

Education and Covid-19: Collaboration of families in school homework

¹Hugo Patricio Torres Andrade, ²Pablo César Torres Cañizalez, ³John Kendry Cobo Beltrán, ⁴Janeth Carolina Cabascango Jaramillo, ⁵Rubén Darío Manturano Pérez, ⁶Alexander Puentes Gómez

¹Universidad Técnica del Norte, abg.hugotorres@gmail.com

²Universidad César Vallejo. Lima, Perú, ptorresc@ucv.edu.pe

³Universidad César Vallejo. Lima, Perú, jcobob@ucv.edu.pe

⁴Universidad Técnica del Norte, carolina.cabascango.j@gmail.com

⁵Universidad Nacional de Ucayali- Pucallpa, Perú, ruben_manturano@unu.edu.pe

⁶Universidad Benito Juárez G. Puebla – México, alexander.puentes@gmail.com

Abstract

A documentary review was carried out on the production and publication of research papers concerning the study of the variable Collaboration of families in school tasks during COVID-19. 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 year 2020 and the first semester of 2021, achieving the identification of 1595 publications. The information provided by this platform was organized by means of tables and figures, categorizing the information by Year of Publication, Country of Origin, Area of Knowledge and Type of Publication. Once these characteristics are described, a qualitative analysis of the position of different authors in relation to the proposed topic is carried out. Among the main findings of this research, it is found that Brazil, with 671 publications, is the country with the highest production. The area of knowledge that made the greatest contribution to the construction of bibliographic material referring to the Back-to-School study within the framework of COVID-19 was the area of medicine with 679 published documents, and the type of publication that was most used during the above-mentioned period was the journal article, which represents 68% of the total scientific production.

Keywords: Education, homework, COVID-19.

1. INTRODUCTION

COVID-19, or Coronavirus, is a human-to-human transmitted infection with a high exponential growth and a high rate of contagion, so named by the World Health Organization (WHO). (2020), which also catalogued this disease as “Pandemic”, on January 30, 2020, due to the large number of cases reported outside China with 37,364 infected and considered, of course, as a “public health emergency of international scope”

(Escudero et al., 2020) (World Health Organization, 2020).

The declaration by the World Health Organization “WHO” in response to the crisis generated by the discovery of this disease and the inevitable impact on life in society that this entailed, led to determine by the different leaders of the organizations and the different governmental scenarios; the rethinking of the different lifestyles and the way we were performing in society. Education was no stranger to this large-scale situation, which led

educators and students to the challenge of teaching from confinement.

The work of teachers in the different educational institutions has been tested from the point of view of vocation, since mitigating the problems, challenges, risks and links in the road that have arisen as a result of COVID-19 has not been an easy task for these actors and others involved. The scourges of inequality and the lack of resources at home have been the cause for not only teachers, but also students and especially families to take an active part in achieving and carrying out the tasks at home. (Muñoz & Lluch, 2020). In effect and consequently with the analysis of several studies facing the subject, it has been concluded that the involvement and intervention of parents in the educational processes of their children and their relationship in front of the school, causes improvements in student performance and student motivation (Distefano et al., 2018). The collaboration of families in these moments of uncertainty is decisive to channel the pedagogical processes of students in the midst of the COVID-19 pandemic, conflict resolution and the search for alternatives to achieve quality education, even if it is not in the face-to-face, is the challenge of the educational community and families. Therefore, it is important to know through bibliographic resources the measures adopted for the collaboration of families in the tasks in the framework of COVID-19, so a bibliometric analysis of the scientific production registered in Scopus database during the period 2020-

2021 is proposed to answer the question: How has been the production and publication of research papers related to the study of the variable Collaboration of Families in the tasks in the framework of COVID-19 in the year 2020 and 2021?

2. General objective

To analyze from a bibliometric and bibliographic perspective, the production of high impact research papers on the variable Collaboration of families in the performance of Tasks in the framework of COVID-19 during 2020 and 2021.

3. Methodology

Quantitative analysis of the information provided by Scopus is carried out under a bibliometric approach on the scientific production regarding the Collaboration of families in the realization of Tasks within the framework of COVID-19. Likewise, it is analyzed from a qualitative perspective, examples on some research works published in the area of study indicated above, from a bibliographic approach to describe the position of different authors in front of the proposed topic.

