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Occupational hardiness and life satisfaction in Spanish primary school teachers

Resistencia ocupacional y satisfacción con la vida en maestros españoles

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Abstract

Objective. The work has multiple objectives: i) to analyze the psychometric properties on a scale of occupational hardiness applied to teachers in Spain; ii) to study the occupational hardiness based on demographic factors, the familiar context and the environment; iii) to predict the degree of satisfaction with life from the variables of the occupational hardiness. Method. A descriptive, transversal and inferential design was used. Occupational Hardiness and Life Satisfaction Scale questionnaires were applied to a sample of 649 active teachers employment. Results. Teachers show a high mean score in the total resistance score $M=3.48\pm.363$ (Likert Scale of 1-4), as well as in the Commitment $M=3.68\pm.400$, Challenge $M=3.51\pm.461$ and Control $M=3.24\pm.516$ dimensions. Confirmatory factor analysis showed an adequate adjustment of the scales. Inferential analysis indicated the existence of significant differences in resistance according to sex, years of experience and specialty (p<.05). Differences were found in the dimension of challenge and years of experience; differences in commitment according to sex and specialty; and in control according to type of school and professional status. The resistance variable is the one that contributes the most to predicting life satisfaction.

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Keywords: Occupational Resistance, Education, Teacher, Satisfaction with life, Psychology.

Resumen

Objetivo. El objetivo del presente trabajo es múltiple: i) analizar las propiedades psicométricas de la escala de resistencia ocupacional aplicada a maestros españoles; ii) estudiar la resistencia ocupacional en función de factores demográficos, el contexto familiar y el, entorno; iii) predecir el grado de satisfacción con la vida a partir de las variables de la resistencia ocupacional. Método. Se empleó un diseño descriptivo, transversal e inferencial. Se aplicaron los cuestionarios de Resistencia ocupacional y la Escala de Satisfacción con la vida a una muestra de 649 docentes en activo. Resultados. Los docentes presentan una puntuación media alta tanto en la puntuación total de resistencia M=3.48±.363 (Escala Likert de 1-4), como en las dimensiones Compromiso M=3.68±.400, Desafío M=3.51±.461 y Control M=3.24±.516. El análisis factorial confirmatorio mostró un ajuste adecuado de las escalas. El análisis inferencial indicó la existencia de diferencias significativas en la resistencia en función del sexo, años de experiencia y especialidad (p < .05). Se encontraron diferencias en la dimensión desafío y los años de experiencia; diferencias en el compromiso en función del sexo y la especialidad; y en el control en función del tipo de centro y el estatus profesional. La variable resistencia es la que más contribuye a predecir la satisfacción con la vida.

Palabras clave: Resistencia ocupacional, Educación, Maestro, Satisfacción con la vida, Psicología.

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Basic education in Spain is structured in three stages: Pre-school education (from 0-6 years), Primary education (from 7-12 years) and Secondary education (from 13-16 years). The compulsory character begins in Primary Education and continues into the secondary stage, although it is true that the gratuity of the second cycle of Infant Education (3-6 years) promotes its early schooling.

The regulatory framework of the Spanish education system is governed by the Organic Law on Education 2/2006 of 3 May, modified by Organic Law 8/2013 of 9 December 2013 or law LOMCE (Organic Law for the Improvement of Education).

This work focuses on the teachers of the first two stages: pre-school and primary.

In recent years, the teaching work could be considered one of the professions with a highest risk of stress (García & Llorens, 2003; Golf & Roth, 1993).

The demands of the new educational situation cause a high degree of dissatisfaction for teachers due to the high expectations for which they are required to meet and their own insufficient personal and working resources (Martinez & Salanova, 2004). Authors, such as Lima and Lerrechea (2013), show that teachers are currently dissatisfied with their results and teaching activity.

Avargues and Borda (2010) point out that these teachers are considered to be a critical factor in the processes of change and that they are expected to have a high degree of adaptation.

Other authors, such as Álvarez, Nejar, Batons and Ramirez (2010), conducted a study with secondary school teachers that showed that half of them felt stress, its main causes being the students' behaviour (rudeness, insults or assaults), the lack of support from families to manage discipline and the excessive number of students.

The proposals aimed at reducing and preventing job stress have focused on improving work environments (Zeffane & Mcloughlin, 2006) as well as learning about the factors of personality in order to confront change. Along the same line, Ortega, Ortiz and Colonel (2007) found a significant and negative correlation between the burnout and the occupational hardiness of the health professionals studied.

Research carried out by Marenco and Hernando (2016) shows that women, both unmarried and without children, have higher depletion and low professional achievement while men show a higher tendency for depersonalization. Moreover, the type of contract has an impact: workers with a permanent or indefinite contracts being those who show a lower level of burnout.

Hardy personality, also called hardiness occupational, is considered to be as a personal resource against the effects of stressful events on health, and especially as a regulator of occupational stress (Kobasa, 1979). This profile depicts a subject capable of facing stressful stimuli in an active and optimistic manner (Kobasa, Maddi & Kahn, 1982). It is the positive organizational capital, together with optimism, self-efficacy, hope, and work engagement (Salanova, 2008).

