PERCEPTIONS OF UNIVERSITY TEACHERS ON THEIR PEDAGOGICAL - ANDRAGOGICAL DIMENSIONS

Nelia González de Pirela¹, Adán Agustín Lindao Alejandro², Sandra Marcela Zapata Vega³, Sandra Edith Rodríguez Bejarano⁴, Angela Victoria Andrade Tapia⁵, Romina Lissette Sánchez Centanaro⁶, Andrea Dolores Ordoñez Balladares⁷

¹Doctora en Ciencias Humanas. Universidad Estatal de Milagro. UNEMI. Ecuador, Universidad de Especialidades Espíritu Santo. UEES. Ecuador

https://orcid.org/0000-0003-1628-4055.

ngonzalezg@unemi.edu.ec /njgonzalez@uees.edu.ec

²Magister en Diseño Curricular, Rector Unidad Educativa Amarilis Fuentes Alcivar, Universidad de Especialidades Espíritu Santo. UEES. Ecuador

https://orcid.org/0000-0001-9508-0303

adan.lindao@educacion.gob.ec

³Doctora en educación, Universidad de Guayaquil

https://orcid.org 0000-0001-8795-9924

sandra.zapatav@ug.edu.ec

⁴Magíster en Administración de Empresas, Universidad Estatal de Milagro. Ecuador

https://orcid.org/0000-0001-7715-7039

srodriguezb@unemi.edu.ec

⁵Magister en negocios Internacionales y gestión de Comercio Exterior, Universidad Laica Vicente Roca Fuerte de Guayaquil. Ecuador

https://orcid.org 0000-0002-3784-0009

aandradet@ulvr.edu.ec

⁶Magíster en marketing de destinos y productos turísticos, Universidad Estatal de Milagro. UNEMI. Ecuador https://orcid.org/0000-0001-9869-8168

rsanchezc3@unemi.edu.ec

⁷Magister en Gestión Educativa, Especialista en Rehabilitación oral, Docente en Universidad de Guayaquil, Universidad Bolivariana del Ecuador.

Andrea.ordonezb@ug.edu.ec

<u>adordonezb@ube.edu.ec</u>

https://orcid.org/0000-0002-6559-4597

Abstract

A documentary review was carried out on the production and publication of research papers related to the study of the Pedagogical - Andragogical Dimensions variables in Latin American university teaching. The purpose of the bibliometric analysis proposed in this document is to know the main characteristics of the volume of publications registered in the Scopus database during the period 2017-2021, achieving the identification of 361 publications. The information provided by the said platform was organized through tables and figures categorizing the information by Year of Publication, Country of Origin, Area of Knowledge and Type of Publication. Once these characteristics were described, the position of different authors regarding the proposed topic was referenced by employing a qualitative analysis. Among the main findings of this research, it is found that Brazil, with 246 publications is the Latin American country with the highest scientific production registered in the name of authors affiliated with institutions of that country. The area of knowledge that made the greatest contribution to the construction of bibliographic material

referring to the study of the Pedagogical - Andragogical Dimensions in Latin American university teaching was Social Sciences with 117 published documents, and the type of publication that was most used during the aforementioned period was the journal article, representing 86% of the total scientific production.

Keywords: Pedagogy, Andragogy, Education, University Teaching.

I. Introduction

To the United Nations (UN) Education is the basic foundation for building any society. It is the single investment that countries can make to build equitable, healthy and prosperous societies (UN, 2022). Similarly, it is also expressed in Goal 4 of the Sustainable Development Goals Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. Education, as a Fundamental Right, is the responsibility of the State, to ensure that it is fulfilled without distinction throughout society. Governmental actors must ensure access to educational training for all people, either through public or private institutions. For both, the competent state entity, which in many nations is the Ministry or Secretary of Education, seeks to maintain certain standards to ensure quality in the teaching-learning process. To comply with the above, the andragogical approach emerges as a model of continuing education, as Dr. Adam (1977) put it: It is the science and art of instructing and educating man permanently... andragogy, unlike pedagogy, focuses its attention on the student and not on the teacher. Teaching under the andragogical approach is opposed to but complements pedagogical teaching since by taking andragogical teaching as a transversal axis, the student is placed in relevance and all the activities to be carried out in the educational activity are established according to him. Their knowledge is taken into consideration considering what is stipulated in class and the final knowledge is constructed from their perspective, taking into account all the variables of the environment (Rojas, 2003). Therefore, it is necessary to consider the perception of teachers regarding the

pedagogical - andragogical dimensions, which allow structuring of the current situation in teaching methods. To this end, the present documentary review has been proposed to answer the question: How has the production and publication of research works been regarding the study of the Pedagogical - Andragogical Dimensions variables in Latin American university teaching during the period 2017-2021?

