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Psychometric properties of the abbreviated Professional Educational Climate questionnaire (CPE-A)

Propiedades psicométricas del cuestionario abreviado Clima Profesional Educativo (CPE-A)

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ABSTRACT

The aim of this study was to assess the professional teaching climate in secondary schools in Asturias by designing a questionnaire with 55 items to assess the dimensions of the work climate and 25 items to assess job satisfaction and teacher effectiveness. The target population was 4,581 teachers from secondary schools and CPEBs in Asturias. 2,000 teachers were selected using a stratified random procedure without item replacement, with a sampling error rate of 1.7% at 95% confidence and a confidence level of 0.95. A panel of experts comprising researchers from different universities and secondary school teachers participated in its construction. In addition, the «expert competence coefficient» or «K coefficient» procedure was used to establish six scales: teacher-student relationship, teacher-peer relationship, teacher-superior relationship, new proposals in education, degree of effectiveness and degree of satisfaction. The results obtained indicate that the questionnaire is valid and reliable for measuring teacher dimensions in the field of education; it gives value to the degree of teacher satisfaction in developing effective academic management. The results are discussed in terms of their contribution to the generation of sustainable, positive and supportive work environments to improve the teaching climate, which is expected to have a positive impact on the quality of teaching and learning processes. This article confirms the relevance of work climate in educational organisations and presents an effective tool for its assessment at regional, national and international levels.

Keywords: organizational climate, job satisfaction, teaching effectiveness, evaluation questionnaire, work climate dimensions

RESUMEN

El artículo tiene como objetivo analizar el clima laboral docente en los centros públicos que imparten educación secundaria obligatoria en la Comunidad Autónoma del Principado de Asturias con la intención de establecer relaciones con la satisfacción laboral y la eficacia docente. El objetivo de este estudio fue evaluar el clima profesional docente en los institutos de educación secundaria de Asturias. A este respecto se diseñó un cuestionario con 55 ítems para evaluar las dimensiones del clima laboral y 25 ítems para evaluar la satisfacción y eficacia laboral del profesorado. La población objeto de estudio fueron los 4581 docentes de IES y CPEB de Asturias. Se seleccionó una muestra de 2000 docentes mediante un procedimiento aleatorio estratificado sin reposición de elementos, con una tasa de error muestral del 1.7% al 95% de confianza y un nivel de confianza de 0.95. En su construcción participó un panel de expertos compuesto por investigadores de diferentes universidades y profesorado de secundaria. Además, se utilizó el procedimiento del «coeficiente de competencia experta» o «coeficiente K» para establecer seis escalas: relación profesor-alumno, relación profesor-compañeros, relación profesor-superiores, nuevas propuestas en educación, grado de eficacia y grado de satisfacción. Los resultados obtenidos indican que el cuestionario es válido y confiable para medir las dimensiones del profesorado en el ámbito educativo; concede valor al grado de satisfacción docente cuando se quiere desarrollar una gestión académica eficaz.

Se discuten los resultados en cuanto a su contribución a la generación de ambientes laborales sostenibles, positivos y de apoyo para mejorar el clima del profesorado lo que se espera tenga un impacto positivo en la calidad de los procesos de enseñanza aprendizaje. Este artículo ratifica la relevancia del clima laboral en las organizaciones educativas y se presenta como una herramienta eficaz su evaluación en los ámbitos autonómico, nacional e internacional.

Palabras clave: clima organizativo, satisfacción en el trabajo, eficacia docente, cuestionario de evaluación, dimensiones del clima laboral

INTRODUCTION

The work environment can be seen as a complex ecosystem, given that it involves and interacts with multiple elements and factors that influence job satisfaction and employee performance due to the actors involved, the dynamic nature of the interactions, the interdependencies that are generated and the adaptability mechanisms that are set in motion (Bravo et al., 2023; García-Herrero et al., 2024; Robbins, & Judge, 2019).

In this scenario, a positive work environment can be created that increases the commitment of those involved with their roles and organisations. In the case of teachers, the professional climate is fundamental for their emotional well-being and for the development of their teaching activity (Eva et al., 2019; García-Montalvo et al., 2021; Newman et al., 2017; Quinteros-Durand et al. 2023). These three components are closely interconnected and influence each other, hence when teachers are highly qualified and motivated, their impact on professional climate can be very positive, and a favourable work environment translates into improved job satisfaction and teacher performance (Halbesleben, & Buckley, 2004). In turn, committed teachers who perform their duties in a positive professional climate are more likely to develop innovative, collaborative and student-centred teaching practices. Therefore, it is important for educational institutions to encourage and promote the holistic development of teachers, the establishment of a positive professional climate and the continuous improvement of teaching activity to ensure quality education (García-Herrero, et al., 2024; Oliveira et al., 2023).

