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# JOB SATISFACTION, ORGANIZATIONAL COMMITMENT AND BURNOUT IN TEACHERS IN MEXICO

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#### **Abstract**

The study's objective was to determine the relationships between the proposed variables that impact to the Job Satisfaction, Organizational Commitment and Burnout through the Psychological Empowerment mediator variable. The variables as impact factors were Structural Empowerment and Remunerations for the case of teachers from public middle-higher education institutions in Mexico. The study had a non-experimental design, being a correlational and causal research. The measurement instrument was applied to a sample of 167 teachers, whose data were analyzed using the structural equations method. The findings show which direct and indirect effects are generating significant effects. Subsequently, the analysis of the contrast and impact differences between the segmentation groups was proposed: by gender, marital status, schooling and employment status. One limitation was to carry out the cross-sectional study, with the data collected in a single moment. One of the main contributions of the model was to determine the impact of the proposed variables on job satisfaction and commitment, seeking to analyze the behavior of teachers and its effects on the development of more satisfied, committed and healthy human capital, being a field, little Empirically studied in Mexico. In addition to this, look for factors and strategies that contribute to improving the behaviors that are related to Burnout, since it interferes with the worker's health and affects the teacher-student relationship. It is recommended to continue with the analysis of Burnout in other contexts and organizational areas.

Keywords – Structural empowerment, Psychological empowerment, Burnout, Teachers, Public institutions.

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#### 1. Problem Statement

Currently, faced with a world in constant change, an increasing interest in the study of the attitudes, conducts and behaviors of the workforce is considered as a fundamental part of any organization. When targeting results to achieve higher productivity, better performance and better conditions for workers, it is necessary to focus on the factors of organizational behavior that impact to the employees and the work environment. Considering the economic, professional, labor, organizational and educational context, the study of human capital becomes increasingly important, focusing on it as the most valuable resource that

an organization has to achieve success. One of its main aspects is organizational behavior, which deals with what people do in an organization and how their behavior affects its performance.

Organizational behavior covers fundamental issues of job satisfaction, motivation, commitment, communication, emotions, moods, job stress or burnout. In addition, situations related to absenteeism, staff turnover, productivity, human performance and administration (Fuentes, 2015; Peña, Díaz, Chávez & Sánchez, 2016).

With the appearance of new terms, Kanter (1977, 1993, cited in Teixeira, Nogueira & Alves, 2016) and Thomas and Velthouse (1990) explain that by providing employees with structural and psychological empowerment, organizational behavior can be impacted.

Based on the above, it could be possible to have satisfied, committed employees with lower or no stress levels, with much higher results than those obtained through extrinsic motivators such as remuneration. Given this, the initiative arises to investigate the factors that make human capital satisfied, committed and with low or zero levels of stress so that it remains as long as possible in an organization in which it is considered suitable to work.

These aforementioned factors are not only sought in workers of for-profit companies, they have also been investigated in workers of care services such as nursing or teaching. In this last population category there is still an epistemological gap not covered in these relationships of concepts, which is why it is necessary to study it.

In this context, the research is carried out in public middle-higher education institutions in the cities of Linares, Hualahuises, Montemorelos, General Terán, Allende and Rayones in Nuevo León, Mexico.

This geographic region is called the Citrus Region. Its name is due to the production, marketing and export of citrus. It is considered an important area for the economy and that demands a large number of workers with a minimum of middle-higher education. This study considers various factors of organizational behavior and human capital for its purposes.

On the other hand, middle-higher education teachers with various types of job dissatisfaction are observed. Some of them without organizational commitment, with stress or emotional exhaustion that could be considered burnout, with some complaining about the remuneration received and the support they have from their organization.

The motivation to carry out this study in a geographical area with important economic, business, academic and cultural advances in recent years arises. This zone is outside the metropolitan area of Monterrey, Nuevo León, in Mexico, not yet considered in previous studies.

The general objective of the research is to determine the relationships and measure the impact of Structural Empowerment and Remuneration on Job Satisfaction, Organizational Commitment and Burnout through the mediating variable Psychological Empowerment in the case of teachers of public middle-higher education institutions of the Citrus Region of the state of Nuevo León, in Mexico. Subsequently, the analysis of the contrast and impact differences between the segmentation groups is proposed: by gender, marital status, schooling and employment situation, in order to determine or verify in all types of strata if the impacts are the same or different.

One of the main contributions is the study of the model proposed in middle-higher education institutions in Mexico, a field little studied empirically. It is important to identify the degree of satisfaction and commitment of the teaching staff as well as to seek strategies that contribute to increasing it, contributing to the development of more satisfied and productive teachers.

This shows the difference with what was found in nursing professionals or in manufacturing companies in previous investigations. In addition, according to Silva, García, González and Ratto (2015), it is relevant to

contribute more and more about Burnout in teaching work, since it interferes with the worker's health, affects the teacher-student relationship, the organization and therefore to society.

This document shows in section one the context of the research, the problem statement and the general objective of the study. In section two, the review of the literature of different authors who have investigated the variables studied, concluding this section with the proposed graphic model.

Section three on methodology describes the type and design of the research, the elaboration of the measurement instrument, the population, the sampling frame and sample, as well as the analysis methods used.

Section four presents the descriptive and inferential statistical results obtained from the application of the questionnaire using the structural equation model and by segmentation groups. Section five presents the discussion of the results obtained. The conclusions mention the theoretical and practical contributions, the limitations found, as well as the recommendations and future lines of research derived from this study.

#### 2. Background

The study is based on a literature analysis of the relationships between the proposed variables related to administration and psychology, which subsequently leads to the construction of the proposed graphic model. The dependent variables whose relationships are studied in this paper are: Job Satisfaction, Organizational Commitment and Burnout. The mediating variable: Psychological Empowerment. The independent variables are: Structural Empowerment and Remuneration.

#### 2.1. Dependent Variables

Job Satisfaction is one of the most fruitful and controversial constructs that make up organizational psychology (Salessi & Omar, 2017). It is defined as a positive and pleasant emotional state resulting from the individual's personal assessment of their work and of the experience acquired in it, considering their obligations, their supervisor and the organization itself (Locke, 1976; Sarwar & Khalid, 2011). It has fluctuated from a positive feeling that a subject experiences for doing a job that interests him to a measurable judgment about the job itself (Salessi & Omar, 2016).

