Educación XX1 ISSN: 1139-613X · e-ISSN: 2174-5374



Vocation and burnout in Mexican teachers

Vocación y burnout en docentes mexicanos

Edgar Fabián Torres-Hernández 1* 📵

- ¹ Universidad de Guanajuato, México
- * Corresponding author. E-mail: ef.torres@ugto.mx

Cómo referenciar este artículo/How to reference this article:

Torres-Hernández, E.F. (2023). Vocation and burnout in mexican tearchers. *Educación XX1*, 26(1), 327-346. https://doi.org/10.5944/educxx1.32954

Fecha de recepción: 01/02/2022 Fecha de aceptación: 23/06/2022 Publicado online: S&/S%20&

ABSTRACT

The increasing rate of demands and urgent adaptations in the health, social and professional fields demand from individuals a response that may exceed their limits. The teaching profession is not the exception since it is an activity of constant challenges and epistemological and cultural ruptures. The phenomenon of burnout or attrition at work is increasingly evident and has been studied in association with certain personal and contextual characteristics. However, there are not enough studies that link it with the vocation to teaching that can respond as a source of support to prevent it. The purpose of this work was to analyse the relationship between vocation and burnout syndrome in Mexican teachers, and to analysing the validity of the vocation to teaching scale. Hence, a quantitative, descriptive, and cross-sectional study was carried out on 824 teachers of different educational levels. The results revealed a predictive and negative association between vocation and burnout, and significant differences according to the different socio-occupational categories. In addition, the analysis of the vocation to teaching scale showed that it is a reliable and valid instrument to analyse their construct. It is concluded that there are critical factors that can trigger job burnout such as contractual uncertainty, the educational level at which teaching is exercised, professional training and experience in teaching. A comprehensive accompaniment to teachers is recommended that allows their professional and human development.

Keywords: teacher attitude, burnout, education, teachers, teaching

RESUMEN

El creciente ritmo de exigencias y urgentes adaptaciones en el plano sanitario, social y profesional demandan de los individuos una respuesta que, para algunos, puede sobrepasar sus límites: la profesión docente no es la excepción puesto que es una actividad de constantes retos y rupturas epistemológicas y culturales. El fenómeno de burnout o desgaste en el trabajo es cada día más patente y se ha estudiado en asociación con ciertas características de índole personal y contextual, sin embargo, no se tienen estudios suficientes que lo vinculen con la vocación a la docencia que puede responder como una fuente de soporte para evitar dicho desgaste. El propósito del presente trabajo es analizar la relación entre la vocación y el síndrome de burnout en el profesorado mexicano, además de analizar la validez de la escala de vocación a la docencia; para ello, se realizó un estudio cuantitativo, descriptivo y de amplitud transversal a 824 docentes de diversos todos los niveles educativos. Los resultados revelan una asociación predictiva y de corte negativa entre la vocación y el burnout, además de encontrarse diferencias significativas según las diferentes categorías sociolaborales: asimismo el análisis de la escala de vocación a la docencia reveló que es un instrumento fiable v válido para analizar dicho constructo. Se concluve que existen factores críticos que pueden detonar el desgaste laboral como la incertidumbre contractual, el nivel educativo en que se ejerce la docencia, la formación profesional y la experiencia en la docencia; se recomienda un acompañamiento integral al profesorado que permita su desarrollo profesional y humano.

Palabras clave: actitud docente, burnout, educación, enseñanza, profesores

INTRODUCTION

Current society demands from all educational actors more and more professionalization and adaptation to immediate challenges at an economic, social, political, and health level. In Mexico, the burnout syndrome is classified by the Mexican Official Standard NOM-035-STPS-2018 as a psychosocial risk factor in the workplace, specifically those activities that can produce changes in the person's mood, sleep or stress that are linked to the demands of the position, the working day, and the exposure of traumatic conditions or violence against workers (Official Gazette of the Federation, 2018). For instance, work-related stress is present in 75% of Mexican workers. Therefore, the living conditions of said population decrease (Instituto Mexicano del Seguro Social, n.d.). On the other hand, there are no statistics

available about the phenomenon of vocation so far. This makes a systematic study even more relevant.

Maslach and Jackson (1981) defined three elements present in burnout: emotional exhaustion, depersonalization, and a low sense of personal achievement. There are multiple contextual and personal factors that can trigger such disruption in the person. The contextual ones could be changing educational reforms, specific challenges to each educational center—bureaucracy, large groups, demands related to certain pedagogical positions, violence between students, and so on. On the other side, there are those associated with personality, psychiatric disorders, gender, or others attributable to the individual (Ranđelović & Stojiljković, 2015).

Among the negative implications of the experience of deterioration in the teacher's work and the feeling of a poor vocation are a poor relationship with their peers and students, somatic problems, an unfavorable promotion of learning and its consequent academic achievement, absenteeism. Therefore, they could make the decision to quit the educational system (Tašner et al., 2017). These inconveniences can be reversed or stopped if there is a network that accompanies the teacher in his development as a person, and if the teacher is able to rediscover the sense of vocation that he or she has to be fully experienced (Franco-Alvarez et al., 2020). Based on this, the purposes of this study are 1) to analyze the relationship between vocation and burnout in teaching staff, and 2) submit the teaching vocation questionnaire (CVOC-D) to validation.

