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## PÁGINA ABERTA

# Scale of satisfaction with teachers dynamics: development and validation

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### Abstract

This paper explains the validity and reliability of the Scale of Satisfaction with Teachers Dynamics (ESDTD). The ESDTD evaluates the conceptual representation of teachers with their curriculum conceptions, curriculum development, curriculum management, educational project and collaborative work; also, the satisfaction of teachers with the work done by direction, by sub-departments, through direct coordination and class councils and by heads of educational units. In the final items of ESDTD, it is assessed the perceptions of teachers about the grouping culture, signaling the aspects considered positive and problematic. It was tested the possibility of making a factor analysis and subsequently assessing the psychometric data and the reliability of each dimension, in order to test the internal validity of the scale. There is evidence of the appropriateness of factor analysis. More specifically, the adequacy measured sample of Kaiser-Meyer-Olkin, and the value of the Bartlett's sphericity test revealed highly significant. It was rated the variance explained by the main components analysis, previously setting the analysis in six factors with values greater than 1. When setting the analysis in six main components, the dimensions explained more than 55% of the total variability. The analysis of the reliability of the size and the assessment of the homogeneity of the items allows obtaining positive and very high internal consistency values for all items and for all of the dimensions. The values found permit to maintain the structure and distribution of initial items. The scale shows good validity and reliability, it is expected other studies to be developed, complementing its psychometric analysis.

**Keywords:** Teachers work; Teachers satisfaction; Scale; Validity; Reliability

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# 1 Introduction

In the last decades, there has been a massive access to school in Portugal, with a deep impact in schools. The transformation of the families' structures, the multicultural diversity and the increase of violence have created a changing reality that forces teachers to change their practices and ways of being. Although there has been a great evolution in Portuguese schools, the national curriculum to which they are tied and the very individualistic work of teachers hind collaboration and a shared thought. Teacher's interactions are very dependent on the socialization, that is to say, dependent on the integration in the schools they are allocated, which depends on formal and informal aspects. Nevertheless, the informal aspects influence more in the relationship between teachers and often go farther than formal definitions, what may have as consequence a distortion of the rolls that end up creating conflicts of different types.

The Portuguese education system is organized at levels of education, training and learning, namely: pre-school education and school education covering basic education, secondary education and higher education. Pre-school education (from 3 to 6 years old) is considered the first stage of the education system, being optional for children from 3 years of age and universal for all children, from 4 years of age (Law No. 65/2015, of 3 July), which means that the state has the duty to ensure the existence of a free preschool education network that allows the enrollment of all children of this age. School education, as mentioned above, is developed at three levels, namely primary, secondary and higher education. Law no. 85/2009, of 27 August, establishes compulsory schooling for primary and secondary education, thus extending compulsory education to 12 years, covering all children and young people aged between six and 18 years of age. At Portugal, basic education lasts for nine years (from six to 15 years of age) and comprises three sequential cycles, with the first cycle lasting four years and encompassing children from 6 to 10 years of age. The 2nd cycle lasts for two years and covers children from 10 to 12 years of age and the third cycle lasts for three years and includes children from 12 to 15 years of age. It should be noted that each cycle aims at completing and deepening the previous one, and, therefore, there must be a solid articulation among all. Portuguese secondary education comprises a three-year cycle (10th, 11th and 12th years of schooling) and covers young people from 15 to 18 years of age. It is organized in different ways, contemplating, according to point 3 of article 10 of the Basic Law of the Portuguese Educational System, "the existence of courses predominantly oriented to the active life or to the continuation of studies, all of which contain training components of a technical, technological and vocational sense and of Portuguese language and culture appropriate to the nature of the various courses" (Law no. 46/86, October, 14). Portuguese

higher education is structured in accordance with the principles of the Bologna Declaration and is organized in: University Higher Education that confers the degrees of graduate, master and doctor; and polytechnic higher education that confers the degrees of graduate and master.

The Portuguese educational policies have been based, mainly, in the “equal opportunities” principle. Meanwhile, according to Ferreira and Teixeira (2010, p.347), we are living a period of contradictory events because “more democratic access to higher levels of schooling is parallel with more social inequalities”. To diminish the differences, sometimes very high, between students coming from different socioeconomic and cultural backgrounds, arises in 1996 the first Educational Territories of Priority Intervention (TEIP), following the ZEP (Priority Educational Areas) created by the French government in 1981. The TEIP were created by the Portuguese Ministry of Education as a way to improve basic schools, based in the equal opportunities idea, with rigor and requirement, combating the social and scholar exclusion, with a criterion of positive discrimination in the allocation of resources, centered mainly in the School Project of each school (BARBIERI, 2003).