The definition for Organizational Commitment is about people involvement with their organizations. This definition includes willingness to work and it is aligned to the classical definition (Keskes, Sallan, Simo & Fernandez, 2018). Which is one of the most developed in recent years and is better adapted to what it is investigated through the data collection instrument used.

Another important issue in organizations today is Burnout. Maslach's definition of Burnout (Maslach, 2003) is currently the most widely used, especially to explain its occurrence in nursing professionals and other human services settings. Burnout is a chronic stress response made up of three fundamental factors: fatigue emotional, depersonalization and low personal fulfillment (Leiter & Maslach, 2017). Its presence as a social problem in many human service professions was the impetus for research that has been carried out in many countries.

For Maslach, Burnout is an emerging occupational disease, which is often understood to be exclusive to help or service professionals. When looking at the literature on this phenomenon, it is found that most of the studies carried out have used samples of professionals of education and health (Olivares, 2017).

#### 2.2. Independent Variables

On the other hand, Empowerment is a term adopted more than three decades ago in the labor context and is made up of two aspects: Structural Empowerment and Psychological Empowerment (De los Ríos & Blanco, 2015). Structural Empowerment is defined as a set of activities and practices carried out by management that give power, control and authority to their subordinates, granting them access to

information, resources, support and opportunities to learn and develop (Chen & Chen, 2008; Cheng & Boey, 2015; Kanter, 1993, cited in Teixeira et al., 2016).

Analyzing the relationships of Structural Empowerment with other variables, most authors relate it to the Psychological Empowerment variable. They using the latter as a mediator between one or more attitudinal variables of employees, such as job satisfaction, organizational commitment or burnout (Gong, Zhang, Zhao & Yin, 2017; Aggarwal, Dhaliwal & Nobi, 2018).

O'Brien (2010) studied the relationship between Structural Empowerment as an independent variable, Psychological Empowerment as a mediator and Burnout as a dependent variable in a sample of nursing professionals. In this study, statistically significant negative correlations were found between Structural Empowerment and Burnout (r = -0.44, p < 0.01) and between Psychological Empowerment and Burnout (r = -0.34, p < 0.01). A statistically significant positive correlation was found between Structural Empowerment and Psychological Empowerment(r = 0.59, p < 0.01).

The results of O'Brien (2010) indicated that Structural Empowerment was an independent predictor of Burnout in this sample; however, Psychological Empowerment was not an independent predictor of Burnout and did not mediate the relationship between Structural Empowerment and Burnout.

In addition, studies were found that relate Structural Empowerment with Psychological Empowerment of private club service employees (Corsun & Enz, 1999; Ergenli, Ari & Metin, 2007; Peterson & Speer, 2000). They suggest that, in general, supportive relationships in the work environment are factors that influence Psychological Empowerment (Corsun & Enz, 1999).

Jaimez and Diaz (2011) analyze the relationship of Empowerment (Structural and Psychological) with the three dimensions of Organizational Commitment according to the multidimensional model of Meyer and Allen, work well-being, the work environment and the workers' intention to leave. To do this, they carried out a study with 56 workers from a Spanish company that operates throughout the national territory. These results showed that Structural Empowerment effectively acts as a predictor of Psychological Empowerment (B = 0.618; sig = 0.00; p < 0.001).

Therefore, it is observed that the reviewed literature supports the direct relationship of Structural Empowerment with Psychological Empowerment. Most of them tested on nursing staff, so it is important and interesting to verify these relationships with variables such as Job Satisfaction, Organizational Commitment and Burnout in other organizational populations that have been little studied. Such is the case of middle-higher school teachers, thus contributing to strengthen the studies of these variables through the cause-and-effect model proposed in this research.

On the other hand, Remuneration is considered as the compensation received by the worker for having made his workforce available to the employer (Rubio & Piatti, 2000). In the labor relationship between the company and the collaborator, the compensations (salaries, raises, incentives and social benefits) are called to significantly influence the satisfaction of the collaborators. The organizations must establish elements of a strategic type, then convert them to operational plans with a defined budget (Torres-Flórez, 2019).

In Mexico, compensation is a system that is used as a way to reward the employee, and in this way create motivation and commitment to the organization. Some examples are the base salary, bonuses and vacation bonuses (Benito, Beas, Mendoza & Ochoa, 2020). In a study carried out by Báez, Esquivel, Núñez, Rojas and Zavaleta (2017), it was concluded that there is a significant relationship between the variables of job satisfaction and compensation with the rotation of some generations. As Gavino (2020) mentions, remuneration contributes to improving in a positive way, seeking efficiency and effectiveness through job performance whose purpose is to attend services by workers with capacity and quality.

Flores and Madero (2012) study internal salary equality as one of the variables of quality of life at work that predict the intention of employees to remain in the institution. Palomo, Galindo and Cantú (2013) in their study test 8 factors to identify those that have the greatest impact on employee satisfaction at

work in service organizations (public or federal, non-profit). They explain about wages that although their presence is less important in relation to the other variables, their lesser importance is justified in relation to the employee's job satisfaction in a service organization. Understanding that this factor would be more important in relation to to the concept of productivity and to an incentive system (Palomo et al., 2013).

Segovia (2014) in his research shows as a second hypothesis that variable compensation is positively related to Psychological Empowerment. When testing this hypothesis, it is rejected, since a non-significant relationship is shown, the estimated result was b = 0.197; p = n.s. Although studies by several authors show that variable compensation or compensation in general have a positive and significant impact on both job satisfaction and productivity.

#### 2.3. Mediating Variable

Psychological Empowerment is considered as the increase in intrinsic motivation in the performance of the function, based on four concepts: meaning of the task, competence, self-determination and impact (Thomas & Velthouse, 1990). Psychological Empowerment is not a personality characteristic, rather it is a set of cognitions defined based on a certain work context (Spreitzer, 1995, cited in Orgambídez-Ramos, Moura & Almeida, 2017).