Burnout

There are factors that potentiate the appearance of burnout and that are related to different skills and dispositions: poor socio-emotional skills (Torres-Hernandez, 2020), poor self-efficacy beliefs (Torres-Hernandez, 2018; Christian-Brandt et al., 2020), and others such as a lack of vocation that conditions the well-being and development of teachers. According to the Real Academia Espanola (2019), vocation is defined as the disposition that a person has to carry out a profession or occupation to which they feel called. It is constituted at different moments of the person's life, so it can be called dynamic and in constant resignification. The lack of a vocational awareness is responsible for the poor performance of the person in the role of teacher, and for the low educational achievement in a country. This is due to the direct influence the teacher has on his or her students (Herman et al., 2018).

The decrease in job satisfaction is one of the components of burnout. It is evidenced in those professionals with poor professional identity (Gallardo et al., 2019). It is one of the manifestations of vocation. It should be clarified that there is currently no research (consultations made at the time of the study in databases such as Scopus, Web of Science, ERIC in Spanish and English) that explicitly describe

the relationship between vocation and professional wear (burnout). Therefore, it is relevant to describe this syndrome with other attitudes different from those already known. However, there are approaches to studies related to the vocation and general well-being of teachers: for example, those associated with stress and the exercise of an occupation typical of a vocational choice (Gallardo-Lopez et al., 2019) well-being or quality of life in teachers or on mental health (Luy-Montejo et al., 2019). The foregoing shows that there is relatively little research that links vocation and other personal components linked to the professional wear and tear of such an occupation.

So, there are personal conditions that are linked to burnout syndrome or wear and tear at work, including gender, in which the females show greater personal fulfillment (Torres-Hernandez, 2018; Torres-Hernandez, 2020) and more emotional exhaustion with less schooling and experience in teachers (Bedoya et al., 2017). The individual with high emotional intelligence tends to develop greater control of what happens in the classroom, and maintain a positive relationship with students, which leads to greater professional performance (Hamidi & Khatib, 2016).

According to some working conditions. Unda et al. (2016) argue that it is more likely to suffer from burnout when there are difficulties in the work environment. particularly if the supervision of teaching is inefficient as well as problems in professional practice. This leads to stressful situations in the teaching staff, and that overwork leads to stress. Regarding to this, the perception of strong elements of disorganization—such as the lack of supervision and poor conditions to carry out teaching—within educational institutions is another factor that triggers a low level in the performance of teaching activity, and eventually from burnout (Carlotto & Gonçalves-Câmara, 2017). On the other side, Ranđelović and Stojiljković (2015) point out that a low perception of autonomy in the teacher's decisions and activities leads, in the midst of an inadequate organizational environment, to emotional exhaustion, including the teacher who is demanding with himself and perceives that their tasks are inconsequential for the institution or for the others (Jimenez & Rios, 2018). In addition, Monroy-Castillo and Juarez-Garcia (2019) state that a poor administrative structure hinders the necessary conditions for teaching performance as one more reason to develop dissatisfaction with the teacher's own work, which implies a greater predisposition to generate symptoms associated with the burnout.

Despite knowledge about the risks of burnout at work, there are no public policies that contribute to its reduction (De Araujo et al., 2019). However, there are some protective factors such as adequate self-esteem or happiness (Benevene et al. al., 2019), the use of effective communication techniques (Bitran et al., 2019), the exercise of functional and varied socio-emotional skills, or engagement to the profession, even despite working with students with some degree with disability or who come from challenging social backgrounds (Nislin & Pesonen, 2018).

Vocation

Vocation is a relatively old theoretical construct. It was an major point of contention for early educators whether or not they owned it. There are at least three conceptions related to vocation: 1) as a sacred calling, 2) as a profession, and 3) as a part of identity. Although historically they have been presented in that order, it cannot be affirmed that, for example, there are currently no individuals who feel motivated to teach for religious reasons. Therefore, the scope of vocational perception and awareness in the work of teachers is reviewed.

Returning to the origin of the vocation as a sacred concept, it takes into account the integrity and proper moral conduct of the subject. In addition, teaching is perceived as an apostolate that was presented innately. Under this approach, the vocation is more like the action of a religious than that of a teacher (Fuentes, 2001). There is a considerable number of sectors in education that promote in their teachers a reflection of the teaching task as part of a divine call and a ministry from which the teacher is challenged. The second approach—vocation as a professional element—refers to other more technical skills that the teacher must possess: self-confidence, fairness, and efficiency, emphasizing pedagogical preparation (Sanchez, 2009). The most recent vision of vocation, from identity, includes pedagogical elements necessary for the teacher's work and personal components, such as passion or motivation (Franco-Alvarez et al., 2020) that configure the individual as a person more comprehensive and not just a professional in the exercise of a certain activity.

Empirical and theoretical evidence indicates that the experience of a vocation, in any of the conceptions mentioned above, can help to overcome daily difficulties of the teacher, making teachers more resistant, altruistic (Valenzuela et al., 2018), emotionally more autonomous (Huertas-Fernandez & Romero-Rodriguez, 2019) and an increase in job satisfaction and empathy towards others (Romero-Llanos, 2019). To "live" one's own vocation, it is important to accompany it through programs that support the resignification of the choice for the teaching profession (Del Pino & Fernandez, 2019). Although there is no ideal time to shape the identity and vocation of the teacher, the first years are considered critical to configure them.

