

School Climate: A Panoramic View Of The Colombian Territory From The Educational Coexistence Observatory At La Casa Del Maestro

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Abstract

This work collects, through exploratory and explanatory non-experimental analysis, the perspective of teachers in the Colombian territory regarding the school climate after the return to face-to-face teaching as a result of the confinement caused by COVID-19. Under this perspective, the factors taken into account were: Cohesion, Coexistence, Empowerment, Teacher Commitment, Educational Goals and Linkage. The results showed that in both the exploratory and confirmatory analysis, the core elements that contribute to the school climate are coexistence and empowerment, which implies the commitment of the educational community to enhance these principles in the institutional educational project.

Keywords: school climate, teachers, coexistence, empowerment, educational goals.

General context of the research and problem.

It is imperative to continue working both in the configuration of scenarios and in the same person, in opportunities through which exclusion of any kind is reduced, especially in the school that is one of the social institutions championed for the configuration of positive coexistence climates.

After two years of confinement as a result of Covid 19 and the return of children and young people to face-to-face attendance; The teacher perception indicates that the behaviors of their students are in a situation where the voice and action of the difference, represented in parents, caregivers and teachers and even their own educational peers, is unknown. For this reason, it is not gratuitous to read prison headlines such as: "Mother denounces beating of son in bathroom of exclusive school of Barranquilla", "Bullying, a school shadow that can no longer be ignored", "Serious case of bullying in school of Manizales: child was almost impaled"; "Of 10 countries in the region, Colombia is the second in school bullying," among others, which tend to exacerbate the situation of the training center when serious complaints are filed involving teachers in behaviors alluding to sexual crimes that compromise the dignity and lives of students.

A clear awareness is imperative that makes it possible to make coexistence a preferential educational task (Peñalva and Soriano, 2011) unlike previous moments, when there was no such awareness (Del Rey and Ortega, 2007; Ortega and Del Rey, 2004); therefore, it is not gratuitous that the Ministry of National Education (MEN, 2008), emphasizes that teachers and members of the educational community must generate a healthy and pleasant environment that contributes to the development of students in their learning and coexistence. Although the city of Barranquilla is a special scenario of interaction between actors, school coexistence also acquires a significant level of complexity, since psychological, educational and social factors converge in it that ultimately give rise to this type of relationships both group and interpersonal in the school environment.

In this order of ideas, it is pertinent to point out that the Comprehensive Plan for Security and Citizen Coexistence of the District of Barranquilla 2020-2023, promotes "the generation of consensus on how to generate conditions of healthy, respectful and harmonious coexistence, based on which security, tranquility, the environment and public health, as legal categories of coexistence, have due respect and guarantees for their implementation within the respective territorial entity". Under this logic, it is evident that although there is a strong legal notion to intervene in the preservation of Human Rights in territory, institutions and actors, no less true is the link between Law 1620 of 2013 and the reports registered by the departmental committees to intervene scientifically in the horizon of the route of coexistence; But these results need to be apprehended structurally to mitigate all those manifestations that threaten each of the actors that inhabit the school.

For this specific exercise, only one aspect of the provisions of Law 1620 of 2013 related to the Prevention and mitigation of school violence will be advocated, from the perception of teachers. Under this explanatory note,

the following question is raised to guide the research: What are the perceptions of school climate of the teachers of the FDI of Barranquilla on prevention and mitigation of school violence?.

Approaches to the object of knowledge and state of the art

Undoubtedly, the project of citizenship is under construction and, each social institution as is the case of Colombia seeks not only punitively but pedagogically and didactically, to reach the articulation of the moral, legal and cultural, with a view to living together as a fundamental part of human life. That is why it is imperative to apprehend the interactions with their senses, in the midst of what the communicability of that coexistence would imply, such as the school climate. The school then represents that intentional and privileged scenario for consensus and dissent, which is nothing more than the other. In this order of ideas, some of the references for this approach of inquiry are supported in productions as shown in table 1:

Board 1. State of the art

Year	Author/s	Scenario	Construct	Variable/Category
2021	Jesús Nivardo Aguayo Pasos, Fabiola Alejandra Favela Ruiz, Beatriz Adriana Parra Quijada	Mexico	Collective effectiveness and management and its relationship with climate and school violence	Both school violence and school coexistence are articulated as relational processes of the school, and are related to the climate of the spaces of learning and coexistence, as well as with aspects of the environment and policies of the educational establishment.
2021	Scarmato, Amancay	Argentina	Some questions about violence in schools and the school climate. An approach to quantitative studies in Argentina.	Based on three quantitative focused studies, the characterization of those situations that generate violence in these schools is presented, making a link with the perceptions of these facts and the school climate.
2021	Dulce Gisel Cerón García Evelia Damary Rodriguez Lozano.	Mexico	Teachers' perception of the school environment in public high schools	Through a semi-structured interview, typical of a qualitative design, the meaning in the voices of the informants that tributes to the look of the school environment and the phenomenological perspective of each of the factors that are

