An explanatory model of the effect of psychosocial variables on non-verbal communicative factors in university teachers of education degrees

Un modelo explicativo del efecto de las variables psicosociales sobre los factores comunicativos no verbales en profesores universitarios de grados de educación

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Resumen

Diversos estudios han puesto de manifiesto la alarmante situación laboral de los docentes universitarios. El ámbito docente junto con la labor investigadora incrementa los niveles de estrés y burnout. Es fundamental estudiar cómo algunos factores psicosociales pueden incidir sobre el lenguaje no verbal del profesorado universitario. Los objetivos de esta investigación fueron (a) desarrollar y ajustar un modelo explicativo sobre la relación entre los niveles de estrés, el síndrome de Burnout, la Inteligencia Emocional y la comunicación no verbal y (b) estudiar las diferencias del modelo teórico en función del sexo de los participantes. Esta investigación exploratoria y transversal se realizó sobre 1316 profesores universitarios españoles. Para la recogida de los datos se han utilizado los siguientes instrumentos: Escala de Estrés Percibido, Inventario de Burnout de Maslach, Trait Meta-Mood Scale and Non-verbal Immediacy Scale Self-report. Los resultados mostraron una relación directa entre el estrés y el agotamiento emocional. También se halló una relación indirecta entre la despersonalización y la eficacia personal, siento ésta más fuerte en las mujeres. El efecto de la reparación emocional sobre el agotamiento emocional fue inverso y mayor para el sexo masculino. Como conclusiones existen diferencias en el efecto de las variables psicosociales sobre los procesos comunicativos no verbales de los docentes universitarios según el sexo.

Palabras clave: estrés; síndrome de burnout; inteligencia emocional; comunicación no verbal.

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Abstract

Several studies have highlighted the alarming work situation of university teachers. The teaching field, together with research work, increases levels of stress and burnout. It is essential to study how some psychosocial factors may affect the non-verbal language of university teachers. The objectives of this research were (a) to develop and adjust an explanatory model of the relationship between stress levels, burnout syndrome, emotional intelligence and non-verbal communication and (b) to study the differences in the theoretical model according to the sex of the participants. This exploratory and cross-sectional research was carried out on 1316 Spanish university teachers. The following instruments were used for data collection: Perceived Stress Scale, Maslach Burnout Inventory, Trait Meta-Mood Scale and Non-verbal Immediacy Scale Self-report. The results showed a direct relationship between stress and emotional exhaustion. An indirect relationship was also found between depersonalization and self-efficacy, the latter being stronger in women. The effect of emotional repair on emotional exhaustion was inverse and stronger for males. As conclusions, there are differences in the effect of psychosocial variables on the non-verbal communicative processes of university teachers according to gender.

Keywords: stress; burnout syndrome; emotional intelligence; non-verbal communication.

Introduction

The Spanish higher education system has undergone a gradual evolution from the advent of democracy to the present day (Hinojo-Lucena et al., 2023; Aznar-Díaz et al., 2020). The incorporation of a culture based on an evaluation culture began in the 1970s, with the first appearance of the concepts of evaluation indicators, quality assurance, evaluation of postgraduate programs and faculty accreditation, among others (Hinojo-Lucena et al., 2023). Specifically, the Organic Law of University Reform was characterized by the implementation of an evaluation of the teaching and research profile of university faculty (García-García and Hervás-Torres, 2020).

In order to evaluate the teaching and research careers of Spanish university teachers, an organization known as the National Agency for Quality Assessment and Accreditation (ANECA) has been consolidated and established. This organization has the objective of determining whether different university teachers are suitable or unsuitable for promotion within the university sphere (Hinojo-Lucena et al., 2023; Ràfols & Molas-Gallart, 2022). The current system of evaluation and accreditation of university teachers presents different questions (Hinojo-Lucena et al., 2023). The first of these is related to the evaluation indicators and the bureaucratic process suffered by those who want to be promoted (Medina-Benavides et al., 2023). The lack of objectivity and transparency in the different teacher evaluation processes is also highlighted (Aznar-Díaz et al., 2020; Ràfols & Molas-Gallart, 2022).