Psychological Empowerment is used as a mediating variable between Structural Empowerment and Remuneration with Job Satisfaction, Organizational Commitment and Burnout. Therefore, it is a third variable, that is, an intervening variable that affects the relationship between two variables. In this case, the independent variables and the potentially mediating variable influence the dependent variables (Montoya & Hayes, 2017; Hayes, 2018).

When reviewing the relationships in empirical studies of this variable, it was found that Rico-Picó, Peinado-Estévez, Salvador-Ruiz and González-Fuentes (2016) tried to verify how Psychological Empowerment, Job Satisfaction and Job Identification interact by selecting a sample of different work groups: teachers, health and security forces in Spain. In said study, it was found that there is a relationship between the levels of Empowerment and Satisfaction (r = 0.477, p = 0.007) and between Empowerment and Identification (r = 0.644, p = 0.000). There is no significant relationship between Identification and Satisfaction (r = 0.296, p = 0.106) (Rico-Picó et al., 2016).

Rios, Rayo and Ferrer (2010) explain that the relationship between the variables of Empowerment and Organizational Commitment has been a little explored field from the organizational perspective. The results confirm the hypotheses raised in the sense that Psychological Empowerment is a predictor of Organizational Commitment. When analyzing the individual impact of each one of the dimensions, only affective commitment has a direct impact on the four dimensions proposed (Rios et al., 2010).

Jaimez and Diaz (2011) analyze the relationship of Empowerment (Structural and Psychological) with the three dimensions of Organizational Commitment. Indeed, Structural Empowerment acts as a predictor of Psychological Empowerment. Structural Empowerment does not show a causal relationship with affective commitment, but it is a predictor of normative commitment. There is no such relationship with Psychological Empowerment.

Chiang, Valenzuela and Lagos (2014) proposed in their research to know the effect of empowerment on Organizational Commitment in small and medium-sized enterprises, with a total of 219 workers in the Bío-Bío region, in Chile. In small companies, a predictive model of commitment based on empowerment variables is not observed (Chiang et al., 2014).

Several studies have linked Psychological Empowerment to behavioral outcomes, such as Job Satisfaction, Job Performance, and Burnout (Fuller, Morrison, Jones, Bridger & Brown, 1999; Hechanova, Alampay & Franco, 2006; Spreitzer, 1995).

#### 2.4. Proposed Model

As has been observed, the different investigations underlying each of the variables of this investigation were reviewed. Based on all of the above, the model of cause and effect of the Figure 1 is proposed.

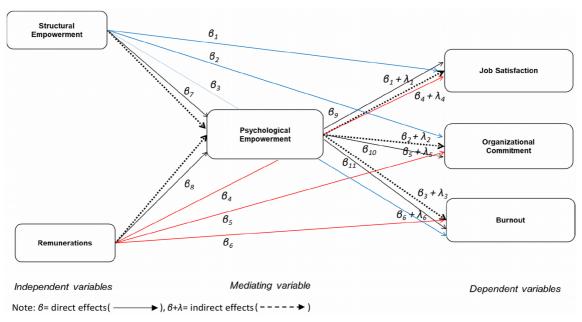


Figure 1. Proposed graphic model. Source: Own elaboration

#### 3. Methodology

The study was carried out with a quantitative approach, correlational, explanatory scope, non-experimental, cross-sectional or transectional design. The relationships that are raised in the previous graph (direct and indirect effects), seek to prove which of these direct and indirect effects are the ones that are generating significant impacts.

In the present work, the mediating effect of the Psychological Empowerment variable between the relationships of the exogenous and endogenous latent variables of the model was evaluated. The effects of mediation are classified as direct and indirect. The former are the relationships that link two constructs through a connector ( $\beta i$ ). Indirect effects are relationships that involve a sequence of relationships with at least one intervening construct ( $\lambda i$ ). The relationships to be studied in this research are shown in Table 1.

The universe of study is represented by the total number of teachers from middle higher education institutions in the state of Nuevo León. According to data from the Ministry of Tourism (SECTUR, 2017) there are 15,206 teachers of public institutions of higher secondary level in the State of Nuevo León, which is the general universe. Of them, 296 teachers are located in the Citrus Region, which represents the population subject to study (UANL, 2018). According to the calculation, a sample size "n" of 167 elements was obtained.

The information was collected through physical questionnaires and self-administered by the teachers themselves, trusting in their professionalism, responsibility and commitment. The procedure for data collection consisted of going to each of the high schools personally, obtaining the authorization of the directors or staff in charge, addressing the teachers to explain the objective of the research and what is related to the instrument, as well as its application.

The teachers who were available at that time agreed to answer the survey, considering the proportional number of items per school to meet the sample size. In cases where teachers required more time to fill out the survey due to labor issues, the questionnaires were left and the next day or days, depending on their activities, they went to pick them up.

Relationship	between variables
Direct effects	Indirect effect (mediating PE)
$\beta_t = SE \rightarrow JS$	$\lambda_1 = SE \to PE \to JS$
$\beta_2 = SE \rightarrow CO$	$\lambda_2 = SE \rightarrow PE \rightarrow CO$
$\beta_{\beta} = SE \rightarrow BOUT$	$\lambda_3 = SE \rightarrow PE \rightarrow BOUT$
$\beta_4 = REM \rightarrow JS$	$\lambda_4 = REM \rightarrow PE \rightarrow JS$
$\beta_5 = REM \rightarrow CO$	$\lambda_5 = REM \rightarrow PE \rightarrow CO$
$\beta_6 = REM \rightarrow BOUT$	$\lambda_6 = REM \rightarrow PE \rightarrow BOUT$
$\beta_7 = SE \rightarrow EP$	
$\beta_8 = REM \rightarrow EP$	
$\beta_9 = PE \rightarrow JS$	
$\beta_{t0} = PE \rightarrow CO$	
$\beta_{11} = PE \rightarrow BOUT$	

Table 1. Relationships between variables to be studied in the research.

