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## **Absenteeism, Burnout and Symptomatology of Teacher Stress: Sex Differences**

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# **Absenteeism, Burnout and Symptomatology of Teacher Stress: Sex Differences**

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## **Abstract**

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Although numerous studies have been carried out confirming high levels in symptomatology of stress and depression in the teaching profession, research focusing on sex differences in these problems has been both scarce and inconclusive. The aim of this study is to analyse differences with regards to sex in the incidence of absenteeism, work-related stress, symptomatology of depression, level of burnout and psychiatric symptomatology. The sample consists of 71 Secondary teachers, 31 men and 40 women. The tools used were the Questionnaire of Teacher Burnout (CBP-R), the Beck Depression Inventory (BDI), the Symptomatology Checklist-90-R (SCL-90-R) and a socio-demographic and work-situation questionnaire. Results showed sex differences only in the types of illness that caused sick leaves in men (50% otorhinolaryngological) and in women (50% psychiatric), and in some of the correlations between Role Stress-Burnout and psychiatric symptomatology that were higher for women than for men. In conclusion, this research supports the results of other studies that have not found different patterns of stress, burnout and depression between female and male teachers.

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**Keywords:** teacher stress, absenteeism, burnout, depression, sex differences

# Absentismo, *Burnout* y Síntomas de Estrés Docente: Diferencias de Sexo

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## Resumen

A pesar de la abundante investigación que confirma los elevados niveles de síntomas de estrés y depresión entre la profesión docente son, sin embargo, relativamente pocos los estudios que analizan las diferencias de sexo en el malestar docente, y los resultados obtenidos no han sido concluyentes. Este estudio tiene como objetivo conocer las diferencias en función del sexo en el absentismo laboral, el estrés laboral, la sintomatología depresiva, el nivel de burnout y en la sintomatología psíquica. La muestra está formada por 71 profesores de secundaria, 31 varones y 40 mujeres. Los instrumentos utilizados son el Cuestionario de Burnout del Profesorado (CBP-R), el Beck Depression Inventory (BDI) y el Symptoms Checklist-90-R (SCL-90-R) y un cuestionario sociodemográfico y laboral. Los resultados mostraron diferencias de sexo sólo en el tipo de dolencia que causó las bajas laborales de varones (el 50% son otorrinolaringológicas) y mujeres (el 50% son psiquiátricas) y en algunas de las correlaciones entre Estrés de Rol-Burnout y sintomatología psiquiátrica que fueran más altas en mujeres que en hombres. En conclusión, esta investigación apoya los resultados de otros estudios que no encontraban patrones distintos de estrés, burnout y depresión entre profesores y profesoras.

**Palabras clave:** estrés docente, absentismo, burnout, depresión, diferencias de sexo



**T**he significant level of symptomatology of stress, burnout and depression in the teaching profession has been recognized for several years now, and has been the subject of a variety of studies by various authors in several countries (Durán, Extremera, Rey, Fernández-Berrocal & Montalbán, 2006; Gil-Monte, Carlotto, & Gonçalves Câmara, 2011; Kyriacou, 2001; Kokkinos, 2007; Mearns & Cain, 2003; Montgomery & Rupp, 2005; Manassero, Fornés, Fernández, Vázquez & Ferrer, 1995; Steinhardt, Smith Jaggars, Faulk, & Gloria, 2011; Tang, Au, Schwarzer & Schmitz, 2001).

However, research focusing on sex differences in teacher uneasiness is few and is far from conclusive. Following is a summary of the conclusions reached in relevant studies dealing with the factor of sex and its relation to different indicators of teacher uneasiness.

### **Sex Differences in Symptomatology**

The different studies carried out on sex differences and teachers' health problems point in the same direction; female teachers seem to have a higher incidence of health problems and they tend to have different types of problems than male teachers, with more work absence for psychiatric causes.

In a study by Esteve (1987) regarding health problems in a sample of teachers, the amount of sick leave taken for health reasons was greater in women than in men (leaves for maternity and childbirth were included in this category). Male teachers had a higher incidence of digestive and cardiovascular illness, while in the women the neuropsychopathic, genitourinary and obstetric problems were considerably greater, although this margin is statistically conditioned by the author's inclusion of maternity leave.

Guerrero (1996) found a higher frequency in the female gender for leaves taken in all of the medical specializations analysed in a study carried out over the course of five school-years with teachers in Badajoz, a city in the south of Spain. In the specific case of leaves taken for psychiatric motives she discovered that in the categories of anxiety and depression disorders the rate for female teachers was more than double that of the male teachers.

The report carried out by Spanish Ministry of Education and Culture about The State of Spanish Education System in 1997-1998, pointed out that the total number of sick leaves taken by Primary and Secondary teachers in that academic year was 29107, of which 21234 were leaves taken by female teachers and 7873 were of their male counterparts. However, 60.7% of the teachers were women and 39.3% men.

In their studies about work-related stress and other health problems affecting teachers, Matud, García, and Matud (2002) found significant differences corresponding to sex in Primary and Secondary School teachers, with women showing more somatic symptomatology than their male counterparts and the men showing a higher incidence of allergic symptoms than women.

### **Sex Differences in Teacher Burnout**

As far as research that focuses on analysing the possible sex differences in the levels of work-related stress and burnout (Byrne, 1999; Eichinger, 2000), results are not so clear. Along with studies that show a higher rate of stress and/or burnout in women (Abraham, 1986; Martínez-Abascal & Bornás, 1992; Antoniou, Polychromi & Vlachakis, 2006), there are other studies showing a greater incidence of stress and burnout among men (Cordeiro et al, 2003; Manassero et al, 1995; Moreno-Jiménez, Garrosa & González, 2000) and yet other studies that reflect no significant difference in the level of stress and burnout in men and women (Capel, 1992; Eichinger, 2000; Matud et al., 2002).

