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Artículos científicos

Esfuerzo-recompensa, demanda-control y satisfacción con la vida: un estudio con docentes de educación primaria

Effort-Reward, Demand-Control and Satisfaction with Life: A Study with Elementary Teachers

Esforço-recompensa, demanda-controle e satisfação com a vida: um estudo com professores do ensino fundamental

José Ángel Vera Noriega

Universidad de Sonora, México

jose.vera@unison.mx

<http://orcid.org/0000-0003-2764-4431>

Jazmín Valdez Tam

Centro de Estudios Educativos y Sindicales de la Sección 54 del Sindicato Nacional de Trabajadores de la Educación, México

profesora.jazmin@hotmail.com

<https://orcid.org/0000-0003-0206-8343>

Erika Selene Contreras Grijalva

Centro de Estudios Educativos y Sindicales de la Sección 54 del Sindicato Nacional de Trabajadores de la Educación, México

eriikacont89@gmail.com

<https://orcid.org/0000-0002-6937-6466>

Silvia Selene Castillo Velasco

Centro de Estudios Educativos y Sindicales de la Sección 54 del Sindicato Nacional de Trabajadores de la Educación, México

sylviacastillo93@hotmail.com

<https://orcid.org/0000-0001-8367-4796>



Resumen

En nuestro país no existe suficiente información sobre los factores psicosociales que afectan la salud mental de los docentes, lo cual es un obstáculo para la implementación de políticas que atiendan esta problemática. Los factores psicosociales de riesgo en el trabajo docente son poco estudiados y se requiere vincular los factores personales de satisfacción con la vida y los de riesgo laboral para dar cuenta sobre la forma en la cual las percepciones personales pueden amortiguar los impactos de los riesgos laborales. Por ello, el objetivo de esta investigación fue estudiar con docentes de primaria la comparación entre las variables *satisfacción con la vida*, *percepción de esfuerzo-recompensa* y *demanda-control* con los factores *sexo*, *edad*, *antigüedad en la docencia*, *antigüedad en el centro de trabajo* y *atención a alumnos con necesidades educativas especiales*. Se utilizó un diseño retrospectivo de alcance descriptivo y comparativo. La muestra de estudio estuvo compuesta por 185 docentes de educación primaria pertenecientes al municipio de Cajeme, Sonora. Para el levantamiento de datos se aplicó la escala de satisfacción con la vida de Diener, el cuestionario de estrés laboral (desbalance esfuerzo-recompensa) en su versión venezolana validado por Díaz y Feldman y el cuestionario de salud general de Goldberg. Se obtuvieron los deciles para cada una de las variables. La variable *demanda-control* obtuvo en el primer decil el valor de 3.00, lo cual coloca a 22 personas (11.9 %) debajo de este valor, lo cual significa que se encuentran en riesgo de un problema de salud mental. Por otra parte, en la variable *percepción esfuerzo-recompensa* 21 individuos (11.4 %) presentaron niveles por debajo del primer decil con un valor de 2.68 y, por tanto, desequilibrado. Por último, el valor del primer decil fue de 3.40 para 22 personas (11.9 %), lo que representa los niveles más bajos en la escala de satisfacción con la vida. Las comparaciones mostraron que el número de alumnos con necesidades de educación especial atendidos influye en las variables *satisfacción con la vida*, *percepción esfuerzo-recompensa* y *demanda-control*, ya que al aumentar el número de alumnos atendidos disminuyó la media en las tres variables. Por otro lado, el tiempo es un factor significativo en la variable *esfuerzo-recompensa*, ya que al aumentar la edad, los años de servicio y la antigüedad en el centro de trabajo, la media en esta variable fue disminuyendo. Existe una relación de las variables *satisfacción con la vida* y *esfuerzo-recompensa* con los factores de temporalidad (edad, años de experiencia en la docencia y años de experiencia en la escuela), aunque se considera necesario indagar en ese aspecto. Resulta importante destacar que avanzar en el estudio de los factores psicosociales que pueden afectar la satisfacción y salud laboral del magisterio es fundamental para la toma de decisiones de políticas para el mejoramiento de la educación en México. Es necesario

ampliar este tipo de investigaciones incluyendo maestros de diferentes niveles y contextos, de escuelas públicas y privadas, con el fin de obtener información más precisa.

Palabras clave: condiciones de empleo del docente, docente de escuela primaria, factores psicológicos, satisfacción laboral.