The resolution 147/B/ME/96, of August 1, promotes the creation of “conditions that allow to guarantee the universalization of a quality basic education and the promotion of the academic success of all students. Very particularly, promotes conditions for the children and youngsters that today are in a social and scholar exclusion risk”. The resolution also says, “Social context in which schools are integrated determines the student’s attitudes toward the process of formal and institutional education. This confirms that in social and economic deprived areas or involved in socioeconomic transformation process, the educational success is often small, which is also verifiable in areas with a significant number of pupils of different ethnical origin, emigrants or children of itinerant populations”. With the TEIP, the schools lived through processes of opening, of critical thinking, about projects and common aims. Schools received more resources, material means, the number of students by group was reduced, mechanisms for a greater continuity of the educational staff were created and, in accordance with the circumstances, projects of fight for the inclusion and for learning were made. In 2006, it was developed a second program for these territories, changing the name to TEIP2. In 2012 -2013 began the TEIP3. In each one of the phases, there was an expansion of the program for more groups of schools. Nowadays, this program is being developed in 137 groups, distributed through the five Regional Educational Directions. Such as for the TEIP1 and TEIP2, also the aims of the program TEIP3 are centered in the improvement of learning, in the educational success of students, in the fight of the indiscipline, in the early school abandonment and absenteeism and in creating conditions for the educational orientation. In addition,

in promoting collaboration between schools, social partnership and institutions of current training in the educational territory. This way, the underlying ideology of the TEIP concretizes in association with other present entities in the community that school inserts, demanding a hinge of spaces and of resources, developing, simultaneously, the educational and formative paper at the same time that the community development. One of the positive effects of the policy TEIP was to make more visible, legitimate and to positively reinforce practical and innovative initiatives in the construction of the autonomy, through projects of educational action in association with different mates at local level, particularly the families of students that take part more actively in specify different initiatives.

The teaching career is permanently questioned in its usefulness and in the educational practices and strategies used. According to Abelha, Machado and Costa-Lobo (2014), several studies have shown that, in fact, the teacher's work remains mostly single and lonely. Collaborative work "implies shared responsibility and reflection on the teaching action, a commitment and collective improvement and availability and a critical attitude towards work" (ABELHA, 2011, p. 125). Costa-Lobo (2011) adds that there is only true collaboration in work among peers. This is because all collaborative work is underpinned by the idea that all elements of the working group maintain a relationship of equality with regard to the status and where reciprocity exists and is decisive for "defining the degree of involvement and positive interdependence among individuals" (p. 48). For these reasons, the collaborative cultures give greater professional confidence, which enhances the feeling of self-efficacy among teachers, developing in them the capacity to initiate change. It also ensures that changes do not disappear with one or two individuals who have implemented them, causing the maintenance of the changes over time and permitting effective and lasting modifications (HARGREAVES et al., 2002).

Following studies of several authors (ABELHA, 2011; ABELHA, MACHADO, & COSTA-LOBO, 2014; ALVES FIGUEIREDO, 2011; HARGREAVES, 1998; HARGREAVES, EARL, & RYAN, 2011; HARGREAVES et al., 2002; MILHEIRO, 2013), the Teaching Satisfaction Scale with Educational Work (ESDTD) was built.

When designing the ESDTD, which aims to evaluate the satisfaction of teachers with the schoolwork, the authors took in consideration that originated items would establish six different dimensions. These dimensions are: satisfaction with the direction; satisfaction with the sub-department and year of coordination; satisfaction with the class council and the leadership of courses; satisfaction with the group culture; positive aspects of the educational context and negative aspects of the educational context.

Specifically, this work is oriented to the conceptual representation of teachers in the pedagogical field, namely through the Scale of Satisfaction with Teachers Dynamics. The work is structured in four sections, in the first, introductory, a brief review of the related literature is presented, followed by another section articulated to the methodological aspects related to the study. The third section exposes the analysis of the data so that, after the discussion is established, the final conclusions of the article are signaled.