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

3.1 Methodological design

Table 1. *Methodological design.*

	PHASE	DESCRIPTION	CLASSIFICATION
PHASE 1	DATA COLLECTION	Data was collected using the Scopus web page search tool, through which a total of 1595 publications were identified.	Published papers whose study variables are related to the Collaboration of Families in the performance of Tasks within the framework of COVID-19. Research papers published during the period 2020-2021. Limited to Latin American countries. Without distinction of area of

			knowledge. Without distinction of type of publication.
PHASE 2	CONSTRUCTION OF ANALYSIS MATERIAL	The information identified in the previous phase is organized. The classification will be made by means of graphs, figures and tables based on data provided by Scopus.	Word Co-occurrence. Year of publication Country of origin of the publication. Area of knowledge. Type of publication
PHASE 3	DRAFTING OF CONCLUSIONS AND FINAL DOCUMENT	After the analysis carried out in the previous phase, we proceed to the drafting of the conclusions and the preparation of the final document.	

Source: Own elaboration (2022)

4. Results

4.1 Co-occurrence of words

Figure 1 shows the co-occurrence of keywords within the publications identified in the Scopus database.

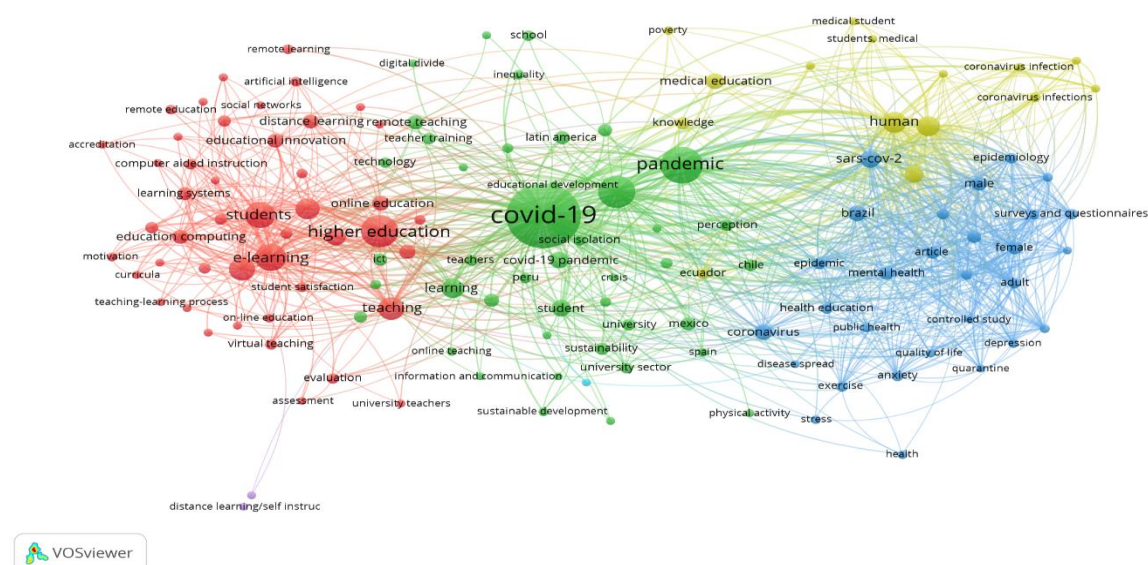


Figure 1. Co-occurrence of key words.

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

In Figure 1, words such as COVID-19, Pandemic, Latin America are observed with strong presence, since they are directly related to the object of this research, taking into account that the arrival of Covid-19 as a pandemic, has led to really significant changes and of great impact on the development of human life and especially in the area of Latin American education and the way it has been developing in today's world. The affectation of the virus does not discriminate of social groups, races, religious beliefs, but it influences in other aspects, given the conditions of each social group and that in short confronts us to the search of ways that help us to create solutions in the educational spaces and more important from the conditions of each one of the homes of the actors of the educational community, it is for this reason, that in the graph are also evidenced words like Humanity, Students, Teacher Training and Online Education, because they are precisely the human components; such as the awareness of the importance of education in society, the recognition of values and the focus on actions that concentrate on leadership of values and other efforts to maintain the educational centers in the midst of the pandemic. It is the latter, the objective of this research, that families as the essential nucleus of any society, acquire an even more significant role in the framework of COVID-19, to mitigate the obstacles in education and that are reflected in the graph as well as frequent use of words such as Crisis, Inequity and Motivation.

4.2 Distribution of scientific production by year of publication.

Figure 2 shows the distribution of scientific production according to the year of publication, taking into account the period from 2020 to 2021.