The vocation can be understood as something intrinsic to the person, it is possible that the context has a negative impact on the teacher's performance by putting pressure on him and not fully living the teaching activity (Lopez et al., 2018). In addition, it is known that the vocation is not privileged according to gender, both women and men can experience it with the same intensity (Munoz-Fernandez et al., 2019), although there is a greater predominance of women who teach (Tašner et al., 2017). When it becomes aware of it, it affects a true formation of the human being and not just instructing him.

METHOD

The present work is a quantitative and descriptive study (Kerlinger & Lee, 2002). Due to its extension and according to Hernandez-Sampieri et al. (2010), this research is descriptive with a transversal breadth. The purpose was to analyze the relationship between vocation and burnout syndrome in Mexican teachers, and to submitting the teaching vocation questionnaire (CVOC-D) to validation.

Participants

The sample was made up of 824 active teachers, with an average age of 34.68 years (sd= 10.8), of which 582 (70.63%) are women and 242 (29.36%) men. Regarding to teaching experience, there is the largest block of more than 20 years (24.8%): 61.7% report being married or in a free union. According to professional characteristics, 63.2% of the participants indicate that they have some type of pedagogical training, with 49.3% having a bachelor's degree, 38.6% a master's degree, 7.8% a doctorate, and 4.4% a specialty. As an initial degree, only 53.9% of teachers studied careers related to education. Among other specific conditions. 32.3% work with students with special educational needs or barriers to learning and participation (BLP), 58.1% work in the public sector and 87.7% work in urban areas. Related to the educational level in which they teach, 58.9% work at the basic level, 11.5% at the upper secondary level, and 29.6% at the higher level (including postgraduate). The type of sampling used was non-probabilistic, for the sake of convenience. The contact with the teachers and the invitation to participate in the study anonymously and taking care of the confidentiality of the participants, was carried out by email. Once the said invitation was accepted, an online form was sent, which was completed by the participants.

Instruments

Teaching Vocation Questionnaire for teachers (CVOC-D). It is a brand-new instrument, whose purpose is to analyze the teaching vocation in general. It has three factors: a) satisfaction with teaching, b) vocational awareness, and c) commitment to education. It consists of 21 items with a 6-option Likert-type scale response, from totally disagree to totally agree. It was validated by construct and content with a general reliability coefficient of 0.96 (Torres-Hernandez, 2022).

Maslach Burnout Inventory Educators Survey. It is a widely used instrument to analyze the level of professional burnout caused by work. It is made up of 22 items

divided into three subscales: emotional exhaustion, depersonalization, and personal fulfillment. Due to its application, like the previous instrument, it is a Likert-type scaling self-report test in which the participant indicates the degree of frequency of suffering from the different symptoms of *burnout*, from never to every day. It was validated by construct and offers different versions in Spanish and English. It has a reliability of 0.76 (Maslach & Jackson, 1981).

Calling and Vocation Questionnaire. The third instrument has six subscales: 1) presence of transcendent vocation; 2) search for a transcendent vocation; 3) presence of purposeful work; 4) purposeful job search; 4) search for prosocial orientation; 5) presence of prosocial orientation; and 6) search for prosocial orientation. It has an overall reliability of 0.90 and has 24 items with four Likert-scaled response options, ranging from 1= not entirely true for me to 4= absolutely true for me. The validation process of the said instrument is convergent and by construct (Dik et al., 2012).

Sociodemographic and Labor Factors Questionnaire. In this section, the following socio-labor elements were analyzed: sector in which they teach, gender, if they work with students with BLP, educational level in which they teach, years of teaching experience, and marital status.

Procedure

This study was developed in five stages: 1) study of the reliability and validity of the instruments; 2) descriptive evaluation of the participants to identify their levels of burnout; 3) association of factors around burnout; 4) comparison of differences between groups, and 5) regression analysis around burnout. Effect sizes were estimated in all inferential tests according to Cohen's (1992) criteria.

The process of applying the inventories was carried out by digital means (online form) with the prior informed consent of each of the individuals, in accordance with the current ethical protocols, establishing that the participants were can voluntarily answer the questions freely and anonymously the instruments. Once the information was collected, the descriptive and inferential analyzes were carried out—such as student's T, one-way ANOVA with the HSD Tukey posthoc test, multiple linear regression, Pearson's correlation coefficient and confirmatory factor analysis—through the programs SPSS v. 25, AMOS v. 24 and GPower 3.1.

RESULTS

Analysis of reliability and validity of the instruments used

The following table shows the analysis of the validity of the instruments through Confirmatory Factor Analysis (CFA) following the maximum likelihood method (Table 1).

Table 1 *AFC of applied instruments*

Instruments	X ^{2 a}	df ^b	x²/gl	Р	NFI°	CFI ^d	PCFIe	RMSEAf	MEV ^g	CR ^h
CVOC-D	736.023	171	4.30	<0.001	0.908	0.925	0.915	0.068	0.56	0.71
MBI	798.219	175	4.51	<0.001	0.901	0.920	0.905	0.066	0.68	0.75
CVQ	1443.50	231	6.24	<0.001	0.796	0.822	0.688	0.080	0.27	0.59

Note. ^a, chi square; ^b, degrees of freedom; ^c, normalized fit index, ^d, comparative fit index; ^e, parsimony goodness-of-fit index; ^f, mean square error of approximation; ^g, mean extracted variance; and ^b, composite reliability.