Abstract

In our country there doesn't exist enough information about psychosocial factors that affect teacher's mental health, which it's an obstacle for the policies implementation that fight against this issue. Psychosocial factors of labor risk in teaching work are barely studied and is required to link personal factors of life satisfaction and those of labor risk to realize about the way personal perceptions can cushion the impacts of labor risks. The objective of this investigation was to study with elementary school teachers, the comparison between life satisfaction, effort-reward perception and demand- control with the following factors: sex, age, antiquity in teaching, time in the workplace and attention to students with special educational needs. A retrospective design with a descriptive and comparative scope was used. The studied population consisted of 185 elementary school teachers of Cajeme, Sonora. In order to collect the information, the Diener Life Satisfaction Scale, the Labor Stress Questionnaire (Effort-Reward Imbalance) in its Venezuelan version, validated by Díaz and Feldman, and the General Health Questionnaire of Goldberg were applied. Deciles were obtained for every one of the variables. The demand-control variable obtained the value of 3.00 in the first decile, which places 22 people (11.9%) below this value, this means they are at risk of a mental health problem. On the other hand, on the perception of effort-reward variable 21 individuals (11.4%) presented levels below the first decil with a 2.68 value and, so, unbalanced. By last, the first decil value was 3.40 for 22 people (11.9%) which represent the lowest levels on the satisfaction with life scale. The comparisons showed that the number of students with special educational needs attended influenced the variables of satisfaction with life, perception of effort-reward and demand-control, since as the number of attended students increased, the average in the three variables decreased. On the other hand, time is a significant factor in the effort-reward variable since with increasing age, years of service and antiquity in the workplace the average in this variable decreased. There is a relation between the variables of satisfaction with life, effort-reward and demand-control with temporality factors (age, years of service and antiquity in the workplace), however, it is considered necessary to inquire into that aspect. It is important to highlight that progress in the study of psychosocial factors that can affect job satisfaction and

health in teachers is essential for decision making around policies for education improvement in Mexico. It is necessary to expand this type of research including teachers of different levels and contexts, from public and private schools, in order to obtain more accurate information.

Keywords: teacher employment conditions, elementary school teacher, psychosocial factors, work satisfaction.

Resumo

Em nosso país, não há informações suficientes sobre os fatores psicossociais que afetam a saúde mental dos professores, o que dificulta a implementação de políticas que abordem essa problemática. Os fatores de risco psicossocial no trabalho docente são pouco estudados e é necessário relacionar os fatores pessoais de satisfação com a vida e os de risco ocupacional para explicar a forma como as percepções pessoais podem amortecer os impactos dos riscos ocupacionais. Portanto, o objetivo desta pesquisa foi estudar com professores do ensino fundamental a comparação entre as variáveis satisfação com a vida, percepção de esforço-recompensa e demanda-controle com os fatores sexo, idade, tempo de docência, tempo de internação, centro de trabalho e atendimento a alunos com necessidades educacionais especiais. Foi utilizado um desenho retrospectivo com escopo descritivo e comparativo. A amostra do estudo foi composta por 185 professores do ensino fundamental do município de Cajeme, Sonora. Para a coleta de dados, foram aplicados a escala Diener de satisfação com a vida, o questionário de estresse no trabalho (desequilíbrio esforço-recompensa) em sua versão venezuelana, validado por Díaz e Feldman, e o questionário geral de saúde de Goldberg. Decis foram obtidos para cada uma das variáveis. A variável demanda-controle obteve no primeiro decil o valor de 3,00, o que coloca 22 pessoas (11,9%) abaixo desse valor, o que significa que estão em risco de desenvolver um problema de saúde mental. Por outro lado, na variável percepção esforço-recompensa, 21 indivíduos (11,4%) apresentaram níveis abaixo do primeiro decil com valor de 2,68 e, portanto, desequilibrados. Por fim, o valor do primeiro decil foi de 3,40 para 22 pessoas (11,9%), o que representa os níveis mais baixos na escala de satisfação com a vida. As comparações mostraram que o número de alunos atendidos com necessidades educacionais especiais influencia as variáveis satisfação com a vida, percepção esforço-recompensa e demanda-controle, pois à medida que o número de alunos atendidos aumenta, a média nas três variáveis diminui. Por outro lado, o tempo é um fator significativo na variável esforço-recompensa, visto que com o aumento da idade, anos de serviço e tempo de serviço no local de trabalho, a média dessa variável diminuiu. Existe relação

entre as variáveis satisfação com a vida e esforço-recompensa com os fatores temporais (idade, anos de experiência na docência e anos de experiência na escola), embora seja necessário indagar sobre este aspecto. É importante destacar que o avanço no estudo dos fatores psicossociais que podem afetar a satisfação e a saúde ocupacional dos professores é essencial para a tomada de decisões políticas para a melhoria da educação no México. É necessário expandir esse tipo de pesquisa incluindo professores de diferentes níveis e contextos, de escolas públicas e privadas, a fim de obter informações mais precisas.

Palavras-chave: condições de emprego do professor, professor do ensino fundamental, fatores psicológicos, satisfação no trabalho.