The term *occupational resistance* has generated considerable interest, both in its definition and the factors and effects it produces (Funk, 1992; 2006; Maddi, Maddi & Martínez, 2008). Research achieved by Moreno, Garrosa and González (2000) with a group of teachers in secondary education have shown that the occupational hardiness appears to induce the development of adaptive coping strategies which reduce the likelihood of experiencing processes of stress and burnout.

Despite its multidimensional appearance, *occupational hardiness* should be regarded as a one-dimensional construct, consisting of three components (control, commitment and challenge), which together give rise to the concept.

The *control* factor refers to the power of management and influence over the events and their consequences perceived by the subject. The *commitment period* refers to the involvement with people and activities, giving what is being done meaning and not giving up easily in stressful contexts. And the *challenge*

deals with the perception of the context as an opportunity for growth. According to Oliver (1993), the three dimensions of *occupational hardiness* explained 33% of the variance of burnout.

Nevertheless, some authors consider only the control component or the control and the commitment ones to be those which actually define the concept (Florian, Mikulincer & Taubman, 1995; Williams, Wiebe & Smith, 1991). In this sense, authors, such as Moreno-Jiménez, Garrosa, Corso. Boada and Rodríguez-Carvajal (2012), found that the commitment variable within the occupational hardiness has direct, significant, moderating effects on exhaustion and vigour. Moreover, other authors like Moreno, Arcenillas, Morante and Garrosa (2005) have studied a sample of primary school teachers where the *commitment* variable to the occupational hardiness and the optimism played a modulating role in burnout. In the same vein, Kobasa (1982) noticed that the use of the *coping regressive* or tendency to avoid problems was inversely associated with the commitment in a study with secondary school teachers.

Authors Maury, Lugo and Gonzalez (2014) found no significant differences in the age and gender with respect to *occupational hardiness*, although they did find differences in relation to optimism, being higher in women. In addition, Hernandez, Ehrenzeweig and Navarro (2009) found, with a sample of elder adults, significant differences in relation to gender, training, selfperception of health, states of mind regarding their illnesses and level of independence.

In the teaching field, psychological well-being is related to satisfaction with life and associated with previous researches with work success and a good relational climate (Luhmann, Lucas, Eid & Diener, 2013); as well as the degree of adjustment between the person-environment and social support (Verhoeven, Kraaij, Joekes & Maes, 2003). In fact, one of the most emergent lines of research on occupational health in teachers is to find explanatory models of well-being based on psychosocial factors of work (Chávez & Quiñónez, 2007). Similarly, the resilience is considered to be the best predictor of satisfaction with with (Noorbakhsh, Besharat & Zarei, 2010).

In the work environment, the pursuit of perfection has been linked to mismatches, neuroticism and negative affection (Einstein, Lovibond & Gaston, 2000). About this, different works (Pelletier, Fortier, Vallerand & Briere, 2001; Pelletier, Fortier, Vallerand, Tuson, Brière, & Blais, 1995) have found that the perception of a controlling climate is correlated with less intrinsic motivation and less satisfaction with life (Méndez, Cecchini & Fernández, 2015).

The control factor at work, as a capacity to influence events and their consequences, seems to have a negative relationship with both work and life satisfaction and in contrast to the concept of *flow*. Thus Csikszentmihalyi (1998) indicates that the greater the flow state in the work environment, the greater the effectiveness they will achieve when interpreting each moment in a pleasant way. Similarly, the state of fluency and the perception of the social climate predict job satisfaction (Nader, Peña & Sánchez, 2014). The awareness of attention in the present moment has been related to the satisfaction with life (Laca Arocena, Mejía, Rodríguez & Carrillo, 2017).

This work has multiple objectives: i) to analyze the psychometric properties of the scale of *occupational hardiness* applied to primary and pre-school teachers, ii) to study occupational hardiness in terms of demographic factors (age, gender, training), family context (marital status and number of children), work environment (specialty, years of experience, type of contract, school ownership and population size); iii) to predict the degree of satisfaction with life from the variables of *occupational hardiness*.

Method

Design

This research develops with a quantitative, descriptive, correlational and transversal design for its application in a unique temporary moment (Montero & Leon, 2005). In the same way, it is an applied research by analyzing the psychometric properties of the instrument used as well as having a comparative focus by finding out differences between the satisfaction with life of the studied population and the demographic and labour situation (Ato, Lopez & Benavente, 2013).

Participants

The sample was composed by 649 pre-school and primary teachers employed by means of an incidental sampling, representing all the autonomous communities and cities in Spain.

With respect to participants, 23.36% were men and 76.64 were women, being the majority profile teachers aged 26-40 years (62.90%).

Measuring instrument

Regarding the socio-demographic variables used, they are included in four dimensions: demographic factors (age, gender, education), family context (marital status, number of children), working environment (field, years of experience, type of contract, ownership of the educational center and number of inhabitants).

The instrument used in this study to assess hardy personality is the Occupational Resistance Questionnaire (Moreno, Rodríguez, Garrosa & Blanco, 2014).

This very instrument measures the occupational hardiness through a series of affirmations where the subjects must score how they value themselves before such situations. These items are grouped according to three types of dimensions when dealing with the demands from the working context: commitment, control and challenge.