2. General objective

To analyze from a bibliometric and bibliographic perspective, the production of research papers on the variable Pedagogical - Andragogical Dimensions in Latin American university teaching during the period 2017-2021.

3. Methodology

Quantitative analysis of the information provided by Scopus under a bibliometric approach on the scientific production concerning the study of Pedagogical - Andragogical Dimensions in university teaching is carried out. Likewise, it is analyzed from a qualitative perspective, examples of some research works published in the area of the study mentioned above, from a bibliographic approach to describe the position of different authors on the proposed topic.

The search is carried out through the tool provided by Scopus and the parameters referenced in Figure 1 are established.

3.1 Methodological design

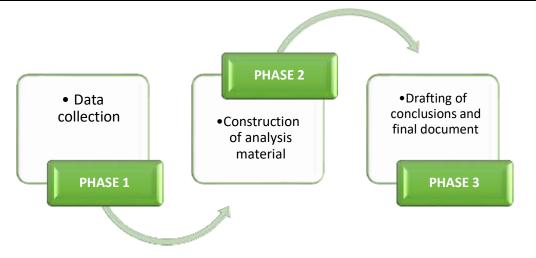


Figure 1. Methodological design

Source: Own elaboration

3.1.1 Phase 1: Data collection

The data collection was carried out employing the Scopus web page search tool, through which a total of 361 publications were identified. For this purpose, search filters were established consisting of:

- Published papers whose study variables are related to the study of Pedagogical Andragogical Dimensions in university teaching.
- ➤ Limited to Latin American countries.
- ➤ Without distinction of the area of knowledge.
- Without distinction of the type of publication.

3.1.2 Phase 2: Construction of analysis material

The information identified in the previous phase is organized. The classification will be done

through graphs, figures and tables based on data provided by Scopus.

- > Co-occurrence of words.
- > Year of publication
- Country of origin of the publication.
- Area of knowledge.
- > Type of publication.

3.1.3 Phase **3:** Drafting of conclusions and final document

After the analysis carried out in the previous phase, the conclusions are drawn up and the final document is prepared.

4. Results

4.1 Co-occurrence of words

Figure 2 shows the co-occurrence of keywords within the publications identified in the Scopus database.

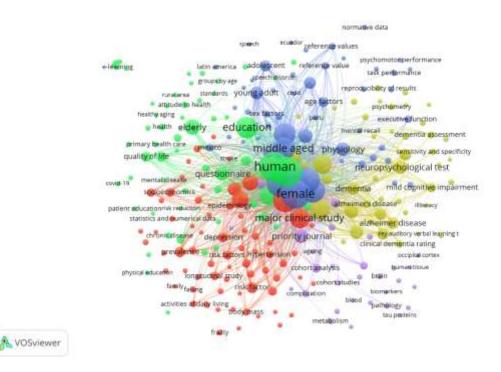


Figure 2. Co-occurrence of words

Within the identification of research papers published in high-impact journals indexed in the Scopus database, it is possible to classify their approaches by observing the most frequently used keywords. Figure 2 shows the formation of four subsets of publications with common themes. Those identified with the green color show an approach to the study of the human being, health conditions in adulthood, quality of life, educational level, and adults, among others. It is also mentioned studies that emphasize the virtual methodology as one of the training options currently available to students, which allows inferring that, for the older population, the possibility of education through technological means based on Information and Communication

Technologies (ICT) has also been opened, as long as it is taken into account, the skills and the development of aptitudes in older adults, which allow them to have a quality experience in this educational environment. The studies also show some physical alterations that may cause university dropout, diseases that may be associated with hypertension, diabetes, senile dementia, and Alzheimer's, among others that the authors have taken into account, within the population classification of their studies and the importance of providing them with the possibility of continuing their professional training.

4.2 Distribution of scientific production by year of publication.

Figure 3 shows how the scientific production is distributed according to the year of publication, taking into account the period from 2017 to 2021.