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Introduction

In recent years, globalization has promoted a series of labor, sociodemographic, demographic and political changes in the world that have had important repercussions on the health of the general population (Gil-Monte, 2009) and on that of educators in particular. In fact, according to various investigations (Aldrete, León, González, Hidalgo and Aranda, 2013; Alvites, 2019; Linares, 2014), teachers are conducive to suffering from stress and other related conditions due to a series of circumstances, such as high administrative burden, excessively large groups, quantity of content, lack of time, lack of tools, lack of support at home, low wages, etc., which causes a difficult and dangerous situation for the emotional stability of said professionals.

Occupational health and safety experts indicate that alterations that can affect people's psychological health are known as psychosocial risks. The Joint Committee of the International Labor Organization and the World Health Organization (ILO and WHO, 1984) defines psychosocial factors at work as follows:

Psychosocial factors at work consist of interactions between work, environment, job satisfaction and organizational conditions, on the one hand, and the worker's capabilities, needs, culture and situation on the other. staff outside of work, all of which, through perceptions and experiences, can influence their health and job performance and satisfaction (p. 12).

According to other research (Jiménez, Jara and Miransa, 2012; Llull, Cerdà and Brage, 2015; Velázquez, Rodríguez, Díaz, Rodríguez and Martínez, 2014), teachers are prone to suffer from the so-called burnout syndrome. Among the main predictors of this phenomenon are difficulties with resources, classroom discipline, conflicts and role ambiguity, low job satisfaction,

low professional recognition and interrelationship with other teachers (Esteras, Chorot and Sandín , 2014; Malander, 2016).

For Gómez-Ortiz and Moreno (2010), there are numerous studies in the United States, Europe and Japan that describe how psychosocial factors at work have a negative impact on the health and performance of workers. Likewise, they point out that these variables generate problems of anxiety, depression, exhaustion, among others. Currently, we have two models to conceptualize health and psychosocial occupational risk factors: the effort-reward model by Siegrist (1996) and the demand-control model by Karasek (1979). Here is a brief description of these.

The effort-reward model assumes that the effort at work is part of a contract based on reciprocity in which the worker receives compensation for his labor efforts in the form of money, esteem or social and / or labor security. This model states that such effort-reward exchange is often unfair to the working party, resulting in a large number of problems (Siegrist et al., 2004).

Thus, the perception of an imbalance between the effort given at work and the rewards received generates negative emotions in people, which in the long term affects the health of individuals. On the other hand, the model maintains that individuals who have a high work commitment coupled with a great need for approval (overcommitment) run a greater risk of presenting stress or other conditions due to the gap between what they give and what they give receive.

On the other hand, Robert Karasek's demand-control theoretical model explains work stress from the relationships that arise between work demands and the control that a person can exercise at work (Karasek, 1979, cited by Arias, Montes and Masías , 2014). According to this model, the demands refer to everything that is required of the worker (physical or mental activities), while the control concept is understood as a moderator of these labor demands based on autonomy and skill development (Arias et al. ., 2014).

As we can see in figure 1, according to Karasek's model, if there are high demands in a job and under control, high voltage states are generated. When there are high demands, but there is also a high level of control, the worker performs his functions actively. In the event that there is a low level of demand and control, the worker becomes passive and, finally, the ideal situation is considered, in terms of stress, when there is a low level of demand and a high level of control, since stress generated in this case is very low.

Figura 1. Modelo demanda-control-apoyo social

Matriz de trabajo



Fuente: Arias *et al.* (2014, p. 68)

On the other hand, satisfaction with life is understood as the degree to which a person evaluates the overall quality of their life as a whole in a positive way (Veenhoven, 1994) or, in other words, the assessment that a person makes in general. about his life and how happy he is with it. The term is part of a broader field of research called quality of life.

According to Diener, Emmons, Larsen and Griffin (1985), people judge their lives by making comparisons of their circumstances with others they consider ideal, so it is an internal and individual process that can change at any time. Thus, satisfaction with life does not depend exclusively on health, education, economy, etc., since individuals can give different value to each of these aspects. The research question is oriented to the search for the relationships between a personal factor associated with the perception of satisfaction and those related to working conditions.

As we can suppose, satisfaction with life could be a personal mechanism to evaluate the relationship between effort and reward at work and, on the other hand, be associated with a better perspective of occupational health, understood as the domain and control of Instrumental and social competences linked to the job.

For all the above, the objective of this work was to compare in primary education teachers the variables satisfaction with life, perception of effort-reward and demand-control with the factors sex, age, length of time in teaching, length of time in the center of work and care for students with special educational needs (SEN).

Method

This was a non-experimental investigation, of a transectional type with a causal-comparative scope (Creswell, 2009), for which a non-probabilistic quota sampling procedure was carried out (McMillan and Schumacher, 2005). The information collection was carried out through the survey technique by applying various questionnaires (to measure different dimensions of psychosocial risk factors) on an electronic sheet and read with an optical reader. The design of the method was based on the positivist paradigm, which seeks objectivity and generalization of the results by controlling the error variables, the application of measures and statistical analysis. (White y Sabarwal, 2014).

