Condición psicosocial de los profesores de Educación Física según las características sociodemográficas
Psychosocial status of Physical Education teachers according to socio-demographic characteristics

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Resumen. Actualmente, los docentes están expuestos a riesgos psicosociales propios del contexto educativo y es importante superar y anticiparse a las adversidades que ello conlleva. Por ello, este estudio pretende analizar los niveles de estrés, síndrome de burnout y resiliencia en profesores de educación física, así como establecer las relaciones existentes en función del género y la situación sociolaboral. El estudio tuvo un diseño no experimental, descriptivo, comparativo y correlacional, con medición en un solo grupo. La muestra estuvo compuesta por 415 profesores de educación física de toda España, con un rango de edad de 21-53 años (M=28.78±6.15) y una distribución heterogénea, representando el 69.4% del género masculino y el 30.6% del género femenino. Para registrar los aspectos sociodemográficos se utilizó la Escala de Estrés Percibido (PSS), el Inventario de Burnout de Maslach (MBI), la Escala de Resiliencia de Connor-Davidson (CD-RISC) y un cuestionario Ad-Hoc. Finalmente se observa que, para el síndrome de burnout, la subescala con mayor puntuación es el agotamiento emocional, seguida de la realización personal y la despersonalización. Para la resiliencia, se observa que la subescala con mayor puntuación es la competencia personal, seguida de la aceptación positiva, el control y el propósito, la tolerancia a los acontecimientos negativos y las influencias espirituales.

Palabras claves: Docentes, Educación Física, Síndrome de Burnout, Estrés, Resiliencia.

Abstract. Currently, teachers are exposed to psychosocial risks specific to the educational context and it is important to overcome and anticipate the adversities involved. Therefore, this study aims to analyse the levels of stress, burnout syndrome and resilience in physical education teachers, as well as to establish the existing relationships according to gender and socio-occupational situation. The study had a non-experimental, descriptive, comparative and correlational design, with measurement in a single group. The sample consisted of 415 physical education teachers from all over Spain, with an age range of 21-53 years (M=28.78±6.15) and a heterogeneous distribution, representing 69.4% of the male gender and 30.6% of the female gender. The Perceived Stress Scale (PSS), the Maslach Burnout Inventory (MBI), the Connor-Davidson Resilience Scale (CD-RISC) and an Ad-Hoc questionnaire were used to record socio-demographic aspects. Finally, it is observed that, for burnout syndrome, the subscale with the highest score is emotional exhaustion, followed by self-fulfilment and depersonalisation. For resilience, the highest scoring subscale is personal competence, followed by positive acceptance, control and purpose, tolerance of negative events and spiritual influences.

Keywords: Teachers, Physical Education, Stress, Burnout Syndrome, Resilience.

Introduction

Currently, the teacher selection process in Spain requires a high level of perseverance and perseverance to become a civil servant in the public teaching profession (de la Fuente-Arias & Amate-Romera, 2019). In addition, teaching requires a strong sense of reflection, imagination and creativity to successfully meet the learning needs of students (Rothland, 2021; Cardina & Seymour, 2021). A large number of factors converge in the teaching profession that affect working conditions, such as stress, burnout and resilience, which affect the quality of teaching (Abos et al., 2019; Fraile García et al., 2018; Koulierakis et al., 2019; Oberle et al., 2020; Wong et al., 2017).