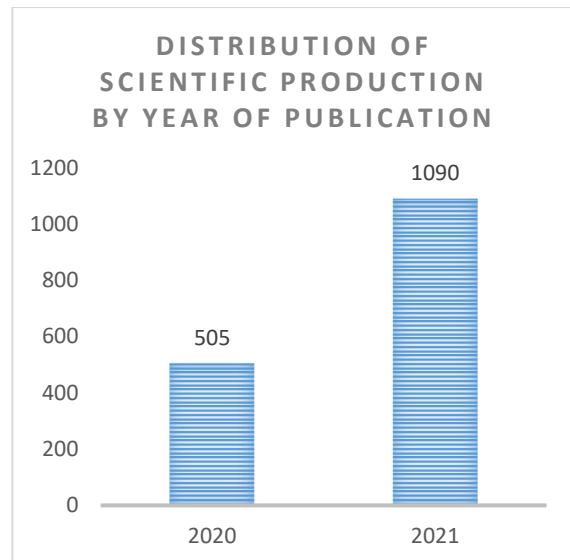


Figure 2. *Distribution of scientific production by year of publication.*

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

Figure 2 shows how 2021 is the year with the highest number of publications registered in the Scopus database, among which the 2021 article entitled “Working conditions, lifestyle and mental health of Brazilian public school teachers during the COVID-19 pandemic” stands out (Silva, y otros, 2021), whose study focused on analyzing the following variables: sociodemographic and economic profile, working conditions, lifestyle and health conditions and global health problems during the 15 pandemic. 641 public school teachers in rural and urban areas of the State of Minas Gerais in Brazil, which showed that 82.3% of the teachers had at least one mental health problem, such as weight gain, difficulty sleeping, use of psychotropic drugs, these results lead to the conclusion that mechanisms should be established to mitigate the problems faced by teachers in the face of the challenges they face due to the pandemic, given the importance they represent in the educational world. On the other hand, it is also important to point out the article of 2020, called “Accompaniment from an ethic of life: to educate in times of pandemic” (Novoa & Pirela, 2020), which had as general objective, to interpret from a more human perspective and from the understanding of the fragilities

assumed by the COVID-19 crisis, the search for tools to face the challenges generated, which goes from the spaces of our homes with the families, to the life in community itself, in general it assumes the accompaniment in education as the most important factor to direct the rudder and generate spaces of balance and well-being.

4.3 Distribution of scientific production by country of origin.

Figure 3 shows the distribution of scientific production according to the nationality of the authors.

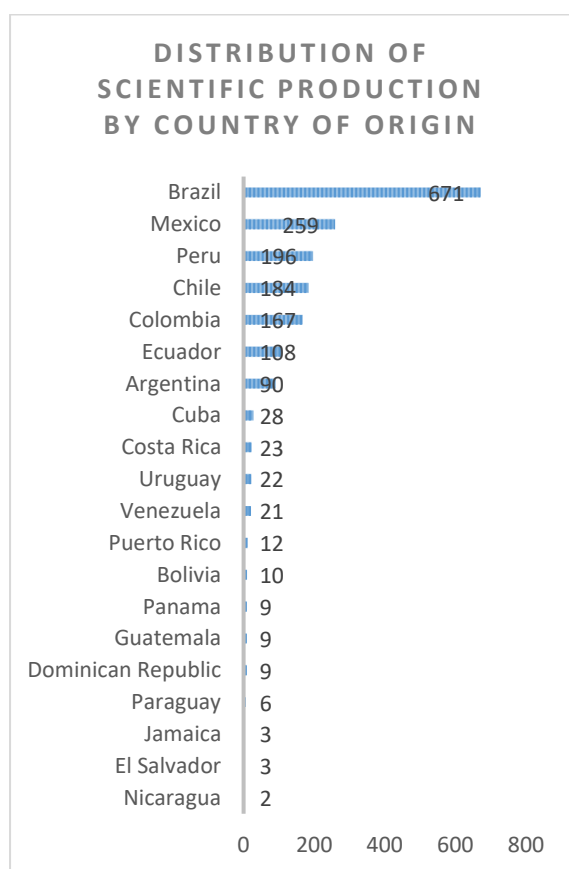


Figure 3. *Distribution of scientific production by country of origin.*

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

Brazil is the Latin American country with the highest production registered in the Scopus database, with a total of 671 publications during the period 2020-2021, in second place is the Mexican country with a total of 259 registered publications, among which the

article entitled “Emotions of higher education students: empirical evidence of online classes taught during the pandemic of COVID-19” stands out (Barba, 2021), which through an exploratory factorial analysis carried out on 611 students from public universities in Mexico and their perception of online classes in times of pandemic and which yields as a result that teachers in their work should encourage active participation of their students and pedagogical models that suggest an abstract and applied learning, that the accompaniment of the students' families is fundamental, not only for the improvement of academic performance, but also for the mental health of those involved, taking into account that the study established that there is a high percentage of negative emotions in the experience of online classes during the pandemic, such as frustration and disappointment, especially among women. These articles, which are the object of study in this paper, intend to know the advantages and disadvantages of the non-presence in the middle of the COVID-19 pandemic, as an alternative to continue with a quality education, as well as to analyze the causes that suggest such experience as traumatic and the lags to the mental health of those involved and finally to establish measures such as family accompaniment in times of confinement to contribute to the improvement of the processes. Similarly, in the Latin American production regarding these variables, countries such as Peru, Chile and Colombia are identified with 196, 184 and 167 publications registered in the Database, and countries such as El Salvador and Nicaragua with very low scientific production regarding this topic.