				part of the school environment is realized, once the findings of the SERCE report are raised and interpreted.
2021	Igono, Daniel Odoma	Peru	Perception of the school climate according to the educational community of the primary level of the I.E.P. "Claretiano" Trujillo, 2018	Its general objective was to know the perception of the school climate in the educational community of the primary level of the I.E.P. "Claretiano" Trujillo, 2018. With a census sample by parents, students and teachers. Two hypotheses were proposed: The school climate, from the perception of the educational community of the primary level of the I.E.P. "Claretiano" Trujillo and, the school climate, from the perception of the educational community of the primary level of the I.E.P. "Claretiano" Trujillo,
2020	Torres Navarrete, William Robert	Peru	The "safe school" program and the school climate from the teaching perception of an educational institution focused on the district of Comas 2020. Cesar Vallejos University Repository.	Correlation of a program coexistence and teacher perception in the mitigation of conflicts
2021	Alberto Linero Gómez, María Matallana Batista, Reinaldo Rico Ballesteros, Edgardo Sánchez Montero, Marcial Conde Hernandez, Belinha	Colombia	The Emotionality of Discourse in Teaching: Towards A Systematic Review of Trends	In this work, conceptual nuclei that gravitate around the Emotionality of the Educational discourse in the exercise of teaching were reviewed, as a fundamental component towards an emerging pedagogy.

	Herrera Tapias, Inírida Avendaño Villa, Erick Fruto Silva			
2020	Ana Quijada , Miguel A Ruiz , Juan A Huertas , Jesús Alonso-Tapia	Spain	Development and validation of the School Climate Questionnaire for Secondary and Baccalaureate Teachers (CES-PSB)	The study evidences the development and validation of a measure of school climate based on teachers' perceptions. The instrument incorporates aspects of the school climate that in the traceability of the literature is reiterative; However, it includes an edge on the structure of school goals and puts them in context with the aspects of leadership in the educational field.
2019	Jaime Retamal. Sebastian Gonzalez ¹	Chile	From microviolence to the school climate: Keys to understanding from the teachers' discourse	Qualitative production that aims to link the hermeneutic understanding of Éric Debarbieux on school microviolence from the perception of the school climate, in teachers of public schools in Santiago de Chile.
2021	Willian Sierra Barón, Catalina Trujillo Vanegas, Eliana Johana González Vargas	Colombia	Exploration of perceptions about school climate in a group of actors from educational institutions in southern Colombia	This research aimed to contribute to the understanding of the school climate of actors of educational institutions in southern Colombia. The results provide elements of characterization of the sociodemographic profiles of the educational actors (decent, students and general community), as well as the description of the dimensions present in the school climate that characterize their contexts (academic commitment and knowledge of the norms.

This approach, part of the same Delors report (1996) where apology is made on school coexistence, and the declaration of its four pillars and with these

learning to live together. This variable presents a renewed interest in citizenship education and skills that allow promoting peaceful and inclusive coexistence (Peiró, 2012); However, it can be observed in the scope of the research process, that the sources, although they express the relationship between coexistence and school climate, no less true is that from the conceptual point of view there is a difference between them, but does not deny the relationship between them. To this is added that although in most Latin American countries the issue has been relevant in the training processes, they have generated the construction of public policies in pursuit of the defense of Human Rights, as an axiological edge of human dignity; hence, some of the variables and categories implicit in the discourse of School Climate and teacher perception, have the management of coexistence, conflict, violence, scenarios, internal and external factors, among others that are associated with a school climate. However, in the Colombian case, a whole regulatory network related to the configuration of better school climates has emerged, but no direct relationship is made with these conceptions; Hence, this is an opportunity to account for teachers' perceptions of their imaginaries and ideas in relation to behavior evidenced among their peers and their students that shed light on a school climate.

Methodological design and procedure

To achieve the objectives of the research, the present work is carried out from an exploratory explanatory non-experimental methodological approach that is used to analyze and understand a specific phenomenon or problem. This type of study focuses on the description and explanation of a phenomenon without actively intervening in it (Creswell, 2014). It is an approach that is used to establish relationships between variables and to obtain a deep understanding of the phenomenon or problem studied (Yin, 2018).

To achieve this, **the questionnaire Stevenson - Leslie R (2014)** self-administered, anonymous and confidential integrated with 22 affirmative reagents was used as a research technique, using a Likert scale where (1) is totally disagree and (7) totally agree, so that the higher the average the variable is better evaluated.

Study of the reliability of the instrument

The instrument was subjected to reliability criteria through the calculation of Cronbach's Alpha Coefficient, suitable for questionnaires of several alternatives, in order to obtain the Alpha reliability coefficient, assumed as the consistency with which the instrument measures the indicators and thus guarantee the effectiveness of the measurement of such indicators and the

questionnaire as a whole. For this purpose, a test of the instrument was performed, when making the respective calculations, a coefficient of .90 was obtained (see fig. 1).