## 2 Materials and Methods

The initial version of the Scale was submitted to analysis to a panel of 22 experts in school management and administration, for validation of the content. Teachers with postgraduate training and experience in management and school administration with two or more years of service in the area constituted this group. There were also researchers with two or more years of service in the area. It was verified, among other aspects, if all the questions were understood, if there were unsuitable questions for the information pretended, or repetitive questions, or missing important items, and if they considered the Scale too long or difficult. This procedure allowed, also, to find out the conditions in which the scale would have to be applied, his graphic quality and the suitability of the instructions that went along with it. This group of 22 professors was encouraged to do observations and suggestions about the structure of the Scale and about each item.

After analyzing the answers and suggestions of the experts, it was created a pilot version that was validated by ten members of the panel that had the required training and experience in school management and school administration. The consensus version took to the Scale of Satisfaction with Teachers Dynamics (ESDTD). In order to validate the clarity and understanding of items and to identify difficulties in filling it in, it was made a pre-test with 12 subjects not included in the study. The analysis of the psychometric properties of the Scale was made in a second time after the positive appraisal of the Ethics Committee and the authorization of Administrations of the involved schools. The data collection occurred at 4 Portuguese schools, between January 2015 and May 2015, covering 498 teachers of Portuguese public (55.9%) and private (44.1%) schools.

All participants of this study were teachers who, at the time of data collection, performed functions in the districts of Viana do Castelo, Braga, Aveiro, Coimbra, Leiria and Évora. All teachers with roles in public schools, when collecting data, were working in TEIP schools (55,9%). All the teachers of private schools were from Districts of Braga and Porto. Teachers from pre-school (21.3%), 1<sup>st</sup> cycle of basic education (37.8%) and 3<sup>rd</sup> cycle of basic education (40.9%) filled in the sample.

The guarantee of confidentiality for the data and the anonymity of respondents was assured. The sample size took into account the recommendations for the further factorial analysis of principal components proposed by Pestana and Gajairo (2005).

Teachers who voluntarily wanted to take part in the study composed the sample. Specifically, teachers between 25 and 61 years old with an age average of  $42.4 \pm 13.13$  years and a median of 43 years. The most represented age group was 41 or older (59.0%) and the least represented group was younger than 28 years (7.5%). The participants were predominantly male (52.0%), married or living in de facto union (65.2%), followed by single (13.8%). Concerning to education, most had the bachelor's degree (58.5%) having 41.5% upper studies.

The information collected was submitted to statistical analysis, with the support of SPSS calculation software tool (Statistical Package for Social Sciences), version 22. The originated items would establish six different dimensions, being previously established which items would make up each dimension.

The ESDTD had only four possible answers per item, using the ordinal scale of 1 (Strongly Disagree) to 4 (Strongly Agree) to simplify answering and prevent "the temptation" of the middle position, neither agree nor disagree. Scale part I intended to evaluate personal and professional characteristics of respondents. In ESDTD part II was evaluated conceptual representation of the teachers with regard to their curriculum conceptions, curriculum development, curriculum management, projects work and collaborative work. The ESDTD part III aimed to assess the teaching work dynamics, considering the teachers' perception about the work done by the direction, by sub-departments and the year of coordination, the class councils and the heads of the leadership of courses, and aimed to assess the perceptions of these teachers about the grouping culture, its positive aspects and its problems.

### 3 Results

The analyses that were made are described below. The appropriateness of factor analysis test, more specifically the adequacy of the sample, was tested by the Kaiser-Meyer-Olkin (KMO) test. Another criterion was the variance explained by the main components, settled in 6 factors with eigenvalues greater than 1. After, it was necessary to complement the analysis by examining the reliability of the size and by assessing the homogeneity of items of each of the sub-scales of this instrument.

In Table 1 appears what was filled in the appropriateness of factor analysis, more specifically the adequacy of measured sample of Kaiser-Meyer-Olkin (KMO).

Likewise, it was found as shown in Table 1, that the value of Bartlett’s sphericity test is highly significant, confirming that performing factor analysis would be perfectly appropriate.