At this point, it should be noted that the production of scientific publications, when classified by country of origin, presents a special characteristic 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 from different nationalities, so that the production of an article co-authored by 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 4, which shows the flow of collaborative work from different countries.

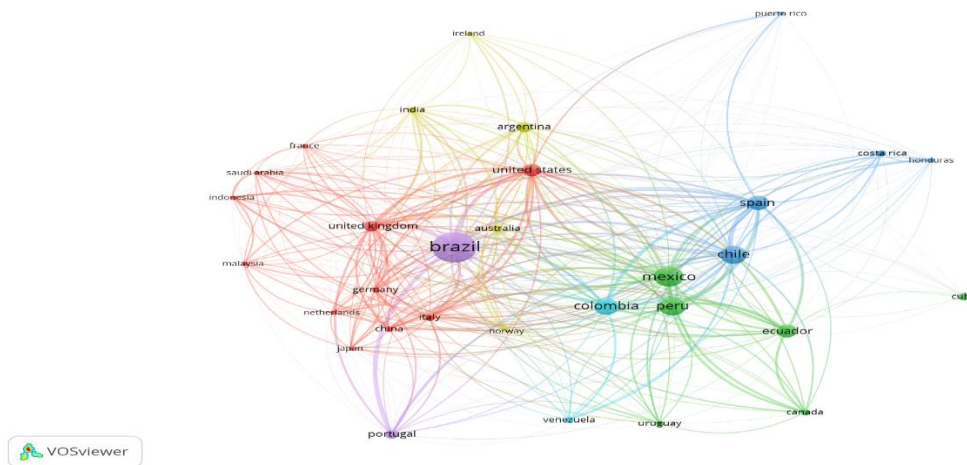


Figure 4. *Co-citations between countries.*

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

Figure 4 shows Brazil as the Latin American country with the highest scientific production on the Variables of Education and Family Collaboration in the framework of COVID-19, with authors affiliated to countries such as Australia, the United Kingdom and the United States. The second country in the graph is Mexico, with authors affiliated to countries such as Colombia, Peru and Chile, as well as countries at the global level with collaborations with Latin American countries such as Spain, Australia and India, and it is important to highlight the Colombian article entitled “Relationship between self-care activities, stress and well-being during COVID-19 confinement: a transcultural mediation model” (Luis et al., 2021), which by means of an Online Cross-sectional Design, analyzed the role of mediation and self-care between stress and psychological well-being of the general population of 4 countries (Chile, Colombia, Ecuador and Spain) and the sociodemographic variables of each region. It was found that the conditions in which confinement in education is fostered are determinant for mental health, whether it is self-care or the accompaniment of family members or, failing that, having dependents, whether elderly or minors, and that the higher the perception of stress, the lower the effects of well-being in society, which inevitably leads to public health problems.

4.4 Distribution of scientific production by area of knowledge

Figure 5 shows how the production of scientific publications is distributed according to the area of knowledge through which the different research methodologies are executed.