One of the results is an adequate fit of the model, for the first two instruments, which is corroborated through the mean extracted variance (>0.50) and composite reliability (>0.70), proposed by Hair et al. (2014). The CVOC-D and the MBI have adequate construct and convergent validity. Parallel to the construct validity analysis, the correlational analysis between the CVOC-D and the CVQ was performed, obtaining a significant association [Pearson= 0.084, p<0.05], which is indicative that the CVOC-D has concurrent validity. In addition, the regression analysis was performed and an R² of 0.007 [p=0.16, f^2 =0.007] was obtained, which has predictive validity with a small effect size as well. Due to the previous results and lacking sufficient validity elements, it is decided to eliminate the CVQ from the subsequent analysis according to the purpose of the study.

A CVOC-D retest was applied one month after the first execution of the instrument (n=159), obtaining a value of α =0.80 [Intraclass correlation coefficient= 0.87, p=<0.001], indicative of the temporal stability that owns the inventory. For the validity analysis procedure of these instruments, the Confirmatory Factor Analysis (CFA) was carried out, specifically for the CVOC-D.

Descriptive analysis

The following table shows the descriptive results of the CVOC-D (Table 2).

Table 2Descriptive evaluation of the CVOC-D

Subscales	Mean (standard deviation)	Skewness	Kurtosis	One-sample t-test (theoretical mean: 4.0)
Commitment to education	5.56 (0.53)	-3.276	19.305	83.48*
Vocational awareness	5.41 (0.71)	-1.74	5.857	59.92*
Satisfaction with teaching	5.38 (0.64)	-2.18	9.421	61.69*
Vocation (general)	5.46 (0.54)	-3.088	18.218	77.45*

^{*} p < 0.001.

According to the previous results, to the theoretical value of the mean (4.0, since it is assumed that the instrument, having a scale from 1 to 6, it is assumed that the value of 4 and more is considered high), and to the asymmetry coefficient, it is found that teachers have high levels of vocation in its three dimensions. In addition, a normal distribution is assumed because the sample size (n= 824) of the present investigation is representative in comparison with similar studies that have used parametric statistics (Lumley et al., 2002). Now, we proceed to report the analysis of *burnout* in teachers (Table 3).

Table 3Descriptive evaluation of the MBI

Subscales	Mean (standard deviation)	Skewness	Kurtosis	One-sample t-test (theoretical mean: 3.0)
Emotional exhaustion	2.11 (1.28)	0.523	-0.372	-19.84*
Personal accomplishment	1.65 (0.68)	0.853	0.726	-56.24*
Depersonalization	0.75 (0.92)	1.699	3.985	-69.41*
Burnout (overall)	1.63 (0.82)	0.642	-0.179	-47.59*

^{*} p < 0.001.

Based on the previous, it is found that teachers report low levels of job burnout, although the greater polarization in responses related to emotional exhaustion stands out. For the present case, a theoretical mean of 3 is assumed since, according to the scale of the instrument, a value higher than that mentioned implies a high presence of burnout in the teaching staff.

Association of factors around burnout

Correlation statistics were calculated at two moments: 1) based on the general variables; and 2) by subscales. For the first case, a significant association is found between vocation and burnout [Pearson= -0.43, p=<0.001]. The following matrix reports the association values between subscales by instruments (Table 4).

Table 4 *Correlational analysis*

Mariah I.a.		Pearson values (N=824)								
Variables	SD	CV	CE	AE	DP	RP				
Satisfaction with teaching (ST)	-									
Vocational awareness (VA)	.628**	-								
Commitment to Education (CE)	.742**	.608**	-							
Emotional exhaustion (EE)	327**	207**	330**	-						
Depersonalization (DP)	331**	241**	298**	.509**	-					
Personal Accomplishment (PA)	409**	312**	381**	.534**	.404**	-				

^{*} p=<0.05; **p=<0.01

Based on the previous table, it is relevant the significant associations in the subscales of satisfaction with teaching and the components of burnout stand out.

Comparisons of differences between groups

In this section, the comparisons are analyzed according to the socio-occupational variables of the subscales that make up the research. To facilitate the analysis, the comparison by gender, students with BLP and marital status with the T test for independent samples is presented in the first instance (Table 5).