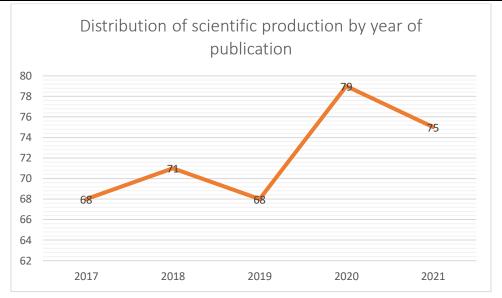


Figure 3. Distribution of scientific production by year of publication.

Source: Own elaboration (2022); based on data provided by Scopus.

One of the main characteristics of the scientific production identified through the execution of Phase 1 of the Methodological Design proposed for this research is its distribution according to the vear in which it was published and registered by Scopus. Thus, Figure 3 shows how during 2017, 68 documents were published by Latin American institutions. In 2018, this figure increased slightly to 71 publications but returned to 68 records in 2019. Then the peak of research is reached in 2020 when 79 research papers were published in highimpact journals indexed in Scopus. In 2021, this figure again falls to 75 papers. Among the latter is the article entitled Education in the twilight of life (da Silva et al., 2021) whose objective was to analyze the access of the elderly population to formal Education in Brazil. The study highlights that according to research before aforementioned, life expectancy in Brazil has increased significantly, so it is necessary to design plans and programs in accompaniment to the elderly, involving educational policies in attention to their needs, in compliance with the fourth sustainable goal of the United Nations Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all (UN, 2022). Thus, the aforementioned study concludes by highlighting the importance of implementing strategies based on the andragogic methodology, focusing all efforts on identifying the needs of students at all levels of education, as well as expanding the possibility of resuming or starting professional studies regardless of the age of the person seeking this opportunity. Finally, the work of the teachers who have efficiently applied the suggestions of Educational Management in search of education with equity and quality is highlighted.

4.3 Distribution of scientific production by country of origin.

Figure 4 shows the distribution of scientific production according to the nationality of the authors.

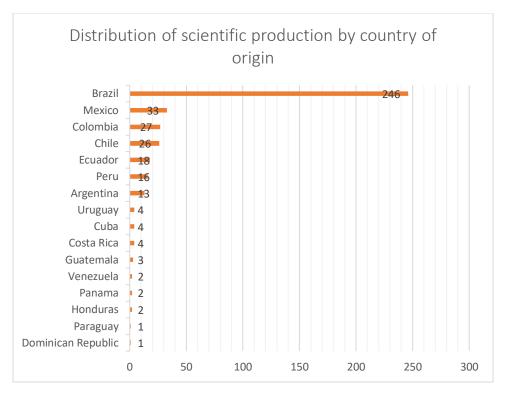


Figure 4. Distribution of scientific production by country of origin.

Brazil was the Latin American country with the highest number of publications registered in Scopus with 246 documents published in high-impact journals indexed in Scopus during the period 2017-2021. In the second place, Mexico with 33 publications, followed by Colombia and Chile with 27 and 26 publications respectively. At this point, it is worth noting that the production of scientific publications when classified by country

of origin, presents a special feature and that is the collaboration between authors with different affiliations to both public and private institutions, and these institutions can be from the same country or of different nationalities so that the production of an article with co-authorship of different authors from different countries of origin allows each of the countries to add up as a unit in the overall publications. This is best explained in Figure 5, which shows the flow of collaborative work from different countries.

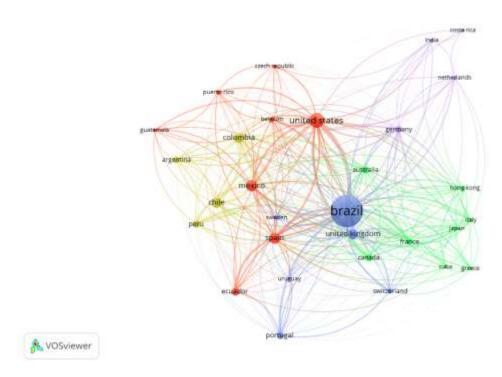


Figure 5. Co-citations between countries.

As shown in the figure above, there is evidence of direct relationships between authors affiliated with institutions in Brazil, with researchers from Uruguay, the United Kingdom, Portugal, and Germany, among others. This is also shown in research such as Continuing education and quality of life of older adults (Orozco et al., 2021) in which authors affiliated with institutions in Ecuador and Cuba participate. The objective of this article was to analyze the contribution that continuing education has on the quality of life of the elderly, highlighting the increase of this population worldwide, which poses challenges for governmental actors since it is necessary to devise programs that guarantee the fulfillment of their rights. The article concludes that the experiences of participation of older adults in university continuing education show that it contributes to

raising the quality of life of these people, as well as their full insertion in the community.