Instruments

Personal data questionnaire. Four questionnaires were used: the first (with 13 items) to collect information on sex, age, marital status, number of working hours in school, type of contract, level of training, length of time in teaching, length of time in the workplace, years of experience in the current degree, students with SEN that he attends, among others.

Life satisfaction scale (SWLS). The instrument of Diener et al. (1985), which consists of five items that evaluate satisfaction with life through the global judgment that people make about it (Padrós-Blázquez, Gutiérrez-Hernández and Medina-Calvillo, 2015). The items were answered on a five-level Likert-type scale, ranging from totally disagree to totally agree. The general statements focused on how satisfied they are with their life. The total score ranges from 5 (low satisfaction) to 25 (high satisfaction). Global satisfaction with life refers to the cognitive component of well-being, which explained 43% of the variance with a Cronbach's alpha of .80 (Vera, 2001).

Factors of the effort-reward imbalance model. The Venezuelan version of the Work stress questionnaire (imbalance-effort / reward), validated by Díaz and Feldman (2010), was used, which consists of 22 items on a Likert-type scale that go from totally disagree to totally agree (15 inclined to a negative peak and 7 toward a positive peak). These measure three subdimensions: rewards,

effort, and implications. The first 6 items correspond to the effort factor, the next 10 to the reward factor and the last 6 to the implications factor.

As internal consistency, this instrument has values higher than .80 in Cronbach's alpha analyzes for the reward and effort dimensions, while for the implication dimension it has .57 (Díaz and Feldman, 2010). However, in studies carried out in European countries, the reliability of this dimension ranges from .64 to values greater than .80 (Siegrist et al., 2004).

Factors of the demand-control model. The General Health Questionnaire (GQH) was designed in 1979 by David Goldberg. In 1988 he developed a version of this, but with 12 items (GHQ-12) that assess self-perceived health and general well-being, with an emphasis on emotional state (Solís-Cámara, Meda, Moreno y Juárez, 2016).

The 12-item Goldberg General Health Questionnaire (GHQ-12) was used in the Cuban version proposed by García-Viniegras (1999). It consists of 12 multiple-choice questions with four possible answers each: 6 of them lean towards a positive peak (whose answers are more than usual, same than usual, less than usual, much less than usual), while the other 6 to a negative one (their answers are no, not at all, not more than usual, a lot more than usual, much more).

Likewise, it handles two subdimensions: psychological well-being (BP) and social functioning and coping (FSA). The first is defined as a construct that expresses the positive feeling and constructive thinking of the human being about himself, while the second refers to the self-evaluation of his own perception of the ability to attend to personal matters, face concerns, decide and attend to life issues.

A confirmatory factor analysis was performed based on the structural equations model, respecting the structure previously proposed by the authors of each scale for the twelve items. The analyzes showed a new structure more appropriate for this population, where reagents 3, 4, 5, 7, 9 and 11 were extracted because they did not show an appropriate fit. The resulting structure was maintained with two dimensions: psychological well-being with three items (1, 2 and 12) and social functioning and coping with three items (6, 8 and 11). This new structure has the following goodness of fit indices, where a CMIN / DF was obtained with a value of 2.52, CFI with a value of .944, RMSEA with a value of .06 and an SRMR of .04, which are considered as parameters with an appropriate fit for the proposed structure (Gaskin, 2016).

Participants

185 teachers belonging to 42 elementary schools in the municipality of Cajeme, Sonora participated in the present research: 130 (70.27%) of the morning shift and 55 (29.72%) of the afternoon shift. For the choice of participating schools, those corresponding to the public subsystem (multigrade and community-type were excluded), morning or evening shift, and located in neighborhoods that have a high number of reports of violence in the different categories: violence family, omission of care, neglect, physical, psychological, sexual abuse, drug addiction and breach of obligations, this in accordance with the State Bank of Data and Information on cases of Violence against Women (BAESVIM). The schools were randomly selected and the instrument was applied to the fifth and sixth grade teachers of the institution present at the time of the evaluation.

Of the total number of participating teachers, 88 (47.6%) were men and 97 (52.4%) were women. The age ranges were 20 (10.8%) between 18 and 25 years, 47 (25.4%) between 26 and 30 years, 43 (23.2%) between 31 and 40 years, 49 (26.5%) between 41 and 50 years, and 25 (14.1%) older than 50 years.

Regarding marital status, 56 (30.3%) single persons participated, 103 (55.7%) married, 16 (8.6%) In common union and 10 (5.4%) separated or divorced. Regarding the item Has an indeterminate contract (position), 19 (10.3%) answered negatively (89.7%) and 166 affirmatively.