 Table 5

 Comparisons of the variables by gender, students with BLP and marital status

Categories	Statistics to contrast	ST ^{to}	VA ^b	CE °	EEd	DP ^e	PA ^f
	Female (n=582) *	5.41 (0.60)	5.46 (0.67)	5.60 (0.49)	2.15 (1.25)	0.66 (0.83)	1.65 (0.66)
Género	Male (n=242) *	5.32 (0.73)	5.31 (0.81)	5.49 (0.64)	2.04 (1.34)	0.98 (1.11)	1.66 (0.75)
Genero	Student's T	1.933	2.849	2.722	1.143	4.601	0.194
	p-value	0.054	0.005	0.007	0.253	< .001	0.846
	Cohen's D	0.148	0.218	0.208	0.087	0.352	0.015
	Not (n=558) *	5.37 (0.68)	5.39 (0.72)	5.53 (0.56)	2.15 (1.30)	0.83 (0.96)	1.69 (0.72)
Estudiantes	Yes (n=266) *	5.42 (0.58)	5.48 (0.70)	5.64 (0.49)	2.03 (1.23)	0.59 (0.85)	1.57 (0.61)
con BAP	Student's T	0.979	1.778	2.718	1.3	3.57	2.355
	p-value	0.328	0.076	0.007	0.194	< .001	0.019
	Cohen's D	0.073	0.132	0.202	0.097	0.266	0.175
	Married/free union (n=508) *	5.41 (0.66)	5.46 (0.73)	5.57 (0.58)	2.04 (1.25)	0.73 (0.87)	1.63 (0.70)
Estado civil	Single (n=316) *	5.35 (0.61)	5.35 (0.69)	5.57 (0.47)	2.24 (1.32)	0.78 (1.02)	1.69 (0.66)
EStudo CIVII	Student's T	1.092	1.989	0.084	2.195	0.754	1.244
	p-value	0.275	0.047	0.933	0.028	0.451	0.214
	Cohen's D	0.078	0.142	0.006	0.157	0.054	0.089

Note. The values of M (SD) are reported in the rows marked with an asterisk; ^a, Satisfaction with Teaching; ^b, Vocational Awareness; ^c, Commitment to Education; ^d, Emotional exhaustion; ^e, Depersonalization; ^f, Personal accomplishment.

According to the reported results, significant differences are found in the contrasted variables, except in satisfaction with teaching, with a small effect size in its statistics. Next, the comparative analysis is shown according to the sector in which the participants work (Table 6).

Table 6Differences in the means according to the educational sector in which teaching is carried out

No vialala	Public (n=479)	Private (n=284)	Both (n=61)	- F		£	CI 9	05%
Variable	Mean (SD)	Mean (SD)	Mean (SD)	- г	р	f	low	Upp
Satisfaction with teaching	5.49 (0.54)	5.20 (0.75)	5.41 (0.70)	18.31	<.001	0.18	-0.39	-0.17
Vocational awareness	5.46 (0.68)	5.35 (0.73)	5.41 (0.86)	2.26	0.104	0.01	-0.18	-0.42
Commitment to education	5.63 (0.48)	5.46 (0.57)	5.57 (0.68)	9.92	<.001	0.12	-0.27	-0.08
Emotional exhaustion	1.90 (1.17)	2.46 (1.30)	2.19 (1.59)	18.07	<.001	0.20	0.34	0.78
Depersonalization	0.63 (0.83)	0.97 (0.97)	0.71 (1.27)	12.06	<.001	0.17	0.17	0.49
Personal accomplishment	1.54 (0.57)	1.88 (0.82)	1.51 (0.62)	25.32	<.001	0.24	0.22	0.46

Through Tukey's HSD post hoc analysis, differences were identified between the group of private and public schools for the variables analyzed with a small effect size, except in vocational awareness. Next, the comparative analysis is presented according to the educational level in which the teachers work (Table 7).

Table 7Differences in means according to educational level

Variable	Basic (n=485)	High School (n=95)	Superior (n=138)	Postgraduate (n=106)	F	р	f	CI 9	95%
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	-			low	Upp
Satisfaction with teaching	5.48 (0.60)	5.12 (0.81)	5.30 (0.64)	5.31 (0.62)	10.26	<.001	.19	.17	.53
Vocational awareness	5.51 (0.68)	5.23 (0.77)	5.30 (0.74)	5.29 (0.70)	7.63	<.001	.16	.07	.48
Commitment to education	5.64 (0.52)	5.35 (0.63)	5.49 (0.50)	5.56 (0.53)	8.79	<.001	.18	.12	.43
Emotional exhaustion	1.99 (1.17)	2.64 (1.49)	2.24 (1.32)	2.04 (1.40)	7.43	<.001	.16	-1	27

Variable	Basic (n=485)	High School (n=95)	Superior (n=138)	Postgraduate (n=106)	F	р	f	CI 9	5%
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	-			low	Upp
Depersonalization	0.57 (0.75)	1.39 (1.22)	0.89 (1.02)	0.81 (0.97)	23.67	<.001	.28	-1.07	55
Personal accomplishment	1.53 (0.57)	2.01 (0.95)	1.79 (0.69)	1.71 (0.78)	16.63	<.001	.24	67	28

Post hoc analysis was applied and differences were found for the basic and upper secondary level groups, the latter being significantly lower compared to the other educational levels. It stands out that in the case of depersonalization the size of the effect is medium, and for the other variables, it has a small size. To conclude the comparative analysis, the results of the differences based on the years of teaching experience are presented (Table 8).