Everything mentioned in the previous paragraph highlights the difficulty of promotion within the Spanish university system. This points to the need to carry out studies focused on the study of psychosocial variables in the university teaching population. The majority of research studying university teachers has focused on aspects related to the teaching-learning process (Escobedo-Seguel & Artera-Viveros, 2015; Simbolon, 2015). In the last decade this trend has begun to change, focusing increasingly on psychosocial aspects (Lee, 2019; Guidetti et al., 2018).

One of the main factors that is currently influencing the work environment is stress (Garcés-Delgado et al., 2023). When stress is suffered over a long time, it leads to the development of Burnout Syndrome (Appelbaum et al., 2019; Bagheri-Hosseinabadi et al., 2019). This is one of the factors that is currently generating more absenteeism in the different working environments (Bravo-Lucas et al., 2022). It has been found that in the university teaching population, the variables that increase stress levels are teaching and research level (Cladellas-Pros et al., 2018). Prolonged stress levels lead to emotional exhaustion (Agustí-López et al., 2023; Cladellas-Pros et al., 2018). It can also lead to low competence for the task at hand (Agustí-López et al., 2023; Cladellas-Pros et al., 2018).

Numerous studies show that Burnout Syndrome is determined by excessive workload and daily contact with students and colleagues (Rojas-Solís et al., 2021). This has come to constitute one of the major risk factors for teachers' mental health and well-being (Aldrup et al., 2018; Roohani and Dayeri, 2019). Burnout can lead to demotivation and disinterest, as well as a feeling of dislike for the profession (Fiorilli et al., 2016). It has also been found that burnout syndrome causes a high number of annual absences from teaching (Garcés-Delgado et al., 2023).

Emotional Intelligence has aroused great interest within the field of teaching (Suárez-Martel and Martín-Santana, 2021). It has been shown that this variable contributes to the reduction of stress levels, as well as to the absence of Burnout Syndrome (Gilar-Corbi et al., 2018). It is a variable that favours emotional management and regulation (Suárez-Martel and Martín-Santana, 2021). These aspects are essential to improve the mental well-being of workers and thus optimise the teaching-learning process (Báez-Mirón et al., 2019; Garipova, 2018). In particular, it has been observed that the teaching population requires high emotional competences (Garcés-Delgado et al., 2023).

Another essential factor in education is non-verbal language (Khan, 2023). The appropriate use of this language helps to properly manage and regulate emotions, to externalise concerns and to facilitate social relations (Castañer et al., 2016; Cestero-Mancera, 2016). This contributes to the resolution and control of conflict situations (Khan, 2023). As a consequence, stress levels and Burnout Syndrome are reduced, as well as an increase in Emotional Intelligence (Khan, 2023; Melguizo-Ibáñez et al., 2023).

Previous studies focused on the study of psychosocial variables have found differences in these variables according to gender (Garcés-Delgado et al., 2023). It has been observed that the male population has a lower emotional competence compared to the female population (Garcés-Delgado et al., 2023). Likewise, it has been found that these differences also exist within the teaching population (Garcés-Delgado et al., 2023).

For this reason, the present investigation establishes the following objectives: a) to develop an explanatory model on the relationships between stress, Burnout Syndrome, Emotional Intelligence and non-verbal language; b) to contrast the structural model developed according to gender through a multi-group analysis.

Method

Participants

A descriptive, exploratory and cross-sectional study was carried out. The sample consisted of a total of 1316 teachers from all public universities in Spain. There were 623 male participants (47.3%) and 693 female participants (52.7%). The age of the study participants ranged from 24 to 70 years (M=45.64; SD: 10.33). A representative sample of 1316 university teachers (sampling error 0.03: CI=95.0%) was established using stratified random sampling techniques from the university universe. For the 2022/2023 academic year, there were a total of 137090 university teachers (Ministry of Science, Innovation and Universities, 2023).

Instruments

The instruments used are described below. All the instruments used have been designed and adapted by the scientific community. In addition, in previous research they have shown a high degree of internal consistency.

Own *ad hoc* questionnaire: This instrument was used to collect socio-demographic variables such as gender (male/female) and age of the participants.

Perceived Stress Scale (PSS): The instrument was developed by Cohen et al. (1983). It was adapted by Remor (2006). This questionnaire is composed of 14 items and answers a Likert scale of 5 options ranging (0 = "Never"; 4 = "Very often"). The total summary indicates that the higher the

score, the higher the level of perceived stress. The study by Remor (2006) obtained a reliability of α = 0.81, with this data being similar to that found in this study (α = 0.91).