Estadísticas de Fiabilidad de Escala	
α de Cronbach	
escala	0.900
[3]	

Estadísticas de Fiabilidad de Elemento	
	Si se descarta el elemento
	α de Cronbach
1.El alumnado participa en la elaboración de las normas de convivencia	0.902
3.Existe un clima de confianza entre el profesorado de este colegio	0.893
4.En este colegio existe buen ambiente entre el alumnado	0.892
5.A mí me gusta bastante este colegio	0.894
6.En este colegio el alumnado propone algunas celebraciones y actividades	0.898
7.La mayoría de profesores y profesoras de este colegio se llevan bien entre sí	0.894
8.Los docentes de este colegio se esfuerzan de forma sincera para lograr las metas.	0.894
11.Cuando hay un conflicto, el alumnado participa en su resolución	0.896
13.Los docentes siempre participamos en las decisiones importantes que adopta el colegio.	0.894
14.En este colegio me siento muy a gusto	0.892
15.Algunas de las actividades que se realizan en las clases son propuestas por el alumnado	0.898
16.En este colegio importa muchísimo la educación en valores del alumnado	0.894
17.El profesorado está muy comprometido con el colegio y con su mejora	0.894
19.El profesorado de este colegio percibe que su influencia en la toma de decisiones es muy alta	0.895
20.Las normas de comportamiento de este colegio son asumidas por casi todo el alumnado	0.894
21.En este colegio formar buenas personas y ciudadanos responsables es más importante.	0.894
22.En este colegio las relaciones entre el alumnado y el profesorado son buenas	0.896
2.Me cambiaría de colegio si pudiera *	0.898
9.En este colegio se valora el rendimiento académico por encima de la formación integral *	0.903
10.En este colegio hay grupos de alumnos/as que se dedican a molestar a los demás... *	0.902
12.Existe muy poco compromiso entre los profesores/as de este colegio *	0.899
18.En este colegio hay bastantes problemas o conflictos fuera de las aulas (recreo, pasillos...) *	0.897

* elemento de escala inversa

Figure 1. Reliability of the instrument from Cronbach's alpha coefficient

Regarding the interpretation of the coefficient obtained, Ruiz Bolívar (2013) states that a practical way to interpret the magnitude of a reliability coefficient can be guided by the scale presented in table no. 2:

Board 2. Interpreting the reliability of the instrument

Ranges	Magnitude
0.81 to 1.0	Very high
0.61 to 0.80	Loud
0.41 to 0.60	Moderate
0.21 to 0.40	Casualty
0.01 to 0.20	Very low

Note: table showing the ranges for reliability interpretation, by Ruiz Bolívar (2013).

As can be seen, the coefficient is located close to the lower limit of the interval that indicates "Very high" reliability in the interpretation table of

the cited author, who raises the convenience of the coefficient tending to the upper limit.

Participants

The population of interest is made up of 203 teachers from different cardinal points of Colombia (Atlántico with 75.4%; Magdalena with 20.2%; Antioquia contributing 5%; Cesar 1%; La Guajira, San Andrés and Providencia and Sucre with 0.5%). Of the total of these participants who completed the questionnaires, 123 (60.0%) are women and 80 are men (39.4%), with age ranges between 41 to 50 (36.9%), 51 to 60 (27.1%), 31 to 40 (22.2%), 20 to 30 (10.8%) and 61 to 70 (3%). In this sense, 92.1% of the participants belong to public institutions while the remaining 7.9% to the private sector. As for the days, 46.8% of the teachers surveyed carry out their activities in the morning, 28.1% in the afternoon and the remaining 25.1% in a single day.

Regarding the distribution of roles, 36.5% are in Basic Primary, followed by Basic Secondary with 30.5%, the average with 11.8%, in the role of coordinator with 5.4%, in preschool 3.9%, in the role of rector 3.4%, psycho counselor with 3% and others with 5.4% corresponds to PTA tutors, Support teacher, higher education, university professor and trainer.

This instrument for collecting information is structured in three large blocks that

They constitute: i) personal and academic data, ii) climate perception scale that measures Cohesion (3, 7, 13 and 21), Coexistence (4, 10, 18, 19 and 22), Empowerment (1, 6, 11 and 15), Teacher commitment (8, 12 and 16), Educational goals (9, 16 and 19), Outreach (2, 5 and 14).

Quantitative approach, descriptive method

With the premise that the appreciation of teachers in the face of the school climate has to contribute to the understanding of emotional, affective and relational dynamics in different institutional contexts; These subjects have the power to offer valid opinions, regarding the management and mediation of the aforementioned processes. From the statistical package Jamovi V. 2.3.18, an initial descriptive study of the responses is carried out together with the analysis of their trend and distribution, to complement this exercise an additional analysis was developed that allowed to identify both the correlations and covariances between the dimensions and variables proposed through the Exploratory Factor Analysis (AFE) and Confirmatory (AFC).

Results

School climate refers to the emotional, social, and psychological conditions that exist in a school. These conditions can influence the well-being and performance of students, as well as the effectiveness of teaching and administrative staff.

A positive school climate is characterized by an atmosphere of mutual respect, trust and collaboration. Students feel safe and valued, and have a sense of belonging at school. Faculty and staff are accessible, supportive of students, and encourage participation. Students are motivated and engaged in their learning and teaching staff are committed to student development and well-being.

On the other hand, a negative school climate is characterized by an environment of mistrust, tension, and sense of belonging. Students may feel insecure, undervalued, and engaged in their learning. Teachers and administrative staff may be inaccessible or even hostile, and students may feel they do not have an active role in the school. Figure 2 then reports the measures of central tendency (means, median and standard deviation), resulting from the application of the questionnaire.