Another criterion was rating the variance explained by the principal components analysis, previously setting the analysis in 6 factors with eigenvalues greater than 1 (factors with eigenvalue - eigenvalue - less than 1 - criterion Keiser). Thus, it was found that, by proceeding to the fixing of the analysis to the 6 theoretical dimensions, these factors are presented as sufficient to group items and to meet one of the criteria for the validity of factor analysis - the percentage of variance explained by factors retained must be at least 40% (LISBOA, AUGUSTO, & FERREIRA, 2012). Thus, by setting the analysis in getting six main components, as shown in Table 2, the six dimensions explained a percentage quite positive of total variability.

After confirming that completion of factor analysis was adequate, it was necessary to complement the analysis by examining the reliability of the size and assessing the homogeneity of items. I.e. advanced to the verification of internal consistency using the alpha Cronbach, and hoping for values greater than 0.7, value set by Lisboa, Augusto, and Ferreira (2012), as the reference value for the internal consistency would be considered quite acceptable.

**Table 1.** Values of KMO test and Bartlett’s sphericity test.

<b>Kaiser-Meyer-Olkin measure of sampling adequacy</b>		<b>.629</b>
Bartlett’s Test of Sphericity		
Approx. Chi-Square		6.558.120
Df		241
Sig.		.000

Source: Produced by the authors (2016).

**Table 2.** ESDTD dimensions- total variance explained.

<b>Components</b>	<b>Initial eigenvalues</b>		
	<b>Total</b>	<b>% variance</b>	<b>% variance accumulated</b>
1	21.284	30.405	30.405
2	5.383	7.689	38.094
3	4.986	7.123	45.218
4	3.536	5.051	50.269
5	2.709	3.870	54.139
6	2.439	3.485	57.623

Source: Produced by the authors (2016).



The dimension of satisfaction with the Sub Department and Year Coordination consists of seventeen items, and the whole dimension, as expressed in Table 4, shows a very high internal consistency. In this dimension, in Table 4, there is the item “discusses the pedagogic differentiation strategy” and the item “Defines common strategies to support students with learning difficulties”. In turn, the item with less weight on the scale is what refers to “Elaborates tests or other assessment tools”.

The dimension of satisfaction with the dynamics of the Class and with directors of educational units includes nineteen items, and according with the values obtained and shown in Table 5, it appears that none of them have very strong reasons to be eliminated.

Regarding the dimension of satisfaction with the Grouping Culture, analyzed in Table 6, and that consists of fourteen items, it appears very high internal consistency was reached.

Regarding the identification of positives aspects of educational environment, exposed in Table 7, the dimension consists of eight items. The Cronbach's Alpha is somewhat lower than in the previous dimensions, but still acceptable, at high internal consistency level.

**Table 3.** Reliability satisfaction with direction.

Item	Mean	SD	Correlation item x total	Extraction value	Cronbach alpha's if item is eliminated
Manages effectively the human resources, spaces and equipment	3.5	.52	.427	.551	.701
Supports the professional development of teaching staff	3.5	.58	.438	.659	.691
Distributes the service to teachers by depositing high expectations on them	3.5	.63	.427	.381	.721
Fulfills the different members of the educational community, listening to them in order to resolving their problems	3.7	.57	.487	.530	.702
Integrates different contributions / views in decision making	3.3	.62	.320	.525	.827
Encourages the professional development of teachers	3.5	.60	.425	.663	.691
Builds together with the educational community the Educational Project	3.7	.53	.432	.447	.719

Reference Cronbach's alpha=.799.

Source: Produced by the authors (2016).

Table 8 shows the degree of reliability regarding the final dimension presented in the survey, which concerns the identification of grouping problems. It reached very high internal consistency.

**Table 4.** Reliability satisfaction with sub department and year coordination.

Item	Mean	SD	Correlation item x total	Extraction value	Cronbach alpha's if item is eliminated
Promotes curricular articulation	3.7	.49	.597	.427	.916
Coordinates the activities of subject areas	3.6	.52	.636	.477	.915
Analyzes and reflects on educational practices	3.7	.49	.709	.559	.913
Analyzes the results of student assessment	3.8	.40	.577	.565	.917
Gives knowledge of information emanating from the Pedagogical Council	3.8	.37	.513	.599	.918
Draws up the flat pattern of the Semester units	3.7	.60	.422	.496	.920
Selects / elaborates the teaching materials	3.4	.74	.577	.438	.917
Discusses the pedagogical differentiation strategies	3.4	.64	.750	.713	.911
Prepares tests or other assessment tools	3.7	.52	.439	.401	.919
Sets evaluation criteria	3.8	.42	.556	.508	.917
Looks for solutions to minimize school failure problems	3.6	.55	.748	.685	.912
Evaluates the effectiveness of teaching strategies used	3.5	.58	.738	.692	.912
Prepares action plans	3.4	.57	.746	.644	.912
Defines common strategies to support students with learning difficulties	3.2	.72	.698	.703	.913
Evaluates the effectiveness of the support measures implemented	3.4	.67	.657	.636	.914
Defines strategies aimed to the involvement of parents in monitoring their students	3.1	.77	.641	.642	.915
Analyzes and presents teacher training proposals	3.3	.68	.512	.504	.919