 Table 8

 Differences according to years in teaching

Variable	From 0 to 5 years (n=186)	From 6 to 10 years (n=173)	From 11 to 15 years old (n=145)	From 16 to 20 years old (n=116)	More than 20 years (n=204)	F	р	f	CI S	95%
	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Media (SD)	-			low	Upp
Satisfaction with teaching	5.25 (0.73) *	5.42 (0.72)	5.42 (0.60)	5.40 (0.55)	5.45 (0.56) *	2.80	.025	0.11	.37	.53
Vocational awareness	5.27 (0.82) *	5.42 (0.77)	5.41 (0.66)	5.45 (0.67)	5.54 (0.60) *	3.60	.006	0.14	46	07
Commitment to education	5.43 (0.64) *	5.55 (0.62)	5.64 (0.41)	5.56 (0.47)	5.66 (0.45) *	5.46	<.001	0.13	37	04
Emotional exhaustion	2.21 (1.29)	2.20 (1.32)	2.13 (1.29)	2.23 (1.26)	1.87 (1.23)	2.54	.038	0.01	36	.37
Depersonalization	0.96 (1.16) *	0.75 (0.87)	0.57 (0.78) *	0.80 (0.89)	0.66 (0.84)	4.25	.002	0.02	.10	.66
Personal accomplishment	1.71 (0.69)	1.58 (0.65)	1.67 (0.69)	1.78 (0.70)	1.58 (0.69)	2.26	.061	0.01	07	.32

Note. The post hoc analysis with Tukey's HSD reveals differences for the groups from 0 to 5 years and over 20 years in the variables of satisfaction with teaching, vocational awareness, commitment to education. In the case of the groups from 0 to 5 years old and from 11 to 15 years old, there are differences for the depersonalization variable.

Según el análisis anterior, para los grupos que poseen diferencias significativas; el tamaño del efecto es pequeño.

Regression analysis around burnout

Linear regression calculation was performed to predict *burnout* (DV) from the subscales satisfaction with teaching (IV1), vocational awareness (IV2), and commitment to education (IV3). The regression equation was statistically significant [F (3.0)= 65.50, p<0.001, R² = 0.19, f ²= 0.23], and had a medium effect size. Said equation was 5.20 – 0.34 for the variable satisfaction with teaching, and 5.20 – 0.31 for commitment to education. In both cases, the burnout score decreases for each unit of the variables indicated. The vocational awareness variable did not contribute to the model. In addition, under the same principle, burnout (DV) and global vocation (IV) were calculated. The result was a statistically significant equation [F (1.0) = 187.58, R ²=0.186, β = -0.65, p=< 0.001, f ²=0.228]. Finally, a negative predictive relationship is found between vocation and burnout with a medium effect size.

DISCUSSION AND CONCLUSIONS

Given the first purpose of the study and the analyzes carried out, it is found that the vocation to teaching and burnout are significantly associated, which implies that the former influences the susceptibility to suffering burnout in teachers. Salgado and Leria (2018) refer the same when pointing out that vocation can reduce the effects of burnout, specifically in the factor of personal fulfillment. In addition, teacher satisfaction is correlated with burnout (Gallardo et al., 2019) because dissatisfaction with a profession can compromise the teacher's identity development.

Among the findings that were found at a comparative level, it stands out that teachers who work in the private sphere are more exposed to wear and tear. The current conditions derived from the COVID-19 pandemic have had a harmful impact on the economic resources of private institutions: migration of students to the public sector as well as partial abandonment. Consequently, job insecurity or, in the worst of cases, the decrease in their income has a negative influence on the psychological well-being of individuals. On the other hand, gender shows significant differences in vocational awareness and depersonalization, being higher in women for the first case and higher in men for the second one. The results are corroborated by the development of greater self-knowledge skills in women and the more recurrent presence of cynical or dismissive behaviors in men (Tašner et al., 2017).

Continuing with the comparatives, it is found that teachers who work with students with disabilities have a greater commitment to education and less depersonalization, corroborated by Nislin and Pesonen (2018). On the other side, both the vocation and manifest burnout at the basic and upper middle level operate in the opposite direction: the teachers who work at the basic level show a greater vocation because the majority who work in this level has a priori professional decision characteristic. Therefore, they are less exposed to attrition, in contrast to the professionals who arrived more fortuitously at upper secondary level teaching. In contrast, the vocation—in the three subscales analyzed—is significantly higher as the teacher has more experience. This shows it greater psychological capital, which allows him to be less susceptible to suffering wear than a component of this is depersonalization, in this case (Mesurado & Laudadio, 2019).

Other personal characteristics of the teacher with the presence of significant differences are emotional exhaustion and vocational awareness that are associated with marital status. Singles are more exhausted and less aware of their vocation. In contrast, married teachers could be likely different due to they could have negotiating behaviors and children. Teachers who have a stable affective relationship have greater representation of reality and personal and vocational awareness that prevents them from suffering burnout at work (Jimenez-Lopez et al., 2019). On the other hand, the time that teachers spend teaching influences emotional exhaustion, for teachers with more life experience appear less tired than their younger colleagues. The learning factor continues to operate approximately the same way than the practice over the years in their profession. It is suggested to carry out studies in the future in which other characteristics are addressed, such as the initial choice of career as a factor that can influence the vocation and the predisposition to wear out in the teaching performance in the future, as Flores suggested (2017). Finally, it is also important to carry out targeted analyzes by segments of urban. rural or other populations or analyze other personal characteristics of teachers, such as personality, subjective well-being or stress.