Descriptivas (n=203)

	Media	Mediana	DE
1.El alumnado participa en la elaboración de las normas de convivencia	4.48	5	2.07
2.Me cambiaría de colegio si pudiera	2.91	2	2.06
3.Existe un clima de confianza entre el profesorado de este colegio	5.25	6	1.60
4.En este colegio existe buen ambiente entre el alumnado	4.85	5	1.57
5.A mí me gusta bastante este colegio	5.93	6	1.36
6.En este colegio el alumnado propone algunas celebraciones y actividades	5.14	6	1.52
7.La mayoría de profesores y profesoras de este colegio se llevan bien entre si	5.44	6	1.52
8.Los docentes de este colegio se esfuerzan de forma sincera para lograr las metas.	5.56	6	1.32
9.En este colegio se valora el rendimiento académico por encima de la formación integral	3.55	3	1.87
10.En este colegio hay grupos de alumnos/as que se dedican a molestar a los demás...	4.75	5	1.83
11.Cuando hay un conflicto, el alumnado participa en su resolución	4.98	5	1.59
12.Existe muy poco compromiso entre los profesores/as de este colegio	2.53	2	1.64
13.Los docentes siempre participamos en las decisiones importantes que adopta el colegio.	5.03	5	1.63
14.En este colegio me siento muy a gusto	5.75	6	1.47
15.Algunas de las actividades que se realizan en las clases son propuestas por el alumnado	4.45	5	1.60
16.En este colegio importa muchísimo la educación en valores del alumnado	5.73	6	1.36
17.El profesorado está muy comprometido con el colegio y con su mejora	5.66	6	1.32
18.En este colegio hay bastantes problemas o conflictos fuera de las aulas (recreo, pasillos...)	3.87	4	1.80
19.El profesorado de este colegio percibe que su influencia en la toma de decisiones es muy alta	4.57	5	1.63
20.Las normas de comportamiento de este colegio son asumidas por casi todo el alumnado	4.71	5	1.61
21.En este colegio formar buenas personas y ciudadanos responsables es más importante.	5.63	6	1.44
22.En este colegio las relaciones entre el alumnado y el profesorado son buenas	5.80	6	1.09

Figure 2. Measures of central tendency (means, median and standard deviation), result of the application of the questionnaire

Exploratory Factor Analysis (EFA)

Among the most important requirements that the data matrix must meet is that the independent variables have to be highly correlated, and for this the determinant of the correlation matrix has to be taken into account. If this determinant is very low, then it means that there are variables with very high intercorrelations, and then it is feasible to continue with the factor analysis. However, the determinant must not be equal to zero, because in this case the data would not be valid. In the case of this study, when checking if the correlation matrix is an identity matrix, that is, that the intercorrelations between the variables are zeros, Bartlett's sphericity test is used, which consists of a chi-square estimate from a transformation of the determinant of the correlation matrix. If the variables are not intercorrelated, then Bartlett's sphericity test must have a value (significance) greater than the limit of 0.05. In the case of this study (Fig. 3), this analysis presented a significance much lower than the limit 0.05, since it was 0.00, which indicates that the data matrix is valid to continue with the process of factor analysis.

Prueba de Esfericidad de Bartlett		
χ^2	gl	p
2007	231	< .001

Figure 3. Barlett sphericity test

Another analysis to be taken into account is the Kaiser-Meyer-Olkin index (KMO) (Fig. 4), which serves to compare the magnitudes of the general or simple correlation coefficients with respect to the magnitudes of the partial correlation coefficients. If the sum of the squared partial correlation coefficients between all pairs of variables is low compared to the sum of the squared correlation coefficients, then the KMO index will be close to one and this will be considered positive and indicate that factor analysis can be continued. But if low values are obtained with the KMO index, then it indicates that the correlations between pairs of variables cannot be explained by the other variables and, therefore, it is not feasible to carry out factor analysis since the KMO index will move away from zero. This is because when the independent variables have common factors, the partial correlation coefficient between pairs of variables is low when the linear effects of the other variables are eliminated. KMO values between 0.5 and 1 indicate that it is appropriate to apply factor analysis to the data matrix under study. In the case of the data matrix analyzed, a KMO of 0.87 was obtained, which indicated that the sample taken for the study is appropriate and that therefore the application of factor analysis can continue.

Medida de idoneidad del Muestreo KMO

	MSA
Global	0.885
1.El alumnado participa en la elaboración de las normas de convivencia	0.859
2.Me cambiaría de colegio si pudiera	0.882
3.Existe un clima de confianza entre el profesorado de este colegio	0.904
4.En este colegio existe buen ambiente entre el alumnado	0.888
5.A mi me gusta bastante este colegio	0.868
6.En este colegio el alumnado propone algunas celebraciones y actividades	0.815
7.La mayoría de profesores y profesoras de este colegio se llevan bien entre si	0.900
8.Los docentes de este colegio se esfuerzan de forma sincera para lograr las metas.	0.915
9.En este colegio se valora el rendimiento académico por encima de la formación integral	0.724
10.En este colegio hay grupos de alumnos/as que se dedican a molestar a los demás...	0.727
11.Cuando hay un conflicto, el alumnado participa en su resolución	0.922
12.Existe muy poco compromiso entre los profesores/as de este colegio	0.821
13.Los docentes siempre participamos en las decisiones importantes que adopta el colegio.	0.875
14.En este colegio me siento muy a gusto	0.902
15.Algunas de las actividades que se realizan en las clases son propuestas por el alumnado	0.852
16.En este colegio importa muchísimo la educación en valores del alumnado	0.883
17.El profesorado está muy comprometido con el colegio y con su mejora	0.897
18.En este colegio hay bastantes problemas o conflictos fuera de las aulas (recreo, pasillos...)	0.883
19.El profesorado de este colegio percibe que su influencia en la toma de decisiones es muy alta	0.882
20.Las normas de comportamiento de este colegio son asumidas por casi todo el alumnado	0.925
21.En este colegio formar buenas personas y ciudadanos responsables es más importante.	0.909
22.En este colegio las relaciones entre el alumnado y el profesorado son buenas	0.925