The evaluation of the questionnaire is conducted by virtue of a Likert-type scale of four options (1= Strongly disagreed to 4= Strongly agreed).

For the evaluation of the life satisfaction of the subjects, the Life Satisfaction Scale, SWLS, was used (Diener, Emmons, Larsen & Griffin, 1985), translated into Spanish by Atienza, Pons, Balaguer and García-Merita (2000).

The items that make up the scale are: 1) Overall, my life is close to ideal, 2) The conditions of my life are excellent, 3) I am satisfied with my life, 4) So far, I have achieved

the important things in my life, and 5) If I could live a new life, I wouldn't change anything.

However, the answers to the original version was measured on a scale of 1 to 7. The Spanish version has a list of 5 items with a rating on the Likert scale of 5 options (1= strongly disagreed 5= strongly agreed).

Procedure

The administration of the instrument was conducted online to achieve a later correlation analysis in order to verify the existence of a relationship between the different variables considered.

Data analysis

The sample was characterized by a descriptive analysis by utilizing the average and the standard deviation. An exploratory (EFA) and confirmatory (AFC) factor analysis of the Occupational Resistance scale was performed. The method of estimation of the least unweighted square was used for the AFC, since the analysis was used with a Likert-type scale and the data did not assume a normal distribution (Brown, 2006; Morata-Ramírez, Holgado-Tello, Barbero-García, & Mendez, 2015; Kline, 2005). In addition, some items showed unacceptable values of kurtosis and asymmetry. Following the recommendations of Kline (1998), several indices were used to evaluate the good fit of the model. The AMOS statistical package was used for this purpose.

Regarding the inferential analysis, Mann Whitney U-test and Kruskal Wallis h-test were used when the equality of the variances was not assumed (Field, 2009). The SPSS statistical package (version 21), was used for this purpose. Moreover, the size of the effect on the variables contrasted was c calculated (Borenstein, 2009).

Results

Table 1 shows that the kurtosis and asymmetry of items 1, 5 and 7 is high as well as all items do not meet the assumption of univariate normality (p<.05) and multivariate kurtosis indicates that multivariate normality is not met (Multivariate kurtosis = 85,331; c.r.= 51,352).

Table 1. Descriptive statistics								
	M	D.t.	As	•	K		Z de K-	р
			Est.	<i>E.T</i> .	Est.	<i>E.T.</i>	S	
1. I involve myself seriously in what I do,	3.84	.434	-3.316	.096	14.125	.192	12.791	.000
because it is the best way to reach my own								
goals.								
2. Even when it supposes greater effort, I	3.56	.579	-1.086	.096	.952	.192	9.633	.000
choose jobs that suppose a new experience for								
me.	2 50	5.07	1 1 1 2	000	1 002	102	0.010	000
3. I do everything I can to make sure I control	3.58	.567	-1.112	.096	1.093	.192	9.810	.000
the results of my work.	2.72	501	0 100	000	5 207	100	11 (52	000
4. I consider that the work that I do is of value for acceptly and I do not mind putting all my	3.73	.531	-2.133	.096	5.307	.192	11.653	.000
for society and I do not mind putting all my efforts.								
5. In my job I feel attracted to innovations and	3.52	.608	978	.096	.354	.192	9.272	.000
developments in the proceedings.	5.52	.008	970	.090	.554	.192	9.212	.000
6. Things are only obtained from personal	3.46	603	-1.156	.096	.967	.192	8.768	.000
effort.	3.40	.095	-1.130	.090	.907	.192	0.700	.000
7. I worry and I identify myself with my work.	3.84	128	-3.238	.096	13.180	.192	12.850	.000
8. In my job I feel attracted to tasks and	3.47	.606	732	.090	212	.192	8.608	.000
situations involving a personal challenge.	3.47	.000	132	.090	212	.192	8.008	.000
9. The control of situations is the only thing	3.01	.731	324	.096	255	.192	6.957	.000
that ensures success.								
10. My daily work satisfi es me and makes me	3.49	.641	-1.067	.096	.820	.192	8.941	.000
totally dedicated to it.								
11. To the extend I can, I try to have new	3.55	.607	-1.239	.096	1.688	.192	9.428	.000
experiences in my daily work.								
12. Things go well when you prepare them	3.30	.681	605	.096	120	.192	6.802	.000
thoroughly.								
13. When possible I look for new and different	3.44	.608	709	.096	.187	.192	8.077	.000
situations in my work environment.								
14. My own excitement is what makes me go	3.51	.658	-1.301	.096	1.672	.192	9.166	.000
ahead with the completion of my activity.								
15. When one works seriously and thoroughly	3.20	.703	507	.096	107	.192	6.581	.000
the results are controlled.								

