Cross-national dataset from Chile, Spain, Venezuela and Colombia to analyze the meanings students attribute to the pedagogical authority of teachers

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\textbf{A B S T R A C T}

The data displayed here were collected through a Likert scale that measures the meanings attributed to the pedagogical authority. The final sample comprised 913 teacher training university students from four Ibero-American countries (Chile, Spain, Colombia, and Venezuela). The value of the data relies, among others, on the possibility to analyse similarities and differences of those meanings among countries. This database allows for an increase of the sample, whether by applying the instrument to the same countries or to different ones. The main contributions of the article “Scale of Pedagogical Authority Meanings in the Classroom (ESAPA) for Ibero-America built on the opinions of teaching students” [1] belong to the psychometrics and education fields.

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Specifications table

| Subject | Education |
|---------|-----------|
| Specific subject area | Students’ perspectives of teachers’ authority |
| Type of data | Table |
| | Chart |
| | Graph |
| How data were acquired | The Scale of Pedagogical Authority Meanings in the Classroom (ESAPA) was applied in a self-administered manner. |
| Data format | Raw |
| | Analyzed |
| Parameters for data collection | The data were collected in natural settings, specifically in the universities’ classrooms of four Ibero-American universities. The participants belonged to four teaching-training-related degree programmes of four different Ibero-American countries (Chile, Spain, Venezuela and Colombia). The sampling among universities was not proportional and the students that filled in the questionnaire did so voluntarily, so it was a convenience sampling. |
| Description of data collection | The questionnaire was applied to 916 university students in their natural environment (their classrooms) between March and June of 2017. Previously, permission was granted from the corresponding authorities of each institution to administer the questionnaire in specific courses. The students were thoroughly informed of the purposes of such questionnaire and were also asked to sign a participation consent. Afterwards, they were given the questionnaire, which was answered in a self-administered manner. |
| Data source location | Santiago (Chile)-Latitude: 33.4986973; longitude: -74.081749 |
| | Albacete (Spain)-Latitude: 38.9738639; longitude: -0.350662 |
| | Valencia (Venezuela)-Latitude: 10.1620200; longitude: -68.0076500 |
| | Bogotá (Colombia)-Latitude: 4.6097102; longitude: -74.081749 |
| Data accessibility | Repository name: Cross-national dataset from Chile, Spain, Venezuela and Colombia to analyze the meanings students attribute to the pedagogical authority of teachers. |
| | Data identification number: http://dx.doi.org/10.17632/bk448r8vfy.1 |
| | Direct URL to data: https://data.mendeley.com/datasets/bk448r8vfy/1 |
| | *The final version of the dataset is under review and will be available: |
| | Data identification number: http://dx.doi.org/10.17632/bk448r8vfy.4 |
| | Direct URL to data: https://data.mendeley.com/datasets/bk448r8vfy/4 |
| Related research article | P. Gil-Madrona, L. Méndez, J.J. Pérez-Segura, M.B. Sáez-Sánchez, G. Zamora. (Unpublished results). Scale of Pedagogical Authority Meanings in the Classroom (ESAPA) for Ibero-America built on the opinions of teaching students. Teaching and Teacher Education. |

Value of the data

- The utility of these data relies on the fact that they allow for the examination of the psychometric properties (the construct validity and the reliability index) of an instrument that measures the pedagogical authority meanings of teacher training students.
- These data can help to devise a predictor model of pedagogical authority meanings based on personal features.
- The data will be especially useful to spot pedagogical authority needs in Ibero-American countries.
- The main potential beneficiaries of this dataset are the basic and applied research, specifically, researchers whose fields of study are Education or Educational Psychology.
- It is highly advisable to consult the research article [1] related to this one in order to acknowledge the instructions of use and categories of these data. Before applying the questionnaire, it is indispensable to adjust it to the cultural setting of the sample and to submit it to experts’ judgment. Furthermore, it is essential to request for the consent of both the institutions and the participants involved, as well as to ensure that they understand the ob-
jectives of the investigation and the confidentiality of the information they provide. Once the instrument is adjusted to the cultural context, its application must be realised in a self-administered manner, whether it be in printed or digital format.

- The sample can be increased with individuals from the same or additional countries, with subjects with similar features to our sample. It is recommended to measure, not only the pedagogical authority meanings, but also the pedagogical authority levels. If possible, it would also be useful to correlate it with the quality of teaching so as to develop the importance of the construct.

Data Description

These data were collected from four countries (Chile, Spain, Colombia and Venezuela) with the aim of analysing the psychometric properties of a scale that measures teacher training students’ opinion about the pedagogical authority. The instrument was applied to 916 students that belonged to a public university from each country; however, 3 individuals were removed from the final sample. This sample comprised 913 students of an average of 20.98 years old, with a mode value of 18 and a range of 28 years (from 16 to 44 years old). The distribution of students among universities is shown in Chart 1.

Chart 1 shows that most of the participants were from Spain, and that Venezuela was the country with less participants.

The scale encompassed 18 positive items with a range from 1 to 5. The five possible answers were: Not important at all, Of little importance, Of average importance, Very Important, Absolutely essential. The students were given the following instruction: according to your viewpoint, what is the importance of these factors for a teacher to be recognized as an authority by their students? The descriptive statistics of each item appear in Table 1. The items with the highest means are 4 (4.34), 7 (4.32) and 2 (4.30); while item 12 has the largest standard deviation (1.301).