Figure 4. Kaiser-Meyer-Olkin index (KMO)

The conclusion about this first stage of factor analysis is that all types of analysis on the relevance and validity of the data matrix are tested and passed satisfactorily. With this it was possible to carry out the second stage that consisted mainly in the extraction of the different factors through the grouping of the original variables into new variables that we will call indistinctly as "components" or "factors", which are combinations of the original variables.

The selection of the main factors (principal components) using the principal components method is shown in the sedimentation figure (Figure 5).

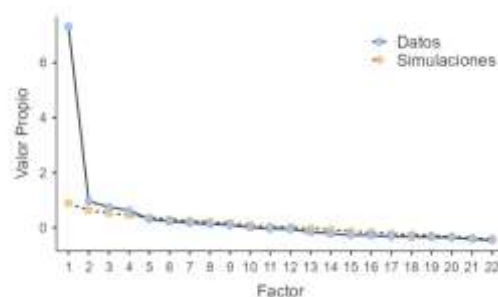


Figure 5. Sedimentation graph

Components whose eigenvalues (eigenvalues) are greater than 1 (eigenvalues >1) are chosen. Fig. It allowed us to extract four components that meet the indicated requirement.

The table of total variance explained (Figure 6) shows in detail the selection of the four main components.

Resumen

Factor	SC Cargas	% de la Varianza	% Acumulado
1	3.20	14.56	14.6
2	3.01	13.66	28.2
3	2.38	10.81	39.0
4	1.77	8.02	47.1

Figure 6. Total variance explained

As can be seen in this table, the first four factors have eigenvalues greater than 1 and explain 47.1% of the variance, this means that with these four factors 47.1% of the original problem is represented, producing the loss of 52.9% of the original information represented by initial variables. In other words, 4 factors are relevant to summarize the original variables of the problem.

From this point, it is necessary to perform an orthogonal rotation that will reduce ambiguities in the factorial loads of the variables and find a clearer solution. In practice, the goal of rotation methods is to simplify rows or columns of the factor matrix for ease of interpretation. The rotation method used is VARIMAX which seeks to redistribute the variance along all components in the load matrix.

This simplifies the model and obtains clearer results to identify the factors in each component, since this method approximates the high loads to 1 or -1 and the low loads of the non-rotated matrix to 0, thus eliminating the ambiguities existing in the non-rotated matrix. With this rotation we obtain new values and own vectors and also different percentages of explanation, but the total variation of the four components is maintained which is 47.1%.

Table 3 and 4 show the rotated factor load matrix of the instrument application (applying Varimax) and the covariance of the factors respectively. Similarly, in fig. 7 shows the Structural Model Diagram for Exploratory Factor Analysis.

Board 3. Rotated factor load matrix

Cargas de los Factores	Factor				Unicidad
	1	2	3	4	
14.En este colegio me siento muy a gusto	0.729				0.321
19.El profesorado de este colegio percibe que su influencia en la toma de decisiones es muy alta	0.675				0.439
13.Los docentes siempre participamos en las decisiones importantes que adopta el colegio.	0.650				0.458
5.A mí me gusta bastante este colegio	0.595				0.478
3.Existe un clima de confianza entre el profesorado de este colegio	0.554				0.430
2.Me cambiaría de colegio si pudiera					0.752
20.Las normas de comportamiento de este colegio son asumidas por casi todo el alumnado					0.594
1.El alumnado participa en la elaboración de las normas de convivencia					0.887
17.El profesorado está muy comprometido con el colegio y con su mejora		0.771			0.257
8.Los docentes de este colegio se esfuerzan de forma sincera para lograr las metas.		0.725			0.329
22.En este colegio las relaciones entre el alumnado y el profesorado son buenas		0.514			0.556
7.La mayoría de profesores y profesoras de este colegio se llevan bien entre sí					0.529
12.Existe muy poco compromiso entre los profesores/as de este colegio.					0.726
16.En este colegio importa muchísimo la educación en valores del alumnado			0.638		0.316
21.En este colegio formar buenas personas y ciudadanos responsables es más importante.			0.578		0.415
15.Algunas de las actividades que se realizan en las clases son propuestas por el alumnado			0.544		0.661
6.En este colegio el alumnado propone algunas celebraciones y actividades			0.520		0.634
11.Cuando hay un conflicto, el alumnado participa en su resolución					0.626
9.En este colegio se valora el rendimiento académico por encima de la formación integral					0.881
16.En este colegio hay bastantes problemas o conflictos fuera de las aulas (recreo, pasillos...)				-0.686	0.426
10.En este colegio hay grupos de alumnos/as que se dedican a molestar a los demás...				-0.668	0.545
4.En este colegio existe buen ambiente entre el alumnado				0.576	0.387