Therefore, understanding the factors that influence the professional climate of teachers is essential for improving the quality of education and teachers' job satisfaction. In this area, the quality of the work environment can have a significant impact on teachers' motivation and job satisfaction, which in turn can affect the quality of educational processes with students (Hakanen et al., 2006; Quinteros-Durand et al., 2023; Sara-Agrati, 2021).

The Job Characteristics Model (JCM) is a theoretical framework used in occupational psychology and human resource management to describe and analyse

the inherent characteristics of a job (Coelho, & Augusto, 2010; Quinteros-Durand, et al. 2023). These characteristics influence employee motivation, job satisfaction and performance, i.e. it suggests that enriched or complex jobs lead to higher job satisfaction, motivation and performance. The model postulates five core characteristics: skill variety, task identity and meaning, autonomy, and feedback, which will influence three critical psychological states: experienced meaningfulness of work, responsibility associated with work outcomes, and knowledge of the real impacts of work activities, educational for us.

These psychological states have effects on work outcomes in the case of internal work motivation, satisfaction with growth, overall job satisfaction, professional efficacy and absenteeism, proposing three moderators of the relationships between task characteristics, psychological states and work outcomes: need for growth, strength, knowledge, skills, and satisfaction in context (García- Montalvo, et al., 2021; Mori, et al., 2021; Quinteros-Durand, et al., 2023). The importance of task identity, autonomy and feedback will also be emphasised to foster teachers' motivation, learning and skill development (Molina-Vicuña, 2023; Mori, et al., 2021). Therefore, the JCM provides a useful framework for understanding how job design can influence teacher motivation and performance, arguing that the professional climate of educational organisations is related to teachers' job satisfaction (Cortina et al., 2018; Fernández-Ballesteros et al., 2019), their motivation and commitment (Sánchez et al., 2020), the quality of their teaching (García-Santos, García-Santos, & Romero-Rodríguez, 2017; García-Herrero et al., 2024) and their emotional well-being (Chughtai, 2018; García-Montalvo et al., 2021; Oliveira et al., 2023).

There are several tools for assessing the work climate of teachers in secondary schools and public elementary schools. Among them, the University of Valencia's Work Climate Questionnaire (Gil-Monte, 2002), the Organisational Climate Evaluation Questionnaire (González-Romá et al., 2002), the Social Climate in the Classroom Questionnaire (Mérida-Lopez et al., 2017), the Work Climate Scale in Educational Centres (García-Santos et al., 2019), the scale to develop and identify attitudes, as a key element to boost the social dimension of Higher Education (Rodríguez-Martín, & Álvarez-Arregui, 2013). These tools have been designed to assess job satisfaction, motivation, commitment and emotional well-being of teachers in different educational contexts. However, it is important to bear in mind that many of these tools were developed pre-pandemic, so it is necessary to adapt them to the new post-pandemic realities (Basualdo, 2022; Consejo de Transparencia y Buen Gobierno, 2023) and to evaluate the work climate taking into account the situational conditioning factors that are emerging (Vidal Acosta, 2021) to take into account all those dimensions and variables that should be considered

in terms of motivational and latent profiles (Del Valle, et al., 2020) associated with self-satisfaction and academic effectiveness in organisations.

It is now assumed that satisfaction with job resources encompasses individual, leadership, group and organisational levels, which will lead to improvements in: (1) task-related resources (performance feedback), (2) implementation of new job resources (peer support) and (3) improvement of social resources in the workplace (supervisory coaching) (Molina-Vicuña, 2023; Spontón, et al., 2019). Workplace resources will therefore include physical, psychological, social and organisational aspects of work, such as social support and job control. Three main objectives can be identified in this regard: (1) to help achieve work goals, i.e. satisfaction; (2) to reduce demands and costs, i.e. effectiveness; and (3) to stimulate personal development, learning and growth within a competent teaching work climate (Quinteros-Durand et al., 2023; Schaufeli, & Bakker, 2004).

Based on these arguments, it should be noted that the analysis of teacher work climate is relevant when it comes to understanding job satisfaction and its impact on the quality of education (Quinteros-Durand, et al., 2023). Dimensions such as organisational culture, workload and compensation need to be addressed to identify the factors that contribute to a positive or negative work environment. Satisfaction with job resources such as administrative support, training and professional development are considered to play an important role in teachers' life satisfaction (García-Herrero, et al., 2024; Nanjundeswaraswamy, 2021). The aim is to gain a better understanding of satisfaction with job resources, as this relationship is intended to enable a better understanding of the dynamics of the determinants of subjective well-being in the compulsory education teaching population. These factors are expected to provide knowledge that can help educational institutions to create a more positive and supportive work environment for their teaching staff. In other words, a healthier and more productive work ecosystem is created for professionals, which in turn is expected to have a positive impact on improving the quality of education offered to students and, therefore, to the educational community. This leads to the following specific objectives:

- Identify the dimensions of the professional teaching climate through institutional behaviours.
- To determine the significant differences in the indicators of the professional teaching climate according to the variables of the institution.