The selection process to become a teacher in the State’s public teaching corps consists of passing a rigorous and demanding competitive examination, where the candidates, who are the applicants for the positions, are examined in order to obtain a position in the State’s public teaching corps (Real Decreto 276/2007, 2007). The life of a teacher in the competitive examination is not an easy path, as it presents a lot of uncertainty and fear of failure, being these states due to the stress
generated by reaching the longed-for position, risking this position through an evaluative test (González-Calvo, 2020). Furthermore, such a situation may lead to a higher degree of complexity, as the candidate teachers may be called to work, so that they have to combine their competitive examination studies with their teaching work (Aramendi-Jáuregui et al., 2019), increasing stress levels (Aramendi-Jáuregui et al., 2019). The theory proposed by Selye (1975) establishes that there are three phases for the channeling of stress, the first of which is the alarm reaction through which the subject is warned that he or she must be put in a state of alert before a certain situation, in such a way that sometimes the levels do not even rise. If this is prolonged, the person reaches the resistance phase, where he or she tries to continue to cope with the situation, but realizes that there is a limit to his or her capacity for endurance, and can become frustrated and suffer (Selye, 1975). Afterwards, the exhaustion phase is presented, which is characterized by fatigue, which can also affect the opponent’s affective-motivational level, as the research carried out by Raudales et al. (2020) and Willroth et al. (2020) concludes that a negative motivational-affective change can develop to the detriment of the positive one, generating a psychological state of tiredness and exhaustion.

Once the selective test is passed, the teaching profession is a job in which various psychosocial factors are manifested, due to legislative changes, new structural models of families, the expansion of the technological world and its inclusion in schools, interpersonal relationships, as well as the process of access to the teaching profession (Larson et al., 2020; Liu et al., 2019; Rodríguez-Mantilla & Fernández-Díaz, 2017). In recent years there has been a great deal of interest in addressing stress and burnout syndrome among employees, the negative effects of which have been documented in various areas of psychology, education and health (Araldi et al., 2021; Comella et al., 2021; González-Valero et al., 2019; Lara-Bocanegra et al., 2020; McCormack et al., 2018; Membrive-Jiménez et al., 2020; Puertas-Molero et al., 2018). Burnout syndrome and stress not only cause damage to workers’ mental and physical health (Capone et al., 2019; María et al., 2020), but also represent a cost to organizations (Cannon & Herda, 2016). Employees in human service occupations such as teaching and nursing are more vulnerable to stress and burnout syndrome (Chacón-Cuberos et al., 2018; Heng et al., 2020; María et al., 2020; Melguizo-Itañez et al., 2022; Sáez-Gallego et al., 2019).

These circumstances mean that teachers need to overcome the adversities they face in the educational environment (Ellison & Woods, 2019). At this point, resilience is fundamental as a construct that refers to the personal qualities that allow them to regain strength and thrive in the face of adversity (Connor & Davidson, 2003; García-Crespo et al., 2021). Depending on the personal context and socio-demographic characteristics of individuals, it has a multidimensional character and is associated with the individual’s circumstances (Seligman & Csikszentmihalyi, 2000; Yin et al., 2020). When faced with adverse situations at work, the most resilient education professionals show better competencies and work skills, as well as control chronic stress, while the least resilient ones show increased fatigue and indifference (Figueiredo et al., 2020; Guo et al., 2019; Vicente de Vera-García & Gabari-Gambarte, 2019). Furthermore, resilience has been shown to help reduce perceived stress and feelings of burnout in teachers (Richards et al., 2016; Romero-Barquero, 2020). Indeed, being resilient is essential for teachers to thrive and survive in today’s school context and education systems (Ellison & Woods, 2016; González-Rivas et al., 2021).

On the basis of the above, the following research hypotheses are presented:

H.1. The levels of the burnout subscales and stress levels are expected to be higher than those of the resilience subscale in the sample of physical education teachers.

H.2. Negative relationships are expected to be found between the subscales that make up the burnout syndrome and the resilience subscales.

H.3. Positive relationships between the subscales of burnout syndrome and stress are expected to be obtained.

H.4. The levels of burnout and stress are expected to be higher in competitive teachers than in teachers who belong to the teaching profession.

Finally, the present research reflects the objectives of describing the levels of stress, burnout syndrome and resilience in Physical Education teachers and studying the existing relationships between the variables according to the current situation of the teachers.