Nota: El método de extracción 'Residuo mínimo' se usó en combinación con una rotación 'varimax'

Board 4. Covariance of factors

Covarianzas de los Factores		Estimador	EE	Intervalo de Confianza al 95%		Z	p
				Inferior	Superior		
Clima y participación Institucional	Clima y participación Institucional	1.000*					
	Cohesión	0.736	0.0465	0.645	0.828	15.83	< .001
	Formación ciudadana	0.638	0.0551	0.530	0.746	11.57	< .001
Cohesión	Conflicto	-0.595	0.0606	-0.713	-0.476	-9.81	< .001
	Cohesión	1.000*					
	Formación ciudadana	0.796	0.0428	0.712	0.880	18.61	< .001
Formación ciudadana	Conflicto	-0.546	0.0656	-0.674	-0.417	-8.32	< .001
	Formación ciudadana	1.000*					
	Conflicto	-0.570	0.0638	-0.695	-0.445	-8.93	< .001
Conflicto	Conflicto	1.000*					

* parámetro fijo

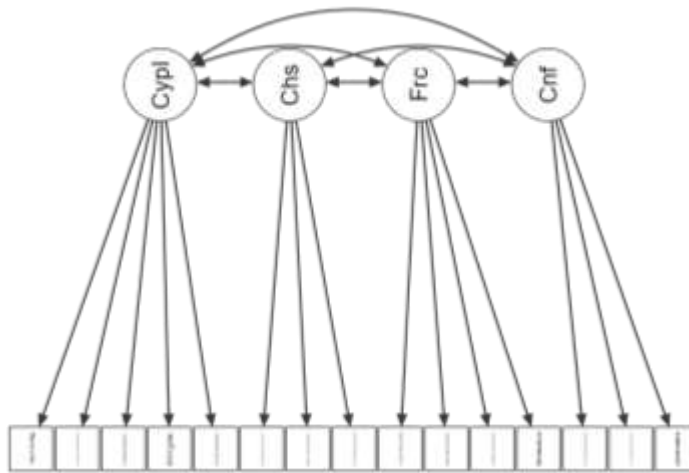


Figure 7. Structural Model Diagram for Exploratory Factor Analysis

Note. The resulting factors were named as follows: Factor 1. Climate and institutional participation (Cypl), Factor 2. Cohesion (Chs), factor 3. Citizen Training (FRC) and Factor 4. Conflict (CNF).

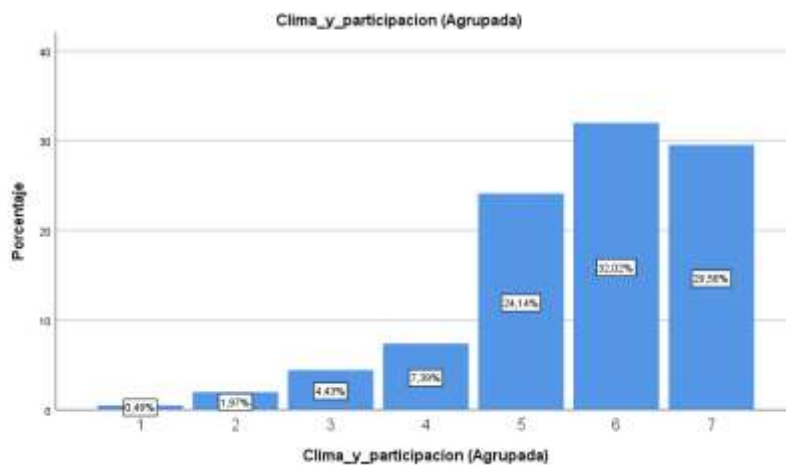


Figure 8. Climate factor and participation

Compared to the results of fig. 8, it can be inferred that most teachers agree or strongly agree with the concept of school climate and participation. However, there is also a significant percentage of teachers who somewhat disagree or neither agree nor disagree with this concept. It is important to consider that the data provided does not provide information on the reasons behind these opinions and it is possible that there is a variety of perspectives and points of view among teachers, so it is important to deepen with the look of other actors who can give holism to the phenomenon. This coincides with the study by Barón, Trujillo and Gonzalez (2021) which establish that: An expanded view of coexistence requires the characterization of the sociodemographic profiles of educational actors (teachers, students and the general community), as well as the description

of the dimensions present in the school climate that characterize their contexts (academic commitment and knowledge of the rules).

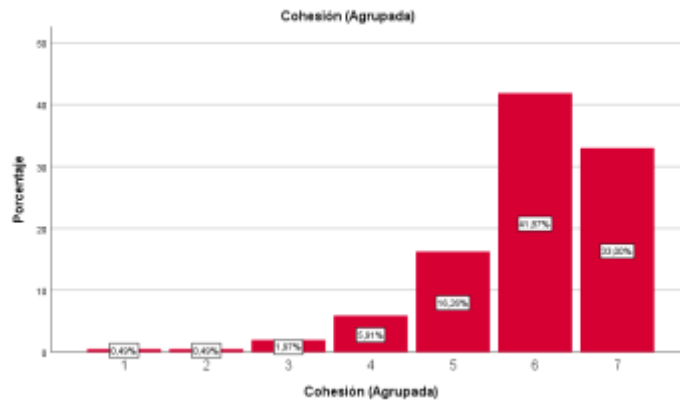


Figure 9. Cohesion factor

According to the data presented in fig. 9, the majority of principal teachers and teachers surveyed in Colombia (75.87%) agree or strongly agree with the category of cohesion within the framework of the school climate. Only 8.44% disagree or somewhat disagree with this category. 5.91% do not have a clear opinion on the matter, indicating that they are neither in agreement nor in disagreement.