The analysis of the correlation matrix showed that the fifteen scale items were appropriate to conduct a factorial analysis. The Bartlett sphericity test (X2= 3294.73; gl=105; p<.001) indicated that the items on the Occupational Resistance scale were not independent. The Kaiser-Meyer-Olkin coefficient, KMO=.89. indicated that correlations between pairs of items can be explained by the remaining selected items. Cattell scree test showed that the model included three factors that explained 55.67% of the variance. It was noted that item 3 (control factor) was saturated in the commitment factor and therefore it was decided to be eliminated. In a second analysis the Bartlett sphericity test (X^2 = 3064.43; gl=91; p<.001) also showed that the items on the occupational resistance scale were not independent. Similarly, the coefficient of KMO=.88 indicated that the correlations between pairs of items can be explained by the remaining selected items. Cattell's scree test showed that the model had three factors that explained 57.33% of the variance, somewhat higher than in the first test. The warp weights ranged from.51 to.80. The AFC, without item 3, showed an adequate adjustment (GFI=.987; AGFI=.981; RMR=.017; SRMR=.047; NFI=.976; RFI=.970).

The reliability of the resistance scale, calculated by the Crombach alpha coefficient, obtained an index of good reliability α =.85. The Challenge factor showed a reliability of .82, the Control factor.72 and the Commitment factor .78. Table 2 shows that the variables of the occupational resistance scale do not meet the assumption of normality as well as the factors are

correlated. The highest scores are seen on the commitment scale, followed by the challenge scale.

Table 2. Descriptive and correlational and	ysis of the factors from the occur	pational resistance scale
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	М	D+	As.		k	5	Z de K-		rs			
	111	<i>D.i.</i> -	Est.	<i>E.T.</i>	Est.	<i>E.T</i> .	S	р	Challenge	Commitmen	t Control	
Challenge	3.509	.461	-1.102	.096	1.741	.192	3.995	.000	1.000			
Commitment	3.682	.400	-2.599	.096	11.114	.192	5.479	.000	.472**	1.000		
Control	3.241	.516	556	.096	.297	.192	2.973	.000	.268**	.424**	1.000	
Resistance	3.478	.363	-1.530	.096	5.279	.192	2.225	.000	.776**	.737**	.741**	
					*:	*p>.01						

An analysis of the scores obtained for each factor was conducted according to the sociodemographic variables. By means of Mann Whitney's U test, significant differences in sex were found for the control (U=33016.50; p=.49; d=.153), challenge (U=33007.00; p=.48; d=.153), compromise (U=31644.00; p=.007; d=.207) and resistance (U=30476.50; p=.001;

d=.254) variables. Women obtained higher marks on all three dimensions of the occupational resistance scale (Table 3). No significant differences were found in the occupational resistance questionnaire according to age, marital status, size of the residence population, number of children and education (p>.05).

			2								
		п	М	D.t.	Mean	U	р	d			
Control	Woman	502	3.262	.516	332.73	33016.50	.49	.153			
Control	Man	147	3.172	.512	298.60						
Challense	Woman	502	3.521	.471	332.75	33007.00	.48	.153			
Challenge	Man	147	3.467	.422	298.54						
Commitment	Woman	502	3.699	.404	335.46	31644.00	.007	.207			
	Man	147	3.626	.381	289.27						
Resistance	Woman	502	3.494	.374	337.79	30476.50	.001	.254			
	Man	147	3.421	.318	281.32						

Subsequently, the analysis was conducted according to the labor variables. Thus, the analysis of occupational resistance showed significant differences in the control variable as a function of the type of school (U=38003.50; p=.025; d=.175).

In terms of work status, Kruskal Wallis' H test showed significant differences in the *control* variable (X^2 =9.924; gl=4; p=.042; d=0.193), although no differences between the groups could be determined in the latter variable. No differences were found according to the work field and the years of working experience (p>.05).

In the *commitment* variable, Kruskal Wallis' H test indicated relevant differences were found depending on the work field (X^2 =15,443;

gl=5; p=,009; d=.257); no differences were observed depending on the rest of the variables (p>.05). In this sense, significant differences were noticed between the teachers of Special Education, Speech Therapy, Theraupetical Pedagogy and Pre-school education (U=4963.50; p=.001; d=.402). Pre-school education teachers scored the highest results, while music and Special Education, Speech Therapy, Theraupetical Pedagogy teachers scored the lowest ones, Table 4.

Considering the *challenge* variable, Kruskal Wallis' H test showed relevant differences according to the years of working experience $(X^2=6.278; gl=2; p=.043; d=.163)$, and differences between groups could not be determined (p>.017). Teachers with 5 to 10

years of working experience are the ones who scored the highest. In addition, there are no differences according to the type of school, professional status and working field (p>.05).

When measuring *resistance*, no significant differences were found in the type of school and professional status. Kruskal Wallis' H test indicated that there were differences in *resistance* according to the working field $(X^2=16.317; gl=5; p=.006; d=.268)$. Comparisons between groups were made

through Mann Whitney's U test. Pre-school teachers scored higher than special needs, hearing and language and therapeutic pedagogy teachers (U=4807.50; p=.001; d=.441), Table 4. Differences in working experience were also noticed (X^2 =6,564; gl=2; p=,038; d=.169), where teachers with five to ten years of working experience presented higher scores than those with less than five years of working experience (U=15029.00; p=.016; d=.243).