4.4 Distribution of scientific production by area of knowledge

Figure 6 shows how the production of scientific publications is distributed according to the area of knowledge through which the different research methodologies are executed.

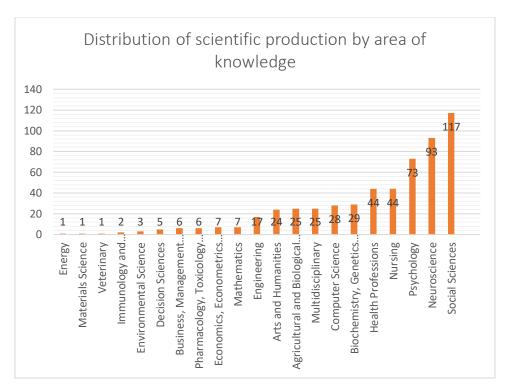


Figure 6. Distribution of scientific production by area of knowledge.

Social Sciences was the area of knowledge with the highest number of publications managed through its thematic areas. A total of 117 publications were reported by Scopus as having been carried out thanks to theories framed within this area of knowledge. Among these is the article entitled Inclusion and digital literacy of the elderly from the perspective of lifelong education (Joaquim et al., 2021) whose objective was to understand digital literacy from the perspective of lifelong education, based on the humanistic perspective of the concept. The study highlights that digital inclusion has a direct impact on the full exercise of citizenship by contemporary social subjects since the hypermedia languages of cyberspace permeate many social practices. Thus, the article seeks to analyze the discussion between four concepts: lifelong learning, digital inclusion, digital literacy and empowerment that would help

to understand the needs of older adults to design efficient strategies for digital literacy, which undoubtedly allows increasing the scope of education and ensuring access to it. The social impact that generates for the adult population the possibility of having access to professional training through digital devices and programs, represents a considerable increase in their quality of life since they have expressed according to the authors, that feeling useful through the use of free time from the process of teaching and generation of new knowledge, is the best way to improve the quality of life of older adults.

4.5 Type of publication

Figure 7 shows how the bibliographic production is distributed according to the type of publication chosen by the authors.

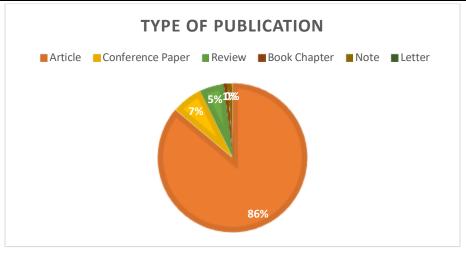


Figure 7. Type of publication

Source: Own elaboration (2022); based on data provided by Scopus.

Journal articles represent 86% of the scientific production identified through the execution of Phase 1 of the Methodological Design. In the second place, Conference Articles with 7% within which is the one entitled A method to build massive open online courses for seniors MOOCEP: from user perceptions (Cedillo et al., 2019) whose purpose was to present user perceptions when seniors use a MOOC that was created using the method to create massive open online courses for seniors (MOOCEP). The authors agree with the results of different works published and referenced in this article, about the growth of the adult population compared to other demographic groups, including textually registering According to Administration on Aging (AoA) for the year 2060, the elderly population will be double that presented in the results of the last census (Cedillo et al., 2019) likewise highlight that of this population, very few are directly related to the use of technological devices. Even so, it is emphasized that universal access to technology is important in the field of education and interactive systems due to the need to promote equal opportunities for all. Therefore, a previous digital literacy program for this population is necessary to achieve the full use of the MOOCEP proposal. The study achieved the identification of the perception of the elderly people targeted by the proposed strategy through a tool applied for data collection. From this analysis, it is possible to

conclude that the results are positive and that MOOCEP allows the creation of appropriate MOOCs based on the perceptions of the elderly.