A relevant theorist in the field of cohesion in the framework of school climate in 2020 is Professor John Hattie, who has developed a large amount of research in this field. One of his main contributions has been the development of an evaluation framework to measure the impact of educational interventions on students' academic performance, known as "Visible Learning". In this framework, cohesion among the members of a school is considered an important factor for the academic success of students.

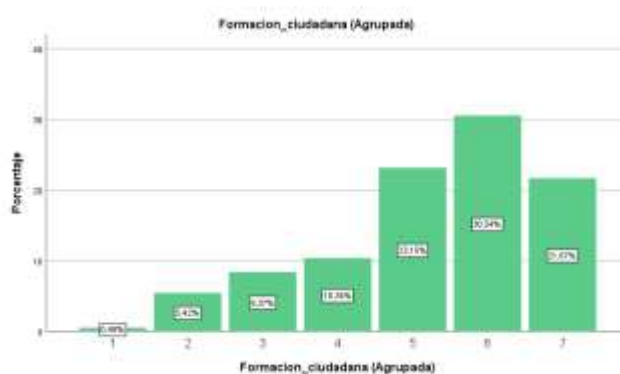


Figure 10. Citizen training factor

According to the data provided in fig. 10, it appears that the majority of educators (54.71%) agree with the concept of civic education in the context of school climate. However, a significant minority (14.28%) disagree with

this concept at some point. A theoretical approach to civics education within the school climate is the concept of "Education for Global Citizenship" developed by theorists such as Peter Levine in 2020. This approach emphasizes the importance of educating students to become active and engaged global citizens who are able to understand and address complex global issues such as climate change.

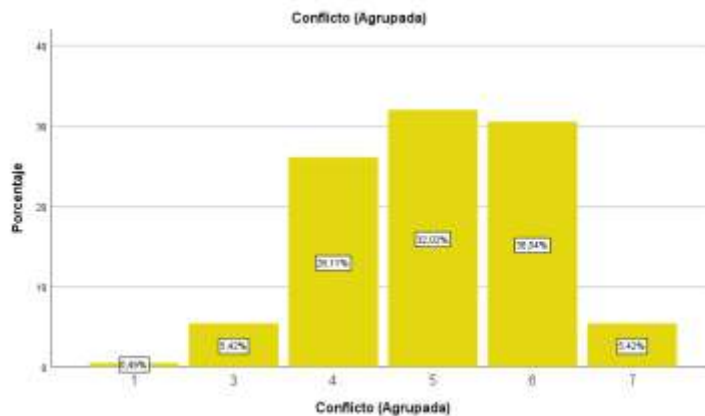


Figure 11. Conflict factor

The data presented in fig. 11 indicate that the majority of educators (63.56%) do not agree with the category of school conflict in school climate. Only 5.42% strongly agree and another 5.42% somewhat agree. On the other hand, 26.11% do not have a clear opinion about it.

This disagreement can be due to several factors, including the lack of adequate strategies and tools for managing conflict in the classroom. According to theorist Lawrence Kohlberg, the moral development of students is a key factor in conflict resolution. If students do not have the necessary skills to resolve conflicts peacefully and fairly, conflicts are likely to become recurrent and negatively affect the school climate.

In conclusion, it is important for educators to work on strategies and tools to improve students' conflict resolution skills and, in this way, improve the overall school climate.

Confirmatory Factor Analysis (CFA)

When submitting the scales to a Confirmatory Factor Analysis (CFA), it is observed that in general results are presented that are

Board 5. Covariance of AFC Factors

Covarianzas de los Factores

		Estimador	EE	Intervalo de Confianza al 95%		Z	p
				Inferior	Superior		
Cohesión	Cohesión	1.000*					
	Convivencia	-0.970	0.0565	-1.081	-0.859	-17.17	< .001
	Empoderamiento	0.747	0.0731	0.603	0.890	10.22	< .001
	Compromiso del profesorado	0.876	0.0398	0.798	0.954	21.98	< .001
	Metas educativas	-0.980	0.0663	-1.109	-0.850	-14.78	< .001
	Vinculación	0.871	0.0405	0.792	0.951	21.51	< .001
Convivencia	Convivencia	1.000*					
	Empoderamiento	-0.776	0.0721	-0.918	-0.635	-10.77	< .001
	Compromiso del profesorado	-0.771	0.0600	-0.888	-0.653	-12.84	< .001
	Metas educativas	1.054	0.0700	0.916	1.191	15.05	< .001
	Vinculación	-0.800	0.0589	-0.915	-0.685	-13.59	< .001
Empoderamiento	Empoderamiento	1.000*					
	Compromiso del profesorado	0.580	0.0780	0.428	0.733	7.44	< .001
	Metas educativas	-0.954	0.0772	-1.105	-0.802	-12.36	< .001
	Vinculación	0.607	0.0753	0.459	0.755	8.06	< .001
Compromiso del profesorado	Compromiso del profesorado	1.000*					
	Metas educativas	-0.806	0.0671	-0.937	-0.674	-12.01	< .001
	Vinculación	0.622	0.0580	0.509	0.736	10.73	< .001
Metas educativas	Metas educativas	1.000*					
	Vinculación	-0.773	0.0715	-0.914	-0.633	-10.82	< .001
Vinculación	Vinculación	1.000*					