Table 4. Inferential analysis of the scale of resistance occupational depending on employment status
and the specialty of the teacher

		п	М	<i>D.t.</i>	Mean	U	X^2	gl	p	d
Control										
Institution	Public	465	3.497	.464	314.73	38003.50			.025	.175
	Concerted / Private	184	3.539	.451	350.96					
Status	Government employed	238	3.190	.526	308.58		9.924	4	.042	.193
	Temporary clerk	210	3.212	.533	313.20					
	Member of a cooperative	9	3.472	.341	409.50					
	Permanent contract	121	3.472	.341	361.73					
	Temporary contract	71	3.347	.495	341.65					
Commitmen	t									
Specialty	Preschool Education	179	3.722	.438	354.80		15.443	5	.009	.257
	Primary Education	209	3.697	.402	332.83					
	Musical Education	21	3.600	.369	269.83					
	Physical Education	84	3.709	.328	329.70					
	EE/ AL / PT	74	3.603	.359	272.74					
	Foreign Language Ed.	82	3.624	.413	296.46					
Challenge										
Experience	Less of 5 years	216	3.492	.438	313.23		6.278	2	.043	.163
	From 5 to 10 years	162	3.575	.454	356.44					
	More than 10 years	271	3.483	.479	315.58					
Resistance										
Specialty	Preschool Education	179	3.525	.379	357.38		16.317	5	.006	.268
	Primary Education	209	3.501	.364	336.81					
	Musical Education	21	3.454	.363	309.07					
	Physical Education	84	3.474	.309	315.28					
	EE/ AL / PT	74	3.387	3.28	267.87					
	Foreign Language Ed.	82	3.406	.388	289.80					
Experience	Less of 5 years	216	3.456	.357	310.58		6.564	2	.038	.169
-	From 5 to 10 years	162	3.539	.341	357.31					
	More than 10 years	271	3.458	.377	317.18					

The variable satisfaction with life obtained with the SWLS scale showed a reliability with α =.87. The AFC showed an adequate adjustment (GFI=.998; AGFI=.984; RMR=.023; SRMR=.028; NFI=.996; RFI=.992).

The Spearman correlation coefficient shows that the variables related to occupational hardiness such as: *Control* (rs=.142; p<.01), *Challenge* (rs=.283; p<.01), *Commitment* (rs=.305; p<.01) and *Resilience* (rs=.289; p<.01); positively correlated with life satisfaction. The possibility of predicting the degree of satisfaction with life through the variables of hardy personality was analyzed. The model obtained explains 11.3% of the variance. The variable resistance is the one that most contributes to being satisfied with life.

The control variable appears with a negative sense ($\beta = -1.51$), indicating that the more control there is, the lower the increase in satisfaction will be.

Table 5. Multiple regre	ession Hardy pers	sonality and Life satisfaction
		· · · · · · · · · · · · · · · · · · ·

Dependent variable	Predictive variable	β	β Est.	R^2	ΔR^2	t	F	Т	FIV	D- W
SLWS	Constant	7.483				5.767**				2.02
	Resistence	4.731	.480	.116	.113	8.218**	42.415**	.40	2.49	
	Control	-1.506	217			-3.719**		.40	2.49	

Discussion

The occupational resistance questionnaire analyzed in a population of Spanish teachers presents good psychometric properties, with a structure of three factors, although it was necessary to eliminate item 3 after saturating the commitment dimension. The structure of the labor resistance or hardy personality construct is composed of three dimensions, commitment, control and challenge, which can be considered as multidimensional and multifaceted, as it was theoretically proposed by several authors regarding some personality characteristics, such as labor resistance (Carver, 1989; Hull, Lehn & Tedlie, 1991), and that has been proved in the psychometric analysis conducted by Moreno-Jiménez, et al. (2014) for this scale with different samples and working contexts. In the AFC conducted in this study, unlike the Moreno-Jiménez study, et al. (2014) where the maximum likelihood method was used. the method of estimating unweighted minimum squares has been employed, since items with kurtosis and asymmetry were found to be adequate and the assumption of univariate and multivariate normality was not met (Guàrdia, 2016; Morata-Ramírez, et al, 2015). The AFC has hypothesized a satisfactory adjustment through several indicators (Kline, 1998), where the RMR and SMRM values were <.08, while the GFI, AGFI, NFI and RFI values were >.095 (Uriel & Aldas, 2005).

The reliability of this fourteen-item version is good, with .85 for the entire resistance range,

.82 for challenge, .72 for control and.78 for compromise. These results are very similar to the reliability obtained for the fifteen-item version of the studies conducted by Moreno-Jiménez, et al., (2014) in a sample with hospital workers, firefighters, and nurses. Our results indicate that the Labor Resistance questionnaire presents acceptable psychometric characteristics in a sample with teachers, item 3 being eliminated.

The average results scored in the dimensions of the labour resistance questionnaire that obtained the highest score were found in the compromise variable, which plays a modular role in burnout according to Moreno, et al. (2005). The commitment and challenge variables show slightly higher scores than studies with event organisers (Bermejo-Casado, Campos & Sánchez-Bayón, 2017), and studies with firefighters, hospital staff and nurses (Moreno-Jiménez, et al., 2014). In addition, it is important to note that the three dimensions explain 33% of burnout (Oliver, 1993).