Direct effects Indirect effect (mediating EP)

A stratified sampling was carried out. A questionnaire based on previously validated scales was applied for each variable: Conditions of Work Effectiveness Questionnaire (CWEQ-II) (O'Brien, 2010), the psychological empowerment scale (The Psychological Empowerment Scale) (O'Brien, 2010), the Meliá and Peiró S20/23 Job Satisfaction Questionnaire (Meliá & Peiró, 1998), the Meyer and Allen Organizational Commitment Questionnaire (Meyer & Allen, 1997), the Maslach Burnout Inventory (Maslach & Jackson, 1981) and the surveys that measure the effectiveness of Remuneration in the employee in the studies of Madero (2010, 2012). Although these questionnaires were used in other study contexts, the items for each of the variables were adapted to the context of this research.

In the first section of the instrument that was integrated and adapted for this study, the items for each of the 6 variables were captured, using the 7-point Likert scale, where the responses range from 1) totally disagree, 2) moderately disagree, 3) slightly disagree, 4) neither agree nor disagree, 5) slightly agree, 6) moderately agree, up to 7) totally agree. The data was discrete quantitative type, where only integer values are allowed.

In the second section of the instrument, demographic data was included to know the profile of the participating teachers, as well as the labor data they manage in the institutions for which they work. Once the questionnaire was integrated, and when adapted to the study context, the items that were not focused on the objective or scope of the study of teaching on which the research is carried out were removed.

Subsequently, 10 experts in the area were sent to support the understanding and coherence of the items and suggest some changes, which were made to obtain the final survey. Once again, the content validity process was carried out, leaving the final instrument and the Cronbach's alpha index was calculated for each of the model variables. Structural Empowerment (SE) and Remuneration (REM) were considered as independent variables, Psychological Empowerment (PE) as mediating variable and Job Satisfaction (JS), Organizational Commitment (CO) and Burnout (BOUT) as dependent variables.

The questionnaire was applied, according to the sample size, to the teachers of the 13 public institutions of middle-higher education that are in the study context. The context is the Citrus Region of the state of Nuevo León, Mexico, has a population of 253,467 inhabitants (INEGI, 2018). It exceeds the generation of formal sources of work in the North and South regions of Nuevo León, where they employ 9,113 and 2,658 people, respectively. In this region there is an entire agribusiness that processes the raw material and that can employ up to 3,500 people per day, exporting more than 100,000 tons of products to various countries such as the United States and Japan, with Mexico standing out among the citrus leaders worldwide (Mendoza, 2016; Pantoja & Flores, 2018).

Statistical analysis was performed from a structural equation model (Structural Equation Modeling, SEM) using SmartPLS 3.0 M3 (Hair, Hult, Ringle & Sarstedt, 2017), since it allows measuring relationships between latent variables and analyzing various relationships of dependence simultaneously (López, 2012).

The sample was analyzed in the first instance with the proposed model and the sample size of 167 elements and, subsequently, by segmentation groups: gender (male and female), marital status (married and not married), education (with a bachelor's degree and postgraduate), as well as employment status (with another job or not). The results show the analysis of the significance of the direct and indirect effects between the exogenous and endogenous constructs.

#### 4. Results

It began with the analysis of demographic data of the teachers surveyed to obtain information about their profile. From the data collection, Table 2 shows the profile of the teachers surveyed, statistically analyzing the information. The results of the application of the survey are shown, previously verifying its reliability and whose sample size was 167 elements (Table 2). In the first instance, a statistical analysis of the entire sample is performed with SEM.

	Quantities	0/0			Quantities	0/0
Gender			Monthly income	:		
Male	82	49.10	\$0 - \$4,999		40	23.95
Female	85	50.90	5,000 - 9,999		50	29.94
Civil status			10,000- 14,999		42	25.15
Single	50	29.94	15,000 - 19,999		17	10.18
Married	104	62.28	20,000 - 24, 999		04	02.40
Widower	00	00.00	25,000 - 29,999		03	01.80
Free Union	05	02.99	30,000 - 34,999		06	03.59
Divorced	07	04.19			01	00.60
Other	00	00.00	More of 40,000		00	00.00
Unanswered	01	00.60	Unanswered		04	02.39
Job Category			Economic deper	ndents		
Eventual (By Contract)	72	43.11	0		37	22.16
For fees	04	02.40	1		33	19.76
Base	33	19.76	2		41	24.55
Halftime	12	07.18	3		32	19.16
Full time	43	25.75	5 4			08.98
Unanswered	03	01.80	5		07	04.19
Scholarship			6		01	00.60
Primary / Secondary	01	00.60	Unanswered		01	00.60
Middle-Higher	04	02.40	Has another job			
Technical career	07	04.19	Yes		85	50.90
Bachelor's degree	82	49.10	No		81	48.50
Master's degree	66	39.52	Unanswered		01	00.60
Doctorate	06	03.59				
Unanswered	01	00.60				
			Average	Standa	ard deviation	Median
Age			39.457		11.322	38.000
Number of class hours per			23.263		8.724	20.000
Number of administrative	hours		06.000		10.836	0.000
Number of hours of stay	Number of hours of stay				3.975	0.000
Seniority within the educate	ional institution	1	10.780 9.64		9.648	7.250
Average number of studen	1 0 1	rved	35.748 12.429			35.000
Years of work experience a	is a teacher		13.167		10.327	10.000

Table 2. Demographic analysis of the profile of the teacher surveyed

#### 4.1. Analysis with Structural Equation Modeling

The analysis of the results of the measurement instrument is presented by the method of structural equations using SmartPLS 3.0. The process begins with the evaluation of the indicators that make up the latent variables through the loads, which must be greater than 0.70. The measuring instrument used had 65 items. After the evaluation, 42 final items remained, the model was rerun and the factor loadings were recalculated, which are shown in Table 3.

Subsequently, the reliability of the instrument is evaluated (Table 4) including the composite reliability index. It is observed that the results of the composite reliability index in this study are within the parameters considered acceptable.