Regarding the level of training, 100 (54.1%) studied a bachelor's degree per normal school, 37 (20%) a university degree, 40 (21.6%) have a postgraduate degree in education, two (1.1%) have a postgraduate degree in another specialty and six answered another (3.2%).

Regarding seniority in the educational service, 48 (25.9%) responded that they have less than 5 years of experience, 37 (20%) from 6 to 10, 43 (23.2%) from 11 to 20, 37 (20%) from 21 to 30, and 20 (10.8%) have more than 30 years of experience. Regarding the years as a teacher in the current educational center, 105 (56.8%) responded that they are less than 5 years old, 34 (18.4%) are 6 to 10 years old, 33 (17.8%) are between 11 and 20 years old, and 13 (7%) are between 21 and 30 years old in this center. The item Years of experience teaching the current degree obtained the following results: 127 (68.6%) have less than 5 years of experience, 43 (23.2%) have 6 to 10 years and 15 (8.1%) have 11 to 20 years.

On the other hand, when questioning about the approximate number of students with different abilities or with SEN that they attend, 41 (22.2%) teachers answered that they do not

attend any student with these characteristics, 75 (40.5%) answered from 1 to 2 students, 60 (32.4%) from 3 to 5 students, eight from 6 to 10 (4.3%) and only one (0.5%) to more than 10.

Process

For the implementation of this research, schools belonging to the municipality of Cajeme were selected, this with the help of a list provided by the Ministry of Education and Culture through the Department of School Health and Safety. Once selected, the corresponding permits were requested in said schools and an informed consent was given where the objective, the procedure and the justification of the project were explained to the teachers. The instruments were applied in a group way through two researchers trained and standardized in the procedure in front of the teachers in the classroom. The teacher read the questions in a booklet and responded on an electronic sheet. The group teacher always completed the questions outside the classroom, everyone signed an informed consent and began their responses.

At the end, it was checked that all the answers were completed, and during the filling in, doubts about the questions were answered, although trying that it was the teacher who discovered the meaning of the question without biasing their answers. Afterwards, the instrument was applied and the database was generated using the SPSS software, version 22. Once the information was captured, descriptive and hypothesis contrast analyzes were carried out for dichotomous Student t variables and analysis of variance for the polytomous.

Results

Descriptive analysis

An initial descriptive analysis was carried out to later perform a hypothesis contrast with the attribute factors and study variables. The different means by sex and by age groups are higher in the demand-control variable than in effort-reward. On the other hand, it is observed that as the number of students with SEN who are under their responsibility increases, the mean in the three observed variables decreases: satisfaction with life, perception of effort-reward and demand-control.

The cut-off point data were determined by means of a statistical analysis of quartiles and deciles, and are as follows: subjects with an adequate level in the optimal limit for the variable satisfaction with life are considered, those who obtained a mean equal to or greater than 4.60, in the case of

effort-reward perception to those who obtained a mean equal to or greater than 3.50, and for demand-control values equal to or greater than 3.58 (table 1).

Tabla 1. Resultados descriptivos para las variables de atributo docentes (n = 185)

Variables		Satisfacción con la vida		Esfuerzo-recompensa		Demanda-control	
		Media	D. E.	Media	D. E.	Media	D. E.
Sexo	Masculino	4.06	0.77	3.2	0.46	3.41	0.36
	Femenino	4.27	0.54	3.23	0.48	3.33	0.36
Edad	18 a 25	4.34	0.56	3.67	0.61	3.47	0.43
	26 a 30	4.2	0.69	3.18	0.37	3.34	0.37
	31 a 40	4.13	0.75	3.15	0.54	3.38	0.28
	41 a 50	4.2	0.65	3.16	0.37	3.35	0.38
	Mayor de 50	4	0.59	3.15	0.41	3.36	0.36
Años de experiencia en la docencia	Menos de 5	4.25	0.7	3.44	0.56	3.39	0.41
	de 6 a 10	4.17	0.52	3.17	0.32	3.36	0.37
	de 11 a 20	4.17	0.83	3.06	0.46	3.4	0.31
	de 21 a 30	4.09	0.6	3.15	0.4	3.32	0.35
	más de 30	4.12	0.57	3.2	0.45	3.34	0.34
Años como docente en esta escuela	Menos de 5	4.24	0.61	3.31	0.51	3.4	0.34
	de 6 a 10	3.94	0.81	3.11	0.37	3.34	0.41
	de 11 a 20	4.21	0.59	3.12	0.42	3.34	0.39
	de 21 a 30	4.06	0.77	2.97	0.32	3.24	0.23
Número de alumnos con NEE que atiende	ninguno	4.34	0.53	3.31	0.47	3.47	0.24
	1 o 2	4.14	0.78	3.22	0.5	3.38	0.37
	de 3 a 5	4.1	0.6	3.14	0.44	3.29	0.42
	de 6 a 10	4	0.51	3.25	0.42	3.35	0.21

Fuente: Elaboración propia

On the other hand, stable subjects with opportunities for improvement are considered to be those who obtained average values: in the variable satisfaction with life between 3.41 and 4.59, in the variable perception effort-reward those with a mean between 2.69 and 3.49 and, finally, in the demand-control variable to those with values between 3.01 and 3.57.