Method

Design and Participants
A descriptive, comparative, cross-sectional and ex
post facto study was carried out by measuring a single group. No experimental treatment was administered nor was there any manipulation of the variables. The dependent variables were recorded to describe the parameters of stress, burnout syndrome, resilience, and sociodemographic aspects. As shown in Table 1, the sample of the present study consisted of 415 Physical Education teachers from Spain. The heterogeneous distribution of the sample according to the gender of the participants was represented by 69.4% for males and 30.6% (n = 127) for females. The age range of the participants was between 21-53 years (M = 28.78 ± 6.15). Within the social-occupational situation in which the study subjects were found, it should be noted that 65.8% (n = 273) were preparing to be teachers, 28.4% (n = 118) combined the study with work and 5.8% (n = 24) dedicated themselves only to work. Convenience sampling was used to select the participants by inviting subjects in possession of an academic title that would allow them to practice as Physical Education teachers and were in any of the socio-occupational situations previously exposed to participate.

Variables and Instruments

A self-registration sheet (Ad-Hoc questionnaire) of our elaboration was used in which the sociodemographic aspects were collected. The gender of the participants categorized in male and female was recorded, as well as the age of the teachers. In this way, the data of the socio-labour situation in which they were found was collected, being categorized into «Only studying», «Studying and working» and «Only working».

For this research, the version adapted by Remor (2006) of the Perceived Stress Scale (PSS), originating from the questionnaire «Perceived Stress Scale (PSS)» by Cohen, Kamarck and Mermelstein (1983) was used. This self-registration instrument evaluates the stress levels perceived in people during the last month. It is made up of 14 items that are answered through a Likert scale with five response alternatives (0 = never, 1 = almost never, 2 = occasionally, 3 = often and 4 = very often). The sum of the items indicates that the higher the score, the higher the level of perceived stress. Items 4, 5, 6, 7, 9, 10 and 13 are formulated in reverse. The original study by Cohen et al. (1983) determined the reliability of $\alpha = 0.85$, while, in the adaptation to Spanish, Remor (2006) shows values of $\alpha = .81$. In the present study, the value obtained in the internal consistency of the scale was $\alpha = .89$, which guarantees the reliability of the scale.

For the evaluation of Burnout syndrome, the version adapted to Spanish by Seisdedos (1997) of the Maslach Burnout Inventory (MBI) was used, which derives from the original version «Maslach Burnout Inventory (MBI)» created by Maslach and Jackson (1981). This questionnaire is made up of 22 items that are answered using a Likert-type scale where $0 = \text{Never}$ and $6 = \text{Daily}$. It measures the general level of Burnout and if percentiles above 75 are reached, it is included in the high category, in the middle category between 75 and 25, and low category below 25 points. Likewise, this scale responds to three dimensions: emotional exhaustion (EE), assesses the experience of being exhausted at an emotional level due to the high demands of work/study (items 1, 2, 3, 6, 8, 13, 14, 16, 20), depersonalization (D) measures relational distancing and degree of coldness (items 5, 10, 11, 15, 22) and personal fulfillment (PF) describes successful performance at work/study towards others, as well as feelings of competence (items 4, 7, 9, 12, 17, 18, 19, 21). The internal consistency of the original questionnaire proposed by Maslach and Jackson (1981) was $\alpha = .83$. While $\alpha = .74$ for EE stands out, $\alpha = .77$ for PF and $\alpha = .59$ for D. Thus, Seisdedos (1997) obtained $\alpha = .90$ for EE, $\alpha = .79$ for D and $\alpha = .71$ for PF. For this study, the reliability of this instrument, in general, was $\alpha = .68$, for the AE dimension $\alpha = .84$, for D $\alpha = .72$ and for the PF $\alpha = .74$, which guarantees the reliability of the scale.