The identification of teacher work climate indicators and the significant differences, according to prioritised institutional variables, can help to guide effective strategies to improve the work climate and job satisfaction of teachers, which is intended to improve the quality of education offered to students.

METHOD

This research used a non-experimental, descriptive-transversal-quantitative design with stratified random sampling, in a community population, implementing the correlational approach using the structural equation method (SEM) and invariance analysis to achieve the proposed objectives.

Participants

The target population was the 4581 teachers of IES and CPEB in Asturias. A sample of 2000 teachers was selected using stratified random sampling, without replacement of elements, with a sampling error rate of 1.7% at 95% confidence. Of the 2000 teachers selected, valid data were obtained for 1906 teachers working in Asturias during the 2017-2018 academic year. This sample offers a typical socio-occupational profile characterised by being female (64%), from the Western area of the Principality of Asturias (20%), working in a school of line 4 or higher (38%), with experience of between 24 and 30 years (28%), having been at the same school for less than 7 years (61%), belonging to the Natural Sciences Department (17%) and teaching up to 4th ESO (43%). They are not heads of department or members of management teams (59%), have a university degree in general (83%) and are permanent career civil servants (71%).

Instrument

In order to assess the professional teaching climate in secondary schools in Asturias, we used the «Abbreviated Questionnaire of Professional Educational Climate (CPE-A)» designed by Álvarez-Arregui et al. (2023), with the aim of assessing the professional teaching climate in educational centres that teach pre-school, primary, secondary and vocational education and training. Carrasco-Ortiz (2005), Collell, & Escudé (2006) Esteve (2009), Jennings, & Greenberg (2009), Kuperminc, Leadbeater, & Blatt (2001), Mantilla, & Fernández-Díaz (2015) and Westling (2002). On the other hand, it is made up of a panel of experts composed of four researchers from different universities and four secondary school teachers, specialised professionals who independently evaluated the items of the instrument; this made it possible to refine its formulation and decide its inclusion or exclusion in the final questionnaire. Based on the «expert competence coefficient» or «K coefficient» procedure, the experts' degree of knowledge (Kn: 0.8) and their degree of confidence (Sn: 0.88) in their evaluations and opinions were established, leading to the establishment of six scales: teacher-student relationship, teacher-peer

relationship, teacher-superiors' relationship, new proposals in education, degree of effectiveness and degree of satisfaction. Likewise, the coherence and internal consistency of the tool was ensured by means of direct questions, to create a valid and reliable questionnaire to assess the professional teaching climate in schools.

The questionnaire was finally structured into 48 items to assess the professional climate, 25 items to assess satisfaction and 25 items to assess effectiveness, in order to provide a picture of the professional teaching climate in schools (see Annex I). This instrument was applied to a sample of teachers classified by socio-demographic characteristics, identified by gender, geographical location, size of the educational institution, years of teaching experience, years of experience in the same educational institution, department or area of specialisation, educational levels at which they teach, current position within the educational institution, level of qualification and administrative status. The use of the questionnaire and the composition of the sample aimed to collect accurate and relevant data to help improve working conditions and the quality of education in schools in this autonomous community.

Data analysis

The study was carried out with the statistical programmes IBM SPSS Statistics for Windows, version 27 (IBM Corp., 2019) and JASP, version 0.18.1.0 (JASP Team, 2023), by means of which the data obtained by CPE-A were analysed. The response to the first objective leads to descriptive analyses of the socio-demographic data and the questionnaire items, as well as preliminary analyses to verify the assumptions of normality of the data, for which the Shapiro-Wilk test was applied, which will indicate whether the data follow a normal distribution ($p < 0.001$). In addition, confirmatory factor analysis with the DWLS estimation method has been used to confirm the original test structure, while several indices were used to assess the overall goodness-of-fit of the model, such as the statistically non-significant $\chi 2$ (sensitive to sample size), the normalised chi-square values ($\chi 2/gl$) <5 (Tabachnick, & Fidell, 2007), comparative fit index (CFI) >0.90 (Schumacker, & Lomax, 2010), standardised root mean square residual (SRMR) ≤ 0.05 and root mean square error of approximation (RMSEA) ≤ 0.08 (Diamantopoulos, & Siguaw, 2000). The factor solution achieved was established by local posterior fit indicators and cut-off points, with statistical significance and standardised regression weights (λ) ≥.40 (Tabachnick, & Fidell, 2007). However, values above.70 were indicative of an acceptable solution (Fornell, & Larcker, 1981), while convergent validity was established by estimating the average variance extracted (AVE), which is proposed to be equal to or greater than.50 (Hair et al., 1998). In addition, the ratio of heterotrait-monotrait correlations was calculated to test the discriminant validity between subscales, accepting good discrimination for values <0.85, although

values <0.90 have also been accepted (Henseler, Ringle, & Sarstedt, 2015). The reliability of each scale was assessed using Cronbach's α coefficient and McDonald's ω coefficient.