Maslach Burnout Inventory (MBI) This questionnaire was developed by Maslach and Jackson (1981). For this research, the version of Seisdedos (1997) has been used. It is composed of 22 items formed by a Likert type scale of 7 options (0 = "Never"; 6 = "Every day"). The Burnout Syndrome is constituted by three dimensions, which are: emotional exhaustion (BEE), depersonalization (DB) and personal efficacy (BPE). Reliability of the scale in the study by Seisdedos (1997), obtained a α = 0.90 for BEE, a α = 0.79 for the DB dimension and a α = 0.71 for BPE. In the present study the internal consistency of the scale had a α = 0.901 for the BEE, α = 0.74 for the DB and α=0.825 for the BPE.

Trait Meta-Mood Scale (TMMS-24). This instrument was developed by Salovey et al. (1995). The version of Fernández-Berrocal et al. (2004) was used for this research. It consists of a total of 24 items, which respond to a Likert type scale with 5 options (1 = "Not at all"; 5 = "Totally agree"). Furthermore, through this scale is constituted in three dimensions: Emotional Attention (EIEA), Emotional Clarity (EIEC) and Emotional Repair (EIER). The reliability of the original scale was a α = 0.90 for the EIEA, a α = 0.90 for the EIEC and a α = 0.86 for the EIER. In this study the consistency of the scale was α = 0.896 for the EIEA, a α = 0.904 for the EIEC category and a α = 0.881 for the EIER.

Nonverbal Immediacy Self-Report Scale (NIS): It was developed by Richmond et al. (2003). Through this instrument it is possible to obtain the sum of a subject's perception of his or her use of non-verbal language. The scale is composed of 26 items, which respond to a Likert-type scale with 5 options ranging (1 = "Never"; 5 = "Very often"). Thirteen of the items are positively scored (1, 2, 6, 10, 12, 13, 14, 16, 17, 19, 21, 22 and 25). The rest are negatively worded (3, 4, 5, 7, 8, 9, 11, 15, 18, 20, 23, 24 and 26). The original version of this instrument obtained a reliability of α = 0.80. For this study, α = 0.828 was obtained.

Procedure

First of all, the collaboration of the professors of the Spanish public universities was requested through an informative letter. The initial contact was made by the Department of Didactics of Musical, Plastic and Bodily Expression at the University of Granada. This letter explained the type of study and the objectives of the research. Once informed consent had been obtained from the participants, they were given access to the questionnaire. This was available on the Google Form platform. The questionnaires were sent by e-mail, together with the necessary instructions for their correct completion. It was requested that the scale be sent only once, in order to guarantee the veracity of the data.

A total of 1403 university lecturers initially took part in the study. Eighty-seven questionnaires were eliminated because they were not properly filled in. It should be noted that anonymity and confidentiality of the data were guaranteed. Regarding the ethical aspects of the research, this study was approved and supervised by an ethics committee (2966/CEIH/2022).

Data Analysis

Descriptive analysis was carried out using SPSS software version 22.0 (IBM Corp., Armonk, NY, USA). This program was also used to establish the internal scale reliability of the scales through the Cronbach's alpha test. AMOS software version 22.0 (IBM Corp., Armonk, NY, SA) was used to develop the theoretical structural equation model. The significance level was set at 0.05 using Pearson's Chi-square test. The theoretical model is shown in Figure 1.

The model was tested for compatibility. For reliability, goodness-of-fit adjustments were taken into account (Kyriazos, 2018; Maydeu-Olivares, 2017; Marsh, 2007; Bentler, 1990; McDonald and Marsh, 1990). Also, for Chi-square, non-significant values associated with p indicate a good fit of the model (Kyriazos, 2018; Maydeu-Olivares, 2017; Marsh, 2007; Bentler, 1990; McDonald and Marsh, 1990). According to the value of the comparative fit index (CFI), it will be acceptable with