The instrument «Connor-Davidson Resilience Scale, CD-RISC» that assesses resilience, was created by Connor and Davidson (2003), although in this study the version validated into Spanish by Crespo et al. (2014) was used. This scale consists of 25 items and is evaluated with a Likert-type scale where $0 = \text{has not been true at all}$ and $4 = \text{almost always true}$. Scores can range from 0 to 100, with greater resilience to higher scores. In this way, it is divided into five dimensions: factor 1 reflects the notion of personal competence, high standards and tenacity (items 10, 11, 12, 16, 17, 23, 24, 25), factor 2 corresponds to confidence in one’s instincts, tolerance to negative effects and strengthening the effects of stress (items 6, 7, 14, 15, 18, 19, 20), factor 3 refers to the positive acceptance of the change and secure relationships (items 1, 2, 4, 5, 8), factor 4 is related to control and purpose (items 13, 21, 22) and factor 5 manifests spiritual influences (Items 3, 9). The original version (Connor and Davidson, 2003) obtained $\alpha = .89$ and the reliability in the test-retest of $\alpha = .87$ in the general population. In the study by Broche et al. (2012) general values of $\alpha = .90$ were obtained and $\alpha = .82$ stood out for Self-
correlations were used, establishing a significance level with the relational analysis, Pearson's bivariate together with the standard deviation (SD). Continuing values of these have been presented as mean (M) tests. For the descriptive analysis of the variables, the verified using the Kolmogorov-Smirnov and Levene and homogeneity of variance of the variables were statistical analysis and data processing. The normality of the University of Granada (1230/CEIH/2020).

Results

For H.1, a descriptive analysis has been carried out. For burnout syndrome, the subscale with the highest score is emotional exhaustion (3.33±0.84), followed by personal fulfillment (2.94±0.71) and depersonalisation (2.90±0.91). Continuing with stress, it can be seen that this variable has obtained a score of 2.28±0.67. Finally, focusing attention on resilience, it is observed that the subscale with the highest score is personal competence (2.97±0.66), followed by positive acceptance (2.96±0.71), control and purpose (2.84±0.81), tolerance to negative events (2.61±0.69) and spiritual influences (2.25±0.99).

Table 1
<table>
<thead>
<tr>
<th>Variables</th>
<th>Categories</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burnout Syndrome</td>
<td>Emotional Exhaustion</td>
<td>3.33</td>
<td>0.84</td>
</tr>
<tr>
<td></td>
<td>Depersonalisation</td>
<td>2.90</td>
<td>0.71</td>
</tr>
<tr>
<td></td>
<td>Personal Fulfillment</td>
<td>2.94</td>
<td>0.71</td>
</tr>
<tr>
<td>Stress</td>
<td>Stress</td>
<td>2.28</td>
<td>0.67</td>
</tr>
<tr>
<td></td>
<td>Tolerance negative events</td>
<td>2.61</td>
<td>0.69</td>
</tr>
<tr>
<td>Resilience</td>
<td>Positive Acceptance</td>
<td>2.96</td>
<td>0.71</td>
</tr>
<tr>
<td></td>
<td>Control and Purpose</td>
<td>2.84</td>
<td>0.81</td>
</tr>
<tr>
<td></td>
<td>Spiritual Influences</td>
<td>2.25</td>
<td>0.99</td>
</tr>
</tbody>
</table>

For H.2 and H.3 a correlational analysis of the variables has been carried out. It is observed that there is a positive relationship between emotional exhaustion and depersonalisation (r=0.491) and stress (r=0.671), however, negative relationships are obtained with personal fulfilment (r=-0.463), personal competence (r=-0.442), tolerance to negative events (r=-0.453), positive acceptance (r=-0.508), control and purpose (r=-0.473) and spiritual influences (r=-0.74). Continuing with depersonalisation, negative relationships are observed with personal fulfilment (r=-0.158), personal competence (r=-0.190), tolerance to negative events (r=-0.110), positive acceptance (r=-0.197) and control and purpose (r=-0.299), however, positive relationships are obtained with stress (r=0.351) and spiritual influences (r=0.026). Looking at Personal Fulfillment, a negative relationship with stress (r=-0.541) and positive relationships with personal competence (r=0.602), tolerance to negative events (r=0.539), positive acceptance (r=0.590), control and purpose (r=0.521) and spiritual influences (r=0.254) are obtained. With regard to stress, this variable shows negative relationships with personal competence (r=-0.579), tolerance to negative events (r=-0.540), positive
acceptance (r = -0.618), control and purpose (r = -0.571) and spiritual influences (r = -0.052). Regarding personal competence, positive relationships are shown with tolerance to negative events (r=0.695), positive acceptance (r=0.747), control and purpose (r=0.639) and spiritual influences (r=0.142). Following tolerance to negative events, positive relationships are shown with positive acceptance (r=0.785), control and purpose (r=0.554) and spiritual influences (r=0.274).