Among the first group of studies is that of Abraham (1986), which shows a tendency for female teachers to have a higher rate of burnout, although the author points out the fact that it is difficult to rule out the possibility that this may be due in part to the women's tendency to have a greater acceptance of their emotional and affective problems, as opposed to the greater negation of these types of problems by men.

Similar results were obtained in a study performed by Martínez-Abascal and Bornás (1992) with a sample of 97 Primary School teachers. Considerable differences were found in this research between men and women with regard to the stress variable, measured with the *Teacher Stress Questionnaire* (TSQ), which indicated that a higher percentage of female

teachers considered the teaching profession to be very or extremely stressful. Approximately 66% of male teachers and 83% of women were found to have medium or high levels of stress.

Antoniou et al. (2006) in their study with 493 primary and secondary school teachers also found that female teachers experienced significantly higher levels of occupational stress, specifically with regards to three stress factors: “interaction with students and colleagues”, “teachers’ workload” and “students’ progress”. In addition, females reported higher levels of “emotional exhaustion” compared to their male counterparts.

However, some studies find a greater prevalence of total burnout in male teachers (Beer & Beer, 1992; Cordeiro et al., 2003; León-Rubio, León-Pérez & Cantero, 2013; Moreno-Jiménez et al., 2000). The meta-analysis carried out by Purvanova and Muros (2010) concluded that a differentiated expression of burnout dimensions exists depending on gender; women tended to score higher in *emotional exhaustion* and men in *depersonalization*. A widespread find is that of the higher incidence in men of the dimension *depersonalization*, in assistance professions in general (Maslach, Schaufeli & Leiter, 2001), as well as in the teaching profession (Byrne, 1991; Greenglass, Burke & Ondrack, 1990; León-Rubio et al, 2013; Manassero et al., 1995; Moreno-Jiménez et al., 2000; Rey, Extremera & Pena, 2012). Some studies have found higher levels of *lack of personal realization* in male teachers than in female teachers (León-Rubio et al, 2013). In the study of Lau, Yuen & Chan (2005) gender differences were found in all three burnout dimensions. Female teachers were significantly more burned-out in emotional exhaustion and personal accomplishment but were less depersonalizing than male teachers. Rey et al. (2012) in their sample of 727 teachers only found significant differences between men and women in the *depersonalization* dimension of burnout, as pointed out above, although they discovered differences in all dimensions of *work engagement*, with higher scores of women in *vigor*, *dedication* and *absorption*.

However, there are also some research exercises in which no significant sex differences in burnout were found (Capel, 1992). León-Rubio et al. (2013) did not find significant differences in the dimension *emotional exhaustion* in their simple of 578 teachers.

Some authors point out the possibility that stress and burnout levels are similar in both genders, but are caused by different factors, playing work

context variables an important role (León-Rubio et al., 2013). It is possible that men and women perceive in a different way work and organizational factors related to burnout.

### **Sex Differences in Teacher Depression**

Finally, regarding to another teacher uneasiness indicator, the level of depression, Martínez-Abascal and Bornás (1992) and Matud et al. (2002) have not discovered differences between female and male teachers in depressive symptomatology.

Therefore, although some studies seem to coincide in citing women as being more prone to suffering some of the symptoms derived from teacher uneasiness, the results are somewhat contradictory. This could be due to the disparity of the variables analysed and of the instruments used to assess these variables. What does seem clear though is the need to continue compiling data in the hope of determining whether sex does indeed play a role in the different ways teachers are affected by symptoms of their work-related health problems.

### **The Present Study**

The aim of this study, then, is to analyse with regard to sex variable the various indicators of teacher unwellness, which include absenteeism, work-related stress, symptoms of depression, burnout level and psychiatric symptomatology.

Due to the various approaches to the concept and measurement of burnout (Cox, Tisserand & Taris, 2005) we consider necessary to specify that, in this work, we are going to assume the burnout conceptualization that Maslach et al. (2001) propose. This conceptualization differentiates three components of burnout: *Exhaustion*, *Depersonalisation* and *Lack of Personal Accomplishment*.

After the literature review about this topic, we are expecting for a higher level of absenteeism among women, due to the usual sex differences in health problems. We also expect to find higher levels of burnout in male teachers than in the female teachers, particularly in the dimension *Depersonalization*, and similar levels of depressive symptoms in both sexes.

Finally, we hypothesised a greater level of psychical symptomatology among women teachers, and a different kind of health problems between both sexes.

## Method

### Participants

The sample consists of 71 teachers, 31 male and 40 female, of Secondary Education from three schools in the Comunidad de Madrid (Spain), with an average age of 42.87 (SD = 10.17) and 40.49 years (SD = 10.40) respectively. Table 1 gives some of the characteristics of the work situation of both groups.

The criteria for inclusion in the sample were that the respondents be teachers in one of these centres and that they participate voluntarily and anonymously in the research.

Table 1

*Work-related characteristics of male and female teachers of the sample*

<i>Characteristics</i>		<i>Men (n = 31)</i>		<i>Women (n = 40)</i>	
		<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>
Age at which teaching began	18-23 years	14	45.2	13	33.3
	24-29 years	16	51.6	21	53.8
	30 years or older	1	3.2	5	12.8
Number of groups taught	1-4	17	54.8	14	36.8
	5 or more	14	45.2	24	63.2
Number of students	Fewer than 60	13	41.9	10	25
	Between 60 and 240	15	48.4	29	72.5
	More than 240	3	9.7	1	2.5
Weekly hours of classes taught	Up to 20 hours	12	38.7	21	52.5
	More than 20 hours	19	61.3	19	47.5

(continued)

<i>Characteristics</i>		Men ( <i>n</i> = 31)		Women ( <i>n</i> = 40)	
		<i>n</i>	%	<i>n</i>	%
Type of subjects taught	Humanities and Social Sciences	10	32.3	24	61.5
	Experimental and/or Health Sciences	6	19.4	6	15.4
	Technological Fields	12	38.7	5	12.8
	Other	3	9.7	4	10.3
Correspondence	Little or none	3	9.7	6	15
Formation-Subjects	Fair amount	8	25.8	10	25
	Much	20	64.5	24	60
Tutor	Yes	20	64.5	17	42.5
	No	11	35.5	23	57.5
Other responsibilities	Yes	12	38.7	13	33.3
	No	19	61.3	26	66.7

## Measures

To define operatively the variables selected in this research and to assess the levels of stress, burnout, symptoms of depression and psychiatric symptomatology, three validated instruments for self-evaluation were given to the participants along with a questionnaire designed by the investigators to furnish information about absenteeism and about the work situation of the teachers. These instruments are described below.

