

## Study of the Level of Burnout among Physical Education Teachers in Light of Certain Variables

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### Abstract:

The study aimed to identify the level of burnout among physical education teachers at the secondary education level and to understand the differences according to study variables (teaching seniority, family status). The sample consisted of 36 randomly selected physical education teachers from the research community, which includes all physical education teachers in the Wilaya of M'sila, totaling 188 teachers according to the 2023/2024 statistics. The researcher employed the descriptive method as it is suitable for such studies. The study tools included the Maslach Burnout Inventory consisting of 22 items, and the researcher used the SPSS software for data analysis. The study findings revealed the following:

- The level of burnout among physical education teachers at the secondary education level is moderate.
- There are statistically significant differences in burnout levels attributed to variables (teaching seniority, family status).

**Key words:** Burnout/Operational Definition/Operational Definition of Physical Education Teacher/Secondary Education Stage

### 1/Problem Statement:

The teacher is a key component of the educational process, presenting and delivering information and knowledge to students. Therefore, the mental and physical health of teachers should be given considerable attention. Teachers choose the teaching profession driven by a strong desire to help others (students, parents, society, the education sector, etc.), but they quickly realize the importance and magnitude of the responsibility they face. They strive to help others to the best of their ability but find themselves facing persistent problems and are required to continue their efforts. This leads to significant pressures they may not be able to handle, resulting in feelings of frustration and anxiety, which inevitably affect their performance. Consequently, teaching is viewed as one of the most stressful professions due to its numerous responsibilities and demands.

The education sector is a profession that suffers from both professional and social pressures, making its practitioners more prone to stress as they encounter high levels of psychological pressure and anxiety. Many studies have shown that the level of psychological stress among teachers is much higher than in other professions, with educators being more susceptible to burnout. Judit mentions that teaching is one of the top five most stressful professions globally. In the UK, teaching is considered the most stressful and exhausting profession (Dahari, 2005, p. 23).

Since teaching is a demanding profession requiring significant effort, it is seen as a stressful job that may leave some teachers dissatisfied with their career, leading to numerous negative consequences reflected in their productivity and psychological and professional adjustment (Hakima and Taous, 2016, p. 566). Therefore, teaching is described as one of the professions most likely to lead to burnout. Teachers encounter various problems, such as increasing workload, inability to control student behavior, and more. If these issues persist, they may cause physical and psychological exhaustion, leading to burnout. This phenomenon represents a significant barrier in the field of education,

particularly for physical education teachers. There is still a need to learn more about burnout among physical education teachers.

Taher Ashour states that "burnout is a psychological phenomenon that has received considerable attention from researchers, particularly in the teaching profession, due to the critical role teachers play in school and society at large" (Taher, 2020, p. 107). Studying burnout is highly important as it benefits teachers, students, and the educational process by mitigating its negative effects. It helps teachers maintain relatively stable mental health, improving their relationships with those around them. Burnout is a state of exhaustion in situations accompanied by high personal expectations regarding performance, causing teachers to feel overwhelmed, regret their career choice, and lose control over their professional matters.

Burnout may affect some teachers more than others, not because the problems they face are resolved—they are continuous—but because some teachers possess psychological traits that help them avoid or cope with burnout. They may manage work challenges through personal experience, support from superiors and colleagues, or their personality type.

From the above, it is evident that physical education teachers experience varying degrees of burnout due to the nature of their profession, which involves direct interaction with a complex social fabric that includes students, parents, administrations, and colleagues. These pressures make studying burnout essential, especially among secondary school teachers who deal with adolescents. Thus, we pose the following general question:

What is the level of burnout among physical education teachers at the secondary level?

From this, we can derive the following specific questions:

- Are there statistically significant differences in the level of burnout among physical education teachers at different teaching stages (middle, secondary) attributed to family status (single, married)?
- Are there statistically significant differences in the level of burnout among physical education teachers at different teaching stages (middle, secondary) attributed to teaching seniority (less than 10 years, more than 10 years)?

## **2-Study Hypotheses:**

### **1-2General Hypothesis:**

The level of burnout among physical education teachers at the secondary education level is moderate.

### **2-2Specific Hypotheses:**

- There are statistically significant differences in burnout levels among physical education teachers attributed to teaching seniority (less than 5 years, 5-10 years, more than 10 years).
- There are statistically significant differences in burnout levels among physical education teachers attributed to family status (single, married).