values above 0.90 and excellent with values above 0.95 (Kyriazos, 2018; Maydeu-Olivares, 2017; Marsh, 2007; Bentler, 1990; McDonald and Marsh, 1990). For the normalized fit index (NFI) values should be above 0.90 (Kyriazos, 2018; Maydeu-Olivares, 2017; Marsh, 2007; Bentler, 1990; McDonald and Marsh, 1990). For the incremental fit index (IFI) it shall be considered acceptable with values above 0.90 and excellent with values above 0.95 (Kyriazos, 2018; Maydeu-Olivares, 2017; Marsh, 2007; Bentler, 1990; McDonald and Marsh, 1990). Finally, the root mean square error of approximation (RMSEA) shall be considered excellent when it is less than 0.08 (Kyriazos, 2018; Maydeu-Olivares, 2017; Marsh, 2007; Bentler, 1990; McDonald and Marsh, 1990).

Figure 1
Theoretical model proposed
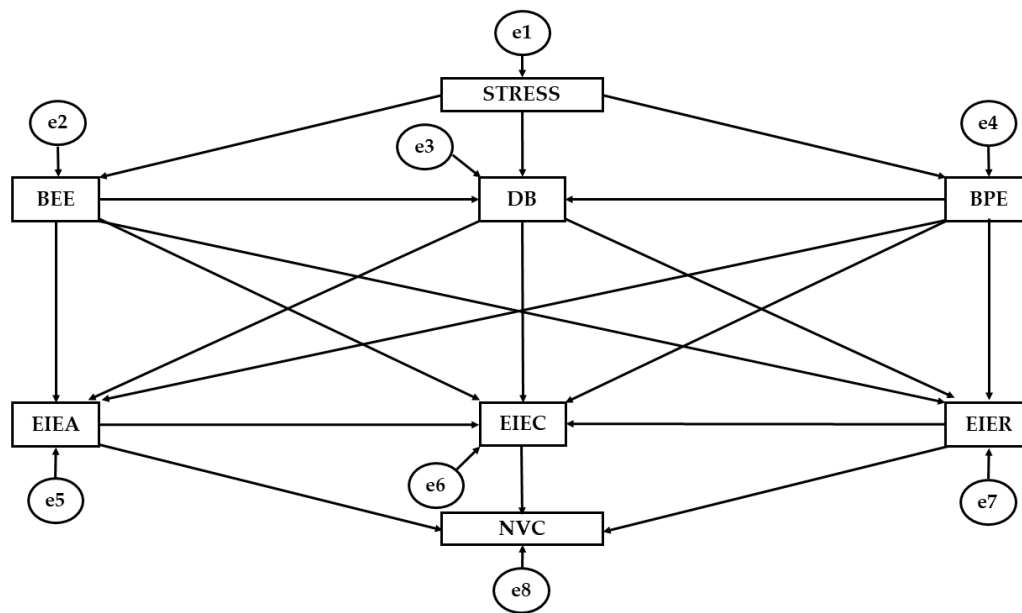
Note. BEE = Emotional Exhaustion; DB = Depersonalization; BPE = Personal Efficacy; EIEA = Emotional Attention; EIEC = Emotional Clarity; EIER = Emotional Repair; NVC = Non-Verbal Communication

Results

Once the material and method section has been contextualized, the results of the research are presented below.

The indices obtained for this structural equation model showed a good fit. First, the Chi-square showed significant values (X^2 = 444.751; p < 0.001). It is important to note that this index is sensitive to sample size, and it is essential to take into account other standardized indices 95 (Kyriazos, 2018; Maydeu-Olivares, 2017; Marsh, 2007; Bentler, 1990; McDonald and Marsh, 1990). The NFI showed a value of 0.912. The CFI obtained a value of 0.902 and the IFI showed a value of 0.914. In addition, the RMSEA obtained a value of 0.079, which reveals a good fit for this parameter.

The regression weights of the structural model for men are presented below. The estimated parameter values are given in table 1. The magnitude of the parameters should be appropriate and the effects significantly different from zero (Kyriazos, 2018; Maydeu-Olivares, 2017; Marsh, 2007; Bentler, 1990; McDonald and Marsh, 1990). Similarly, inappropriate estimates, such as negative variances, should not be obtained (Kyriazos, 2018; Maydeu-Olivares, 2017; Marsh, 2007; Bentler, 1990; McDonald and Marsh, 1990).