To conclude and based on the second purpose of the work, it is found that the CVOC-D has sufficient temporal stability and internal consistency. In addition, it has adequate construct, concurrent and predictive validity of the vocation to teaching, which makes it a reliable and valid instrument to analyze said faculty in the current teacher and be a useful scale for its diagnosis and study.

REFERENCES

- Benevene, P., Stasio, S. De, Fiorilli, C., Buonomo, I., Ragni, B., José, J., Briegas, M., & Barni, D. (2019). Effect of teachers 'happiness on teachers' health. The mediating role of happiness at work. *Frontiers in Pshychology, 10*(October), 1–10. https://doi.org/10.3389/fpsyg.2019.02449
- Bitran, M., Pedrals, N., Vergara, C., Rigotti, A., & Puschel, K. (2019). Burnout en la formación de profesionales de la salud en Chile: Factores de protección y riesgo, y propuestas de abordaje desde la perspectiva de los educadores. *Revista Médica de Chile 147*, 510–517. http://dx.doi.org/10.4067/S0034-9887201 9000400510
- Carlotto, M. S., & Gonçalves Câmara, S. (2017). Riscos psicossociais associados à síndrome de burnout em professores universitários. *Avances en Psicología Latinoamericana*, *35*(3), 447–457. https://doi.org/10.12804/revistas.urosario. edu.co/apl/a.4036
- Christian-Brandt, A. S., Santacrose, D. E., & Barnett, M. L. (2020). In the trauma-informed care trenches: Teacher compassion satisfaction, secondary traumatic stress, burnout, and intent to leave education within underserved elementary schools. *Child Abuse and Neglect*, 110(December 2019), 104437. https://doi.org/10.1016/j.chiabu.2020.104437
- Cohen, J. (1992). A power primer. *Psychological Bulletin, 112,* 155-159. https://doi.org/10.1037/0033-2909.112.1.155
- Del Pino, M., & Fernández, M. (2019). La importancia de la vocación en la elección de la carrera de Magisterio. Análisis de las expectativas vocacionales de los aspirantes a maestro en el Centro Adscrito de Magisterio Mª Inmaculada de Antequera. Revista de Estudios Regionales, (114), 119-146. https://bit.ly/3aRpGcr
- Diario Oficial de la Federación (Ed.) (2018). Norma Oficial Mexicana NOM-035-STPS-2018, Factores de riesgo psicosocial en el trabajo-Identificación, análisis y prevención. https://bit.ly/3fzD6v6
- Dik, B. J., Eldridge, B. M., Steger, M. F., & Duffy, R. D. (2012). *Development and validation of the Calling and Vocation Questionnaire (CVQ) and Brief Calling Scale (BCS)*. *Journal of Career Assessment, 20*(3), 242–263. https://doi.org/10.1177/1069072711434410
- Flores, D.I. (2017). El síndrome de burnout como riesgo laboral de los docentes. *Revista Caribeña de Ciencias Sociales,* (noviembre 2017), 1–6. https://bit.ly/3d9IWGn
- Franco-Álvarez, E., González-Peño, A., & Coterón-López, J. (2020). Compromiso y motivación en los alumnos de educación física, ¿es importante el burnout del profesor? *Revista de Psicología del Deporte*, 29(2), 28–35
- Fuentes, T. (2001). La vocación docente: una experiencia vital. *Ars Abrevis*, (7), 285-303. https://bit.ly/3tKuSrh

- Gallardo-López, J. A., López-Noguero, F., & Gallardo-Vázquez, P. (2019). Análisis del síndrome de burnout en docentes de educación infantil, primaria y secundaria para su prevención y tratamiento. *Revista Electrónica Educare, 23*(2), 1–20. https://doi:10.15359/ree.23-2.17
- Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2014). *Multivariate data analysis*. Pearson Education Limited.
- Hamidi, H., & Khatib, M. (2016). The Interplay among Emotional Intelligence, Classroom Management, and Language Proficiency of Iranian EFL Teachers. Broad Research in Artificial Intelligence and Neuroscience, 7(2), 49-58. https://bit.ly/3tS68h4
- Herman, K. C., Hickmon-Rosa, J., & Reinke, W. M. (2018). Empirically derived profiles of teacher stress, burnout, self-efficacy, and coping and associated student outcomes. *Journal of Positive Behavior Interventions*, *20*(2), 90–100. https://doi.org/10.1177/1098300717732066
- Hernández-Sampieri, R., Fernández-Collado, C., & Baptista-Lucio, M. (2010). *Metodología de la Investigación*. Mc Graw Hill
- Huertas-Fernández, J. M., & Romero-Rodríguez, S. (2019). La autonomía emocional en el profesorado de secundaria. Análisis en el marco de un proceso de coaching personal. *REOP Revista Española de Orientación y Psicopedagogía, 30*(3), 120. https://doi.org/10.5944/reop.vol.30.num.3.2019.26276
- Instituto Mexicano del Seguro Social (s.f.). Estrés laboral. https://bit.ly/3dPihvp
- Jiménez, C., & Ríos, D. (2018). Dimensiones laborales del síndrome burnout en docentes investigadores de universidades públicas. *Face Revista de la Facultad de Ciencias Económicas y Empresariales, 18*(2), 97-108. http://dx.doi.org/10.24054/01204211.v2.n2.2018.3431
- Jiménez-López, R. A., Pérez de Albéniz Iturriaga, A., Lucas-Molina, B., & Fonseca-Pedrero, E. (2019). El profesorado de la Universidad de La Rioja: ¿Resistente al burnout? *Contextos Educativos. Revista de Educación, 24*(24), 163–180. https://doi.org/10.18172/con.3590
- Kerlinger, F., & Lee, H. (2002). Investigación del comportamiento. Mc Graw Hill
- López, S., Civís, M., & Molina, J. L. (2018). La influencia del capital social en el desarrollo profesional de maestros noveles: una aproximación con métodos mixtos desde el análisis de redes sociales. *Profesorado. Revista de Currículum y Formación del Profesorado, 22*(2), 111–132. http://doi:10.30827/profesorado. v22i2.7717
- Lumley, T., Diehr, P., Emerson, S., & Chen, L. (2002). The importance of the normality assumption in large public health data sets. *Annual review of public health*, *23*, 151–169. https://doi.org/10.1146/annurev.publhealth.23.100901.140546
- Maslach, C., & Jackson, S. (1981). *Maslach Burnout Inventory*. Consulting Psychologists Press.

