showed higher levels of emotional exhaustion and lower levels of personal accomplishment compared to their less qualified colleagues. Maslach, et al (19) found that teachers with a high level of education are more prone to the occurrence of the syndrome, as they occupy hierarchical positions with more responsibilities, have high expectations of themselves and are disappointed when they cannot fulfill them.

Also, the analysis of the data showed that the female teachers of the sample present higher levels of emotional exhaustion compared to their male colleagues. The findings are consistent with the results of previous research (20,2). However, Maslach, et al (19) pointed out that these differences may be due to stereotypes related to gender roles..

The analysis of the survey data showed that teachers who chose this profession for better career prospects showed higher levels of emotional exhaustion compared to their colleagues who made this choice for different reasons. Also, teachers whose initial professional goal was not to work with students with M.R. showed low levels of personal accomplishment. One could, therefore, claim that the need for job security leads a number of Greek teachers to choices that deviate from their original professional pursuits, resulting in experiencing feelings of mental and physical fatigue, inefficiency in the performance of their duties, feelings of failure and inadequacy.

Of particular interest is the fact that the majority of teachers who participated in the survey (70.3%), regardless of whether or not they experienced the burnout syndrome, stated that they did not wish to change their job. This finding agrees with the results of previous research conducted in Greece (21). On the contrary, Boe, et al (22) and Wisniewski et Gargiulo (17) showed that the professional burnout of the S.E. teachers seems to be a key factor in the transfer of teachers from the S.E. to G.E. Therefore, a contradiction arises: the S.E. teachers in Greece, although experiencing the burnout syndrome, they do not wish to change their job. Possibly, the stability offered by the specific profession, the abundance of available jobs and the prospect of permanence combined with the conditions of job insecurity and unemployment that the economic crisis has created in Greece lead the professionally exhausted S.E. teachers in the decision not to leave their career.

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