Women scored higher than men in the three dimensions of the labour resistance questionnaire, in contrast to the results of Maury, Martínez and González (2014), where only significant differences were found between gender and the optimism variable as well as comparing the results of Hernández, Ehrenzeweig and Navarro (2009), who found significant differences in gender higher than in men. These results should be interpreted with caution as the effect sizes are low, but they show a tendency for women to have a more resilient personality.

The analysis of occupational resistance showed significant differences for the control variable depending on the type of school and the employment status, being the teachers in the subsidized/private and cooperative schools to score higher in control than those in the public schools, although with a low effect size. Additionally, this dimension as a counterpoint to inefficiency characterizes a profile that performs well even under the most difficult circumstances. As a reference, workers showed a higher score than teachers in the study with event organizers (Bermejo-Casado, et al., 2017).

On the other hand, differences were observed between teachers of Early Childhood Education and teachers of Special Education, Speech Therapy and Therapeutic Pedagogy in the commitment dimension, Pre-school teachers of early scoring significantly higher. This opposite dimension to the term alignment represents the tendency to be involved in different areas of life, being more persistent in achieving their goals (Godoy-Izquierdo & Godoy, 2002). In fact, authors such as Kittredge (2010) have identified commitment as the only dimension that has predictive value of engagement.

Teachers with 5-10 years of experience are the ones with the highest scores in the challenge dimension, but the differences between groups could not be determined. Moreover, no differences were found according to the type of school, professional status and working field. Following Morett (2005), it could be said that such experience represents a moment when teachers find greater security in their own personal resources.

No significant differences were found in the type of school and professional status In the total measure of resistance. However, it was observed that Pre-school teachers have higher scores than teachers of Special Education, Speech Therapy and Therapeutic Pedagogy. In addition, teachers with five to ten years of experience had higher scores than those with less than five years of experience. In this sense, the results would be along the same lines of Maury, Martínez & González (2014), where a positive and moderate relationship was found between the resistant personality and the engagement.

The correlations found between occupational hardiness variables and life satisfaction are in line with the other studies (Luhmann, et al., 2013; Verhoeven, Kraaij, Joekes, & Maes, 2003), finding that a occupational hardiness also contributes to being more satisfied with life.

The results of the control variable as a predictive factor in the negative sense of life satisfaction, would be in accordance with the works that give importance to the state of flow (Nader, et al., 2014) as well as with those studies that show the negative effect of the perception of a controlling climate (Méndez, et al., 2015).

References

- Álvarez, F., Néjar, A., Porras, G. Y. & Ramírez, F. (2010). *Estrés en el sector de enseñanza secundaria*. Madrid, Spain: Comisión Ejecutiva Federal de FETE-UGT. Secretaría Salud laboral y Medio ambiente.
- Atienza, F. L., Pons, D., Balaguer, I., & García-Merita, M. (2000). Propiedades psicométricas de la Escala de Satisfacción con la Vida en adolescentes. *Psicothema*, *12*(2), 314-319.
- Ato, M., López, J.J. & Benavente, A. (2013). Un sistema de clasificación de los diseños de investigación en psicología. *Anales de psicología*, 29(3), 1038-1059. doi: https://doi.org/10.6018/analesps.29.3.178511
- Avargues, M.L. & Borda, M. (2010). Estrés laboral y síndrome de burnout en la Universidad: análisis descriptivo de la situación actual y revisión de las principales líneas de investigación. *Anuario de Psicología Clínica y de la Salud*, 6, 73-78.
- Bermejo-Casado, I., Campos García de Quevedo, G., & Sánchez-Bayón, A. (2017). Estrés y síndrome de desgaste profesional en la

organización de eventos en el sector de las agencias de comunicación. *Revista Latina de Comunicación Social*, 72, 1394-1417. doi: https://doi.org/10.4185/RLCS-2017-1225

- Brown, T. A. (2006). Confirmatory factor analysis for applied research. New York: The Guilford Press. doi: https://doi.org/10.1080/00036810600603377
- Byrne, B. M. (2009). *Structural equation modeling with AMOS*. New York: Routledge.
- Carver, C.S. (1989). How should multifaceted personality constructs be tested? Issues illustrated by self-monitoring, attributional style, and hardiness. *Journal of Personality and Social Psychology*, *56*, 577-585. doi: https://doi.org/10.1037/0022-3514.56.4.577
- Chávez, R.C., & Quiñónez, M. (2007). Factores asociados al malestar/bienestar docente. Una investigación actual. *REICE-Revista Electrónica Iberoamericana sobre Calidad, Eficacia y Cambio en Educación, 5, 5.*
- Csikszentmihalyi, M. (1998). *Aprender a fluir* (1st ed.). Barcelona: Kairós.
- Diener, E., Emmons, R., Larsen, R. J. & Griffin,S. (1985). The Satisfaction With Life Scale.*Journal of Personality Assessment*, 49, 71-75.doi:

https://doi.org/10.1207/s15327752jpa4901_13

- Field, A.P. (2009). *Discovering statistics using SPSS*. London, England: SAGE.
- Florian, V., Mikulincer, M. & Taubman, 0. (1995). Does hardiness contribute to mental health during a stressful real-life situation? The roles of appraisal and coping. *Journal of Personality and Social Psychology*, 68, 687-695. doi: <u>https://doi.org/10.1037/0022-3514.68.4.687</u>
- García, M., & Llorens, S. (2003). ¿Influyen los obstáculos laborales en el malestar docente? Paper presented at Jornades de Foment de la Investigació Universitat Jaume I. doi: <u>http://www.uji.es/bin/publ/edicions/jfi8/psi/17.</u> pdf
- Godoy-Izquierdo, D. & Godoy, J.F. (2002). La personalidad resistente: una revisión de la

conceptualización e investigación sobre la dureza. *Clínica y Salud*, *13*(2), 135-162.