Analyzing Burnout Syndrome and stress, a negative effect was found between self-efficacy and stress (p < 0.001; β = −0.527). However, a direct relationship was obtained between stress and

emotional exhaustion ($p < 0.001$; β = 0.723). No statistically significant data were found between stress and depersonalization. Likewise, among the dimensions of Burnout Syndrome, a direct effect was found between emotional exhaustion and depersonalization ($p < 0.001$; β = 0.536). In contrast, a negative effect was found between depersonalization and personal fulfilment ($p < 0.05$; β = −0.090).

Regarding Burnout Syndrome and Emotional Intelligence, a positive association was obtained between self-fulfillment, emotional recovery ($p < 0.001$; β = 0.488), emotional attention ($p < 0.001$; r = 0.239) and emotional clarity ($p < 0.001$; β = 0.201). An indirect relationship was obtained between depersonalization and emotional clarity ($p < 0.001$; β = −0.140). No significant associations were found between depersonalization and emotional repair, nor with emotional attention. With regard to emotional exhaustion, statistically significant and positive data were found with emotion mindfulness ($p < 0.001$; β = 0.251) and with emotional clarity ($p < 0.01$; β = 0.124). This was negatively related to emotional repair ($p < 0.05$; β = −0.094).

Considering the association between the dimensions of Emotional Intelligence, significant and direct data were obtained between emotional clarity and emotional attention ($p < 0.001$; β = 0.134) and between emotional repair and emotional clarity ($p < 0.001$; β = 0.378). Regarding the perception of the use of non-verbal communication and emotional intelligence, statistically significant data were obtained with emotional attention ($p < 0.01$; β = 0.112), emotional clarity ($p < 0.001$; β = 0.345) and emotional repair ($p < 0.001$; β = 0.137).

Table 1
Regression weight and standardized regression weights in male population

Associations between variables			R.W.				S.R.W.
			EST	S.E.	C.R.	*p*	β
BPE	←	STRESS	−0.458	0.030	−15.452	***	−0.527
BEE	←	STRESS	0.889	0.034	26.094	***	0.723
DB	←	BEE	0.434	0.038	11.395	***	0.536
DB	←	BPE	−0.103	0.044	−2.364	*	−0.090
DB	←	STRESS	0.012	0.051	0.236	0.814	0.012
EIER	←	BPE	0.549	0.042	13.032	***	0.488
EIER	←	DB	0.061	0.042	1.463	0.144	0.062
EIEA	←	DB	0.077	0.052	1.480	0.139	0.070
EIEA	←	BEE	0.222	0.043	5.153	***	0.251
EIER	←	BEE	−0.075	0.035	−2.147	*	−0.094
EIEA	←	BPE	0.300	0.052	5.752	***	0.239
EIEC	←	EIEA	0.120	0.032	3.788	***	0.134
EIEC	←	EIER	0.377	0.039	9.637	***	0.378
EIEC	←	BEE	0.099	0.035	2.831	**	0.124
EIEC	←	BPE	0.225	0.047	4.763	***	0.201
EIEC	←	DB	−0.137	0.041	-3.354	***	−0.140
NVC	←	EIEA	0.068	0.022	3.073	**	0.112
NVC	←	EIER	0.234	0.028	8.493	***	0.345
NVC	←	EIEC	0.093	0.028	3.323	***	0.137

Note. R.W. = Regression Weights; S.R.W. = Standardized Regression Weights; EST = Estimations; S.E. = Standard Error; C.R. = Critical Ratio. *Note:* BEE = Emotional Exhaustion; DB = Depersonalization; BPE = Personal Efficacy; EIEA = Emotional Attention; EIEC = Emotional Clarity; EIER = Emotional Repair; NVC = Non-Verbal Communication. *Note:* * = Statistically Significant Association Between Variables at Level 0.05; ** = Statistically Significant Association Between Variables at Level 0.01; *** = Statistically Significant Association Between Variables at Level 0.005.

Table 2 shows the standardised regression weights for the female population. A positive causal relationship of stress on emotional exhaustion was found ($p < 0.001$; $\beta = 0.690$). A negative causal relationship of stress on self-efficacy was found ($p < 0.001$; $\beta = -0.456$). No significant data were found between stress and depersonalisation.