### **3-Significance of the Study:**

- The current study is significant as it highlights the importance and necessity of understanding the level of burnout among physical education teachers at the secondary education level.
- It aims to identify and uncover the phenomenon of burnout among physical education teachers at this educational stage.
- The results of this study are of great importance to school administrations, educational institutions, and educational planners.

### **4-Study Objectives:**

- Identify the level of burnout among physical education teachers at the secondary education level.
- Determine the extent of agreement or disagreement in burnout levels among physical education teachers at the secondary education level according to study variables (teaching seniority, family status).

### **5-Definition of Terms:**

**Burnout:** Defined as "an internal psychological state experienced by the teacher as a result of work stress and excessive burdens. It includes feelings of emotional exhaustion, depersonalization, and a lack of personal accomplishment. It is measured operationally by the score obtained on the teacher burnout scale" (Somia, Mohamed, 2022, p. 326).

**Operational Definition:** An internal psychological state suffered by the individual due to various psychological pressures and burdens, leading to mental and physical exhaustion.

**Operational Definition of Physical Education Teacher:** An individual who teaches physical education and sports at the secondary education level, holding a bachelor's or master's degree from institutes of physical education and sports.

**Secondary Education Stage:** A stage of education accredited by the Algerian Ministry of National Education, positioned critically within the educational process, coming after the middle education stage and before the university education stage.

#### **6- Previous Studies:**

##### **6-1 Study by Azizi Amina (2018):**

- Title: "Burnout among Middle School Teachers"
- Objective: To investigate the levels of burnout among middle school teachers.
- Institution: University of Moulay Tahar – Saida (Algeria)
- Sample: The study sample consisted of 40 middle school teachers (both male and female) selected randomly.
- Methodology: The study employed a descriptive method and used the Maslach and Jackson Burnout Inventory as the data collection tool.
- Key Findings:
  - The level of burnout among middle school teachers was moderate.
  - There were no statistically significant differences in burnout levels based on the variables of gender and experience.

##### **6-2 Study by Ben Nabi Nassira (2013):**

- Title: "Indicators of Burnout among Secondary School Teachers"
- Objective: To examine the level of burnout among secondary school teachers and to identify differences in burnout levels based on certain variables (seniority, training).
- Institution: University of Algiers
- Sample: The study sample comprised 51 secondary school teachers selected randomly.
- Methodology: The study employed a descriptive method and used a burnout scale as the data collection tool.
- Key Findings:
  - There were no statistically significant differences in burnout levels between teachers trained and not trained in the competency-based approach.
  - There were no statistically significant differences in burnout levels among teachers based on seniority.

##### **6-3 Exploratory Study**

The researcher conducted a field test through an exploratory study in six high schools, selecting 10 teachers to understand the initial responses of the participants and to identify potential obstacles and challenges. This also aimed to ensure the tool's suitability for its intended purpose (validity) and to verify the clarity and appropriateness of the items and statements for the sample.

#### **7- Research Methodology**

The choice of a research method is based on the nature of the topic being studied. Given the research problem in this study, the descriptive method was used as it is deemed suitable for this research.

#### **8- Study Variables**

Based on the research topic, there are two main variables:

##### **8-1 Independent Variables:**

- **Seniority in Teaching:** Less than 5 years, 5 to 10 years, more than 10 years.
- **Family Status:** Single, Married.

##### **8-2 Dependent Variable:**

- **Level of Burnout:** The degree of burnout among physical education teachers at the secondary education level.

#### **9- Study Population**

The study population consists of all physical education and sports teachers at the secondary level in M'sila province for the academic year 2023-2024, totaling 188 teachers.

##### **9-1 Research Sample**

The research sample includes physical education and sports teachers at the secondary education level in M'sila province. The exploratory study sample consisted of 10 teachers, while the main study

included 36 teachers selected randomly from various high schools within different educational districts of the province, representing more than 19% of the original study population.

**9-2 Spatial Scope of the Study**

The field study was conducted in high schools within M'sila province, involving 36 physical education and sports teachers.

**9-3 Temporal Scope of the Study**

The research was conducted over a period from the beginning of January 2024 to the end of February 2024 for the theoretical part. The practical part, including the distribution of the burnout scale to the research sample, collection, analysis, and discussion of the results, took place from the beginning of March to mid-April 2024.