Finally, subjects with an inadequate level with the limit of insufficient for the life satisfaction variable are considered those whose mean is equal to or less than 3.40, in the case of effort-reward perception those who obtained a mean equal to or less than 2.68 and in the case of demand-control to those who obtained a value equal to or less than 3.

We observe that the variation in the standard deviation is less than 1 in all cases, which implies very little variation between the responses of the subjects. In the GHQ-12 health instrument we found even less variation, which means that it is the most stable (see table 1).

Satisfaction with life. This variable has a mean of 4.2. Regarding the sex factor, both groups are considered stable subjects with opportunities for improvement. When reviewing the results by age range and years of teaching experience, a downward trend is observed: the younger or less teaching experience they are, the more satisfied they are with life; This trend only breaks in the range of 41 to 50 years and in the case of more than 30 years of experience, since the average rises a little with respect to the previous level; all are in a stable range with room for improvement.

The item Years as a teacher in this school does not present any type of trend and all fall within the range of stability with opportunity for improvement. Finally, the item Number of students with SEN who attends was reviewed, where a tendency to discharge is observed: the fewer students with these characteristics are attended to, the greater satisfaction with life we find, as with the other factors; all groups are considered stable subjects with opportunities for improvement.

Effort-reward perception. We find a general mean of 3.13 in this variable. In the sex factor, both groups are at a stable level with opportunity for improvement. In the age factor, we observe only one group with an adequate level in the optimal limit, that is, that feels satisfied with the relationship of the effort made and the reward it receives for it (this is the youngest group between 18 and 25 years old, the rest present results similar to each other, and are at a level of stability with opportunities for improvement).

When analyzing the item Years of experience, we find that at the beginning, teachers are mostly satisfied with the effort-reward relationship, but this perception is decreasing towards the midpoint of their career (the lowest point is found in teachers with experience of 11 to 20 years) and then gradually rises again. This is not the case in the item Years as a teacher in this school, where a downward trend is observed as the years of experience in the educational center increase.

Finally, the item Students with SEN who attend was analyzed, where a downward trend is observed in the level of satisfaction with the effort-reward relationship: the fewer students are attended to, the greater satisfaction (Table 1).

GHQ-12 Health Questionnaire. The mean in the demand-control variable is 3.41. The health questionnaire measures in general terms the perception that individuals have of their health, especially the emotional part, as well as the balance between the demands received in labor matters and the control that one has over these matters. In general, we can observe a minimum variation in the responses and, therefore, in the results obtained in this variable, which is why it is considered the most stable. According to the results observed in Table 1, we found that in the sex factor both groups are at a stable level with opportunity for improvement. The same happens when analyzing the results by age groups.

On the other hand, in the item Years of teaching experience a minimal downward trend is observed: the less experience, the greater satisfaction with the demand-control relationship (healthier). The same is observed in the item Years as a teacher in this school. When analyzing the groups according to the number of students with SEN that they attend, we find a downward trend: the fewer students with these characteristics, the greater the satisfaction with the demand-control or health relationship.

Hypothesis contrast

The variables demand-control and satisfaction with life did not show statistically significant differences in any of the attribute factors that were contrasted. In relation to polytomous factors (age, length of time in teaching and length of time in the workplace), we are talking about temporary variables and, as we can see in Table 2, all three are significant for the effort-reward perception.

In Scheffé's post hoc tests it was shown that in the age factor the equilibrium value decreases with age, finding its highest mean (3.67) with young people between 18 and 25 years old, and the lowest (3.15) with older people. 50 years. The same logic is observed for teaching experience: a higher average (3.44) for the group under 5 years old, and the lowest (3.06) for 11 to 20 years. Finally, for less than 5 years of experience in the same school we have 3.31 on average and 2.97 for 21 to 30 years of seniority in the same school. Likewise, Cohen's f values indicate a median effect size in the three significant differences observed (Table 2).