- Guàrdia, J. (2016). Esquema y recomendaciones para el uso de los Modelos de Ecuaciones Estructurales. *Revista de estudios e investigación en psicología y educación, 3*(2), 75-80. doi: <u>https://doi.org/10.17979/reipe.2016.3.2.1847</u>
- Hernández, Z.E. Ehrenzeweig, Y. & Navarro,
 A.M. (2009). Factores psicológicos,
 demográficos y sociales asociados al estrés y a
 la Personalidad Resistente en adultos mayores. *Pensamiento Psicológico*, 5(12), 13-28.
- Hull, J.G., Lehn, D.A., & Tedlie, J.C. (1991). A general approach to testing multifaceted personality constructs. *Journal of Personality and Social Psychology*, *61*, 932-945. doi: <u>https://doi.org/10.1037/0022-3514.61.6.932</u>
- Kardum, I., Hudek-Knežević, J. & Krapić, N. (2012). The structure of hardiness, its measurement invariance across gender and relationships with personality traits and mental health outcomes. *Psychological Topics*, *21*(3), 487-507.
- Kittredge, A. (2010). Predicting Work and Organizational Engagement with Work and Personal Factors (Master Thesis, San Jose State University). Retrieved from<u>http://scholarworks.sjsu.edu/cgi/viewcont</u> ent.cgi?article=4767&context=etd_theses
- Kline, R.B. (1998). *Principles and practice of structural equation modeling*. New York: Guildford Press.
- Kline, R. B. (2005). *Structural equation modeling*. New York: Guilford Press.
- Kobasa, S.C. (1979). Personality and resistance to illness. *American Journal of Community Psychology*, 7, 413-423. doi: <u>https://doi.org/10.1007/BF00894383</u>
- Kobasa, S.C. (1982). Commitment and coping in stress resistance among lawyers. *Journal of Personality and Social Psychology*, 42, 707-717. doi: <u>https://doi.org/10.1037/0022-</u> 3514.42.4.707

Kobasa, S.C., Maddi, S.R. & Kahn, S. (1982).
Hardiness and health: A prospective study. *Journal of Personality and Social Psychology*,
42, 168-177. doi: <u>https://doi.org/10.1037/0022-3514.42.1.168</u>

- Laca Arocena, F.A, Mejía, J.C., Rodríguez, E. & Carrillo, E. (2017) Avances en Psicología del Bienestar Subjetivo: Relación entre el Mindfulness y la Satisfacción con la vida. *UARICHA. Revista de Psicología*, Vol. 14(32), 78-86.
- Ley Orgánica 2/2006, de 3 de mayo, de Educación (LOE). *Boletín Oficial del Estado*. Madrid, may, 05 de 2006, (106), pp. 17158-17207.
- Ley Orgánica 8/2013, de 9 de diciembre, para la mejora de la calidad educativa (LOMCE). *Boletín Oficial del Estado*. Madrid, 30 de december, 2013, (295), pp. 97858–97921.

Lima, C.L., & Lerrechea, E.M. (2013). La práctica docente y su relación con el malestar docente. *Debates em Educação*, *4*, 40-57. doi: <u>https://doi.org/10.28998/2175-6600.2012v4n8p40</u>

Luhmann, M., Lucas, R. E., Eid, M., & Diener, E. (2013). The Prospective Effect of Life Satisfaction on Life Events. *Social Psychological and Personality Science*, 4(1), 39-45. doi: https://doi.org/10.1177/1948550612440105

- Maddi, S.R., & Martínez, M.L. (2008). La personalidad resistente: promoviendo el crecimiento ante condiciones de estrés [Ardí personality: Promoting growth in stressful conditions]. En C. Vázquez & G. Hervás (Eds.), *Psicología positiva aplicada* [Positive applied psychology] (pp. 217-236) Bilbao, Spain: Desclee de Brouwer.
- Marenco-Escuderos, A., & Ávila-Toscano, J. (2016). Burnout y problemas de salud mental en docentes: diferencias según características demográficas y sociolaborales. *Psychologia: Avances de la Disciplina*, 10(1), 91-100. doi: <u>https://doi.org/10.21500/19002386.2469</u>
- Martínez, I.M., & Salanova, M. (2004). *Obstáculos y facilitadores organizacionales y*

su relación con el burnout docente. Disponible en:

http://www.wont.uji.es/wont/downloads/articu los/nacionales/2005MARTINEZ0 5AN.pdf