Considering the Burnout Syndrome and Emotional Intelligence dimensions, the data showed a positive causal effect between self-efficacy and emotional repair ($p < 0.001$; $\beta = 0.369$). A positive effect of self-efficacy on emotional attention ($p < 0.001$; $\beta = 0.174$) and emotional clarity ($p < 0.001$; $\beta = 0.229$) was also found. Emotional exhaustion was positively and directly associated with emotional attention ($p < 0.001$; $\beta = 0.279$). No significant data were obtained with emotional recovery and emotional clarity. It should be noted that among the Burnout dimensions, a positive causal relationship was found between depersonalisation and emotional exhaustion ($p < 0.001$; $\beta = 0.519$). On the other hand, there was a negative relationship between cynicism and self-efficacy ($p < 0.001$; $\beta = -0.146$).

For the dimensions of Emotional Intelligence, the data showed that there is a positive relationship between emotional clarity and emotional attention ($p < 0.001$; $\beta = 0.219$). Positive causal relationships were also found between emotional clarity and personal repair ($p < 0.001$; $\beta = 0.282$). Significant and direct associations were found around non-verbal communication and EQ dimensions. The weakest causal relationship was found with emotional attention ($p < 0.05$; $\beta = 0.064$) and the strongest with reparation ($p < 0.001$; $\beta = 0.278$).

Table 2
Regression weight and standardized regression weights in female population

Associations between variables			R.W.				S.P.W.
			EST	S.E.	C.R.	*p*	B
BPE	←	STRESS	−0.433	0.032	−13.496	***	−0.456
BEE	←	STRESS	0.909	0.036	25.064	***	0.690
DB	←	BEE	0.406	0.033	12.192	***	0.519
DB	←	BPE	−0.158	0.038	−4.201	***	−0.146
DB	←	STRESS	0.005	0.047	0.105	0.916	0.005
EIER	←	BPE	0.406	0.041	9.952	***	0.369
EIER	←	DB	−0.034	0.043	−0.795	0.427	−0.034
IEEA	←	DB	−0.023	0.051	−0.445	0.657	−0.020
EIEA	←	BEE	0.249	0.040	6.185	***	0.279
EIER	←	BEE	−0.054	0.034	−1.579	0.114	−0.068
EIEA	←	BPE	0.216	0.048	4.449	***	0.174
EIEC	←	EIEA	0.199	0.031	6.434	***	0.219
EIEC	←	EIER	0.289	0.037	7.845	***	0.282
EIEC	←	BEE	−0.025	0.034	−0.754	0.451	−0.031
EIEC	←	BPE	0.258	0.043	6.028	***	0.229
EIEC	←	DB	−0.030	0.042	−0.723	0.470	−0.029
NVC	←	EIEA	0.138	0.022	2.775	*	0.064
NVC	←	EIER	0.188	0.026	7.304	***	0.278
NVC	←	EIEC	0.118	0.026	4.589	***	0.179

Note. R.W. = Regression Weights; S.R.W. = Standardized Regression Weights; EST = Estimations; S.E. = Standard Error; C.R. = Critical Ratio. *Note:* BEE = Emotional Exhaustion; DB = Depersonalization; BPE = Personal Efficacy; EIEA = Emotional Attention; EIEC = Emotional Clarity; EIER = Emotional Repair; NVC = Non-Verbal Communication. *Note:* * = Statistically Significant Association Between Variables at Level 0.05; ** = Statistically Significant Association Between Variables at Level 0.01; *** = Statistically Significant Association Between Variables at Level 0.005.

Discussion

This research was carried out with university teachers in Spain, due to the emerging concern about the mental health problems they are developing. The aim of this research was to develop a structural equation model to explain the causal relationships between stress, Burnout Syndrome, Emotional Intelligence and non-verbal communication. A multi-group system was created to compare the effects between these variables as a function of teachers' gender. Likewise, some research that has worked along similar lines is highlighted, such as the studies developed by Baez-Mirón et al. (2019), Gilar-Corbi et al. (2018); Puertas Molero et al. (2018) and Taddei et al. (2019).

Considering the relationship between stress and Burnout, a negative causal relationship between stress and personal effectiveness was obtained for both sexes. These findings have been corroborated by various research in multiple populations (Oullette, 2018; Zhu et al., 2018; Zimmermann et al., 2018). This may be because those who feel satisfied with their daily work are able to successfully cope with stressful situations and avoid their prolonged manifestation over time (Oullette, 2018; Zhu et al., 2018; Zimmermannet al., 2018).