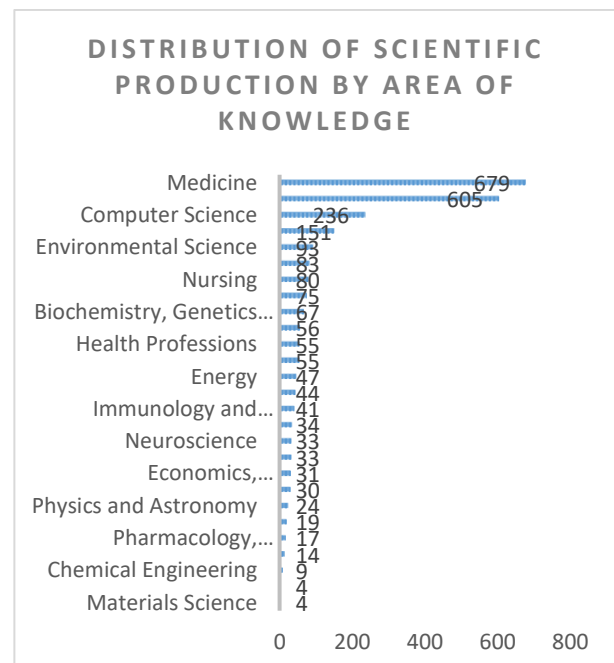


Figure 5. *Distribution of scientific production by area of knowledge.*

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

As shown in Figure 5, different areas of knowledge have been dedicated to the work of investigating the variables under study, however, Medicine as an area of knowledge, has the largest number of records in the Scopus database with 679 publications, among which stands out “Traits related to suicidal risk and impulsivity among young Argentine university students during a quarantine of up to 103 days: longitudinal evidence of the COVID-19 pandemic” (López, Fong, & Godoy, 2021), whose objective was to examine the longitudinal changes in the suicide risk levels of young Argentine university students during a 103-day quarantine, during the COVID-19 Pandemic and the analysis of various factors, for which it was obtained that the long periods of isolation resulting from the Pandemic affect the mental health of young university students, detecting really high and alarming risks of suicide. Therefore, it is absolutely necessary the accompaniment of the faculty, family and close people, in order to reduce the risk, with support and knowledge in the management of negative emotions caused by the impact of confinement and stress generated by academic obligations, the proactivity of the teacher, the dynamics in teaching, the active and participatory support of families and self-care in mental health are essential at this time.

Similarly, and with great importance, areas of knowledge such as: Computer Science, Environmental Science and Nursing, generate great contributions in relation to the variables under study within the framework of Covid-19, in Latin American countries.

4.5 Type of publication

Figure 6 shows how the bibliographic production is distributed according to the type of publication chosen by the authors.

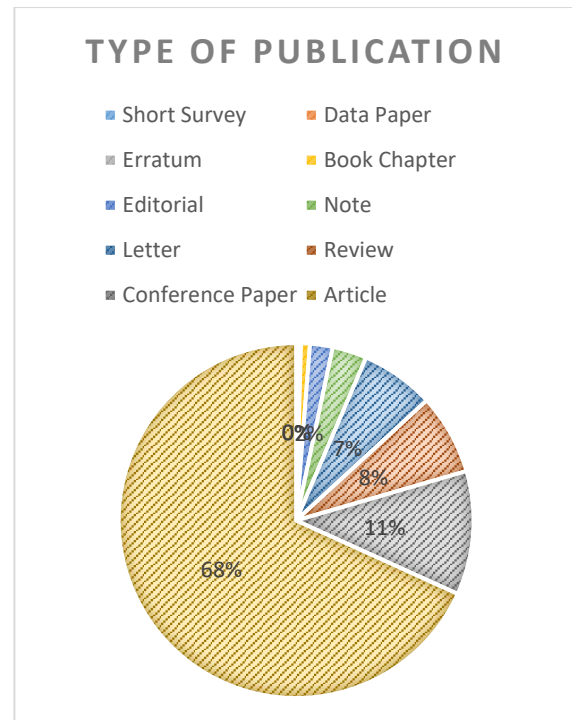


Figure 6. *TYPE OF PUBLICATION*

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

After reviewing Figure 6, it is found that the Scientific Article is the most used type of publication in the Phase 1 Data Collection of the Methodological Design in the Scopus Database with a total of 68%, within which, the article entitled “Developing teaching strategies for computational thinking to model pandemics and containment measures” is identified (Araya, Isoda, & Moris, 2021), whose purpose was based on the challenges of incorporating computational thinking in the curricula that cover real-world problems such as the COVID-19 pandemic we are going through and other similar global crises, based on three main pillars: algorithmic thinking, computational modeling and machine learning. Within the study, these pillars were implemented in 2 schools with low resources and high vulnerability in primary and secondary students, for which it was found that, with a good teaching by the teaching team, this result allows to infer the total importance of the role played by teachers, parents and third parties in general, in the involvement of educational processes and the practice of teaching from isolation. On the other hand, Conference

Papers, Reviews and Letters are also found as the types of publication mostly used for the registration of publications, as shown in the Scopus Database with 11%, 8% and 7% respectively.

5. Conclusions

Through the bibliometric analysis made in this research, it can be determined that Brazil is the country with the largest number of publications registered with a total of 671 publications on the variable of Family Collaboration in the tasks as a result of isolation in the framework of COVID-19, in the Scopus database, followed by countries such as Mexico, Peru, Chile and Colombia. Likewise, the production was increased by double the number of records published in the period between 2020 and 2021, with an increase of 585 publications, which allows concluding that family collaboration in the academic processes of students in Latin America gained real relevance during that period, taking into account of course the vicissitudes that are going through from the point of view of health, political, economic and social that have affected of course the dogmas, practices and the perspective of education against this new scourge.