Reference Cronbach's alpha=.924.

Source: Produced by the authors (2016).

**Table 5.** Reliability satisfaction with class councils and boards of curriculum units.

Item	Mean	SD	Correlation item x total	Extraction value	Cronbach alpha's if item is eliminated
Discusses the guidelines of the grouping action	3.3	.73	.474	.655	.816
Discusses the guidelines for school action / Educational Unit	3.3	.71	.392	.524	.820
Analyzes and reflects on the educational practices	3.4	.68	.594	.581	.812
Analyzes the results of student assessment	3.7	.56	.661	.561	.813
Gives knowledge of information emanating from the Pedagogical Council	3.4	.80	.513	.495	.814
Elaborates. analyzes compliance / implementation and reformulates Own Project Class / Course	3.5	.68	.635	.558	.811
Is planning interdisciplinary activities	3.5	.60	.560	.447	.815
Looks for solutions to minimize school failure problems	3.6	.58	.597	.462	.814
Organizes curriculum enrichment activities	3.3	.77	.549	.479	.813
Prepares plans for support	3.6	.61	.625	.615	.813
Defines common strategies to support students with learning difficulties	3.5	.60	.672	.672	.811
Evaluates the effectiveness of the support measures implemented	3.4	.63	.750	.761	.808
Defines strategies aimed at involvement of Guardians monitoring of their children	3.4	.57	.320	.334	.927
Evaluates the effectiveness of teaching strategies	3.3	.66	.671	.601	.810
Analyzes personal problems of students	3.7	.54	.467	.403	.819
Analyzes occurrence of interests presented by students	3.6	.54	.637	.710	.804
Analyzes instances of participation presented by Guardian	3.5	.62	.642	.698	.812

Source: Produced by the authors (2016).

**Table 6.** Reliability satisfaction with the culture.

Item	Mean	SD	Correlation item x total	Extraction value	Cronbach alpha's if item is eliminated
The rules and school regulations are applied	3.5	.52	.560	.495	.901
Students are encouraged to work hard	3.7	.57	.646	.652	.898
Students are recognized when they develop good work	3.7	.54	.582	.558	.900
Students are informed in a timely manner, about the relevant matters of educational policy	3.4	.76	.595	.566	.900
Teachers are recognized when they develop good work	3.3	.75	.645	.679	.898
Teachers are motivated to participate in development / project activities	3.4	.62	.660	.524	.897
Teachers are informed in a timely manner, about the relevant matters of educational policy	3.4	.63	.694	.728	.895
Expectations are high about the students	3.3	.65	.496	.440	.903
The non-teaching staff are recognized when they develop good work	3.4	.66	.702	.537	.895
Parents are encouraged to participate in the activities of the Grouping	3.4	.62	.640	.600	.898
The school community is motivated to take part in the activities of the Grouping	3.5	.52	.736	.652	.895
The school community is involved in decision-making	3.2	.64	.678	.656	.896
The grouping is a disciplined and safe place	3.5	.58	.513	.488	.902
The rules and school regulations are applied	3.4	.58	.374	.390	.907

Reference Cronbach's alpha=.907

Source: Produced by the authors (2016).

**Table 7.** Reliability of positive aspects identification of the educational environment.

Item	Mean	SD	Correlation item x total	Extraction value	Cronbach alpha's if item is eliminated
Motivation of teachers	3.3	.65	.549	.576	.773
Cooperation among teachers	3.5	.56	.350	.537	.743
Interaction with the community	3.3	.55	.304	.362	.814
Leadership of school management bodies	3.6	.55	.435	.653	.711
Good condition or suitability of facilities	3.1	.71	.431	.399	.723
Sufficient material resources	2.9	.69	.366	.536	.711
Support of management bodies	3.5	.56	.479	.734	.702
Sufficient training offers	3.0	.77	.463	.668	.678

Reference Cronbach's alpha=.799.