- *Questionnaire on Teacher Burnout (Cuestionario de Burnout del Profesorado) (CBP-R)* (Moreno-Jiménez, Garrosa & González, 2000). The CBP-R consists of three factors: Factor I (*Stress and Burnout*), Factor II (*Disorganization*) and Factor III (*Administrative Problems*). For this study we have used only the information from Factor I, which consists of two subcategories:
  - o Role stress, which analyses the stress caused by Role dysfunctions. This category includes 13 items, such as, “I find very stressful being attentive to the students’ individual

problems or needs” and “The requirements of my job are too high”.

- Burnout, which deals with those questions pertaining to the process of burnout and its three dimensions: *Emotional Exhaustion* (8 items, e.g. “Every day I feel anxious and strained when I go to work”), *Depersonalisation* (4 items, e.g. “I feel that students are the enemy”) and *Lack of Personal Realization* (7 items, e.g. “Generally I feel very happy with my job”).

The response categories were given on a 5-point scale ranging from “Absolutely disagree” to “Absolutely agree”.

As far as the reliability of the instrument as a whole, we obtained a very high rating of internal consistency Alpha – Cronbach ( $\alpha = .92$ ). Moreno-Jiménez et al. (2000) also obtained a very high reliability for the total scale ( $\alpha = .91$ ).

- *Symptoms Checklist-90-R (SCL-90-R)* (Derogatis, 1977). We used the Spanish version of the instrument, designed by Gonzalez de Rivera, De las Cuevas, Rodríguez-Abuin and Rodríguez-Pulido (2002). The SCL-90-R has ninety items and is divided into nine scales which evaluate nine dimensions of psychiatric symptomatology: *Somatization* (e.g., “Headache”, “Trouble getting your breathe”); *Obsession-Compulsion* (e.g., “Unwanted thoughts, words, or ideas that won’t leave your mind”, “Having to check and double-check what you do”), *Interpersonal Sensitivity* (e.g., “Feeling shy or uneasy with the opposite sex”), *Depression* (e.g., “Feeling low in energy or slowed down”), *Anxiety* (e.g., “Nervousness or shakiness inside”, *Hostility* (“Feeling easily annoyed or irritated”), *Phobic Anxiety* (e.g., “Feeling afraid in open spaces or on the streets”), *Paranoid Ideation* (e.g., “Feeling that most people cannot be trusted”) and *Psychoticism* (e.g. “The idea that someone else can control your thoughts”). The response categories were given on a 5-points scale ranging from “Not at all” to “Extremely”. This instrument also offers the option of calculating three global indexes of unwellness: The *Global Severity Index (GSI)*,

the *Positive Symptom Total (PST)* and the *Positive Symptom Distress Index (PSDI)*. The GSI, together with the average scores of the symptomatic dimensions, were the indexes we used in this study for those statistical analyses which included psychopathological symptomatology. A high level of internal consistency was also obtained in the application of the SCL-90-R in this study ( $\alpha = .96$ ). In the original instrument from Derogatis the Alpha coefficient values in the nine dimensions ranged from .81 to .90.

- *Beck Depression Inventory (BDI)* (Beck, Rush, Shaw & Emery, 1979). We used the self-administered model of this revised version of the inventory, adapted and translated by Vázquez and Sanz (1991). This inventory consists of twenty-one questions about how the subject has been feeling in the last week. Each question has a set of at least four possible answer choices, ranging in intensity. For example, (0) “I do not feel sad”, (1) “I feel sad”, (2) “I am sad all the time and I can't snap out of it”, (3) “I am so sad or unhappy that I can't stand it”. The current application of the inventory achieved an alpha of .78. In the Spanish version from Vázquez and Sanz (1991) the Alpha reliability coefficient was .83.
- A self-report questionnaire designed for the research, which provided relevant socio-demographic and work-situation variables (*age, gender, age at which the profession was begun, number of groups and students taught to, weekly hours of class given, field of knowledge of the subjects given, relation between subjects taught and the teacher's formation, whether the teacher is tutor of a group and whether he/she has any administrative role*) and data referring to absenteeism (*number of sick leaves taken the previous school year, number of days of these leaves, medical speciality to which these leaves were attributed, number of workdays missed but not officially considered leaves*).

## **Procedure**

We accessed to the sample after telephone and personal contact with the principals and other supervisors of five secondary schools located in the region of Madrid (Spain). In these contacts we informed the principals about

the objectives of the research and we evaluated their possibilities of collaboration. Finally, three of the five centres accepted to collaborate with the research. Two schools, one public and another subsidized belong to the urban area of Madrid and the third one is on the outskirts of the city.

Questionnaires were supplied to the person in charge in each school, who assumed the responsibility to inform to teachers about research aims and who distributed the assessment measures. The instruments were handed to teachers in an envelope that included the questionnaires, an instructions sheet and a little stamped envelope to return answered questionnaires. Instructions, according APA (American Psychological Association, 2002) guidelines to obtain informed consent from participants, informed about the nature of the research, the voluntarily and anonymously participation and about the confidentiality and only researching purpose to treat the data. Instructions about the way to answer the questionnaires and about its return were also included. Teachers were asked for return the answered questionnaires in a period of approximately fifteen days, through giving the questionnaires in a closed envelope to our person in charge in their centre or through sending us the questionnaires in the stamped envelope.