The COVID-19 health emergency has introduced in our humanity alternatives in the achievement of improvements within the organization in society and the way in which it was affected; The family, the human component that the same situation implies and requires, is vital for the development, continuity and improvement of the very processes of coexistence of the human being. The synergy in the academic processes with the new challenges of virtuality, non-presence with confinement and coping with mental health problems that arise from an obligatory and not at all consensual isolation, lead us to look again at interpersonal relationships and more than all family relationships as vehicles for educational progress. It is extremely important that the bibliographical production object of this review be of knowledge of all the actors of education

and society, for future research. For this reason, the intention of this article is to strengthen the sources of research and determine, by way of conclusion, that the family and its collaboration with the teaching staff optimize learning in times of crisis.

Reference

- [1] Araya, R., Isoda, M., & Moris, J. (2021). Developing computational thinking teaching strategies to model pandemics and containment measures. *International Journal of Environmental Research and Public Health*.
- [2] Babativa, L. (2021). Salud Mental en Niños y Adolescentes Relacionado a la Cuarentena Ocasionada por Covid-19.
- [3] Barba, E. (2021). Higher education student emotions: Empirical evidence from online classes given during the COVID-19 pandemic. *International Journal of Virtual and Personal Learning Environments*.
- [4] Distefano, R., Galinsky, E., McClelland, M. M., Zelazo, P. D., & Carlson, S. M. (2018). Autonomy supportive parenting and association with child and parent executive function. *Journal of Applied Developmental Psychology*.
- [5] Escudero, x., J., G., A., G.-F., M., E.-S., M., A. G., & Del Río, C. (2020). The SARS-CoV-2 (COVID-19) coronavirus pandemic: current situation and implications for Mexico. *Archivos de cardiología de Mexico*.
- [6] López, L., Fong, S., & Godoy, J. (2021). Suicidal risk and impulsivity-related traits among young Argentinean college students during a quarantine of up to 103-day duration: Longitudinal evidence from the COVID-19 pandemic. *Suicide and Life-Threatening Behavior*, 1175-1188.
- [7] Luis, E., Bermejo-Martins, E., Martinez, M., Sarrionandia, A., Cortes, C., Oliveros, E., . . . Fernández-Berrocal, P. (2021). Relationship between self-care activities, stress and well-being during COVID-19 lockdown: A cross-cultural mediation model. *BMJ Open*.
- [8] Muñoz, J., & Lluch, L. (2020). Consecuencias del Cierre de Escuelas por el Covid-19 en las Desigualdades