Source: Produced by the authors (2016).

**Table 8.** Reliability of negative aspects identification of the educational environment.

Item	Mean	SD	Correlation item x total	Extraction value	Cronbach alpha's if item is eliminated
Demotivation of teachers	2.3	1.05	.599	.604	.934
Lack of collaboration among teachers	1.9	.93	.759	.841	.898
Lack of interaction with the community Grouping	1.9	.91	.825	.882	.885
Lack of leadership of school management bodies	1.8	.97	.857	.897	.877
Insufficient support of the management bodies	1.8	.91	.888	.911	.872

Reference Cronbach's alpha=.917.

Source: Produced by the authors (2016).

## 4 Discussion

By analyzing the items, it can be seen that all of them have a positive correlation value with the total (between 0.320 and 0.487) and very acceptable extraction values indicates when treating items with favorable factor weight to dimension - for some authors is acceptable when it is less than 0.400 (PESTANA; GAGEIRO, 2005). Similarly, it appears that the internal consistency of the size would decrease if these items were removed. There is, however, an item with lower values: "integrates different contributions / views in decision making". If it is eliminated, the reliability of the scale increases slightly (to 0.827); but since the correlation value and extraction

are acceptable (0.320 and 0.525 respectively), it was decided to keep the item in the dimension structure. A very high internal consistency is observed in Table 4, all items obtained *correlation values item x total* more than 0.400, and extracting values ranging between 0.401 and 0.713; also all items to attend to a decrease in internal consistency subscale if the item was deleted. The internal consistency of the dimension of satisfaction with the dynamics of the Class and with directors of educational units is quite high, Alpha Cronbach's 0.925. It seems that only in one of the situations the consistency would be slightly higher if the item were deleted; it specifically mentions the item "Set strategies aimed at involvement of Guardians monitoring of their children "(would rise to 0.927). However, as the correlation and extraction values are admissible (0.320 and 0.334), and increased internal consistency would not be very significant, we believe that item can be kept in the initial structure of the scale. In this group of problematic items, in Table 5, stands out the item "evaluates the effectiveness of the implemented support measures", because it has a very strong correlative value (0.750) and a very high factor weight (0.761). The same happens with the item "analyzes occurrence of interests submitted by students "(0.637 and 0.710 respectively). After that, there are items where there would be the greatest decrease in Alpha Cronbach's if they were eliminated; regarding dimension of satisfaction with the Grouping Culture, almost all items internal consistency decreases slightly if the item is deleted. For one of them, Alpha remains the same maintaining or not the item; this is the same item that presented the lower weight factor ("the rules and school regulations are applied" = 0.374 and 0.390, respectively). In other items, the correlation and extraction values are quite significant, showing a strong association between the items and the total size. Regarding the identification Aspects Grouping positives there is the item "Grouping Interaction with the community" that has correlational values and lower extraction (0.304 and 0.362); the internal consistency increases if the item is eliminated from dimension. However, this is not a significant rise to alter the reliability of the dimension, and the values obtained are not considered fully unacceptable, so that it will maintain the integrated item in the dimension. The last dimension, related to the Grouping Problem Identification and covering 5 items, has a very high alpha of 0.917, and it appears that if the item "Lack of motivation of teachers" is eliminated, the internal consistency of the scale surface increases (0.934). However, the values of correlation and extraction of this item are high enough to justify maintaining the item subscale, so it will not change its original structure.

The internal consistency obtained is high enough and exclusively positive and in all dimensions and on all items. The values found it possible to maintain the structure and distribution of initial items and confirm the existence of reliability of the Scale of Satisfaction with Teachers Dynamics.

The school organization still does not favor teamwork, so it should be questioned the traditional forms with a view to a reorganization that will allow and encourage critical reflection, sharing of experiences and teaching practices. Unfortunately, the national curriculum to which they are subject and the individualistic work to which teachers are accustomed, hinder collaboration and shared reflection. In this type of work, which should be dynamic, lively and creative, it is necessary sometimes to stop, reflect and decide the best way forward and make the necessary adjustments. To know how to manage the difference can be considered another embarrassment because each participant has his own goals and priorities that sometimes may hit with the goals and priorities of other persons. Thus, if the characteristics of each individual, the different ways of working and the relationship between the members of the working group are not handled well, they can be an impediment for the suitable functioning of the collaborative work.