The data was processed using the program *SPSS* in its version 15.0 for Windows. The compiling of information as well as the communication and treatment of the data were done in accordance with the Public General Acts of Parliament (*Ley Orgánica 15/99 of December 13*), which establishes legal guidelines for the protection of personal data.

Due to the reduced and no-representative sample, results below and statistical analysis must be considered in a descriptive study context, whose contribution will not be to confirm the existence of sex differences in the researched population but to identify the most relevant dimensions in which it will be interesting to focus future research.

## **Data Analysis**

We used *t*-Student tests to compare means between two independent groups. In the case of significant results we present Cohen's *d* as effect size measures. Descriptive data present mean and standard deviation (MEAN ± SD). We set  $\alpha$ -level at 0.05, although when we did many tests with the same variables (i.e., *symptomatology by sex*) inside the same statistical framework

(*t*-test) we correct  $\alpha$ -level by Bonferroni in order to adjust for Type I error. We also employed Pearson's correlation.

## **Results**

The results shall be organized by analysing in the first place the data referring to the differences found between male and female teachers with regard to absenteeism and sick leaves. We will then describe the differences by sexes in the levels of stress and burnout, and finally, we will describe the differences found in symptomatology of depression and the various psychiatric symptomatology of the sample.

### **Sex Differences in Absenteeism**

Before beginning a description of the results referring to absenteeism, it should be remembered that the statistics regarding sick leaves do not include maternity leave or leave for giving birth.

Of the 31 men in the sample, 7 (22.6%) had taken a leave from work during the previous school year, with a total accumulation of 69 days of leave. Among the female teachers on the other hand, only 5 (12.8%) had taken leaves; although the number of leaves was lower, the workdays missed due to these leaves totalled 453. There is not a significant statistical difference in the average number of days missed due to sick leave for men ( $M = 2.23$ ;  $SD = 5.65$ ) and women ( $M = 11.33$ ;  $SD = 40.2$ ) and there is a small size effect (Cohen, *d*) ( $t = 1.41$ ;  $p = 0.165$ ;  $d = 0.32$ ).

As far as the causes for the leaves taken (Table 2), the most common cause for taking leave among men was otorhinolaryngology problems (5 leaves for this cause, with an accumulation of 49 days missed), whereas no leaves had been taken the previous school year for psychiatric causes. The female teachers on the other hand had taken the majority of their leaves for psychiatric causes (4 leaves taken for this reason, with a total of 301 days missed), with the second most common cause being traumatological (2 leaves, 104 days total).

Table 2

*Number of leaves and days of leaves for different types of illness in men and women*

Type of illness	Number of Leaves				Days of Leave			
	Males		Females		Males		Females	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
1.Cardiovascular	0	0	0	0	0	0	0	0
2.Gynecology	0	0	0	0	0	0	0	0
3.Psychiatric	0	0	4	50%	0	0	301	66.4%
4. Infections	0	0	0	0	0	0	0	0
5.Hematology	0	0	0	0	0	0	0	0
6.Organ-Neurology	0	0	1	12.5%	0	0	45	9.9%
7.Otorhinolaringology	5	50%	0	0	49	71%	0	0
8.Traumatology	1	10%	2	25%	3	4.3%	104	23%
9.Digestive	1	10%	1	12.5%	7	10.1%	3	0.7%
10.Ophthalmology	0	0	0	0	0	0	0	0
11.Urology-Renal	1	10%	0	0	4	5.8%	0	0
12.Endocrino- Metabolical	0	0	0	0	0	0	0	0
13 .Respiratory	1	10%	0	0	3	4.3%	0	0
14. Dermatology	0	0	0	0	0	0	0	0
15. Others	1	10%	0	0	3	4.3%	0	0
TOTAL	10	100%	8	100%	69	100%	453	100%

The study also inquired of the teachers the number of workdays missed that were not part of a leave. This data provides some interesting information: 31% (9 cases) of the men had missed some workdays, whereas 55.3% of the female teachers (21 cases) reported absences from work. The days missed by the men totalled 30 and those by the women, 65. There is not a significant statistical difference in the average number of days missed by male teachers ( $M = 1.03$ ;  $SD = 1.88$ ) and women teachers ( $M = 1.71$ ;  $SD = 3.02$ ), and there is a small size effect ( $t = 1.06$ ;  $p = 0.293$ ;  $d = 0.27$ ).

**Sex Differences in Levels of Stress and Burnout**

Table 3 shows the data corresponding to men and women regarding the incidence of Role Stress, Burnout and the three specific dimensions of burnout: Emotional Exhaustion, Depersonalisation and Lack of Personal Accomplishment. As can be observed, in all measurements of stress and burnout assessed by this instrument the percentage in “high” level was greater for men than for women.

Table 3

*Levels of stress and burnout among male and female teachers*

CBP-R		Males (n = 31)		Females (n = 40)	
		n	%	n	%
Role stress	High	10	33.3	11	30.6
	Medium	15	50	20	55.6
	Low	5	16.7	5	13.9
Burnout	High	9	31	6	16.2
	Medium	14	48.3	17	45.9
	Low	6	20.7	14	37.8
Emotional Exhaustion	High	15	48.4	12	32.4
	Medium	10	32.3	12	32.4
	Low	6	19.4	13	35.1
Depersonalization	High	8	25.8	8	20
	Medium	13	41.9	21	52.5
	Low	10	32.3	11	27.5
Lack of Personal Accomplishment	High	7	24.1	4	10.3
	Medium	10	34.5	12	30.8
	Low	12	41.4	23	59

As far as the average scores obtained by men and women (Table 4) in these measures, none of the means differences can be considered statistically significant, and none of the size effects is of a moderate magnitude.