- Maury, J.G., Martínez, M.E. & González, Z.L. (2014). Relación del optimismo, la personalidad resistente y el engagement con el trabajo en una muestra de empleados. *Revista Puertorriqueña de Psicología*, 25(2), 280-296.
- Méndez-Giménez, A., Cecchini Estrada, J.A. & Fernández-Río (2016). Pasión por el deporte, actividad física vigorosa y satisfacción con la vida. *Revista de Psicología del Deporte*. 25(1), pp. 73-79.
- Montero, I. & León, O.G. (2007). Guía para nombrar los estudios de investigación en Psicología. *International Journal of Clinical and Health Psychology*, 7, 847-862.
- Morata-Ramírez, M. A., Holgado-Tello, F. P., Barbero-García, I., & Mendez, G. (2015). Análisis factorial confirmatorio. Recomendaciones sobre mínimos cuadrados no ponderados en función del error tipo i de Ji-Cuadrado y RMSEA. *Acción Psicológica*, *12*(1), 79-90. doi: https://doi.org/10.5944/ap.12.1.14362
- Moreno, B. Arcenillas, M^a V., Morante, M.E. & Garrosa, E. (2005). Burnout en profesores de primaria: personalidad y sintomatología. *Revista de Psicología del Trabajo y de las Organizaciones*, 21(1-2), 71-87.
- Moreno-Jiménez, B., Garrosa, E., Corso, S., Boada, M. & Rodríguez-Carvajal, R. (2012) Personalidad resistente y capital psicológico: las variables personales positivas y los procesos de agotamiento y vigor. *Psicothema*. 24(1), 79-86
- Moreno-Jiménez, B., Garrosa Hernández, E. & González Gutiérrez, J.L. (2000) Personalidad resistente, burnout y salud. *Revista Escritos de Psicología*, 4, 64-77. doi: <u>https://doi.org/10.5944/rppc.vol.4.num.3.1999.</u> <u>3881</u>
- Moreno-Jiménez, B., Rodríguez-Muñoz, A., Garrosa Hernández, E., & Blanco, L.M. (2014) Development and validation of the

Occupational Hardiness Questionnaire. *Psicothema*, 26(2), 207-214. doi: <u>https://doi.org/10.1037/t61574-000</u>

- Moreno-Murcia, J.A. & Siveira, Y. (2011). Modelo causal de la satisfacción con la vida en adolescentes de Educación Física. *Revista de Psicodidáctica*, 16(2), 367-380.
- Morett, N.I. (2005). *El desgaste profesional y el estrés traumático secundario en una muestra de bomberos* (Unpublished Doctoral Thesis). Universidad Autónoma de Madrid.
- Nader, M., Peña, S.P. & Sánchez, E. (2014) Predicción de la satisfacción y el bienestar en el trabajo: hacia un modelo de organización saludable en Colombia. *Estudios Gerenciales*, 30, 31-39. doi: https://doi.org/10.1016/j.estger.2014.02.006
- Noorbakhsh, S. N., Besharat, M. A. & Zarei, J. (2010). Emotional intelligence and coping styles with stress. *Procedia Social and Behavioral Sciences*, 5, 818-822. doi: <u>https://doi.org/10.1016/j.sbspro.2010.07.191</u>
- Oliver, C. (1993) Análisis de la problemática estrés en el profesorado de enseñanza media: El burnout como síndrome específico. Unpublished Doctoral Thesis. Autonomous University of Madrid.
- Ortega, M.E., Ortiz, G.R. & Coronel, P.G. (2007). Burnout en médicos y enfermeras y su relación con el constructo de personalidad resistente. *Psicología y Salud*, 17, (1), 5-16.
- Pelletier, L. G., Fortier, M. S., Vallerand, R. J., & Brière, N. M. (2001). Perceived autonomy support, levels of self-determination, and persistence for an activity: a longitudinal investigation. *Motivation and Emotion*, 25, 279-306. 36. doi: https://doi.org/10.1023/A:1014805132406

- Pelletier, L. G., Fortier, M. S., Vallerand, R. J., Tuson, K. M., Brière, N. M., & Blais, M. R. (1995). Toward a new measure of intrinsic motivation, extrinsic motivation, and amotivation in sports: the sport motivation scale (SMS). *Journal of Sport and Exercise Psychology*, 17, 35-53. doi: <u>https://doi.org/10.1123/jsep.17.1.35</u>
- Salanova, M. (2008). Organizaciones saludables y desarrollo de recursos humanos. *Revista de trabajo y seguridad social*, 47, 179-214.
- Uriel, E., & Aldas, J. (2005). *Análisis Multivariante Aplicado*. Madrid: Thomson Editorial.
- Verhoeven, C., Kraaij, V., Joekes, K., & Maes, S. (2003). Job conditions and wellness/health outcomes in Dutch secondary school teachers. *Psychology and Health*, 18, 473-487. doi: https://doi.org/10.1080/0887044031000147201
- Williams, P.G., Wiebe, D.J. & Smith, T.W. (1992). Coping processes as mediators of the relationship between hardiness and health. *Journal of Behavioral Medicine*, 15, 237-255. doi: <u>https://doi.org/10.1007/BF00845354</u>
- & Mcloughlin, Zeffane, R. D. (2006).Cooperation and stress; exploring the differential impact of job satisfaction. communication and culture. Management research news, 29(10), 618-631. doi:. https://doi.org/10.1108/01409170610712326

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