- Educativas . Revista Internacional de Educación para la Justicia Social.
- [9] Novoa, A., & Pirela, J. (2020). Accompaniment from an ethics of life to educate in times of pandemic. *Utopia y Praxis Latinoamericana*, 11-24.
 - [10] Silva, N., Cabral, R., Leão, L., Pena, G., Pinho, L., Magalhães, T., . . . D.S. (2021). Working conditions, lifestyle and mental health of Brazilian public-school teachers during the COVID-19 pandemic. *Psychiatrike = Psychiatriki*, 282-289.
 - [11] World Health Organization . (2020). Coronavirus Disease (COVID-19). Obtenido de <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>
 - [12] Abbas, A., Samad, L., Ozgediz, D., Ademuyiwa, A., Ameh, E. A., Banu, T., . . . Butler, M. W. (2021). Online action planning forums to develop a roadmap to mitigate the impact of COVID-19 on the delivery of global children's surgical care. *Pediatric Surgery International*, 37(9), 1221-1233. doi:10.1007/s00383-021-04903-4
 - [13] Abimbola, S., Asthana, S., Cortes, C. M., Guinto, R. R., Jumbam, D. T., Louskieter, L., . . . Pai, M. (2021). Addressing power asymmetries in global health: Imperatives in the wake of the COVID-19 pandemic. *PLoS Medicine*, 18(4) doi:10.1371/journal.pmed.1003604
 - [14] Abrahão-Curvo, P., Mendes, K. D. S., Lettiere-Viana, A., Furtado, M. C. C., Delatorre, T., & Segura-Muñoz, S. I. (2021). Masks for at-risk population: Nursing promoting biosafety in pandemic times. *Revista Gaucha De Enfermagem*, 42(spe), e20200276. doi:10.1590/1983-1447.2021.20200276
 - [15] Abreu-Hernández, L. F., Valdez-García, J. E., Esperón-Hernández, R. I., & Olivares-Olivares, S. L. (2020). COVID-19 challenge with regard to medical schools social responsibility: New professional and human perspectives. [El reto de COVID-19 respecto a la responsabilidad social de las escuelas de medicina: Nuevas perspectivas profesionales y humanas] *Gaceta Medica De Mexico*, 156(4), 311-316. doi:10.24875/GMM.20000306
 - [16] Aceves-González, C., Rodríguez, Y., Escobar-Galindo, C. M., Pérez, E., Gutiérrez-Moreno, B., Hignett, S., & Lang, A. R. (2021). Frontiers in human factors: Integrating human factors and ergonomics to improve safety and quality in latin american healthcare systems. *International Journal for Quality in Health Care*, 33, 45-50. doi:10.1093/intqhc/mzaa135
 - [17] Acosta, F., Vilorio, D., Arteta, A., & Ospino, C. (2021). Determinants of managerial performance: Higher education institutions of the atlantico-colombia department against covid-19. [Determinantes del desempeño gerencial: Instituciones de Educación Superior del departamento Atlántico-Colombia frente al Covid-19] *Revista De Ciencias Sociales*, 27(2), 296-308. Retrieved from www.scopus.com
 - [18] Acosta-Vargas, P., Acosta-Vargas, G., Losada, J. A. G., Santórum, M., Gabriel Elías Chanchí, G., & Gonzalez, M. (2020). Evaluation of accessibility in teleconferencing systems for low vision users during covid-19. [Evaluación de la accesibilidad en sistemas de teleconferencia para usuarios con baja visión durante la covid-19] *RISTI - Revista Iberica De Sistemas e Tecnologías De Informacao*, 2020(E37), 205-218. Retrieved from www.scopus.com
 - [19] Acurio-Páez, D., Vega, B., Orellana, D., Charry, R., Gómez, A., Obimpeh, M., . . . Colebunders, R. (2021). Seroprevalence of sars-cov-2 infection and adherence to preventive measures in cuenca, ecuador, october 2020, a cross-sectional study. *International Journal of Environmental Research and Public Health*, 18(9) doi:10.3390/ijerph18094657
 - [20] Adusumilli, N. C., Kalen, J., Hausmann, K., & Friedman, A. J. (2021). Dermatology applicant perspectives of a virtual visiting rotation in the era of COVID-19. *Journal of the American Academy of Dermatology*, 84(6), 1699-1701. doi:10.1016/j.jaad.2021.02.085
 - [21] Agarwal, A., Finelli, R., Durairajanayagam, D., Leisegang, K., Sharma, R., Gupta, S., . . . Henkel, R. (2021). A web-based global educational model for training in semen analysis during the covid-19 pandemic. *World Journal of Men's Health*, 39 doi:10.5534/WJMH.210075