Regarding the relationship between stress and emotional exhaustion, positive causal relationships were observed for both populations. According to Dicke et al. (2018) and Sastre-Morcillo et al. (2018), teachers with long-lasting stress symptoms manifest feelings of burnout. This leads to lower performance in the workplace (Sastre-Morcillo et al., 2018) along with an inability to cope with conflict situations leading to absenteeism (Dicke et al., 2018; Sastre-Morcillo et al., 2018).

Considering the dimensions of Burnout Syndrome, the data highlighted the association between emotional exhaustion and depersonalization in both populations. This is determined by the fact that the feeling of frustration at work is a cause of cynicism, isolation from peers and development of pessimistic attitudes (Lee, 2017; Tackett et al., 2018). However, an indirect relationship was obtained between depersonalization and personal efficacy, with this causal relationship being greater for the female sex. This may be caused by the fact that the higher the job satisfaction, the more comfortable the employee feels and therefore generates more positive feelings towards the work performed, which would decrease cynical attitudes (Lee, 2017; Tackett et al., 2018). This causal relationship was greater for the female population. It has been found that women tend to express their emotions more freely, favoring comfort in the work environment and the reduction of the occurrence of negative emotions (Paris & Omar, 2008; Victorio-Estrada, 2008).

Regarding the relationship between the dimensions of Burnout Syndrome and those of Emotional Intelligence, the data showed that the greater the personal efficacy, the greater the recovery of emotions, obtaining similar data for both sexes. As stated by Lin et al. (2016), this fact can be determined because the greater the feeling and personal efficacy within the work environment, the capacity to effectively face conflict situations is developed, which has a positive effect on a greater repair of emotions. However, Sahin (2015) and Shafiq and Adram (2016) detected that women who work in the university environment have a worse emotional recovery and therefore a worse job satisfaction, linked to aspects such as the workload and the salary received.

Likewise, a negative relationship between depersonalization and emotional clarity was found in males. The male population does not usually show their feelings publicly, which causes them to begin to distance themselves from the rest of their peers, to develop sarcastic attitudes and to confuse emotions and feelings in certain situations (Pérez-Fuentes et al., 2019).

Regarding emotional exhaustion, it was found that this was positively related to emotional care in both sexes. However, emotional exhaustion was related to worse emotional repair in the male sex. This is because when workers experience the feeling of being exhausted, there is a decrease in motivation, which hinders rapid recovery in complex situations (Puertas-Molero et al., 2018).

Despite having met the objectives, this study is not free of limitations. The first is related to the type of study. As it is a cross-sectional study, causal relationships can only be established at one point in time. The second is related to the instruments. Although they have shown a high degree of internal consistency, they present an intrinsic error when collecting data. It should also be noted that variables such as category, teaching hours, accreditations obtained, etc., have been limited. In addition, other variables that may have influenced the variables analyzed have been left out.

This study also proposes future lines of research. The first of these would focus on including new study variables. It is worth highlighting the importance of six-year research periods, teaching position held, accreditations obtained, contract, among others. It would be convenient to carry out an intervention program focused on the different emotional competences to deal with the different negative emotional states.

Conclusions

The study found gender-related differences in psychosocial and communicative factor among university professors. Women showed higher levels of depersonalization and lower personal fulfillment, while men experienced more emotional exhaustion, which negatively impacted their emotional clarity and emotional repair. For men, greater emotional awareness was linked to increased use of non-verbal communication, a pattern that was connected to overall emotional intelligence in both populations. The research underscores the importance of emotional training to manage stress and prevent burnout, as these factors can impair non-verbal communication. Developing strong emotional skills is essential for university professor to maintain emotional well-being and effective communication.

Consideraciones éticas de la investigación y uso de inteligencia artificial

El estudio ha seguido los principios establecidos en la Declaración de Helsinki. Además, ha sido aprobado y supervisado por un comité de ética perteneciente a la Universidad de Granada. No se ha hecho uso de la Inteligencia Artificial para la realización de este estudio.

Conflicto de intereses

Los autores declaran no tener ningún conflicto de intereses.

Contribuciones de los autores

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