Table 4

*Means, standard deviations and differences by sexes of stress and burnout*

Stress and burnout indices	Males		Females		<i>t</i>	<i>p</i>	<i>d</i>
	M	SD	M	SD			
Role Stress	2.81	0.61	2.85	0.54	0.30	.77	0.07
Burnout	2.22	0.54	2.05	0.61	1.18	.24	0.30
Emotional Exhaustion	2.49	0.60	2.36	0.81	0.72	.47	0.18
Depersonalization	1.73	0.57	1.72	0.55	0.11	.91	0.02
Lack of Personal Accomplishment	2.17	0.70	1.93	0.61	1.52	.13	0.37

\*  $\alpha$ -level was set by Bonferroni correction for 5 tests (critical value,  $p = .01$ )

### Sex Differences in Depression

This study used two different measurements to assess levels of depressive symptomatology, the BDI and the subscale “Depression” of the SCL-90-R. Table 5 shows the results that these measurements gave for men and women in the sample.

Table 5

*Levels of depression symptomatology in males and women*

		Males ( <i>n</i> = 31)		Females ( <i>n</i> = 40)	
		<i>n</i>	%	<i>n</i>	%
Depression BDI	Moderate Depression	1	3.2	0	0
	Mild Depression	6	19.4	8	20.5
	No Depression	24	77.4	31	79.5
Depression SCL-90-R	High	8	25.8	10	26.3
	Medium	13	41.9	13	34.2
	Low	10	32.3	15	39.5

It can be observed here how there is scarcely a difference in the presence of men and women in the different levels of depression symptomatology. An

analysis of the average scores obtained by the two groups shows that men received a mean in the BDI of 5.97 (SD = 4.71), while women received a mean of 6.21 (SD = 4.42), a difference which cannot be considered statistically significant. ( $t = 0.22$ ;  $p = 0.83$ ;  $d = 0.05$ ). The results from the subscale of depression symptomatology of the SCL-90-R point in the same direction; the men obtained a mean of 0.57 (SD = 0.44) whereas the mean for the women was 0.74 (SD = 0.60), a difference of means that is not of statistical significance ( $t = 1.28$ ;  $p = 0.20$ ;  $d = 0.32$ )

**Sex Differences in Other Symptomatology**

The results that refer to the differences between male and female teachers in the symptomatology reports (Table 6) show that there are no significant differences between men and women in the levels of symptomatology assessed by SCL-90-R.

Table 6

*Levels of psychiatric symptomatology in male and female teachers*

SCL-90-R		Males ( $n = 31$ )		Females ( $n = 40$ )	
		<i>n</i>	%	<i>n</i>	%
Global Severity Index	High	10	32.3	12	31.6
	Medium	11	35.5	11	28.9
	Low	10	32.3	15	39.5
Somatization	High	10	32.3	11	28.9
	Medium	11	35.5	16	42.1
	Low	10	32.2	11	28.9
Obsession-Compulsion	High	11	35.5	18	47.4
	Medium	11	35.5	13	34.2
	Low	9	29	7	18.4

(continued)

SCL-90-R		Males ( <i>n</i> = 31)		Females ( <i>n</i> = 40)	
		<i>n</i>	%	<i>n</i>	%
Interpersonal Sensitivity	High	9	29	13	34.2
	Medium	16	51.6	13	34.2
	Low	6	19.4	12	31.6
Anxiety	High	8	25.8	10	26.3
	Medium	10	32.3	13	34.2
	Low	13	41.9	15	39.5
Hostility	High	6	19.4	4	10.5
	Medium	14	45.2	30	78.9
	Low	11	35.5	4	10.5
Phobic Anxiety	High	8	25.8	9	23.7
	Medium	7	22.6	12	31.6
	Low	16	51.6	17	44.7
Paranoid Ideation	High	11	35.5	12	31.6
	Medium	7	22.6	12	31.6
	Low	13	41.9	14	36.8
Psychoticism	High	11	35.5	15	39.5
	Medium	14	45.2	11	28.9
	Low	6	19.4	12	31.6

With regard to the average scores obtained by men and women in the different scales of psychiatric symptomatology (Table 7), we did not find considerable differences in terms of sexes.

Table 7

*Means, standard deviations and differences in psychiatric symptomatology by sexes*

SCL-90-R	Males		Females		<i>t</i>	<i>p</i>	<i>d</i>
	M	SD	M	SD			
Global Severity Index	0.45	0.31	0.57	0.45	1.30	.20	0.31
Somatization	0.46	0.43	0.81	0.85	2.24	.03	0.52
Obsession-Compulsion	0.65	0.49	0.80	0.61	1.07	.29	0.27
Interpersonal Sensitivity	0.50	0.48	0.49	0.43	0.07	.95	0.02
Anxiety	0.38	0.33	0.58	0.62	1.65	.10	0.40
Hostility	0.34	0.43	0.34	0.27	0.02	.98	0.00
Phobic Anxiety	0.18	0.27	0.23	0.33	0.74	.47	0.17
Paranoid Ideation	0.47	0.50	0.48	0.43	0.08	.93	0.02
Psychoticism	0.30	0.37	0.29	0.33	0.16	.88	0.05

\*  $\alpha$ -level was set by Bonferroni correction for 9 tests (critical value,  $p = .005$ )

As far as the relationships found between dependent variables of the study, Table 8 shows correlation coefficients separately by sexes. As it may be noticed, significant correlations between dependent variables are mostly positive like it could be expected. There are a higher number of significant correlations for women than for men between Role Stress and the dimensions of Symptomatology assessed by SCL-90-R and between Burnout and this psychiatric symptomatology.