In order to respond to the second objective of the study of establishing the presence of significant differences in the indicators of the professional teaching climate, according to the variables of the institution, the invariance of the test was determined for variables such as gender, area, size of the school, teaching seniority, seniority of the school and administrative situation (See Annex 2).

RESULTS

Identify the dimensions of the professional teaching climate through institutional behaviours

Descriptive analysis

The results of the CPE-A on the various dimensions of job climate and job satisfaction, carried out on 1882 teachers, report that on average teachers report a moderate level of job satisfaction and job effectiveness. The job climate scales in general and the specific factors in particular obtained moderate values, with the standard deviation being relatively high, suggesting significant variability in teachers' responses. The standard deviation, minimum and maximum as a range suggest that the items of the instrument have a high variability. The values of the Shapiro-Wilk test indicate a non-normal distribution (see table 1).

Confirmatory Factor Analysis

The results (see table 2) provide the model fit. The Chi-square (666) = 1984.957, p<.001, indicates that there is a significant difference between the theoretical model and the observed data, i.e. the model does not fit the data well and is assumed to be affected by the sample size. This problem leads to replacing it with the standardised Chi-square, X2/gl = 2.98. Other indices of model fit were obtained, including the CFI=.991 and the TLI=.990; in addition, complementary indices of model fit were obtained, such as the RMSEA=.034 CI 90% [.032.036], which gives a good model fit, and the SRMR=.044, which also indicates an adequate model fit.

Table 1

Descriptive statistics of the FPC-A scale

Descriptive Statistics									
	Scale Sat	**Scale Eficac**	**Scale Cli1**	**Scale Cli2**	**Scale Cli3**	**Scale Climate**	**Scale Eficac2**	**P eficaF1**	**P eficaF2**
Valid	1882	1882	1882	1882	1882	1882	1882	1882	1882
Lost	0	0	0	0	0	0	0	0	0
Media	55.800	48.932	26.090	55.823	56.408	138.321	16.875	12.579	10.178
Standard Deviation	9.425	9.811	4.364	9.389	9.716	19.423	4.691	3.429	2.214
Shapiro-Wilk	0.996	0.979	0.988	0.992	0.953	0.996	0.957	0.949	0.952
Shapiro-Wilk P-value	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001	<.001
Minimum	20.000	20.000	12.000	28.000	15.000	70.000	6.000	4.000	4.000
Maximum	85.000	85.000	35.000	80.000	70.000	185.000	30.000	20.000	15.000

Table 2
Comparative index, chi-square and RMSEA

Adjustment of the model			
Model	**X^2**	**Gl**	**p**
Baseline Model	148307.961	666	<.001
Model	1984.957	626	<.001
Index			
Comparative Index (CFI)			0.991
Tucker-Lewis Index (TLI)			0.990
Other Adjustment Measures			
Root mean square error of approximation (RMSEA)			0.034
Standardised root mean square residual (SRMR)			0.044
Expected cross validation index (ECVI)			1.137

Table 3 shows the Predictor Model of Social Climate in the professional educational setting, F (2, 1879) = 1015.511, p<.001, R^2 =.519. The Regression Coefficients are significant for the Satisfaction Scale, β=.644, *t=28*.618, *p*<.001, and for the Efficacy Scale, β=.103, *t=4*.588, *p*<.001; this shows a greater weight in the forecast for the Satisfaction Scale.

Table 4 refers, on the one hand, to the convergent validity results, with acceptable levels in the range of.454 to.596; on the other hand, the discriminant validity obtained by the HTMT index is below the 0.85 threshold, suggesting that the factors have good validity.