- [22] Aguiar, M. M., Barros, M. N. D. S., Macedo, A., Puccia, M. I. R., & Pereira, A. T. (2021). COVID-19 fear scale – translation and validation into brazilian portuguese. *Journal of Human Growth and Development*, 31(3), 376-386. doi:10.36311/JHGD.V31.12604
- [23] Aguilar Carlos, M. L., Muñoz Arteaga, J., Guzmán Mendoza, J. E., & Velázquez Amador, C. E. (2021). Digital ecosystem for Children's rehabilitation with psychomotor deficit doi:10.1007/978-3-030-92325-9_5 Retrieved from www.scopus.com
- [24] Aguilar, O. G., Duche Perez, A. B., & Aguilar, A. G. (2020). Teacher performance evaluation model in covid-19 times. Paper presented at the Proceedings of the 15th Latin American Conference on Learning Technologies, LACLO 2020, doi:10.1109/LACLO50806.2020.9381159 Retrieved from www.scopus.com
- [25] Aguilar, O. G., & Gutierrez Aguilar, A. (2020). A model validation to establish the relationship between teacher performance and student satisfaction. Paper presented at the Proceedings - 2020 3rd International Conference of Inclusive Technology and Education, CONTIE 2020, 202-207. doi:10.1109/CONTIE51334.2020.00044 Retrieved from www.scopus.com
- [26] Aguilera-Hermida, A. P., Quiroga-Garza, A., Gómez-Mendoza, S., Del Río Villanueva, C. A., Avolio Alecchi, B., & Avci, D. (2021). Comparison of students' use and acceptance of emergency online learning due to COVID-19 in the USA, mexico, peru, and turkey. *Education and Information Technologies*, 26(6), 6823-6845. doi:10.1007/s10639-021-10473-8
- [27] Ahmed, W., Taft, T. H., & Charabaty, A. (2021). Social media in inflammatory bowel disease: The patient and physician perspective. *Current Opinion in Gastroenterology*, 37(4), 328-335. doi:10.1097/MOG.0000000000000742
- [28] Ajler, P. (2020). Microneurosurgery in COVID-19–Positive patients. *World Neurosurgery*, 142, 532. doi:10.1016/j.wneu.2020.04.251
- [29] Alania-Contreras, R. D., Chanca-Flores, A., Condori-Apaza, M., Fabian-Arias, E., & Rafaele-De-la-Cruz, M. (2021). Adaptation, validation, reliability and assessment of an attitude towards online education scale for university students in the COVID-19 crisis. [在 COVID-19 背景下对大学生关于在线教育态度量表的修改、检验、验证可靠性及测量] Publicaciones De La Facultad De Educacion y Humanidades Del Campus De Melilla, 52(3), 241-256. doi:10.30827/PUBLICACIONES.V52I3.22273
- [30] Alanya-Beltran, J., Khamidullina, Z., Alsaraireh, M. Y., De Souza, R., Tarakci, V., Panduro-Ramirez, J., . . . Carole, H. H. F. (2021). Students e-learning access in select higher learning institutions of less-economically developed south east asian nations: Implications for economics of education. *Estudios De Economia Aplicada*, 39(12) doi:10.25115/eea.v39i12.6310
- [31] Alanya-Beltran, J., & Panduro-Ramirez, J. (2021). Mobile learning in business english its effect to south american students' learning styles in the covid 19 pandemic era: Its economic implications. *Estudios De Economia Aplicada*, 39(12) doi:10.25115/eea.v39i12.6394
- [32] Alarcón, M. A., Sanz-Sánchez, I., Shibli, J. A., Treviño Santos, A., Caram, S., Lanis, A., . . . Sanz, M. (2021). Delphi project on the trends in implant dentistry in the COVID-19 era: Perspectives from latin america. *Clinical Oral Implants Research*, 32(4), 521-537. doi:10.1111/clr.13723
- [33] Albarello, F. J., Arri, F. H., & Luna, A. L. G. (2021). The use of the smartphone for the management of collaborative work in argentine higher education students during the COVID-19 pandemic. [O uso do smartphone para a gestão do trabalho colaborativo em estudantes argentinos do ensino superior durante a pandemia de COVID-19] *Contratexto*, (36), 65-85. doi:10.26439/CONTRATEXTO2021.N036.5195
- [34] Albitres-Flores, L., Pisfil-Farroñay, Y. A., Guillen-Macedo, K., Niño-Garcia, R., & Alarcon-Ruiz, C. A. (2020). Interns' perceptions about the medical internship suspension during the covid-19 quarantine. [Percepción de los internos sobre la suspensión del internado médico durante la cuarentena por la covid-19] *Revista Peruana De Medicina Experimental y*

- Salud Publica, 37(3), 504-509. doi:10.17843/rpmesp.2020.373.5729
- [35] Aldana, C., Revilla, M., Saavedra, Y., Mestanza, V., & Palacios, C. (2020). Post COVID-19 global macrorends in the pedagogical practice to achieve student outcomes-'ICACIT'. Paper presented at the Proceedings of the 2020 IEEE International Symposium on Accreditation of Engineering and Computing Education, ICACIT 2020, doi:10.1109/ICACIT50253.2020.9277691 Retrieved from www.scopus.com
- [36] Aldeman, N. L. S., de Sá Urtiga Aita, K. M., Machado, V. P., da Mata Sousa, L. C. D., Coelho, A. G. B., da Silva, A. S., . . . do Monte, S. J. H. (2021). Smartpathk: A platform for teaching glomerulopathies using machine learning. *BMC Medical Education*, 21(1) doi:10.1186/s12909-021-02680-1
- [37] Alencar, N. E. S., Lima, F. F. F., De Oliveira Gouveia, M. T., & Da Silva, G. R. F. (2021). Fake news on coronavirus in the context of the COVID-19 pandemic: A documentary analysis. [Notícias falsas em tempos de pandemia pelo novo coronavírus: Uma análise documental] *Revista Cuidarte*, 12(2) doi:10.15649/CUIDARTE.1297
- [38] Alessi, J., de Oliveira, G. B., Franco, D. W., Becker, A. S., Knijnik, C. P., Kobe, G. L., . . . Telo, G. H. (2021). Telehealth strategy to mitigate the negative psychological impact of the COVID-19 pandemic on type 2 diabetes: A randomized controlled trial. *Acta Diabetologica*, 58(7), 899-909. doi:10.1007/s00592-021-01690-1
- [39] Alfaro, L., Rivera, C., Luna-Urquizo, J., Castañeda, E., