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Trabajo completo publicado en: García-Garnica, M., Chacón-Cuberos, R., Expósito-López, J., & Martínez-Martínez, A. (2022). Emotional management and self-efficacy associated with low stress levels in Spanish university teachers: A national perspective. *Bordón. Revista de Pedagogía*, 74(1), 29–44.
<https://doi.org/10.13042/Bordon.2022.90354>

Emotional management and self-efficacy associated with low stress levels in Spanish university teachers: A national perspective

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Abstract

Stress is defined as a state of physical and mental exhaustion, derived from a demanding context. Several national reports indicate that six out of ten teachers present medium to high levels of stress, affecting the quality of their professional activity. This perspective is extremely common in Higher Education. The aim of this research was to better understand the relationships between emotional management, stress and self-efficacy, alongside the effect of other academic and professional variables in Higher Education teachers. **METHOD.** The present study was descriptive, ex post-facto and cross-sectional and was performed with a sample of 798 Higher Education teachers from 15 Spanish universities, using IBM SPSS v.23.0 software for data analysis. **RESULTS.** Better emotional regulation was observed in males, those with a stable job and those working in the field of Science. Stress was higher amongst non-academic staff, whilst teaching staff perceived themselves to have greater self-efficacy when they reported family responsibilities and other obligations. Along these lines, teaching experience was determined to favour cognitive re-evaluation and self-efficacy, whilst also decreasing stress levels. This was especially the case amongst permanent teaching staff. Further, emotional regulation favoured a decrease in stress and the development of self-efficacy. **DISCUSSION.** In conclusion, the need is established to conduct actions for the development of emotional regulation techniques within university teaching staff. This will allow one self to manage stressful situations and inoculate anxiety and stress derived from professional activity. Ultimately, it will result in an improvement in teaching activity, favouring the achievement of the proposed teaching objectives and the academic performance of students.

Keywords: *Higher Education, Stress management, Emotional adjustment, Self-efficacy.*

Introduction

Teaching is one of the most extensively examined professions when it comes to working conditions, performance, and wellbeing. Important changes such as new social dynamics,

emerging employment types, evolving training needs, and technological expansion have significantly affected the higher education sector. In Spain, university teachers face high academic and work demands, including multi-disciplinary training and research excellence. Stress is a state of physical and emotional imbalance that occurs when individuals perceive themselves as unable to overcome certain demands. WHO data indicates two out of every five workers experience job stress, and in Spain, stress levels among university staff approach 40%. Stress impacts job performance, health, and institutional reputation. Emotional regulation, the ability to identify, modify, and express emotions, is crucial and includes strategies like cognitive re-evaluation and expressive suppression. Self-efficacy refers to beliefs about one's capacity to manage and organize resources to face challenges successfully. Stress mediates self-efficacy and burnout. This study aims to analyze the relationships between emotional regulation, stress, and self-efficacy, considering working conditions. It proposes that higher stress is associated with lower emotional regulation and self-efficacy and that staff with job instability and family responsibilities report higher stress and lower self-efficacy.

Method

Design and participants

The present study presents research which employed a non-experimental, ex post-facto, descriptive and cross-sectional design. The population of interest was Spanish university staff. Staff from different Spanish universities were invited to participate, thus, sampling was random and did not use convenience sampling. Measurements were made once within a single group. The sample was comprised of a total of 798 higher education teachers from 15 Spanish universities. Respondents were represented by the four knowledge areas: Health Sciences (23.4%), Social and Legal Sciences (22.7%), Technology and Engineering Sciences (26.7%) and Humanities (27.2%). The sample was distributed according to 54.5% males and 45.5% females. Self-reported ages belonged to four groups which were distributed from 30 years old to 55 years and above. In this case, the largest proportion pertained to the age range of 41-55 years (39.8%), followed by older than 55 (29.8%), between 30 and 40 (23.4%) and, finally, younger than 30 (6.9%). In relation to the professional setting, 53.4% were teaching staff, whilst 46.6% were non-teaching staff. Participants had different levels of teaching experience, as follows: Less than 5 years (19%), between 5 and 10 years (15.2%), between 11 and 20 years (24%), between 21 and 30 years (19.5%) and more than 30 years (22.3%).

Instruments

In order to measure the proposed variables, the following instruments were employed:

Emotional regulation questionnaire, ERQ (Gross and John, 2003). This is a self-report questionnaire that evaluates two factors: Cognitive re-evaluation (6 items) and expressive suppression (4 items). It comprises 10 items which are rated along

a 7-point Likert scale, with 1 being totally disagree and 7 being totally agree. The validated Spanish version of this instrument (Cabello *et al.*, 2013) presents acceptable internal consistency, with an alpha coefficient of .75 for expressive suppression and an alpha coefficient of .79 for cognitive re-evaluation.

- Perceived Stress Scale, PSS-14 (Cohen *et al.*, 1983). This scale is a self-report instrument that evaluates perceptions of stress over the month prior to instrument completion and is based on the model of stress described by Lazarus and Folkman. It comprises 14 items which evaluate the extent to which respondents perceived their life as being unpredictable, uncontrollable and overbearing throughout the previous month. It employs a 5-point response scale (1 = never; 5 = very often). An overall score is obtained by inverting scores for items 4, 5, 6, 7, 9, 10 and 13 and, following this, adding all of the scores together. Higher scores indicate perceptions of higher levels of stress. The Spanish version of the instrument has demonstrated adequate reliability (internal consistency, $\alpha = .81$, and test-retest, $r = .73$), validity (concurrent) and sensitivity (Remor, 2006).

- General Self-Efficacy Scale (Baessler and Schwarzer, 1996). This self-report questionnaire enables evaluations of feelings of personal competence for effectively overcoming a variety of situations. It comprises 10 items rated along a 4-point Likert scale (1 = unsure; 4 = sure). For the Spanish version of the instrument, internal consistency of .87 has been obtained (alpha coefficient) and a split half correlation of .88 (Sanjuán *et al.*, 2000).

Procedure

Firstly, an online version of the questionnaire was constructed using the tool Google Forms. This modality enabled access to a broader and more geographically disperse population, with lower costs to time and resources. Next, this was sent out via mass mail-out to teaching staff at various Spanish universities, reaching them through institutional email. The email included an invitation to participate with a link to the questionnaire, alongside a participation information letter containing the objectives and confidentiality criteria. The full process complied with the ethical research principles defined in the Declaration of Helsinki in 1975 and later re-established in Brazil in 2013.

Data analysis

Data analysis was performed using the software IBM SPSS® for Windows in its version 23.0. Frequencies and means were employed for basic descriptive analysis. Likewise, Cronbach alpha coefficient analysis was employed to determine internal consistency of instruments, setting the reliability index at 95%. The parametric nature of the data permitted the use of Student's t-test for independent samples and one-way ANOVA in order to examine relationships between dependent and independent variables.

Results

Emotional regulation (ER)

No relationship was found between cognitive re-evaluation (RC) and the independent variables established in the research as show Table 1 and Table 2. In relation to the dimension of expressive suppression (SE), statistically significant differences were identified for the variables of sex, professional category, field of knowledge (Table 1) and teaching experience (Table 2).

In this sense, when specifically considering sex, male teachers were seen to score more highly on this dimension. With regards to professional

category, official permanent teaching staff reported higher scores relative to casual or non-permanent staff. Moreover, it was observed that teaching staff in the field of science obtained higher average scores for expressive suppression when compared with those in the field of humanities.

Finally, in relation to teaching experience, it was uncovered that university staff with greater experience (more than 30 years) also showed a greater degree of expressive suppression, followed by those who reported the least experience (less than 5 years). The three middle intervals relating to length of experience presented lower scores for expressive suppression.

Perceived stress (PE)

A link was also found between perceived stress (EP) and a number of the independent variables included in the present research: Family responsibility, professional category, any other job position, age and teaching experience. In relation to family responsibility, it was revealed that teachers who report having fewer duties in the family setting are those who have greater perceptions of stress, with perceptions being lower amongst those with a high or a very high level of family responsibility.

For professional category, it is observed in Table 1 that casual or non-permanent staff scored more highly for perceived stress when compared with official permanent teaching staff. With respect to job position, perceptions of stress were reduced amongst university staff who combined teaching work with another profession.

Furthermore, it is observed in Table 2 that perceived stress level is greater amongst younger participants, with the highest values being found amongst teachers younger than 30 years old. Specifically, it is seen that as the age-range being examined increases, the perception of stress decreases.

Finally, in relation to teaching experience, it is uncovered that whilst those who had spent the least time teaching were most vulnerable to high stress levels, beyond this perceived stress level reduced as the number of years of teaching experience increased. Concretely, highest scores were found amongst university teaching staff who had spent less than 5 exercising in the teaching profession.

General self-efficacy (GSE)

Further, as can be observed in Tables 1 and 2, an association was found between general self-efficacy (AG) and two of the independent variables, namely, family responsibility and having another job position. In this sense, university teachers who reported high or very high levels of family responsibility have greater self-perceptions of general self-efficacy when compared to those who have few or no responsibilities in this setting. In the same way, university staff who combine their teaching work at the university with another job position scored more highly for self-efficacy than those who reported their

Discussion and conclusions

The findings indicate that emotional regulation and self-efficacy are key protective factors against stress in university teachers. Cognitive re-evaluation is associated with lower stress and higher self-efficacy, while expressive suppression correlates with higher

stress. Male teachers and those with permanent positions in science fields demonstrated better emotional regulation. Younger and less experienced teachers are more vulnerable to stress. Teachers with family responsibilities and additional jobs show higher self-efficacy and lower stress. Interventions aimed at developing emotional regulation and self-efficacy can improve wellbeing and professional performance. Limitations include the cross-sectional and descriptive design, which limits causal inferences. The timing of data collection during the COVID-19 pandemic may have influenced results. Future studies should use stratified random sampling and longitudinal designs to better understand causal relationships.

Overall relationship between variables

Table 3 presents bivariate Pearson correlations between the studied variables, considering the age of individuals, teaching experience and professional category (official permanent staff at the top and casual or non-permanent staff at the bottom). Important results are observed for the association between age and expressive suppression, showing a negative relationship in relation to casual or non-permanent staff and a non-significant relationship in official permanent staff. Likewise, age was negatively correlated with perceived stress in both groups, displaying a slightly weaker correlation strength in relation to permanent staff.

The relationship between cognitive re-evaluation and teaching experience also turned out to be important, although this association was only significant for permanent staff. Likewise, the association between teaching experience and perceived stress was statistically significant in both groups, being weaker in official permanent staff. General self-efficacy was only positively related with cognitive re-evaluation in permanent staff.

Finally, the relationship between perceived stress and emotional regulation was addressed. Statistically significant associations were only observed in relation to non-permanent staff, with stress being negatively associated with cognitive re-evaluation ($r = -.237$; $p = .01$) and positively associated with expressive suppression ($r = .206$; $p = .01$). Likewise, stress was inversely associated with general self-efficacy, producing a stronger correlation in relation to non-permanent staff.

Discussion and conclusions

When we talk about emotional regulation we are referring to the process through which individuals identify, modify and express their emotions whilst interacting with other. Emotional regulation is determined by two highly differentiated variables. The first of these is cognitive re-evaluation. This consists of making some sort of mental transformation of a situation that challenges us, in this way reducing its emotional impact. The second is expressive suppression. This refers to not showing any type of emotional response, neither positive nor negative (Cabello *et al.*, 2013).

The present research establishes that the capacity for cognitive re-evaluation of university teaching staff can be explained by five of the points on a 7-point scale, without finding any relationship with any of the sociodemographic variables. Further, average scores for expressive suppression were lower. This indicates a moderate tendency towards the suppression of positive or negative emotions. This variable, however, was seen to be determined by factors such as sex, professional category, field of knowledge and teaching experience.

Males were found to repress their emotional expressions much more than females. These results are in accordance with those reported in a study by García (2017). This study indicated that the origin of this suppression may be linked to social expectations and the roles that have been traditionally attributed to males. As a result of this, males may feel a degree of stress if they openly demonstrate their emotions. Other research studies argue that these results could be related with gender differences, arguing that females present better emotional management skills than males, or that males employ expressive

suppression to a greater extent (Illaja and Reyes, 2016; Moreta, *et al.*, 2018; Nolen-Hoeksema and Aldao, 2019).

With regards to professional category, official permanent teaching staff (contracted lecturers and university professors) present higher scores for expressive suppression when compared to casual or non-permanent staff (substitutes, short-term contracted researchers, junior researchers, research assistants, amongst others).

Funding

This research was funded by the national research project PID2019-105631GA-I00 - “The influence of neoliberalism on academic identities and professional satisfaction.”

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