Independent variable		Independent variable		Mediating variable	
Structural				Psychological	
Empowerment	Load	Remuneration	Load	Empowerment	Load
SE-1	0.798	REM-1	0.896	PE-1	0.850
SE-2	0.834	REM-2	0.898	PE-2	0.896
SE-3	0.770	REM-3	0.915	PE-3	0.749
SE-4	0.799	REM-4	0.815	PE-4	0.809
SE-5	0.755	REM-5	0.857	PE-5	0.857
SE-6	0.757	REM-6	0.840	PE-6	0.716
SE-7	0.789			PE-7	0.793
SE-8	0.744				
SE-9	0.813				
SE-10	0.861				
Dependent variable		Dependent variable		Dependent variable	
		Organizational	1 [		
Job Satisfaction	Load	Commitment	Load	Burnout	Load
JS-1	0.779	CO-1	0.915	BOUT-1	0.759
JS-2	0.726	CO-2	0.833	BOUT-2	0.746
JS-3	0.701	CO-3	0.903	BOUT-3	0.833
JS-4	0.832	CO-4	0.830	BOUT-4	0.832
JS-5	0.845	CO-5	0.883		
JS-6	0.808	CO-6	0.860		
JS-7	0.747	CO-7	0.915		
JS-8	0.800				

Variables: SE= Structural Empowerment, REM= Remuneration, PE= Psychological Empowerment, JS= Job Satisfaction, CO= Organizational Commitment, BOUT= Burnout.

Table 3. Factor loadings (final items)

Variable Type	Variable name	Cronbach's alpha	Composite reliability	Average Variance Extracted (AVE)
Independent	Structural Empowerment	0.934	0.944	0.629
Independent	Remunerations	0.936	0.950	0.759
Mediator	Psychological Empowerment	0.913	0.931	0.660
Dependent	Job Satisfaction	0.908	0.926	0.610
Dependent	Organizational Commitment	0.949	0.958	0.766
Dependent	Burnout	0.803	0.872	0.630

Table 4. Reliability

Analyzing Table 5, it is observed that in the structural model the average  $R^2$  of 0.648 was estimated, verifying that the model shows how the dependent variable is explained by the independent variables, where the  $R^2$  values represent a substantial explanatory power with values 0.67, moderate 0.33 and weak 0.19. The  $R^2$  values for Psychological Empowerment, Organizational Commitment and Job Satisfaction (Table 5) are within the parameters considered acceptable, except Burnout.

To determine the confidence intervals of the trajectory coefficients and establish the bases for statistical inference, the Bootstrapping technique is used. It represents another nonparametric approach to estimating the precision of partial least squares (PLS) estimated values. Table 6 shows the results obtained in the structural model, observing the standardized betas, the student's t values and the significance of the relationships of de variables.

Variable Type	Variable	R <sup>2</sup>	$R^2$ adjusted
Mediator	Psychological Empowerment	0.668	0.664
Dependent	Job Satisfaction	0.892	0.890
Dependent	Organizational Commitment	0.853	0.850
Dependent	Burnout	0.178	0.163
	Average	0.648	0.642

Table 5. Structural model: Results of the R<sup>2</sup>

Relationship between variables	Direct effect	t of student	p value (sig.)	Significance $(p < 0.05)$	Indirect effect (PE mediator)	t of student	p value (sig.)	Significance $(p < 0.05)$
$\beta_1 = SE \rightarrow JS$	0.671	12.267	0.000	Yes	$\lambda_1 = 0.206$	4.057	0.000	Yes
$\beta_2 = SE \rightarrow CO$	0.122	1.921	0.046	Yes	$\lambda_2 = 0.624$	10.324	0.000	Yes
$\beta_3 = SE \rightarrow BOUT$	-0.372	2.157	0.034	Yes	$\lambda_3 = 0.026$	0.177	0.859	No
$\beta_4 = REM \rightarrow JS$	0.083	2.415	0.017	Yes	$\lambda_4 = 0.029$	1.953	0.051	No
$\beta_5 = REM \rightarrow CO$	0.013	0.374	0.712	No	$\lambda_5 = 0.089$	2.075	0.038	Yes
$\beta_6 = REM \rightarrow BOUT$	-0.136	1.319	0.187	No	$\lambda_6 = 0.004$	0.150	0.881	No
$\beta_7 = SE \rightarrow PE$	0.764	18.640	0.000	Yes				
$\beta_8 = REM \rightarrow PE$	0.108	2.121	0.037	Yes				
$\beta_9 = PE \rightarrow JS$	0.270	4.431	0.000	Yes				
$\beta_{t0} = PE \rightarrow CO$	0.816	13.325	0.000	Yes				
$\beta_{11} = PE \rightarrow BOUT$	0.034	0.180	0.859	No				

Variables: SE= Structural Empowerment, REM= Remuneration, PE= Psychological Empowerment, JS= Job Satisfaction, CO= Organizational Commitment, BOUT= Burnout.

Table 6. Path Coefficients: Significance analysis of the direct and indirect effects of the research model

#### 4.2. Statistical Analysis by Segmentation Groups Based on Demographic Variables

Subsequently, the analysis of the results of the segmentation groups is deepened: by gender (Table 7), marital status (Table 8), schooling (Table 9) and their employment status (Table 10), in order to obtain more relevant and accurate information on this population context.

	Male	e: 6 significan	t variable	es $(n = 82)$	Female: 7 significant variables $(n = 85)$				
Relationship	Direct	Significance	Indirect	Significance	Direct	Significance	Indirect	Significance	
between variables	effect	(p < 0.05)	effect	(p < 0.05)	effect	(p < 0.05)	effect	(p < 0.05)	
$SE \rightarrow JS$	0.627	0.000	0.267	0.000	0.785	0.000	0.092	0.104	
$SE \rightarrow CO$	0.064	0.412	0.713	0.000	0.147	0.190	0.552	0.000	
$SE \rightarrow BOUT$	-0.133	0.789	-0.007	0.981	-0.462	0.000	-0.126	0.150	
$REM \rightarrow JS$	0.078	0.085	0.019	0.398	0.093	0.044	0.021	0.377	
$REM \rightarrow CO$	0.061	0.122	0.051	0.398	-0.046	0.513	0.126	0.042	