Table 3

Regression model obtained for the Social Climate Scale

Model Summary - Climate Scale						
Model	**R**	**R^2**	**Adjusted R^2 Adjusted**		**RMSE**	
H_1	0.721	0.519	0.519		13.472	
ANOVA						
Model		**Sum of Squares**	**gl**	**Quadratic Mean**	**F**	**p**
H_1	Regression	55.010	2	184308.805	1015.511	<.001
	Residual	1.328	1879	181.494		
	Total	0.906	1881			
Model		**Non-standardised**	**Standard Error**	**Standardised**	**t**	**p**
H_1	(Intercept)	55.010	1.875		29.346	<.001
	EscalaSat	1.328	0.046	0.644	28.618	<.001
	PreficaF2	0.906	0.198	0.103	4.588	<.001

Table 4

Table of coefficients of determination, Average Variance Extracted (AVE) and Heterotrait-Monotrait Ratio (HTMT)

Average Variance Extracted	
Factor	**AVE**
Factor 1	0.475
Factor 2	0.454
Factor 3	0.596
HTMT	
Factor 1	**Factor 2**

0.442	---
0.452	0.633

The reliability of the CPE-A was established using Cronbach's omega and alpha reliability coefficients (see Table 5). The results showed that the reliability coefficients for each factor are high, with values of.855/.865 for Factor 1,.925/.930 for Factor 2 and.946/.954 for Factor 3. Furthermore, the overall reliability coefficient of the questionnaire was.962 for omega and.954 for Cronbach's alpha, indicating high internal consistency in the questionnaire responses.

Table 5
Table of reliability coefficients

	Reliability	
	Coefficient ω	**Coefficient α**
Factor 1	0.855	0.865
Factor 2	0.925	0.930
Factor 3	0.946	0.954
Total	0.962	0.954

To determine the significant differences in the indicators of the professional teaching climate according to the variables of the institution.

The invariance results show that the scale is invariant to the groupings by gender, area, school size, teaching seniority, school seniority and administrative situation, i.e. it is stable for the different grouping variables with an impact on the professional educational climate (absolute increase in the CFI <.01).

DISCUSSION AND CONCLUSIONS

The results of the CPE-A on the various dimensions of work climate and job satisfaction among 1882 teachers report that the questionnaire is a valid instrument for assessing the different domains of teacher work climate, offering interest in its relationship to job satisfaction in the educational setting. The results assume that the quality of the atmosphere in the institutions is relevant because of the significant impact it has on the well-being, motivation and performance of teachers, which in turn is expected to be related to the educational outcomes of students (Alvarado-Calderón, 2022). Therefore, the deployment of periodic analyses of the teaching work climate becomes an intrinsic demand of the educational models that are deployed, given that the elements and interactions emerging in the processes of organisational communication, leadership, teamwork, work and personal balance,

professional development opportunities and performance recognition must be identified and evaluated.

The results to be obtained provide us with valuable information on the strengths and areas for improvement in the work environment, allowing educational institutions to implement strategies and policies aimed at improving the work climate and promoting teacher satisfaction and well-being (García-Montalvo, et al., 2024; Nanjundeswaraswamy, 2021). It is important that this regular identification and contextualisation of indicators is carried out on a regular basis to ensure that interventions are relevant and effective in improving the teacher work environment (Bravo-Sanzana et al., 2023). Therefore, institutional behaviours associated with teaching should be analysed to determine the significant differences in teaching climate indicators, according to singular situational variables, since from these it will be possible to guide effective strategies for improving the work climate given their impact on the job satisfaction of the professionals involved, which in turn leads to an improvement in the quality of the teaching and learning processes that are promoted (García-Herrero, et al., 2024).

Based on these arguments, a confirmatory factor analysis (CFA) was conducted using data from 1882 teachers, distributed according to gender, type of school, professional seniority and educational level to present the results of the study. The response to our main study objective found that institutional behaviours related to collaboration, communication, support and recognition were positively associated with teacher professional climate (Quinteros-Durand, et al., 2023; Sara-Agrati, 2021). Furthermore, even with the same structure and invariance of the questionnaire, it is possible to identify significant differences in the indicators of teacher professional climate according to gender, type of school, professional seniority and educational level, as already found by García-Herrero, et al. (2024) and Rodríguez-Marulanda, & Lechuga-Cardozo, (2019).

Overall, the analysis of the study objectives provides valuable information on the indicators of teacher professional climate and the institutional variables that may influence them. The results suggest that satisfaction and effectiveness are interrelated, and that organisational climate can have a significant impact on teachers' effectiveness and well-being (Quinteros-Durand, et al., 2023). These findings can be useful for managers and organisational leaders seeking to improve teacher performance and satisfaction, as they show how organisational climate can affect teachers and their performance (García- Montalvo, et al., 2021). They are also useful in providing relevant information on how organisational climate and other independent variables may affect teachers and their performance (García-Herrero, et al., 2024; Molina-Vicuña, 2023).