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Table 8

*Correlations between dependent variables of the study by sexes*

SEX	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MEN	1.ROLE STRESS	1	,676 **	,559 **	,569 **	,718 **	,254	,446 *	,108	-,097	,080	,115	,227	-,055	,112	-,147	,143
	2.Emotional exhaustion	,676 **	1	,503 **	,586 **	,871 **	,380 *	,466 **	,215	,011	,076	,191	,381 *	-,139	,229	,069	,255
	3.Depersonalization	,559 **	,503 **	1	,573 **	,749 **	,084	,083	-,113	-,190	-,084	,007	,097	-,004	-,090	-,244	-,090
	4.Lack of personal accomplishment	,569 **	,586 **	,573 **	1	,882 **	,210	,106	-,221	-,249	-,077	-,028	,063	-,286	-,105	-,378 *	-,194
	5.BURNOUT	,718 **	,871 **	,749 **	,882 **	1	,290	,286	-,031	-,151	-,028	,069	,231	-,195	,034	-,204	,005
	6.DEPRESSION BDI	,254	,380 *	,084	,210	,290	1	,622 **	,545 **	,206	,569 **	,246	,387 *	,201	,000	,136	,511 **
	7.Somatization	,446 *	,466 **	,083	,106	,286	,622 **	1	,693 **	,198	,448 *	,537 **	,638 **	,387 *	,364 *	,510 **	,773 **
	8. Obsession-compulsion	,108	,215	-,113	-,221	-,031	,545 **	,693 **	1	,509 **	,678 **	,601 **	,451 *	,492 **	,448 *	,582 **	,873 **
	9. Interpersonal sensitivity	-,097	,011	-,190	-,249	-,151	,206	,198	,509 **	1	,744 **	,118	,219	,330 **	,604 **	,330 **	,652 **
	10. Depression	,080	,076	-,084	-,077	-,028	,569 **	,448 *	,678 **	,744 **	1	,413 *	,356 *	,390 *	,298	,225	,754 **
	11. Anxiety	,115	,191	,007	-,028	,069	,246	,537 **	,601 **	,118	,413 *	1	,482 **	,446 *	,320	,418 *	,656 **
	12. Hostility	,227	,381 *	,097	,063	,231	,387 *	,638 **	,451 *	,219	,356 *	,482 **	1	,292	,498 **	,382 *	,666 **

(continued)

SEX	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	13.Fobic anxiety	-,055	-,139	-,004	-,286	-,195	,201	,387	,492	,330	,390	,446	,292	1	,238	,548	,615
								*	**		*	*				**	**
	14.Paranoid ideation	,112	,229	-,090	-,105	,034	,000	,364	,448	,604	,298	,320	,498	,238	1	,565	,640
								*	*	**		**	**		**	**	**
	15.Psycoticism	-,147	,069	-,244	-,378	-,204	,136	,510	,582	,330	,225	,418	,382	,548	,565	1	,692
					*			**	**			*	*	**	**	**	**
	16.GLOBAL SEVERITY INDEX	,143	,255	-,090	-,194	,005	,511	,773	,873	,652	,754	,656	,666	,615	,640	,692	1
							**	**	**	**	**	**	**	**	**	**	**
WOM EN	1.ROLE STRESS	1	,663	,671	,374	,641	,659	,632	,626	,363	,694	,659	,545	,405	,438	,436	,703
			**	**	*	**	**	**	**	*	**	**	**	*	**	**	**
	2.Emotional exhaustion	,663	1	,699	,690	,946	,460	,413	,409	,347	,494	,505	,232	,293	,559	,301	,512
		**		**	**	**	**	*	*	*	**	**	**	**	**	**	**
	3.Depersonalization	,671	,699	1	,605	,800	,564	,360	,442	,382	,362	,293	,276	,393	,445	,286	,433
		**	**		**	**	**	*	**	*	*	*	*	*	**	**	**
	4.Lack of personal accomplishment	,374	,690	,605	1	,866	,306	,321	,192	,069	,254	,254	,161	,153	,359	,180	,297
		*	**	**		**		*							*		
	5.BURNOUT	,641	,946	,800	,866	1	,498	,456	,422	,336	,486	,460	,269	,314	,564	,326	,524
		**	**	**	**		**	**	*	*	**	**			**	**	**
	6.DEPRESIÓN BDI	,659	,460	,564	,306	,498	1	,644	,683	,464	,743	,643	,450	,627	,566	,619	,776
		**	**	**	**	**		**	**	**	**	**	**	**	**	**	**
	7.Somatization	,632	,413	,360	,321	,456	,644	1	,663	,486	,774	,735	,505	,435	,495	,643	,868
		**	*	*	*	**	**		**	**	**	**	**	**	**	**	**
	8.Obsesión-compulsion	,626	,409	,442	,192	,422	,683	,663	1	,610	,748	,572	,579	,344	,626	,691	,823
		**	*	**	*	*	**	**		**	**	**	**	*	**	**	**
	9.Interpersonal sensitivity	,363	,347	,382	,069	,336	,464	,486	,610	1	,620	,518	,340	,461	,813	,753	,727
		*	*	*		*	**	**	**		**	**	*	**	**	**	**

(continued)

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SEX	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	10.Depression	,694 **	,494 **	,362 *	,254	,486 **	,743 **	,774 **	,748 **	,620 **	1	,791 **	,496 **	,485 **	,692 **	,756 **	,933 **
	11.Anxiety	,659 **	,505 **	,293	,254	,460 **	,643 **	,735 **	,572 **	,518 **	,791 **	1	,350 *	,661 **	,583 **	,693 **	,863 **
	12.Hostility	,545 **	,232	,276	,161	,269	,450 **	,505 **	,579 **	,340 *	,496 **	,350 *	1	,113	,372 *	,392 *	,539 **
	13.Fobic anxiety	,405 *	,293	,393 *	,153	,314	,627 **	,435 **	,344 *	,461 **	,485 **	,661 **	,113	1	,490 **	,523 **	,605 **
	14.Paranoid ideation	,438 **	,559 **	,445 **	,359 *	,564 **	,566 **	,495 **	,626 **	,813 **	,692 **	,583 **	,372 *	,490 **	1	,696 **	,762 **
	15.Psycoticism	,436 **	,301	,286	,180	,326	,619 **	,643 **	,691 **	,753 **	,756 **	,693 **	,392 *	,523 **	,696 **	1	,849 **
	16.GLOBAL SEVERITY INDEX	,703 **	,512 **	,433 **	,297	,524 **	,776 **	,868 **	,823 **	,727 **	,933 **	,863 **	,539 **	,605 **	,762 **	,849 **	1