	Male	e: 6 significan	t variable	es $(n = 82)$	Female: 7 significant variables $(n = 85)$				
Relationship between variables		Significance $(p < 0.05)$	Indirect effect	Significance $(p < 0.05)$	Direct effect	Significance $(p < 0.05)$	Indirect effect	Significance $(p < 0.05)$	
$REM \rightarrow BOUT$	-0.187	0.490	0.000	0.987	-0.052	0.604	-0.029	0.343	
$SE \rightarrow PE$	0.820	0.000			0.701	0.000			
$REM \rightarrow PE$	0.058	0.396			0.159	0.074			
$PE \rightarrow JS$	0.326	0.000			0.131	0.110			
$PE \rightarrow CO$	0.870	0.000			0.788	0.000			
$PE \rightarrow BOUT$	-0.008	0.981			-0.180	0.141			

Table 7. Path Coefficients: Significance analysis of direct and indirect effects by gender

	Singl	es: 6 significa	nt variab	les (n = 50)	Marrie	ed: 11 significa	nt variabl	les $(n = 104)$
Relationship between variables	Direct effect	Significance $(p < 0.05)$	Indirect effect	Significance $(p < 0.05)$	Direct effect	Significance $(p < 0.05)$	Indirect effect	Significance $(p < 0.05)$
$SE \rightarrow JS$	0.780	0.000	0.149	0.009	0.605	0.000	0.269	0.000
$SE \rightarrow CO$	0.059	0.637	0.655	0.000	0.179	0.031	0.589	0.000
$SE \rightarrow BOUT$	-0.270	0.609	0.067	0.817	-0.452	0.019	0.031	0.866
$REM \rightarrow JS$	0.035	0.515	0.020	0.430	0.064	0.099	0.048	0.038
$REM \rightarrow CO$	-0.006	0.946	0.089	0.380	0.045	0.258	0.105	0.028
$REM \rightarrow BOUT$	-0.331	0.308	0.009	0.895	-0.033	0.771	0.005	0.888
$SE \rightarrow PE$	0.745	0.000			0.775	0.000		
$REM \rightarrow PE$	0.101	0.395			0.138	0.020		
$PE \rightarrow JS$	0.200	0.002			0.347	0.000		
$PE \rightarrow CO$	0.880	0.000			0.759	0.000		
$PE \rightarrow BOUT$	0.090	0.814			0.040	0.866		

Variables: SE= Structural Empowerment, REM= Remuneration, PE= Psychological Empowerment, JS= Job Satisfaction, CO= Organizational Commitment, BOUT= Burnout.

Table 8. Path Coefficients: Significance analysis of direct and indirect effects by marital status

	Degr	ee: 8 significa	nt variab	les (n = 82)	Postgrad	luate: 8 signifi	cant varia	ables $(n = 73)$
Relationship	Direct	Significance	Indirect	Significance	Direct	Significance	Indirect	Significance
between variables	effect	(p < 0.05)	effect	(p < 0.05)	effect	(p < 0.05)	effect	(p < 0.05)
$SE \rightarrow JS$	0.645	0.000	0.235	0.000	0.702	0.000	0.189	0.016
$SE \rightarrow CO$	0.005	0.962	0.801	0.000	0.196	0.051	0.468	0.000
$SE \rightarrow BOUT$	-0.573	0.025	0.136	0.584	-0.228	0.355	-0.024	0.902
$REM \rightarrow JS$	0.089	0.088	0.011	0.615	0.042	0.327	0.055	0.021
$REM \rightarrow CO$	0.017	0.720	0.039	0.595	0.020	0.783	0.135	0.016
$REM \rightarrow BOUT$	-0.098	0.519	0.007	0.838	-0.048	0.836	-0.007	0.912
$SE \rightarrow PE$	0.844	0.000			0.656	0.000		
$REM \rightarrow PE$	0.041	0.597			0.189	0.014		
$PE \rightarrow JS$	0.278	0.000			0.288	0.005		
$PE \rightarrow CO$	0.949	0.000			0.714	0.000		
$PE \rightarrow BOUT$	0.161	0.584			-0.037	0.897		

Variables: SE= Structural Empowerment, REM= Remuneration, PE= Psychological Empowerment, JS= Job Satisfaction, CO= Organizational Commitment, BOUT= Burnout.

Table 9. Path Coefficients: Significance analysis of the direct and indirect effects by schooling

	1	Has and 1 significant v	ther job:		Does not have another job: 6 significant variables (n = 81)				
Relationship between variables	Direct		· · · · · ·	Significance $(p < 0.05)$		Significance $(p < 0.05)$		<u> </u>	
$SE \rightarrow JS$	0.594	0.000	0.270	0.001	0.751	0.000	0.169	0.007	
$SE \rightarrow CO$	0.137	0.125	0.645	0.000	0.074	0.492	0.629	0.000	
$SE \rightarrow BOUT$	-0.413	0.030	-0.031	0.861	-0.421	0.128	0.093	0.665	
$REM \rightarrow JS$	0.115	0.008	0.036	0.110	0.014	0.756	0.027	0.293	
$REM \rightarrow CO$	0.014	0.736	0.085	0.098	0.008	0.908	0.100	0.283	
$REM \rightarrow BOUT$	-0.259	0.026	-0.004	0.890	0.084	0.647	0.015	0.770	
$SE \rightarrow PE$	0.794	0.000			0.733	0.000			
$REM \rightarrow PE$	0.105	0.088			0.116	0.276			
$PE \rightarrow JS$	0.34	0.001			0.23	0.002			
$PE \rightarrow CO$	0.812	0.000			0.858	0.000			
$PE \rightarrow BOUT$	-0.039	0.861			0.127	0.657			

Table 10. Path Coefficients: Significance analysis of the direct and indirect effects by employment status (has or does not have another job)

Based on the results stratified by gender (Table 7), marital status (Table 8), education (Table 9) and employment status (Table 10), the results are comparatively analyzed by segmentation groups (Table 11 and Table 12).

The Table 13 shows the analysis of the differences in impact by segmentation groups of the relationships that were significant.