- Mesurado, B., & Laudadío, J. (2019). Experiencia profesional, capital psicológico y engagement. Su relación con el burnout en docentes universitarios. *Propósitos y Representaciones, 7*(3), 12-40. http://dx.doi.org/10.20511/pyr2019.v7n3.327
- Monroy-Castillo, A., & Juárez-García, A. (2019). Factores de riesgo psicosocial laboral en académicos de instituciones de educación superior en Latinoamérica: Una revisión sistemática. *Propósitos y Representaciones, 7*(3), 248. https://doi.org/10.20511/pyr2019.v7n3.361
- Muñoz-Fernández, G. A., Rodríguez-Gutiérrez, P., & Luque-Vílchez, M. (2019). La formación inicial del profesorado de educación secundaria en España: perfil y motivaciones del futuro docente. *Educación XX1*, 22(1), 71–92. https://doi.org/10.5944/educXX1.20007
- Nislin, M., & Pesonen, H. (2018). Associations of self-perceived competence, well-being and sense of belonging among pre- and in-service teachers encountering children with diverse needs Associations of self-perceived competence, well-being and sense of belonging among pre- and in-servi. *European Journal of Special Needs Education*, 34(4), 424–440. https://doi.org/10.1080/08856257.2 018.1533093
- Ranđelović, K., & Stojiljković, S. (2015). Work climate, basic psychological needs and burnout syndrome of primary school teachers and university professors. *TEME*, 6(3), 823-844. https://bit.ly/3aQ30t7
- Real Academia Española (Ed.) (2019). Vocación. En *Diccionario de la Real Academia Española*. https://bit.ly/2NfkhDV
- Romero-Llanos, K. (2019). Empatía y síndrome de desgaste profesional (burnout) en docentes de educación básica regular de Lima Metropolitana. *Avances en Psicología*, *27*(2), 237–254. https://doi.org/10.33539/avpsicol.2019. v27n2.1801
- Salgado, J.A., & Leria, F.J. (2018). Síndrome de burnout y calidad de vida profesional percibida según estilos de personalidad en profesores de educación primaria. *Revista CES Psicología*, 11(1), 69-89. http://dx.doi.org/10.21615/cesp.11.1.6
- Sánchez, E. (2009). Mitos y realidades en la carrera docente. *Revista de Educación*, 348, 465-488. https://bit.ly/3aSF88a
- Tašner, V., Mihelič, M. Ž., & Čeplak, M. M. (2017). Gender in the teaching profession: University students' views of teaching as a career. *Center for Educational Policy Studies Journal*, 7(2), 47–69. https://bit.ly/3cVlnzw
- Torres-Hernández, E.F. (2018). Competencias socioemocionales y creencias de autoeficacia como predictores del burnout en docentes mexicanos. *Revista de Estudios y Experiencias en Educación, REXE, 17*(35), 15-27. https://doi.org/10.21703/rexe.20181735torres1

- Torres-Hernández, E.F. (2020). Habilidades intrapersonales y su relación con el burnout en docentes de educación básica en León, México. *Revista de Estudios y Experiencias en Educación, REXE*, 19(39), 163-179. https://doi.org/10.21703/rexe.20201939torres9
- Torres-Hernández, E. F. (2022). Diseño y validación de una escala de vocación docente para profesores (CVOC-D) Design and validation of a teacher vocation scale for teachers. *Revista Fuentes*, *24*(1), 104–115. https://doi.org/https://doi.org/10.12795/revistafuentes.2022.15751
- Unda, S., Uribe, F., Jurado, S., García, M., Tovalín, H., & Juárez, A. (2016). Construction of a scale for assessing at work psychosocial risk factors in professors. *Revista de Psicología Del Trabajo y de Las Organizaciones, 32*(2), 67–74. https://doi.org/10.1016/i.rpto.2016.04.004
- Valenzuela, J., Muñoz, C., & Marfull-Jensen, M. (2018). Perfiles motivacionales durante la formación inicial docente. *Profesorado. Revista de Currículum y Formación Del Profesorado, 22*(1), 325–346. https://bit.ly/3tHL7pa