## Discussion

The first noteworthy result of this study is the confirmation of differences between men and women in the data referring to absenteeism (although we should keep in mind the fact that the information comes from the subjects' self-evaluation and not from official sources). Women were not found to have more frequent work leaves than men due to illness, unlike in the study of Esteve (1987), but this difference is most likely due to the fact that maternity leave, included in Esteve's study, was eliminated in our consideration of leave. However, although the number of sick leaves taken by female teachers in our study is smaller, the number of days taken on those leaves is considerably higher, as is the number of days that women missed work without it being a leave. The absence of significant differences between men and women in these variables can be due to the reduced size of the sample, what do not permit us to take out conclusions that can be applied to the teachers' population. However it is possible to point out some dimensions of analysis about work-related teachers' absenteeism that can be interesting to confirm in the future. This is, if this problem of absenteeism is greater among the female teachers than among the men. It can be also very relevant to analysed if individual differences in absenteeism can be related to the role of several gender variables (childcare obligations, work load, work attitudes, etc.) more than the sex variable. In fact, Bekker, Croon, and Bressers (2005) have found, in a sample of nurses, that sickness absence was not higher in women. In particular they found that work-load as well as care-load appeared to predict sickness absence.

This study confirms the differences between women and men in the types of illness that tend to cause them to take sick leave, with a greater number of psychiatric problems present in the female teachers, a result that coincides with the findings of other studies (Esteve, 1987; Guerrero, 1996). In our sample, it is the psychiatric problems in fact that are responsible for the greatest number of days missed on sick leave. This result is coherent with the fact of a greater proportion of psychiatric problems among women in the adult population. In fact, our data do not show a significant difference between men and women in psychiatric symptoms, but we have found significant correlations between teacher stress and burnout with psychiatric

symptoms among women, and no significant correlations between these variables in the case of men.

A conclusion, derived from the findings commented on above, and coinciding with other previous research, can be drawn. This is, male and female teachers suffer a similar level of teacher uneasiness. Depending if the teacher is female or male, the uneasiness could manifest differently. Particularly, there are differences in psychiatric symptoms related to teacher stress or burnout. Among women this relationship seems to be stronger than in men. There are also differences in the various types of medical problems that affect male and female teachers.

One of the more interesting objectives of the research however was to try to shed new light on the contradictory results that had emerged regarding the differences in the levels of stress and burnout in men and women. Although, as we have hypothesized scores in burnout and in its three dimensions are higher among men, our data does not show significant differences between the groups in the average levels of burnout or role stress, and the size effects are small.

Our findings do not coincide, then, with other studies that show differences between men and women in levels of burnout (Cordeiro et al., 2003; Greenglass et al, 1990; Manassero et al, 1995; Moreno-Jiménez et al, 2000), because of our research indicates very similar scores in this dimension in both sexes, in the direction that Eichinger (2000) pointed out. Eichinger (2000) as well as other authors recently, assert that maybe, better than focusing research on biological differences between men and women, it would be interesting to develop studies on gender orientation in coping styles that both, men and women, use to handle the environmental demands.

And finally, this study does not show significant differences in the symptomatology of depression between men and women, thus coinciding with the study carried out by Matud et al. (2002). This result is interesting because it is established the higher prevalence of depressive disorders among women in general population (WHO, 2000). The lack of significant differences in our research can be due, as we said above, to little sample size. However, to the extent that this result coincide with the results of another studies it can be possible to think about another reasons. This is, it would be that teachers' population do not reproduce psychopathological patterns of the general population, not only because teachers present a bigger

percentage of mental health problems, but also because of changes in the relation men-women in the incidence rates of these problems. Also, it can be possible that the characteristic processes and particular dimensions of a high index of burnout would be the variables that contribute to diminish differences between people affected by them.

It is necessary to continue this line of research in the future. Only then will we be able to confirm the presence or absence of sex differences in problems involving work stress and determine which variables could explain the contradictory results obtained regarding these problems.

### References

- Abraham, A. (1986). Testimonios sobre las vivencias de las mujeres docentes. In A. Abraham, *El docente es también una persona* (pp. 105-124). Barcelona: Gedisa.
- American Psychological Association (2002). *Manual de estilo para publicaciones de la American Psychological Association*. 5ª edición. México: Manual Moderno.
- Antoniou, A.S., Polychromi, 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. doi: [10.1108/02683940610690213](https://doi.org/10.1108/02683940610690213)
- Beck, A.T., Rush, A.J., Shaw, B.F. & Emery, G. (1979). *Cognitive Therapy of Depression*. New York: Guilford Press.
- Beer, J. & Beer, J. (1992). Burnout and stress, depression and self-esteem of teachers. *Psychological Reports*, 71, 1331-1336.
- 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. doi: [10.1080/02678370500286095](https://doi.org/10.1080/02678370500286095)
- Byrne, B. M. (1991). Burnout: Investigating the impact of background variables for elementary, intermediate, secondary and university educators. *Teaching and Teacher Education: An International Journal of Research*, 7, 197-209. doi: [10.1016/0742-051X\(91\)90027-M](https://doi.org/10.1016/0742-051X(91)90027-M)
- Byrne, B.M. (1999). The Nomological Network of Teacher Burnout: A Literature Review and Empirically Validated Model. In R.

Vandenberghe and A. M. Huberman (Eds.), *Understanding and Preventing Teacher Burnout* (pp.15-37). New York: Cambridge University Press.