Tabla 2. Resultados del análisis de varianza para los factores politómicos de atributo

Variables		Esfuerzo-recompensa			F	Sig.	Tamaño del efecto (<i>f</i>)
		n	Media	D. E.			
Edad	18 a 25	20	3.67	0.61	5.62	0.000	.33
	26 a 30	47	3.18	0.37			
	31 a 40	43	3.15	0.54			
	41 a 50	49	3.16	0.37			
	Mayor de 50	26	3.15	0.41			
Años de experiencia docente	Menos de 5	48	3.44	0.56	4.43	0.002	.30
	de 6 a 10	37	3.17	0.32			
	de 11 a 20	43	3.06	0.46			
	de 21 a 30	37	3.15	0.4			
	más de 30	20	3.2	0.45			
Años de experiencia en la escuela	Menos de 5	105	3.31	0.51	3.65	0.014	.24
	de 6 a 10	34	3.11	0.37			
	de 11 a 20	33	3.12	0.42			
	de 21 a 30	13	2.97	0.32			

Fuente: Elaboración propia

Deciles were obtained for each of the variables. The demand-control variable obtained in the first decile the value of 3.00, which places 22 people (11.9%) below this value, considered as the lowest level and, therefore, not adequate in the demand-control variable. which means they are at risk for a mental health problem. On the other hand, in the effort-reward perception variable, 21 individuals (11.4%) presented levels below the first decile with a value of 2.68 and, therefore, unbalanced, they perceive that the effort they make is greater than the rewards they receive for it in your work. Finally, the value of the first decile was 3.40 for 22 people (11.9%), which represents the lowest levels on the life satisfaction scale.

In the case of the demand-control variable, there does not seem to be a significant change over time, although a minimal decrease is observed, unlike the effort-reward perception variable, in which time does have an effect: According to the results of this study, over the years the perception of receiving what is deserved for the effort made decreases significantly or, in other words, over time the belief that more rewards are required for the effort is strengthened accomplished.

The demand-control variable does not generate significant differences because the teacher establishes a personal relationship between the commitment to teach and the infants learning and their own ability to carry it out. In this way, a feeling of helplessness is generated by perceiving

little or no support from their authorities, parents or colleagues, so an intrinsic commitment is created for their work and, therefore, of control in their work.

Continuing with the analysis, it is observed that the factor Number of students with SEN who attends does not present significant differences in any of the variables studied: satisfaction with life, effort-reward perception and demand-control.

Finally, a hypothesis test for dichotomous variables was carried out using Student's t test comparing men against women, and it was found that women have a higher mean satisfaction with life than men, with a t value of 2.12 and a significance of .03.

Discussion

The descriptive analysis made it possible to compare different factors with the three variables studied and, with this, it is evidenced that the number of students with SEN who are treated influences life satisfaction, effort-reward perception and demand-control: to the extent that the number of students served with these characteristics increases, the mean in the three variables decreases. In relation to the above, Amezcua-Sandoval, Preciado-Serrano, Pando-Moreno and Salazar-Estrada (2011) found that of the sample of special education teachers included in their research, 11.1% presented depressive symptoms, a figure higher than that reported for the adult population in Mexico in 2005.

This lack of skills and competencies for inclusion are not exclusive to basic education, but permeate all educational levels in which this group is segregated, excluded and mistreated (García, 2019; Pérez, 2016; Zárate, Díaz and Ortiz, 2017). Even when the diagnosis is based on the teacher's beliefs or assumptions about the student's problem, it can be observed by the satisfaction means that the grade is between medium-high, which coincides with the findings of Anaya and Suárez (2010) and Linares and Gutiérrez (2010).

On the other hand, we find that the temporal factor also influences the variables studied: both the item Years of experience in teaching and Years as a teacher in school show a downward trend in relation to the demand-control variable; Thus, the less experience or age one has, the greater the satisfaction with the demand-control relationship at work, or as an instrument that measures the level of self-perceived health appears; Therefore, we conclude that the younger the age, the greater the perception of good health. Notably, the Goldberg instrument focuses on mental health. This also occurs with the variable satisfaction with life: the younger the age or years of experience, the higher the level of satisfaction is observed. In this regard, Clark, Oswald and Warr

(1996) and Womack-Wynne et al. (2011) state that newly entered workers feel greater satisfaction in being in a new situation and by the simple fact of belonging to the labor market of which they do not know enough to carry out an objective evaluation of their work. For example, among the workforce in a Swedish county a high level of burnout was more common among older workers (Ahola, Honkonen, Virtanen, Aromaa and Lönnqvist, 2008).

In this regard, Carrillo-García, Solano-Ruiz, Martínez-Roche and Gómez-García (2013) mention that there is no unanimity in the studies on age and its influence on different aspects of the work or personal environment. On the one hand, it is pointed out that job satisfaction increases with age (Alonso, 2008; Malander, 2016), while other studies mention that the older the age, the lower the satisfaction (Hermosa, 2006; Llorent y Ruiz-Calzado, 2016).

On the demand-control variable, very few variations were found, which coincides with the findings of Villa, Zuluaga-Arboleda and Restrepo-Roldán (2013), who suggest based on the little variation in the results of a study carried out with patients of a hospital in Medellín, Colombia, that the perception of well-being or discomfort that the GHQ-12 instrument shows is mainly related to intrinsic factors rather than extrinsic factors.