* parámetro fijo

Regarding confirmatory factor analysis, it is important to point out the multilinear and collinear structures of the factors identified in the framework of school coexistence; That said, with regard to the cohesion item, there is a significant variational load of 0.876 with respect to teacher commitment, followed by linkage 0.871. However, the relationship between coexistence (-0.97) and educational goals (-0.98) is not relevant, which represents a challenge for educational institutions in the structuring of policies and projects aimed at improving the inclusion of these elements.

This last statement coincides with what was proposed by Nivardo et al (2021) in their study Collective effectiveness and directive management and its relationship with climate and school violence, where it is stated that "school violence, like school coexistence, are articulated as relational processes of the school, and are related to the climate of learning and coexistence spaces, as well as aspects of the environment and policies of the educational establishment".

On the other hand, the coexistence factor shows a powerful relationship with educational goals as opposed to the factors of empowerment, teacher commitment and linkage where variational loads show negative data. This description puts in tension the role of the school against what was stated in the Magna Carta of 1991, where the school has the task of defining an aspirational citizen training to improve the country. These assertions converge with what was found by Retamal (2019), in his project From

microviolence to school climate: Keys to understanding from the teachers' discourse, which expresses the qualitative production that aims to link Éric Debarbieux's hermeneutic understanding of school microviolence from the perception of the school climate, in public school teachers in Santiago de Chile. This triangulation shows that the absence of bonding, empowerment and commitment enhances the likelihood of violent environments in educational institutions.

In the specific topic of empowerment, there is evidence of a high variational load of 0.607 with respect to linkage. This indicates that there is a strong relationship between empowerment and bonding, and that empowerment is an important factor to take into account in school coexistence. In addition, a significant variational load of 0.581 is observed in relation to teacher engagement. This suggests that teacher engagement is a key factor in school empowerment and coexistence. However, there is a negative relationship (-0.954) between educational goals and school coexistence. This indicates that there is no relevant relationship between educational goals and school coexistence, and represents a challenge for educational institutions in the formulation of policies and projects to improve the inclusion of these aspects. A more comprehensive and holistic approach to addressing school coexistence may be required, including greater consideration of factors such as teacher empowerment and engagement, and ongoing assessment of the relationship between educational goals and school coexistence.

The above is related to the research of Linero et al (2020) called "The Emotionality of Discourse in Teaching: Towards A Systematic Review of Trends" where conceptual nuclei that gravitate around the Emotionality of the Educational discourse in the exercise of teaching were reviewed, as a fundamental component towards an emerging pedagogy, in which school coexistence and learning mediated in the concert of emotional intelligence are integrated.

Regarding the commitment of teachers, the data collected indicate that there is a significant variational load of 0.62 in relation to the link of teaching staff with the educational institution. This suggests that the level of commitment of teachers varies significantly in relation to their degree of connection with the institution. However, when analyzing the relationship between educational goals and teacher engagement, a negative relationship is found with a value of -0.86. This indicates that there is no relevant connection between the educational goals set and the commitment of the teaching staff. It is important to note that these results should be interpreted with caution since they may vary depending on the research methodologies and the sample under study, but in general, it is suggested that the link of the teaching staff with the educational institution

should be encouraged to improve the commitment of the teaching staff and achieve the desired educational goals.

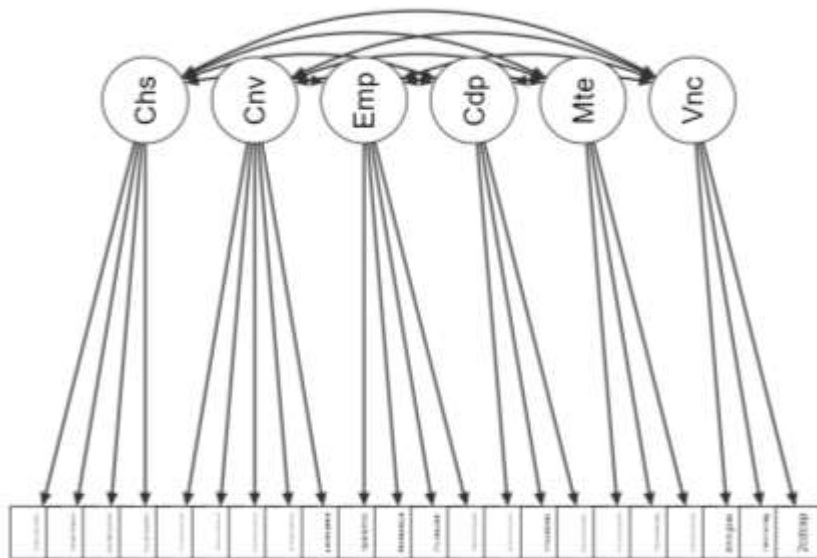


Figure 12. Estimation of parameters of the measurement model

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