The scale ESDTD shows good levels of validity and reliability. It is anticipated the usefulness of other studies being developed, complementing their psychometric analysis.

## **Escala de Satisfação com a Dinâmica de Trabalho Docente: Desenvolvimento e Validação**

### **Resumo**

*Este artigo explica os procedimentos de estudo de validade e de confiabilidade da Escala de Satisfação com a Dinâmica de Trabalho Docente (ESDTD). A ESDTD avalia a representação conceptual dos professores em relação às suas concepções de currículo, ao desenvolvimento curricular, à gestão curricular, ao projeto e ao trabalho colaborativo; a satisfação dos professores em relação ao trabalho realizado pela direção, pelos sub-departamentos, pela coordenação direta, pelos conselhos de turma e pelos responsáveis de unidades educacionais. Nos itens finais da ESDTD, são avaliadas as percepções dos professores sobre a cultura de agrupamento, sinalizando os aspectos considerados positivos e considerados problemáticos. Foi testada a possibilidade de realizar uma análise fatorial e posteriormente avaliar os dados psicométricos e a confiabilidade de cada dimensão, para testar a validade interna da escala. Há evidências da adequação da análise fatorial, mais especificamente da pertinência da prova de Kaiser-Meyer-Olkin e do teste de esfericidade de Bartlett. Foi avaliada a variância explicada pela análise de componentes principais, definindo previamente a análise em seis fatores, com valores próprios superiores a 1. Ao definir seis componentes principais, as dimensões explicaram mais de 55% da variabilidade total. A análise da confiabilidade do tamanho e a avaliação da homogeneidade dos itens permitem obter valores de consistência interna muito elevados para todos os itens e para todas as dimensões. Os valores encontrados foram adequados para manter a estrutura e a distribuição dos itens iniciais. A escala mostra bons níveis de validade e de confiabilidade. Antecipa-se a utilidade de outros estudos serem desenvolvidos, complementando a sua análise psicométrica.*

**Palavras-chave:** *Dinâmica docente; Satisfação de Docentes; Escala; Validade; Confiabilidade.*



## **Escala de Satisfacción con la Dinámica de trabajo Docente: Desarrollo y Validación**

### **Resumen**

*Este artículo explica los procedimientos de análisis de la validez y fiabilidad de la Escala de Satisfacción con la Dinámica de Trabajo Docente (ESDTD). La ESDTD evalúa la representación de los maestros con respecto a sus concepciones curriculares, desarrollo curricular, gestión curricular, proyecto educativo y trabajo colaborativo, así como la satisfacción de los maestros respecto al trabajo realizado por la dirección, los sub-departamentos, la coordinación directa, los consejos de clase y los jefes de las unidades educativas. En los ítems finales de la ESDTD se evalúan las percepciones de los profesores sobre la cultura de agrupamiento escolar, señalando los aspectos considerados positivos y los considerados problemáticos. Se testó la posibilidad de realizar un análisis factorial y posteriormente se evaluaron los datos psicométricos y la fiabilidad de cada dimensión, para probar la validez interna de la escala. Hay evidencias de la adecuación del análisis factorial, más específicamente de la significatividad de la prueba Kaiser-Meyer-Olkin y del valor de la prueba de esfericidad de Bartlett, que revelaron ser altamente significativas. Se evaluó la varianza explicada por el análisis de componentes principales, estableciendo previamente el análisis en seis factores con valores propios mayores a 1. Al establecer el análisis en seis componentes principales, las dimensiones explicaron más del 55% de la variabilidad total. El análisis de la fiabilidad del tamaño y la evaluación de la homogeneidad de los ítems permiten obtener valores positivos de consistencia interna muy altos para todos los elementos y para todas las dimensiones. Los valores encontrados son acordes con el mantenimiento de la estructura y distribución de los ítems iniciales. La escala muestra buena validez y fiabilidad. Se espera que se desarrollen otros estudios, complementando los análisis psicométricos.*

**Palabras clave:** Trabajo docente; Satisfacción de los profesores; Escala; Validez; Fiabilidad.

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