			I	<b>?</b> <sup>2</sup>		Significant variables				
Segmentation groups	Demographic variable	PE	JS	СО	BOUT	Directs	Indirects	Totals	% of Effects	
Gender	Male	0.908	0.713	0.901	0.076	4	2	6	35%	
Gender	Female	0.621	0.882	0.782	0.409	5	2	7	41%	
C: 1	Singles	0.66	0.944	0.854	0.23	4	2	6	35%	
Civil status	Married	0.692	0.879	0.867	0.186	7	4	11	65%	
Salacalina	Bachelor's degree	0.754	0.905	0.925	0.251	6	2	8	47%	
Schooling	Postgraduate	0.547	0.897	0.764	0.076	4	4	8	47%	
Labor Status	Without another job	0.693	0.884	0.872	0.339	7	4	11	65%	
Labor Status	Without another job	0.655	0.911	0.852	0.083	4	2	6	35%	
General		0.668	0.892	0.853	0.178	8	3	11	65%	

Variables: *PE*= Psychological Empowerment, *JS*= Job Satisfaction, *CO*= Organizational Commitment, *BOUT*= Burnout.

Table 11. Analysis of variances explained by segmentation groups

Relation	Gene ral	Male	Fem ale	Abso lute Diffe renc e	Singl es	Marr ied	Abso lute Diffe renc e	Bach elor's degr ee	Post grad uate	Abso lute Diffe renc e	With anot her job	With out anot her job	Abso lute Diffe renc e	Tot als
$SE \rightarrow JS$	0.671	0.627	0.785	0.158	0.780	0.605	0.175	0.645			0.594	0.751	0.157	8/9
$SE \rightarrow CO$	0.122					0.179								2/9
$SE \rightarrow BOUT$	-0.372		-0.462					-0.573			-0.413			4/9
$REM \rightarrow JS$	0.083		0.093								0.115			3/9
$REM \rightarrow CO$														0/9
$REM \rightarrow BOUT$											-0.259			1/9
$SE \rightarrow PE$	0.764	0.82	0.701	0.119	0.745	0.775	0.03	0.844	0.656	0.188	0.794	0.733	0.061	9/9
$\text{REM} \rightarrow \text{PE}$	0.108					0.138			0.189					3/9
$PE \rightarrow JS$	0.270	0.326			0.200	0.347	0.147	0.278	0.288	0.010	0.34	0.23	0.110	8/9
$PE \rightarrow CO$	0.816	0.87	0.788	0.082	0.880	0.759	0.121	0.949	0.714	0.235	0.812	0.858	0.046	9/9
$PE \rightarrow BOUT$								0.161						1/9

Table 12. Path coefficients: Analysis of impact differences by segmentation groups

	Segmentation groups									
Relationships	Male / Female	Single / Married	Bachelor's degree / Postgraduate	With / without another job						
$SE \rightarrow JS$	F > M	S > M	-	$W_{out} > W$						
$SE \rightarrow PE$	M > F	M > S	B > P	$W > W_{out}$						
$SP \rightarrow JS$	-	M > S	P > B	$W > W_{out}$						
$SP \rightarrow CO$	M > F	S > M	B > P	$W_{out} > W$						

Variables: SE=Structural Empowerment, PE=Psychological Empowerment, JS=Job Satisfaction, CO=Organizational Commitment.

Table 13. Analysis of impact differences by segmentation groups

#### 5. Discussion

The established research objective was met, in which each of the total direct and indirect effects of the variables under study was determined, considering Psychological Empowerment in its mediating role. The acceptable values of R<sup>2</sup> are shown, where the dependent variables are considerably explained by their predictors, with the exception of the Burnout variable. In the first instance, the complete research model was analyzed with a sample size of 167 elements. Subsequently, the analysis was carried out based on segmentation groups by gender, marital status, education and employment status.

The findings found support the positive and significant relationship of structural empowerment that impacts job satisfaction with psychological empowerment ( $\beta_t + \lambda_t = 0.206$ ;  $R^2 = 0.892$ , p = 0.000). It is a theoretical contribution, since no studies were found that analyzed this relationship in this way. Only investigations that studied the individual and direct relationship of Psychological Empowerment and Job Satisfaction were found.

Another result that stands out is the positive and significant relationship between Remuneration and Organizational Commitment through Psychological Empowerment ( $\beta_5 + \lambda_5 = 0.089$ ;  $R^2 = 0.853$ , p = 0.038). Since there is no history of previous studies was found on this relationship, it consolidates the importance of having studied it according to this epistemological vacuum, contributing to the theory its result.

It is noted that the results do not support the inverse relationship between Structural Empowerment and Burnout through Psychological Empowerment ( $\beta_{\bar{j}} + \lambda_{\bar{j}} = 0.026$ ;  $R^2 = 0.178$ , p = 0.859). Contrary to what was found by O'Brien (2010) in nurses from a medical center, whose results significantly supported his

hypothesis. Therefore, it is a contribution to the existing epistemological vacuum in this field of science and in the population segment studied in this research. Likewise, the results do not support the relationship or the negative (inverse) impact of Remuneration on Burnout through Psychological Empowerment ( $\beta_6 + \lambda_6 = 0.004$ ;  $R^2 = 0.178$ , p = 0.881).

With the above, it is observed that there is a contribution in the mediation of Psychological Empowerment in Structural Empowerment and Remuneration with Burnout, because by not presenting a significant relationship, teachers do not consider stress or Burnout as part of their daily routine.

According to the Burnout theory of Villarruel, Chávez, Hernández, Naranjo, Salazar, Roque et al. (2018), and possibly explaining the results for the relationship of the Empowerment Structural and Burnout through the Psychological Empowerment, teachers in Mexico tend to have low levels of Burnout. It is due to the effective attitude of dealing with stressors, triggers of the syndrome, or that teachers are not involved in high productivity, paying little attention to the demands of their teaching function.

Additionally, individuals with a high degree of commitment, effectiveness, enthusiasm, optimism and self-esteem security are better able to face work demands, actively resulting in problems (Bakker & Costa, 2014), conditions that might be present in the teachers group of this research.