The results of the study also make it possible to explain how variables related to teachers' well-being and satisfaction can affect their performance and productivity,

which can help them to design interventions and policies to improve the well-being and effectiveness of their employees and teachers in education, as Quinteros-Durand et al. (2023) have already pointed out. The results, in this line, indicate that the Satisfaction Scale has a direct effect on the Climate Scale and suggest that as the Satisfaction Scale increases, the Climate Scale also increases, which implies improving the well-being and effectiveness of teachers through specific interventions on these variables (García-Montalvo et al., 2021; Sara-Agrati, 2021).

In conclusion, this study provides valuable information on the indicators of teacher professional climate and the institutional variables that may influence them. On the one hand, the results of the exploratory and confirmatory factor analysis indicate that institutional behaviours related to collaboration, communication, support and recognition are positively associated with the professional teaching climate, which is in line with those obtained by Rodríguez-Marulanda, & Lechuga-Cardozo (2019). Furthermore, by maintaining invariance in the structure of the questionnaire, it will be possible to establish and support previous research by Rodríguez-Marulanda, & Lechuga-Cardozo (2019) which has shown that teachers' professional seniority and educational level influence work climate. In short, these results offer relevant implications for intervention to improve the professional work climate in schools, with the aim not only of achieving greater satisfaction (improvement in mental health), but also greater efficiency in the development of the professional teaching activity to promote the performance and adaptation of this professional group. At the same time, it provides a better understanding of how organisational climate can affect teachers and their adaptation, which can help design interventions and policies to improve their well-being and effectiveness (Dimitrova et al., 2016; García-Montalvo et al., 2021; Sara-Agrati, 2021).

In addition to providing interesting results, it is important to be aware of the limitations of the study. It should be noted that this is a self-report questionnaire, where other factors that could influence the professional climate of teachers, such as educational policies or organisational culture, have not been considered, as Bravo-Sanzana et al. (2023) have already pointed out. However, the results make it possible to support the idea that work climate is an important factor in teacher well-being and performance (Smith et al., 2020) and leads to the need, beyond this study, to seek a better understanding of teacher professional climate and the implementation of effective policies and practices to improve teachers' work environment (Molina-Vicuña; 2023).

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ANNEXES

Annex 1. Questionnaire. Analysis of the professional climate

Section 1: Personal and professional data

Sex:
❒ Male ❒ Female

Region where the organisation is located:
❒ Asturias ❒ Cantabria ❒ León ❒ Burgos

Support for the centre:
❒ Public ❒ Subsidised ❒ Private

Age
❒ - 25 years ❒ 25 - 35 ❒ 36 - 45 ❒ 46 - 55 ❒ over 55

Years of professional seniority
❒ 0-3 ❒ 4-7 ❒ 8-15 ❒ 16-23 ❒ 24 a 30 ❒ over 31

Years of seniority in this organisation/institution
❒ 0-7 ❒ 8-23 ❒ more than 24

Current job title (please tick as appropriate)
❒ Direction ❒ Coordination ❒ Teacher

Size of the centre
❒ Small (< 12 units) ❒ Medium (13 - 20 units) ❒ Large (+ than 20 units)

Highest qualification held
❒ Degree ❒ Bachelor's degree ❒ Doctorate ❒ Basic Vocational Training
❒ Intermediate Vocational Training ❒ Higher Vocational Training

Administrative Status
❒ Permanent ❒ Interim ❒ Otros_____

For the second part, we present a series of questions about the working climate in your educational institution.

Answer the different items honestly by adjusting your degree of agreement (from 1 to 5) with the statements made.

There are no good or bad responses, but different ways of perceiving what happens in institutions, as all contexts and communities are unique.

1	*2*	*3*	*4*	*5*
Fully at odds	**Little agreement**	**Agreed.**	**Very much in agreement**	**Fully in agreement**

In general, with regard to the following issues related to the climate of my educational institution, I consider that…

1 Students allow me to teach my classes 1 2 3 4 5
2 Students participate in my classes 1 2 3 4 5
3 I maintain good relations with students. 1 2 3 4 5
4 Students come to me when they are having academic difficulties . . 1 2 3 4 5
5 There is a socio-affective environment in the classroom that is conducive to learning 1 2 3 4 5
6 Students entrust me with their personal affairs 1 2 3 4 5
7 Students respect the teacher's authority. 1 2 3 4 5
8 Behavioural rules are respected in my class 1 2 3 4 5
9 My relationship with students is close 1 2 3 4 5
10 When there are conflicts between students, I am asked to act as a mediator 12 3 4 5
11 Positive attitude of the teacher to teamwork 1 2 3 4 5
12 I feel valued by my peers. 1 2 3 4 5
13 Teachers have good relationships with each other 1 2 3 4 5
14 Teachers are involved in the improvement of the institution 1 2 3 4 5
15 The teacher is individualistic (everyone goes his or her own way) . 1 2 3 4 5
16 Communication between teachers is fluid 1 2 3 4 5
17 Teachers collaborate in the institution's events 1 2 3 4 5
18 A competitive atmosphere is perceived among teachers. 1 2 3 4 5
19 I maintain good relations with all my colleagues 1 2 3 4 5
20 The attitude of some colleagues makes it difficult for me to express my opinions 1 2 3 4 5
21 Teachers help each other when they have difficulties 1 2 3 4 5
22 I feel that I am negatively criticised by other teachers 1 2 3 4 5
23 Teachers are enthusiastic about the tasks they carry out 1 2 3 4 5