It is important to note that the demand-control relationship associated with the teacher's effectiveness in fulfilling educational work is linked to job satisfaction (Viel-Ruma, Houchins, Jolivette & Benson, 2010) and results in a history of burnout problems in teachers (Aldrete, Aranda, Valencia and Salazar, 2011; Hermosa, 2006).

Regarding satisfaction with life, according to some studies, it is always higher for men than for women (Expósito, Agost-Felip and Soto, 2015; Moreta-Herrera, López-Calle, Gordón-Villalba, Ortiz-Ochoa and Gaibor-González, 2018); However, in our data the opposite happens, so we must bear in mind that it is a labor group that has historically been feminized, and it is possible that women in this feminine context feel more satisfied. Regarding the limitations of the study, we must initially mention the biases and errors generated by a retrospective study with non-random samples; in the background, the way in which the fact that the population is only from one municipality can affect external validity. However, it is important to highlight that advancing in the study of psychosocial factors that can affect job satisfaction and health of teachers is essential for making policy decisions to improve education in Mexico.

Conclusions

After analyzing the results, it can be concluded that there seems to be a relationship between the variables satisfaction with life, effort-reward, and demand-control with the temporality factors (age, years of experience in teaching and years of experience in school). , although we consider it necessary to inquire into that aspect. The factor Students with SEN who attend affects the three variables studied. This, among other factors of the teaching work, can mean a source of stress due to the lack of tools or training to perform the tasks optimally.

The temporal factor also showed an influence on the effort-reward perception variable, because according to what was observed in this study, with the passage of time the gap of perceiving that not enough is received for the effort made, or that they are required more rewards, so satisfaction in this variable decreases.

This phenomenon can be explained by considering that people's responsibilities, needs and commitments grow over the years (marriage, children, own home, parental care, etc.), so that the rewards that at first seemed fair pass to be insufficient while feelings of tiredness, tiredness or fatigue accumulate over time. Various studies show a positive relationship between exhaustion and age.

It is observed that younger teachers with fewer years of experience are more satisfied, but we have also described that there are a series of concerns that are related to demands and lack of control, including the perception of students with special needs that appears as a criterion of heterogeneity of the students.

Future lines of research

For all the above, we consider it very important to continue researching the different factors that can be stressors and cause other problems of an emotional nature in teachers, since, being trainers, their work directly impacts the learning of children and particularly in their social behavior. It is suggested to carry out broader studies that include teachers of different levels and contexts, from public and private schools, to gather more precise information on the psychosocial factors that affect the teaching profession, the way in which the effort-reward balance and mental health they can impact their social behavior in school and the classroom, and trigger negative emotions that promote antisocial behaviors in students and constitute an obstacle to achieving a culture of peace.

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Rol de Contribución	Autor (es)
Conceptualización	JOSE ANGEL VERA NORIEGA
Metodología	JOSE ANGEL VERA NORIEGA
Software	NO APLICA
Validación	JOSE ANGEL VERA NORIEGA
Análisis Formal	JAZMÍN VALDEZ TAM (IGUAL) ERIKA SELENE CONTRERAS GRIJALVA (IGUAL) SILVIA SELENE CASTILLO VELASCO (IGUAL)
Investigación	JOSE ANGEL VERA NORIEGA (PRINICPAL) JAZMÍN VALDEZ TAM (IGUAL) ERIKA SELENE CONTRERAS GRIJALVA (IGUAL) SILVIA SELENE CASTILLO VELASCO (IGUAL)
Recursos	JOSE ANGEL VERA NORIEGA
Curación de datos	JOSE ANGEL VERA NORIEGA (PRINICPAL) JAZMÍN VALDEZ TAM (IGUAL) ERIKA SELENE CONTRERAS GRIJALVA (IGUAL) SILVIA SELENE CASTILLO VELASCO (IGUAL)
Escritura - Preparación del borrador original	JOSE ANGEL VERA NORIEGA (PRINICPAL) JAZMÍN VALDEZ TAM (IGUAL) ERIKA SELENE CONTRERAS GRIJALVA (IGUAL) SILVIA SELENE CASTILLO VELASCO (IGUAL)
Escritura - Revisión y edición	JOSE ANGEL VERA NORIEGA (PRINICPAL) JAZMÍN VALDEZ TAM (IGUAL) ERIKA SELENE CONTRERAS GRIJALVA (IGUAL) SILVIA SELENE CASTILLO VELASCO (IGUAL)
Visualización	JOSE ANGEL VERA NORIEGA (PRINICPAL) JAZMÍN VALDEZ TAM (IGUAL) ERIKA SELENE CONTRERAS GRIJALVA (IGUAL) SILVIA SELENE CASTILLO VELASCO (IGUAL)
Supervisión	JOSE ANGEL VERA NORIEGA
Administración de Proyectos	JOSE ANGEL VERA NORIEGA
Adquisición de fondos	JOSE ANGEL VERA NORIEGA