In the same line of argument, another interpretation for results with a negative (inverse) impact of Remuneration in Burnout for Psychological Empowerment ( $\beta_6 + \lambda_6 = 0.004$ ;  $R^2 = 0.178$ , p = 0.881) is related to the theory of the existence of teachers who support their academic work without great aspirations of achievement, with minimal productivity. This results in the absence of stressors in their institutional work (Villarruel, et al., 2018).

The results of the research model based on samples stratified by sex, marital status, education, and whether they have another job were analyzed. It is observed that the results support the direct relationship between Structural Empowerment and Job Satisfaction, with a higher incidence in the female gender than in the male gender ( $\Delta\beta = 0.158$ ). In singles more than married ( $\Delta\beta = 0.175$ ) and those who have another job more than those who do not ( $\Delta\beta = 0.157$ ).

Regarding the impact of Structural Empowerment on Psychological Empowerment, we can affirm that it was greater in teachers who only have a Bachelor's degree, compared to those who already have a postgraduate degree ( $\Delta\beta=0.188$ ). The same occurs with the relationship between Psychological Empowerment and Organizational Commitment ( $\Delta\beta=0.235$ ).

The column of totals in Table 12, on the comparison of the importance of direct effects, refers to the number of significant direct effects with respect to a total of 9 analyzes (i.e., 2 categories for each of the 4 target groups plus the general analysis) for each of the studies of variable relationships. Table 13 shows the analysis of the differences in impact by segmentation groups of the relationships that were significant.

#### 6. Conclusions

The findings of this work show that teachers to whom the organization provides support, information, resources and opportunities to learn and develop have higher levels of Job Satisfaction and Organizational Commitment. Just as those who are better paid are more committed to their work and institution. The foregoing implies that the search for well-being, satisfaction and commitment in the workplace is manifested in highly significant relationships where the organization is capable of stimulating its Empowerment in the face of educational and labor needs.

The foregoing shows that those teachers to whom the organization provides Structural Empowerment, and who have this intrinsic motivation in the form of Psychological Empowerment, are satisfied teachers. They feel involved and that their work is valued by the institutions for which they work. Whose results will improve and increase the sense of belonging, which will translate into better teaching practice, better performance with their students, with their peers and with the organization.

On the other hand, in the results, by not presenting a significant relationship and impact of Structural Empowerment and Remuneration with Burnout, they show that the expected effects of intrinsic motivation in teachers are not generated through Psychological Empowerment. Burnout is not considered part of your daily routine.

Under an academic approach, this research has several contributions. Important contributions are made in the Mexican context aimed at teachers on the variables investigated. The empirical results obtained lead to a valuable contribution to the knowledge of this topic in the country, the population and the area selected to investigate. It should be noted that other authors have analyzed some variables independently, such as Structural Empowerment with Psychological Empowerment. It has been found that the latter is positively related to Job Satisfaction and Organizational Commitment and inversely and negatively with Burnout, presenting these relationships separately. The complete mediation model in this study had not been the subject of another investigation, nor had it been analyzed through segmentation groups, finding significant contrasts.

As shown in the literature review, the relevance of studying each of the variables as a construct as a contribution to knowledge is confirmed. When finding significant relationships, it was shown that the independent variables are relevant to them. They generate their intrinsic motivation through Psychological Empowerment as part of their daily routine, with a beneficial impact on the organization where they work.

Another contribution is the investigation of the proposed model in a different context such as that of middle-high educational institutions in Mexico, a field little studied empirically (Barraza, 2008). It is important to identify the degree of satisfaction and commitment of teachers as well as to seek strategies that contribute to increasing it. This contributes to the development of more satisfied and productive teachers. This shows the difference with what was found in nursing professionals or in manufacturing companies in previous investigations. In addition, according to Silva et al. (2015), it is relevant to contribute more and more about Burnout in teaching work, since it interferes with the worker's health, affects the teacher-student relationship, the organization and therefore to society.

As part of the methodological rigor, a further contribution is made by using the fully grounded structural equation model (SEM). The empirical evaluation of the relationships of the variables of the cause and effect model was carried out, using the SmartPLS 3.0 M3 software of Hair, et al. (2017) and the PLS technique according to the criteria indicated, both for the general sample and for the comparatively stratified samples, issuing more precise results regarding the mediating role of Psychological Empowerment in said relationships, contrasting with the statistical methods used in the research found in the literature review.

This research is useful to educational organizations in their need to adapt to the changes and reforms implemented by the educational system. This with the aim of increasing productivity, competitiveness and work performance by having elements and strategies that keep teachers satisfied, committed, healthy and motivated. It also contributes to the implementation of projects by the management to have more motivated and committed teachers who have a positive impact on the integral formation of the student. In addition, increasing terminal efficiency rates and minimizing failure rates and dropouts every six months or annually.

In turn, this study has applications not only for the institutions under study, but also for other secondary schools in Mexico or units at other levels of the educational system. Finally, for organizations of any other line of business, that are interested in what really affects the behaviors and attitudes of their employees that cause their Satisfaction, Commitment and low or no Burnout levels.

It is important to consider each of the positive and limiting aspects of this study when designing future research. It is recommended to analyze the cause-and-effect model under a scheme of dimensions per construct to find relevant empirical findings for organizations. On the other hand, it would be

transcendental to continue investigating the impact of Structural Empowerment and Remuneration on Burnout through Psychological Empowerment, as well as the latter on Burnout, in other contexts and organizational areas. It would also be convenient to study other human capital factors that generate Job Satisfaction and Organizational Commitment, as well as lower levels of Burnout.

It should be noted that at the end of this investigation in 2019, it came to light that the who recognized Burnout as a disease associated with mental, emotional and physical exhaustion caused by work, after decades of study (WHO, 2021). However, his diagnosis would take effect from 2022 (Forbes, 2019). On the other hand, in Mexico, in accordance with NOM-035, as of October 23, 2019, any business or company that has workers must be prepared to receive inspectors from the Ministry of Labor and Social Welfare or Accredited Inspection Units and Approved to carry out inspections in their work centers. Therefore, its importance for new lines of research is consolidated (DOF, 2018).

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