24 My professional proposals are taken into account by my colleagues 1 2 3 4 5
25 I have professional conflicts with other teachers 1 2 3 4 5
26 I am satisfied with the way my colleagues work 1 2 3 4 5
27 Colleagues comply with assigned schedules 1 2 3 4 5
28 My colleagues have a good opinion of me 1 2 3 4 5
29 Teachers work professionally 1 2 3 4 5
30 Teachers have a sense of belonging to the institution 1 2 3 4 5
31 Teachers share materials and resources with other colleagues. . . . 1 2 3 4 5
32 The management team addresses the needs of the teachers 1 2 3 4 5
33 The management team is effective in resolving teachers' problems 1 2 3 4 5
34 The management team takes into account different opinions in decision making 12 3 4 5
35 The management team supports in-service training for teachers. . 1 2 3 4 5
36 Working teams develop actions relevant to the training task 12 3 4 5
37 The management of institutional actions is effective 1 2 3 4 5
38 The management team improvises rather than plans 1 2 3 4 5
39 The management team distributes information effectively 1 2 3 4 5
40 The management team publicly recognises teaching merit. 1 2 3 4 5
41 The management team has a cordial relationship with its teachers 1 2 3 4 5
42 Relevant decisions are made between management and teachers 1 2 3 4 5
43 The management team takes account of majority decisions. 1 2 3 4 5
44 There are good relations between teachers and the management team 1 2 3 4 5
45 The pedagogical management of the institution is effective. 1 2 3 4 5
46 Current initial teacher training is inadequate 1 2 3 4 5
47 A system of in-service training would improve teacher professional performance. 1 2 3 4 5
48 Teachers' salaries should be complemented by professional evaluations 12 3 4 5

1	2	3	4	5
Fully at odds	***Little in agreement***	***Agreed.***	***Very in***	***Fully in agreement***
For the third part, please indicate *how satisfied you are.*				
1. The infrastructure of the institution				1 2 3 4 5
2. The educational model developed in the centre				1 2 3 4 5
3. Interdisciplinary projects between different subjects				1 2 3 4 5
4. The level of bureaucracy				1 2 3 4 5
5. The educational resources available to develop my work				1 2 3 4 5
6. The technology available to develop my work				1 2 3 4 5
7. Vocational training opportunities at the centre				1 2 3 4 5
8. The management team				1 2 3 4 5
9. Academic/curricular coordination				1 2 3 4 5
10. Coordination with my fellow teachers				1 2 3 4 5
11. The area of knowledge in which I work				1 2 3 4 5
12. Relations between members of the educational community				1 2 3 4 5
13. The premises available for teaching tasks				1 2 3 4 5
14. Diversity measures				1 2 3 4 5
15. The participation of families				1 2 3 4 5
16. External monitoring (inspection)				1 2 3 4 5
17. The guidance department				1 2 3 4 5
18. The freedom to organise my work				1 2 3 4 5
19. The hourly load				1 2 3 4 5
20. The number of additional hours				1 2 3 4 5
21. The wage-labour relationship				1 2 3 4 5
22. The social prestige of my profession				1 2 3 4 5
23. Professional development opportunities				1 2 3 4 5
24. The academic results of the student body				1 2 3 4 5
25. Social recognition of the institution				1 2 3 4 5
For the fourth part, indicate the DEGREE OF EFFECTIVENESS OF THE EDUCATION SYSTEM				
1. The infrastructure of the institution				1 2 3 4 5
2. The educational model developed in the centre				1 2 3 4 5