5. Conclusions

Thanks to the bibliometric analysis carried out in this article, it is possible to determine that within the classification of scientific production related to the study of teachers' perception of the pedagogical - andragogical dimensions identified through the search conducted in the Scopus database, the main characteristics in the volume of production. Brazil was the Latin American country with the highest number of publications made through high-impact journals indexed in the Scopus database with a total of 246 scientific papers registered on that platform during the period 2017-2021. It is likewise concluded that within this temporal delimitation, 2020 was the period in which the largest number of publications was carried out, with a total of 79 documents. It can be inferred that thanks to the proposal of virtualization of academic content made in response to the restrictive policies imposed to avoid the growth in the number of infections and deaths due to Covid-19, a disease originated in China and rapidly decreed pandemic by the World Health Organization (WHO) in March 2020, the educational institutions designed strategies to comply with the academic calendar through ICTbased tools. For this reason, it is evident throughout this article that the position of the

authors coincides to a large extent with the creation of programs and technological tools to ensure accessibility to education at all academic levels for the elderly population but taking into account the need to first teach this population how to use this type of tools. In the same way, it is possible to measure the perception of teachers regarding the institutionalization of andragogic methodologies under the condition that it is not limited only to the education of the elderly population, but that it remains open to the entire population in general to achieve a culture of continuous education where it is necessary a constant updating by the teaching professionals in the new processes. Therefore, this article concludes by reaffirming the importance of knowing the current state of scientific production related to the study of the variables mentioned above to provide researchers with theoretical support as a starting point in the generation of new knowledge in this regard that is in tune with the search for new and better tools to implement andragogic methodology policies more efficiently and constantly in compliance with the Fundamental Rights defended by the Political Constitution in the vast majority of the States.

References

- [1] Adams, F. (1977). Algunos Enfoques sobre Andragogía. UNESR.
- [2] Cedillo, P., Bermeo, A., Beltran, P., Rodriguez-Ch, P., & Serrano, F. (2019). A method for building massive open online courses for elderly people MOOCEP: From the user perceptions. 48th Frontiers in Education Conference, FIE 2018. San Jose: IEEE.
- [3] da Silva Xavier Barros, A., Alves, T. P., da Silva Luiz, M. K., & Souza, E. B. (2021). Education in the evening of life. Ensaio, 1115 1135.
- [4] Joaquim, B. d., de Oliveira, W. C., & Pesce, L. (2021). Inclusion and digital literacy of the elderly from the perspective of lifelong education. Revista Conhecimento Online, 67 88.
- [5] ONU, O. d. (2022). Naciones Unidas. Obtenido de https://www.un.org/es/impacto-acad%C3%A9mico/educaci%C3%B3n-

- paratodos#:~:text=La%20educaci%C3%B3n%2 0es%20el%20fundamento,sociedades%20eq
- uitativas%2C%20saludables%20y%20pr%C 3%B3speras.
- [6] Orozco, S. E., Cháve, D. A., & Bretaña, R. M. (2021). Continuous education and quality of life in older adults. Revista Cubana de Educacion Medica Superior.
- [7] Rojas, P. R. (2003). La andragogía y el constructivismo en la sociedad del conocimiento. Laurus, 80-89.
- [8] Amorim, É. G., de Medeiros Neta, O. M., Aguiar, P. A. G. A., Amorim, I. G., & de Morais, R. B. (2017). The production of knowledge on elderly and aging in the collective health area of the federal university of rio grande do norte, brazil (2013 to 2016). [A produção do conhecimento sobre o idoso e o envelhecimento na área de saúde coletiva da Universidade Federal do Rio Grande do Norte, Brasil (2013 a 2016)] Espacios, 38(32) Retrieved from www.scopus.com
- [9] Anacleto, A., Negrelle, R. R. B., Cuquel, F. L., & Muraro, D. (2017). Profile and behavior of flower consumer: Subsidies for marketing actions. Revista Ceres, 64(6), 557-566. doi:10.1590/0034-737X201764060001
- [10] Andel, R., Dávila-Roman, A. L., Grotz, C., Small, B. J., Markides, K. S., & Crowe, M. (2019). Complexity ofwork and incident cognitive impairment in puerto rican older adults. Journals of Gerontology Series B Psychological Sciences and Social Sciences, 74(5), 785-795. doi:10.1093/geronb/gbx127
- [11] Andrade, F. C. D., & López-Ortega, M. (2017). Educational differences in health among middle-aged and older adults in brazil and mexico. Journal of Aging and Health, 29(6), 923-950. doi:10.1177/0898264317705781
- [12] Araujo, O. S. C. C., Hinsliff-Smith, K., & Cachioni, M. (2020). Education and the relationships between museums and older audiences: A scoping review protocol. International Journal of Educational