Graph 1.

As a result of the factorial structure analysis, the items were grouped in categories or dimensions. Graphs 2-6 project the frequencies of each possible answer.

In category 1 (Closeness and Empathy), item 1 (Possessing much professional experience) shows the highest number of “Very Important” y “Absolutely essential” answers.
| Item                                                                 | Mean | Median | Mode | S.D  | Asymmetry | T.E. Asymmetry | Kurtosis | T.E. Kurtosis |
|----------------------------------------------------------------------|------|--------|------|------|-----------|----------------|----------|--------------|
| Possessing much professional experience                             | 3.82 | 4.00   | 5    | 1.57 | -.615     | .081           | -.643    | .162         |
| Teaching in a clear way                                            | 4.30 | 5.00   | 5    | .919 | -1.523    | .081           | 2.163    | .162         |
| Having a strong character                                          | 2.93 | 3.00   | 3    | 1.08 | .206      | .081           | -3.90    | .162         |
| Possessing a high knowledge of the subject                         | 4.34 | 5.00   | 5    | .854 | -1.539    | .081           | 2.666    | .162         |
| Being nice                                                          | 3.22 | 3.00   | 3    | 1.301| -.174     | .081           | -9.54    | .162         |
| Being intelligent                                                  | 4.00 | 4.00   | 5    | .978 | -.735     | .081           | -0.75    | .162         |
| Being respectful with students                                     | 4.32 | 5.00   | 5    | .868 | -1.535    | .081           | 2.420    | .162         |
| Teaching in an entertaining way                                     | 3.88 | 4.00   | 4    | 1.131| -.957     | .081           | .195     | .162         |
| Being cool                                                         | 3.01 | 3.00   | 3    | 1.267| .135      | .081           | -8.46    | .162         |
| Being demanding in teaching                                         | 3.84 | 4.00   | 4    | 1.09 | -.452     | .081           | -6.59    | .162         |
| Being friendly with students                                       | 3.36 | 3.00   | 3    | 1.187| -.176     | .081           | -7.90    | .162         |
| Teaching an important subject                                      | 3.26 | 3.00   | 5    | 1.409| -.276     | .081           | -1.163   | .162         |
| Being democratic in the classroom                                   | 3.87 | 4.00   | 5    | 1.137| -.776     | .081           | -2.75    | .162         |
| Applying sanctions relentlessly                                     | 2.82 | 3.00   | 3    | 1.218| .224      | .081           | -7.60    | .162         |
| Having an outgoing personality                                     | 3.14 | 3.00   | 3    | 1.284| .006      | .081           | -9.76    | .162         |
| Being a woman                                                      | 1.38 | 1.00   | 1    | .907 | 2.415     | .081           | 5.077    | .162         |
| Being a man                                                        | 1.38 | 1.00   | 1    | .902 | 2.360     | .081           | 4.796    | .162         |
Category 2 (Teaching and Respect) is the one with more “Very Important” and “Absolutely essential” responses.

Category 3 (Teacher gender) has the lowest scores in “Very Important” and “Absolutely essential”, and the highest frequency in “Not important at all”.

Graph 3.

The item 8 (Teaching in an entertaining way) of Category 4 (Closeness and Empathy), as seen in Graph 4, has the highest number of “Very Important” and “Absolutely essential” responses.
Experimental Design, Materials, and Methods

The set of data described [4] was collected through a non-experimental research design. It is framed within the quantitative research, particularly, it holds the features of an instrumental investigation [2].

The Scale of Pedagogical Authority Meanings in the Classroom (ESAPA) for Ibero-America was designed with the purpose of acknowledging the meanings attributed to the concept of pedagogical authority.
It was decided that teacher training university students were the core of this recollection because they will be the future teachers. The nature of discipline in the classroom and of teaching empowerment will rely on them.

Once the research idea arose, researchers from the chosen countries were selected so as to contextualise the instrument.

The design procedure followed the guidelines of the referential framework for that purpose [3]. The rigorous steps that were adopted are thoroughly explained in the paper linked to this document [1], where it is described that the items were developed according to the current theoretical basis. They underwent an expert analysis and were deemed satisfactory. Once the scale was expert-validated, it was applied in a pilot version. Then, the instrument was adjusted according to the students’ comments. Given the fact that the instrument was to be administered in four countries, it also was subjected to a cultural adaptation of its items. Afterwards, the application of the scale was scheduled.

Special attention was paid to ensure that every participant –both at institutional and individual level– would grant permission to be involved in the data recollection.

The instruments were applied in the university classrooms in a self-administered manner at the time established by the pertinent authorities.

The answers were codified from 1 to 5 with the options: Not important at all, Of little importance, Of average importance, Very Important, Absolutely essential. Firstly, the information was typed into an Excel file, and after that, an SPSS datafile was created. Finally, the corresponding analyses were conducted with the SPSS and AMOS packages.

The measurement instrument [3] initially comprised 17 items; nonetheless, after the validation process, one of them was omitted and 16 remained.

Conflict of Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.dib.2020.105655.

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