**10- Data Collection Tool**

The objective of this study was to determine the level of burnout among physical education and sports teachers at the secondary education level. To achieve this, the following tool was used:

**10-1 Maslach Burnout Inventory (MBI):**

The researcher utilized the Maslach Burnout Inventory, developed by Maslach and Jackson, which measures burnout among professionals in human services and social work. Several researchers have adapted the scale for the Arabic-speaking environment, including Duani et al. (1979), Maqabla and Salama (1990), and Al-Waably (1995).

**10-2 Dimensions and Items of the Scale:**

Dimension	Item Numbers	Total Items
Emotional Exhaustion	20-16-14-13-8-6-3-2-1	9 items
Depersonalization	22-15-11-10-5	8 items
Reduced Personal Accomplishment	21-19-18-17-12-9-7-4	5 items
<b>Total</b>		22 items

**Table (01):** Illustrates the distribution of scale items across the three dimensions.

**11- Psychometric Properties:**

**11-1 Reliability:** The original scale demonstrates a good level of reliability. Maslach and Jackson (1981) extracted discriminant validity for the scale, showing its ability to distinguish between different categories of individuals experiencing varying levels of burnout, from low to high.

- In Arab studies, several researchers have also found good indications of reliability. Additionally, the scale has been utilized even in the Algerian environment, further enhancing its credibility.

The Pearson correlation coefficient was calculated between each dimension and the overall score of the scale. The following table illustrates the correlation relationship between the overall score of the scale and its sub-dimensions:

**Table 02:** Illustrates the correlation relationship between the overall score of the scale and its sub-dimensions.

Dimensions of the Scale	Correlation Coefficient	Significance Level
Emotional Exhaustion	0,86	0,01
Depersonalization	0,82	0,01
Reduced Personal Accomplishment	0,92	0,01

The data presented in the table above indicate that all correlation coefficient values for the scale dimensions are statistically significant at the significance level ( $\alpha = 0.01$ ). The values are (0.86/0.82/0.92) respectively, which confirms the high degree of homogeneity and strong internal consistency of the scale.

**11-2 Scale Reliability:** The reliability of the burnout scale for physical education teachers was confirmed.

By calculating **Cronbach's Alpha coefficient for internal consistency:** the Cronbach's Alpha reliability coefficient for this scale was calculated, and we obtained the following result:

**Table 03:** Illustrates the Cronbach's Alpha coefficient for the burnout scale for physical education teachers and its sub-dimensions.

Dimensions of the Scale and Overall Score	Cronbach's Alpha coefficient	Number of Items
Emotional Exhaustion	0,93	9
Depersonalization	0,88	5
Reduced Personal Accomplishment	0,79	8
Overall Score of the Scale	0,75	22

The table above shows that all Cronbach's Alpha coefficients for the scale dimensions were high, ranging between (0.79/0.93), while the Cronbach's Alpha coefficient for the entire scale was (0.75). This indicates that it has a strong reliability coefficient, making it suitable for application in the main study.

**12- Study Design and Statistical Analysis:** The following statistical methods were used in our study:  
 -The researcher used the SPSS program for data analysis.

**13- Distribution of the data.**

**Table 04:** Illustrates the results of the distribution tests for the data.

Scale	Kolmogorov-Smirnov		Shapiro-Wilk		Statistical Decision
	Test Value	Significance Level	Test Value	Significance Level	
		(Sig)		(Sig)	Non-Normal Distribution
	0.288	0.12	0.957	0.26	

**From Table 04,** we find that the significance levels for both tests are greater than (0.05). Therefore, we accept the null hypothesis and reject the alternative hypothesis, meaning that the data follow a normal distribution. Consequently, we will rely on parametric statistical tests for the analysis.

**14- Presentation and Analysis of the Results Related to the Hypotheses**

**14-1 Presentation and Analysis of the Results Related to the First Hypothesis:**

- There are no statistically significant differences in the level of burnout among physical education teachers attributed to the variable of teaching experience (less than 5 years, 5-10 years, more than 10 years).

**Table 05:** Illustrates the statistical description of the level of burnout among physical education teachers according to the variable of teaching experience.