- Research, 102 doi:10.1016/j.ijer.2020.10159
- [13] Arruda, L. S., & Moreira, C. O. F. (2018). Interprofessional collaboration: A case study regarding the professionals of the care center for elderly, rio de janeiro state university (NAI/UERJ), brazil. [Colaboração interprofissional: Um estudo de caso sobre os profissionais do núcleo de atenção ao idoso da universidade estadual do rio de janeiro (NAI/UERJ), Brasil] Interface: Communication, Health, Education, 22(64), 199-210. doi:10.1590/1807-57622016.0613
- [14] Azevedo, I. G., Sousa, S. L. D. O., Viana, E. D. S. R., Dantas, D. D. S., Maciel, Á. C. C., & Da Câmara, S. M. A. (2021). Relationship between symptomatic pelvic organ prolapse and respiratory muscle strength in middle-aged and older women in northeast brazil: A cross-sectional study. Physiotherapy Theory and Practice, 37(6), 755-761. doi:10.1080/09593985.2019.1642428
- [15] Balladares, J., Carvacho, R., Basualto, P., Acevedo, J. C., Garzón, M. M., Catalán, L., . . . Alvarez, M. A. (2021). Taking care for those who take care: Experiences of informal caregivers of dependent elderly people in a COVID-19. [Cuidar a los que cuidan: Experiencias de cuidadores informales de personas mayores dependientes en contexto COVID-19] Psicoperspectivas, 20(3) doi:10.5027/PSICOPERSPECTIVAS-VOL20-ISSUE3-FULLTEXT-2397
- [16] Barbosa, B. T., da Silva Filho, E. M., da Cruz Santos, A., & do Socorro Brasileiro-Santos, M. (2020). COVID-19 and social isolation: The consequences of not exercising for older adults' health. Motriz.Revista De Educacao Fisica, 26(4) doi:10.1590/S1980-6574202000040017
- [17] Barbosa, B. T., da Silva Filho, E. M., da Cruz Santos, A., & do Socorro Brasileiro-Santos, M. (2021). COVID-19 and social isolation: The consequences of not exercising for older adults' health. Motriz.Revista De Educacao Fisica, 26(4) doi:10.1590/S1980-65742020000400170
- [18] Beltran, P., Cedillo, P., Rodriguez-Ch, P., & Bermeo, A. (2018). MOOCEP: Towards a method for building massive open online courses for elderly people. Paper presented at

- the Proceedings 2017 International Conference on Information Systems and Computer Science, INCISCOS 2017, , 2017-November 279-286. doi:10.1109/INCISCOS.2017.61 Retrieved
- [19] Beza, E., Steinke, J., Van Etten, J., Reidsma, P., Fadda, C., Mittra, S., . . . Kooistra, L. (2017). What are the prospects for citizen science in agriculture? evidence from three continents on motivation and mobile telephone use of resource-poor farmers. PLoS ONE, 12(5) doi:10.1371/journal.pone.0175700

from www.scopus.com

- [20] Borracci, R. A., Doval, H. C., Celano, L., Ciancio, A., Manente, D., & Calderón, J. G. E. (2017). Patients' perceptions of argentine physicians' empathy based on the jefferson scale of patient's perceptions of physician **Psychometric** empathy: data and demographic differences. Education for Health: Change in Learning and Practice, 30(1), 19-25. doi:10.4103/1357-6283.210513
- [21] Bulgarelli, A. F., & Toassi, R. F. C. (2018). Narrative of a teaching practice. an autoethnography about being a geriatrics professor. Ethnography and Education, 13(2), 172-184. doi:10.1080/17457823.2017.1299026
- [22] Burchi, F., Espinoza-Delgado, J., Montenegro, C. E., & Rippin, N. (2021). An individual-based index of multidimensional poverty for low- and middle-income countries. Journal of Human Development and Capabilities, 22(4), 682-705. doi:10.1080/19452829.2021.1964450
- [23] Campoverde-Molina, M., Lujan-Mora, S., & Garcia, L. V. (2020). Empirical studies on web accessibility of educational websites: A systematic literature review. IEEE Access, 8, 91676-91700. doi:10.1109/ACCESS.2020.2994288
- [24] Canavire-Bacarreza, G., Chong, A., Ríos-Avila, F., & Yáñez-Pagans, M. (2020). Will elders provide for their grandchildren? unconditional cash transfers and educational expenditures in bolivia. Review of Development Economics, 24(2), 424-447. doi:10.1111/rode.12647