- Capel, S.A. (1992). Stress and *burnout* in teachers. *European Journal of Teacher Education*, 15, 197-211.
- Cordeiro, J.A., Guillén, C.L., Gala, F.J., Lupiani, M., Benítez, A. & Gómez, A. (2003). Prevalencia del Síndrome de *Burnout* en los maestros. Resultados de una investigación preliminar. *Psicología.com*, 7 (1). Retrieved from <http://www.psiquiatria.com>
- Cox, T., Tisserand, M. & Taris, T. (2005). The conceptualization and measurement of burnout: Questions and directions. *Work & Stress*, 19 (3), 187-191. doi: 10.1080/02678370500387109
- Derogatis, L.R. (1977). *SCL-90-R, Administration, Scoring and Procedures Manual I for the Revised Version of the SCL-90*. Baltimore: John Hopkins University Press.
- Durán, A., Extremera, N., Rey, L., Fernández-Berrocal, P. y Montalbán, F. M. (2006). Predicting academic *burnout* and *engagement* in educational settings: Assessing the incremental validity of perceived emotional intelligence beyond perceived stress and general self-efficacy. *Psicothema*, 18 supl., 158-164.
- Eichinger, J. (2000). Job Stress and Satisfaction Among Special Education Teachers: effects of gender and social role orientation. *International Journal of Disability, Development and Education*, 47(4), 397-412. doi: 10.1080/713671153
- Esteve, J.M. (1987). *El malestar docente*. Barcelona: Laia.
- Gil-Monte, P.R., Carlotto, M.S., & Gonçalves Câmara, S. (2011). Prevalence of burnout in a sample of Brazilian teachers. *The European Journal of Psychiatry*, 25(4), 205-212. doi: 10.4321/S0213-61632011000400003
- Gonzalez de Rivera, JL, De las Cuevas, C, Rodriguez-Abuin, M & Rodriguez-Pulido, F. (2002). *El cuestionario de 90 síntomas. Adaptación española del SCL-90-R*. Madrid: Publicaciones de Psicología Aplicada, TEA Ediciones.

- Greenglass, E.R., Burke, R.J. & Ondrack, M. (1990). A gender-role perspective of coping and burnout. *Applied Psychology: An International Review*, 39(1), 5-27.
- Guerrero, E. (1996). Estudio preliminar al síndrome de burnout. *Ciencia Psicológica*, 3, 63-76.
- Kokkinos, C. M. (2007). Job stressors, personality and burnout in primary school teachers. *British Journal of Educational Psychology*, 77, 229-243. doi: 10.1348/000709905X90344
- Kyriacou, C. (2001). Teacher stress: directions for future research. *Educational Review*, 53 (1), 27-35. doi: 10.1080/00131910120033628
- Lau, P.S.Y., Yuen, M.T. & Chan, R.M.C. (2005). Do demographic characteristics make a difference to burnout among Hong Kong secondary school teachers?. *Social Indicators Research*, 71, 495-516. doi: 10.1007/s11205-004-8033-z
- León-Rubio, J.M., León-Pérez, J.M. & Cantero, F.J. (2013). Prevalencia y factores predictivos del burnout en docentes de la enseñanza pública: el papel del género. *Ansiedad y Estrés*, 19(1), 11-24.
- Ley Orgánica 15/99 of December 13 on Personal Data Protection.
- Manassero, M.A., Fornés, J., Fernández, M.C., Vázquez, A. & Ferrer, V.A. (1995). «Burnout» en la enseñanza: análisis de su incidencia y factores determinantes. *Revista de Educación*, 308, 241-266.
- Martínez-Abascal, M. & Bornás, X. (1992). Malestar docente, atribuciones y desamparo aprendido: un estudio correlacional. *Revista española de pedagogía*, 193, 563-580.
- Matud, M.P., García, M.A. & Matud, M.J. (2002). Estrés laboral y salud en el profesorado: un análisis diferencial en función del género y del tipo de enseñanza. *International Journal of Clinical and Health Psychology*, 2 (3), 451-465.
- Maslach, C., Schaufeli, W.B. & Leiter, M.P. (2001). Job burnout. *Annual Review of Psychology*, 52(1), 397-422. doi: 10.1146/annurev.psych.52.1.397
- Mearns, J., & Cain, J. E. (2003). Relationships between teachers' occupational stress and their burnout and distress: Roles of coping and negative mood regulation expectancies. *Anxiety, Stress and Coping*, 16, 71-82. doi: 10.1080/1061580021000057040

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- Montgomery, C. & Rupp, A. A. (2005). A Meta-analysis for Exploring the Diverse Causes and Effects of Stress in Teachers. *Canadian Journal of Education*, 28 (3), 458-486.
- Moreno-Jiménez, B., Garrosa, E. & González, J.L. (2000). La evaluación del estrés y el burnout del profesorado: el CBP-R. *Revista de Psicología del Trabajo y de las Organizaciones*, 16 (2), 151-171.
- Purvanova, R.K. & Muros, J.P. (2010). Gender differences in burnout: A meta-analysis. *Journal of Vocational Behavior*, 77, 168-185. doi: [10.1016/j.jvb.2010.04.006](https://doi.org/10.1016/j.jvb.2010.04.006)
- Rey, L., Extremera, N. & Pena, M. (2012). Burnout and work engagement in teachers: Are sex and level taught important?. *Ansiedad y Estrés*, 18(2-3), 119-129.
- 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. doi: [10.1002\smi.1394](https://doi.org/10.1002\smi.1394)
- Tang, C., Au, W., Schwarzer, R. & Schmitz, G. (2001). Mental health outcomes of job stress among Chinese teachers: role of stress resource factors and Burnout. *Journal of Organizational Behavior*, 22, 887-901. doi: <http://dx.doi.org/10.1002\job.120>
- Vázquez, C. & Sanz, J. (1991). *Fiabilidad y validez factorial de la versión española del inventario de depresión de Beck*. Barcelona: III Congreso de Evaluación Psicológica.
- World Health Organization. (2000). *Women's Mental Health. An evidence based review*. Geneva: WHO.

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