For personal acceptance, positive relationships are shown with control and purpose (r=0.555) and spiritual influences (r=0.142). Following tolerance to negative events, positive relationships are shown with positive acceptance (r=0.785), control and purpose (r=0.639) and spiritual influences (r=0.193). Finally, for control and purpose, a positive relationship is obtained with spiritual influences (r=0.156).

Table 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>Work and Study</th>
<th>Only Study</th>
<th>Only Work</th>
<th>M</th>
<th>SD</th>
<th>F</th>
<th>Sig.</th>
<th>ES (d)</th>
<th>CI 95%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stress</td>
<td>2.11</td>
<td>0.98</td>
<td>0.55</td>
<td>1.826</td>
<td>0.05c</td>
<td></td>
<td>0.705</td>
<td>[0.055; 0.976]</td>
<td></td>
</tr>
<tr>
<td>Personal Acceptance</td>
<td>2.86</td>
<td>0.68</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control and Purpose</td>
<td>3.61</td>
<td>0.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spiritual Influences</td>
<td>2.11</td>
<td>0.98</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note 1: Differences between Work and Study and Only Study; Note 2: *Correlation is significant at the 0.05 level (bilateral).

Finally, for H.4, a one-factor ANOVA was performed, determining statistically significant differences at p = 0.05 and the effect size (d) according to Cohen (1992). For stress, statistically significant differences are observed for the Only Study and Only Work groups (p = 0.05; d=0.553). In this case, higher scores are observed for those participants who only study (2.33±0.68) compared to those who only work (1.96±0.53). Continuing with the burnout syndrome, specifically in the emotional exhaustion subscale, statistically significant differences were observed for the Work and Study and Only Study groups (p = 0.05; d=0.177). Participants who only study show higher levels (3.42±0.84) than those who combine both activities (3.11±0.83). Following with resilience, specifically with the positive acceptance subscale, statistically significant differences are observed for the Work and Study and Only Work groups (p = 0.05; d=0.853). In this case, higher scores are observed for those participants who only work (3.44±0.52) than those who combine both activities (2.88±0.68). Statistically significant differences were also observed between the groups Work and Study and Only Study (p = 0.05; d=0.269) and Only Study and Only Work (p = 0.05; d=0.704). The differences in the first group show that those who only study (2.37±0.95) have higher scores than those who combine both activities (2.11±0.98). Finally, for the second group, it is observed that those who only study (2.37±0.95) reflect higher scores than those who only work (1.60±0.99).

Discussion

The present research reflects the levels of stress, burnout syndrome and resilience in a sample of physical education teachers, as well as the relationships between the variables. The results obtained respond to the proposed hypotheses and the proposed objectives, so that the present discussion aims to compare the data obtained with those of other research already carried out.

Based on what was developed in H.1, it can be observed that not all of the items that make up the stress and burnout syndrome subscale outperform the items of the resilience subscale. Similar results were obtained by Chesak et al., (2019), González-Valero et al., (2019) and Richards et al., (2019) stating that despite the fact that teaching work involves high levels of stress, as well as a high level of burnout syndrome, teachers carry out the use of techniques to channel disruptive states (Latino & Catildi, 2021; Lee, 2019). Furthermore, the study conducted by Nishida & Otomo (2010) concludes that, in a sample of teachers, the practice of physical exercise provided benefits to teachers' mental health, increasing and improving the quality of the teaching-learning process and motivation towards work.
For H.2, no negative relationships are observed between all the variables that make up the subscales of resilience and burnout syndrome. Very distant results were obtained by de Vera and Gambarte (2019), stating de Vera-García and Gabari-Gambarte, (2019) that resilience is a protective factor against disruptive states such as burnout syndrome and stress. In this case, the study by Martínez-Ramón et al. (2021) states that, in the presence of adverse situations, teachers with higher levels of resilience do not burn out, but acquire a greater work commitment, overcoming difficulties. Likewise, for H.3, positive relationships are observed with emotional exhaustion and depersonalisation, however, a negative relationship is obtained with personal fulfilment. Given these results, Chesak et al. (2019) and Conde-Pipó et al. (2021) affirm that stress is related to emotional exhaustion and therefore to depersonalisation, due to the negative effects of this variable on mental health. In addition, research by Zadok-Gurman et al., (2021) states that stress is negatively related to personal fulfilment as this variable has a negative impact on personal success and the worsening of the achievement of goals.