3. Interdisciplinary projects between different subjects	1 2 3 4 5
4. The level of bureaucracy	1 2 3 4 5
5. The educational resources available to develop my work	1 2 3 4 5
6. The technology available to develop my work	1 2 3 4 5
7. Professional teacher training opportunities at the school level	1 2 3 4 5
8. The management team	1 2 3 4 5
9. Academic/curricular coordination	1 2 3 4 5
10. Coordination with my fellow teachers	1 2 3 4 5
11. The area of knowledge in which I work	1 2 3 4 5
12. Relations between members of the educational community	1 2 3 4 5
13. The premises available for teaching tasks	1 2 3 4 5
14. Diversity measures	1 2 3 4 5
15. The participation of families	1 2 3 4 5
16. External monitoring (inspection)	1 2 3 4 5
17. The guidance department	1 2 3 4 5
18. The freedom to organise my work	1 2 3 4 5
19. The hourly load	1 2 3 4 5
20. The number of additional hours	1 2 3 4 5
21. The wage-labour relationship	1 2 3 4 5
22. The social prestige of my profession	1 2 3 4 5
23. Professional development opportunities	1 2 3 4 5
24. The academic results of the student body	1 2 3 4 5
25. Social recognition of the institution	1 2 3 4 5

Indicate at least THREE INITIATIVES that could IMPROVE the professional climate; and provide a brief explanation.

1ª.

2ª.

3ª.

We welcome your comments on the QUESTIONNAIRE in general and on SATISFACTION, EFFECTIVENESS and ENTREPRENEURIAL CULTURE. Your input will help us to improve.

Thank you for your cooperation

Annex 2
Invariance Table

Model		Chi-2	GL	p	CHI/GL	RMSEA	SRMR	IFC	I-CHI2	I-GL	p	I-RMSEA	I-SRMR	I-CFI
	All	**1984.957**	**626**		**3.171**	**0.034**	**0.044**	**0.991**	-			-	-	-
Configural	Sex	2372.605	1252	0.000	1.895	0.031	0.048	0.992						
Loads		2824.294	1286	0.000	2.196	0.036	0.052	0.990	451.689	34	0.000	0.005	0.004	-0.002
Intercepts		2918.043	1320	0.000	2.211	0.036	0.051	0.989	93.749	34	0.000	0.000	-0.001	-0.001
Waste		2965.039	1357	0.000	2.185	0.036	0.052	0.989	46.996	37	0.126	0.000	0.001	0.000
Configural	Zone	2357.880	1252	0.000	1.883	0.031	0.048	0.992						
Loads		2712.608	1286	0.000	2.109	0.034	0.051	0.990	354.728	34	0.000	0.003	0.003	-0.002
Intercepts		2767.253	1320	0.000	2.096	0.034	0.050	0.990	54.645	34	0.014	0.000	-0.001	0.000
Waste		2815.630	1357	0.000	2.075	0.034	0.051	0.990	48.377	37	0.100	0.000	0.001	0.000
Configural	Size	2715.327	1878	0.000	1.446	0.027	0.051	0.994						
Loads		3360.329	1946	0.000	1.727	0.034	0.056	0.991	645.002	68	0.000	0.007	0.005	-0.003
Intercepts		3468.611	2014	0.000	1.722	0.034	0.055	0.990	108.282	68	0.001	0.000	-0.001	-0.001
Waste		3582.122	2088	0.000	1.716	0.034	0.057	0.990	113.511	74	0.002	0.000	0.002	0.000
Configural	Seniority	3359.719	3130	0.002	1.073	0.014	0.056	0.998						
Loads		4249.786	3266	0.000	1.301	0.028	0.062	0.994	890.067	136	0.000	0.014	0.006	-0.004
Intercepts		4379.014	3402	0.000	1.287	0.028	0.061	0.994	129.228	136	0.647	0.000	-0.001	0.000
Waste		4575.649	3550	0.000	1.289	0.028	0.063	0.993	196.635	148	0.005	0.000	0.002	-0.001
Configural	Seniority centre	2285.495	1252	0.000	1.825	0.030	0.047	0.993						
Loads		2557.535	1286	0.000	1.989	0.032	0.050	0.991	272.040	34	0.000	0.002	0.003	-0.002
Intercepts		2623.389	1320	0.000	1.987	0.032	0.049	0.991	65.854	34	0.001	0.000	-0.001	0.000

Model		Chi-2	GL	p	CHI/GL	RMSEA	SRMR	IFC	I-CHI2	I-GL	p	I-RMSEA	I-SRMR	I-CFI
Waste		2678.668	1357	0.000	1.974	0.032	0.049	0.991	55.279	37	0.027	0.000	0.000	0.000
Configural	Situation Administration	2348.687	1252	0.000	1.876	0.031	0.047	0.993						
Loads		2550.674	1286	0.000	1.983	0.032	0.049	0.991	201.987	34	0.000	0.001	0.002	-0.002
Intercepts		2618.864	1320	0.000	1.984	0.032	0.048	0.991	68.190	34	0.000	0.000	-0.001	0.000
Waste		2663.325	1357	0.000	1.963	0.032	0.049	0.991	44.461	37	0.186	0.000	0.001	0.000