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GUIDE FOR INSTRUMENTAL STUDIES

The structure of articles derived from instrumental studies must comply with the following conditions:

Title: It must include an attractive title related to the main objective of the manuscript of a **maximum of 25 words**.

Abstract: It should **include an abstract in Spanish, English and Portuguese**, without headings or subheadings (minimum: 230 words; maximum: 250 words), describing the objective of the research, the methodology, the most important results and the main conclusions. At the end of the abstract should be included **between 4 and 6 key words (in Spanish, English and Portuguese),** with the most significant standardized terms associated with the topics of the study. It is recommended that the APA (https://psycnet.apa.org/home) or UNESCO (https://vocabularies.unesco.org/browser/thesaurus/es/) thesaurus be used as a guide.

Introduction: It should specify, based on a rigorous bibliographic review, the delimitation of the construct to be measured and contain a bibliographic review that includes: **first**, the pertinent sources associated with the construct to be measured; **second**, the relationship with previous studies and instruments and a description of how the study differs from the previously mentioned reports; **finally**, it should present the objectives or hypotheses of the research.

Method: you should develop the following sections separately:

- **Participants:** should include the **sociodemographic characteristics** of the participants (e.g. age, gender, sex, racial or ethnic group, educational

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and socioeconomic level, etc.) and the **selection criteria** (inclusion and exclusion) of the sample used. The sample size should follow the parameters recommended by Ferrando and Anguiano-Carrasco (2010), Lloret-Segura et al. (2014) and Herrero (2010). Keep in mind that the **Confirmatory Factor Analysis (CFA)** should be performed with a different sample than the **Exploratory Factor Analysis (EFA).**

- **Data collection instruments: a** description of the instruments used should be presented, referencing the original version and, if applicable, the version used. In addition, the **quality criteria of the tests used should be reported (item analysis, reliability indexes, validity criteria).** In case the authors have directly translated the instrument, it is necessary to describe the translation strategy used.

- **Procedure:** should detail the type of sampling (randomized, stratified, by convenience, etc.), the order of application of the instruments and any instructions received by the sample in general during the phases of the study. Also, if applicable, the criteria for the assignment of participants to different groups should be explained and it should be made explicit that the participants signed informed consents or assents.

- **Data analysis strategy: the** statistical software used and its version, the statistical tests used for the different hypothesis tests and the procedures related to data treatment as appropriate (any post-hoc correction or additional treatment to the raw data) should be detailed.

- **Ethical considerations:** it should be specified how the principles of respect, autonomy and justice were respected in the participants. The author is encouraged to incorporate the ethical and bioethical standards indicated in national and international legislation in their studies. It is also important to include information on ethical endorsements from committees and institutional bodies. In the specific case of instrumental

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studies, it is important that the authors make it clear that the entire procedure reported guarantees that no omission was made in the analyses performed and results obtained; in addition, if possible, indicate whether the contents submitted for analysis are stored in repositories recognized by the academic community.

Results: first, a descriptive analysis of the participants or groups should be made with measures of central tendency according to the sample distribution (e.g. median, mode, mean, standard deviation, number of observations, percentages, etc.), preferably supported by tables that help to economize the use of words. Then, the decisions taken in the data treatment (missing data, sample mortality or outliers) are specified and justified.

Please note that, for both **EFAs** and **CFAs**, the criteria proposed by Hu and Bentler (1999), Ferrando and Anguiano-Carrasco (2010), Lloret-Segura et al. (2014) and Herrero (2010) or others supported in the specialized literature should be taken into account to determine whether or not the instrument meets quality criteria. For the presentation of graphs and equations, it is suggested to take into account the following aspects:

- **Charts:** High quality summary charts in editable format should be presented.
- **Equations:** It is suggested to use **Word's** MathType or **equation editor**. All equations must be editable and not appear as an image.
- In case of using **Machine Learning** models it is necessary to report the hyperparameters used in the training phase of the model . For more details see https://aws.amazon.com/es/what-is/hyperparameter-tuning/
- All **statistical and parameter symbols** should be written in italics (examples: M, DE, t, p, r, F, N), except for those written in Greek letters (examples: β, $\chi 2$), superscripts and non-statistical subscripts of statistical symbols (Fmax, SA + SB).
- **References** (must include URL or DOI): The article must have a **minimum of 30 references**, of which at least **80% are** expected to **correspond to works published in the last 10 years.**

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For further information on the above aspects and in order to strengthen the presentation of the research, it is suggested to take into account the guidelines contained in the following references:

References:

APA (2020). Journal Article Reporting Standards. https://apastyle.apa.org/jars/quantitative

American Educational Research Association (APA) and National Council on Measurement in Education (2014). Standards for educational and psychological testing. American Educational Research Association. https://www.apa.org/science/programs/testing/standards

Arias, A., & Sireci, S. (2021). Validity and Validation for Educational and Psychological Tests: Theory and Recommendations. Iberoamerican Journal of Psychology, 14(1), 11-22. https://doi.org/10.33881/2027-1786.rip.14102

Ato, M., López, J., & Benavente, A. (2013). A classification system for research designs in psychology. Annals of Psychology, 29(3), 1038-1059. https://dx.doi.org/10.6018/analesps.29.3.178511

Carretero-Dios, H., Pérez, C. (2005). Standards for the development and review of instrumental studies. International Journal of Clinical and Health Psychology, 5 (3), 521-551. https://www.redalyc.org/articulo.oa?id=33705307

Ferrando, P. and Anguiano - Carrasco, C. (2010). Factor analysis as a research technique in psychology. Papeles del psicólogo,31(1), 18 - 33. https://www.redalyc.org/articulo.oa?id=77812441003

Herrero, J. (2010). Confirmatory factor analysis in the study of the structure and stability of assessment instruments: an example with the CA-14 self-esteem questionnaire. Psychosocial Intervention. 19(3), 289 - 300. https://doi.org/10.5093/in2010v19n3a9

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Lloret - Segura, S., Ferreres - Traver, A., Hernández - Baeza, A. and Tomás - Marco, I. (2014). El análisis factorial exploratório de los ítems: uma guia práctica, revisada y actualizada. Annals of psychology. 30(3), 1151 - 1169. https://dx.doi.org/10.6018/analesps.30.3.199361

Montero, I., & León, O. G. (2002). Classification and description of research methodologies in Psychology. International Journal of Clinical and Health Psychology, 2(3), 503-508. https://www.redalyc.org/articulo.oa?id=33720308

Muñiz, J., Elosua, P., & Hambleton, R. (2013). Guidelines for test translation and adaptation: second edition. Psicothema Journal. 25(2), 151-157 available at http://www.cop.es/pdf/dtyatest.pdf