Axis	Variable (Educational Qualification)	Sum of Squares	Degrees of Freedom	Mean Squares	F Value	Statistical Significance SIG
	Between Groups	817.723	2	408.862	1.543	0.250
	Within Groups	3443.714	13	264.901		
	Total	4261.438	35			

**From Table 05,** we observe that the test value (one-way ANOVA) represented by F equals 1.543, and the significance level of the test (Sig) equals 0.250, which is greater than the significance level (0.05). Therefore, there are no statistically significant differences attributed to the variable of teaching experience in burnout. This means that the first hypothesis (there are no statistically significant differences in the level of burnout among physical education teachers attributed to the variable of teaching experience (less than 5 years, 5-10 years, more than 10 years)) is confirmed (accepted).

**14-2 Presentation and Analysis of the Results Related to the Second Hypothesis:**

- There are no significant differences in the level of burnout among physical education teachers attributed to marital status (single, married).

**Table 06:** Illustrates the statistical description of the level of burnout among physical education teachers according to marital status (single, married).

Axis	Variable (Marital Status)	Sample	Size Mean	Standard Deviation	T Value	Degrees of Freedom	Significance Level sig	Decision
	Single	22	53.82	6.42	16.11	34	0.002	Significant
	Married	14	59.83	8.43				
	Total	36						

From Table 06, it is evident that out of the sample of 36 individuals, 22 are single and 14 are married. The mean score for singles is 53.82 with a standard deviation of 6.42, while the mean score for married individuals is 59.83 with a standard deviation of 8.43. This indicates clear differences attributed to marital status in burnout levels, which is confirmed by the independent samples T-test (since the distribution is normal, the independent samples T-test is used). The test value (T) is 16.11, and the significance level (Sig) is 0.002, which is less than the significance level of 0.05. Therefore, the test is statistically significant, indicating significant differences between married and single individuals in burnout levels. When comparing the mean scores, the differences favor the married individuals, thus the hypothesis that "there are no significant differences in the level of burnout among physical education teachers attributed to marital status (single, married)" is not confirmed (rejected).

#### 14-3 Presentation and Analysis of the Results Related to the General Hypothesis:

From Tables 04 and 06, we observe no significant differences between the mean score and the hypothetical mean, indicating that the burnout level of physical education teachers is moderate. Thus, the burnout level among physical education teachers at the secondary education level is moderate.

#### Discussion of Hypothesis 1:

The first hypothesis stated that there are no statistically significant differences in the level of burnout among physical education teachers attributed to teaching experience (less than 5 years, 5-10 years, more than 10 years). From Table 05, it is evident that there are no clear differences attributed to teaching experience in burnout levels. This was further confirmed using the one-way ANOVA test (Table 09), where the test value (ANOVA) was 1.543 and the significance level (Sig) was 0.250, which is greater than 0.05. Therefore, there is no statistical significance in the test, indicating no significant differences attributed to teaching experience among physical education teachers.

The researcher interprets this result by suggesting that teachers may have acquired coping mechanisms and emotional regulation skills over their years of experience, enabling them to manage classroom stress and external pressures effectively. This finding is consistent with previous studies such as Taher Ashour (2020), which concluded no differences in burnout levels based on professional experience, and Azizi Amina (2018), which found no significant differences in burnout levels among teachers of middle education based on teaching experience. Similarly, Ben Nabi Nesrine (2013) also concluded no statistically significant differences in burnout levels among teachers based on seniority.

#### Discussion of Hypothesis 2:

The second hypothesis proposed that there are no statistically significant differences in the level of burnout among physical education teachers attributed to marital status (single, married). From Table 06, which presents the mean scores and standard deviations for marital status categories (single, married), it is observed that single individuals have a mean score of 53.82 with a standard deviation of 6.42, while married individuals have a mean score of 59.83 with a standard deviation of 8.43. This suggests slight differences attributed to marital status, favoring married individuals in burnout levels.

To confirm the statistical significance of these differences, the independent samples T-test was conducted (Table 10), yielding a test value (T) of 16.11 and a significance level (Sig) of 0.002, which is less than 0.05. This indicates statistical significance in the test, revealing significant differences between married and single individuals in burnout levels. Upon comparing the mean scores, the differences favor married individuals. These results contradict the hypothesis that there are no significant differences in burnout levels among physical education teachers attributed to marital status. The researcher attributes these findings to family and marital issues that may affect the psychological well-being of physical education teachers. The presence of statistically significant differences supports the existence of meaningful differences in burnout levels based on marital status, thereby refuting the initial hypothesis of the study.