For H.4, it is observed that the teachers in the competitive examination reflect higher levels of stress, emotional exhaustion and depersonalisation than teachers belonging to the teaching profession. In view of these results, de la Fuente-Arias & Amate-Romera, (2019) state that the selection process for the Spanish public teaching profession involves a lot of effort and preparation. Likewise, González-Calvo (2020) and Bakioflu & Kiraz (2019) found that as the preparation time of the candidate increases, there is an increase in stress and burnout syndrome, due to the non-achievement of the expected goal. Also, higher scores on personal fulfilment, personal competence, tolerance to negative events and positive acceptance are observed for those teachers who belong to the state civil service. In view of these findings, Noriega et al. (2015) state that these results are due to the fact that teachers who belong to the public teaching body feel fully satisfied with their work, despite its negative characteristics. Finally, for control and purpose and spiritual influences, it is observed that oppositional teachers show higher scores. In view of these results, Vera-García and Gabari-Gambarte (2019) and Puertas-Molero et al. (2018) affirm that emotional control, as well as the spiritual realm, play a key role in overcoming events that involve high levels of stress.

Limitations and future perspectives

The present research reflects several limitations. Also, the very nature of the study reflects one of them, since, being a descriptive and cross-sectional study, it has only been possible to analyse the variables at a single point in time. Furthermore, attention must be paid to the sample, as it belongs to a very specific geographical area and to a very specific branch of study, so that no generalisations can be made.

Finally, in terms of future perspectives, focusing on the results obtained, the aim is to develop an intervention that affects the control of disruptive states such as burnout syndrome and stress, while at the same time increasing the levels of resilience in teachers in the public teaching profession and in teachers in competitive examinations.

Conclusions

The descriptive analysis shows that for burnout syndrome the subscale with the highest score is emotional exhaustion, followed by personal fulfilment and depersonalisation. For resilience, it is observed that the subscale with the highest score is personal competence, followed by positive acceptance, control and purpose, tolerance to negative events and spiritual influences. Stress shows a higher score than spiritual influences.

Regarding the correlational analysis, it is observed that there is a positive relationship between emotional exhaustion and depersonalisation and stress, however, negative relationships are obtained with personal fulfilment, personal competence, tolerance to negative events, positive acceptance, control and purpose and spiritual influences. Continuing with depersonalisation, negative relationships are observed with personal fulfilment, personal competence, tolerance to negative events, positive acceptance and control and purpose, however, positive relationships are obtained with stress and spiritual influences. Looking at Personal Fulfilment, a negative relationship with stress and positive relationships with personal competence, tolerance to negative events, positive acceptance, control and purpose and spiritual influences are obtained. With regard to stress, this variable shows negative relationships with personal competence, tolerance to negative events, positive acceptance, control and purpose and spiritual influences. Regarding personal competence, positive relationships are shown with tolerance to negative events, positive acceptance, control and purpose and
spiritual influences. Following tolerance to negative events, positive relationships are shown with positive acceptance, control and purpose and spiritual influences. For personal acceptance, positive relationships are shown with control and purpose and spiritual influences. Lastly, for control and purpose, a positive relationship is obtained with spiritual influences.

Finally, for the comparative analysis it is obtained that participants who work and study and those who only study show higher scores in stress, emotional exhaustion, depersonalization, control and purpose and spiritual influences, while those who only work show higher scores in personal fulfillment, personal competence, tolerance to negative events and resilience to positive acceptance.

References