## **15- Discussion of Results in Light of Hypotheses:**

### **15-1 Discussion of Hypothesis 1:**

**Hypothesis 1:** There are no statistically significant differences in the level of burnout among physical education teachers attributed to teaching experience (less than 5 years, 5-10 years, more than 10 years).

According to Table 05, no significant differences in burnout levels were observed across different levels of teaching experience among physical education teachers. This conclusion was further confirmed by conducting a one-way ANOVA test (Table 09), where the ANOVA value was 1.543 and the significance level (Sig) was 0.250, which is above the standard threshold of 0.05 for statistical significance. Therefore, there is no statistically significant evidence to support the hypothesis that teaching experience influences burnout levels among physical education teachers.

The results indicate that regardless of their years of teaching experience, physical education teachers exhibit similar levels of burnout. This finding aligns with previous studies by **Taher Ashour (2020)**, **Azizi Amina (2018)**, and **Ben Nabi Nesrine (2013)**, all of which concluded that there is no significant difference in burnout levels based on teaching experience. The explanation provided suggests that teachers may develop coping mechanisms and emotional resilience over time, which helps them manage stress and maintain consistent levels of burnout despite varying teaching experience.

### **15-2 Discussion of Hypothesis 2:**

**Hypothesis 2:** There are no statistically significant differences in the level of burnout among physical education teachers attributed to marital status (single, married).

According to Table 60, which presents the means and standard deviations for burnout levels based on marital status (single, married) among physical education teachers, the mean score for singles was 53.82 with a standard deviation of 6.42, while for married individuals, the mean score was 59.83 with a standard deviation of 8.43. This indicates a slight difference favoring married individuals in terms of burnout levels.

To confirm the statistical significance of these differences, an independent samples t-test (Test d'échantillons indépendants) was conducted (Table 10), revealing a t-value of 16.11 with a significance level (Sig) of 0.002. Since the significance level (0.002) is less than the standard threshold of 0.05, there is statistical evidence to support that there are significant differences in burnout levels between married and single physical education teachers. Specifically, married teachers tend to experience higher levels of burnout compared to their single counterparts.

The results contradict Hypothesis 2, which posited no significant differences in burnout levels based on marital status among physical education teachers. This finding suggests that marital status does indeed influence burnout levels, with married teachers showing higher levels of burnout. The researcher attributes this to familial and domestic issues that married teachers may face, which could contribute to increased stress and burnout. This interpretation is supported by existing literature that highlights the impact of family-related stressors on occupational well-being.

### **15-3 Discussion of General Hypothesis:**

**General Hypothesis:** The level of burnout among physical education teachers at the secondary school level is moderate.

Upon examining Tables 4 and 6, which present the mean scores and inferred means, it becomes evident that there are no substantial differences between the calculated mean and the hypothetical mean. This indicates that the burnout level among physical education teachers in the secondary school setting is indeed moderate, aligning with the initial general hypothesis. This finding is consistent with the study by **Azizi Amina (2018)**, who similarly concluded that the burnout level among teachers in secondary education is moderate.

However, this finding contradicts the study by **Taher Ashour (2020)**, which suggested that a majority of teachers in secondary education experience high levels of burnout. The discrepancy in findings could be attributed to various contextual factors and differences in research methodologies.

The researcher interprets these results in the context of prevailing conditions in educational institutions at the secondary level. Factors contributing to moderate burnout levels include diminished student motivation towards learning, prevalent indifference, low academic achievement, reduced parental involvement, persistent disciplinary issues with students, frequent absenteeism, and the emotional toll experienced by physical education teachers, especially following assessment results.



These factors collectively contribute to the challenging and sometimes unrewarding nature of teaching physical education throughout the day, thereby increasing teachers' stress and frustration.

#### **16- General Conclusions:**

Based on the findings derived from the study:

- There are significant differences in the level of burnout among physical education teachers based on marital status (single, married).
- There are no significant differences in the level of burnout among physical education teachers based on teaching experience categories (less than 5 years, 5-10 years, more than 10 years).
- Overall, physical education teachers experience moderate burnout across all three dimensions, particularly at the secondary school level.

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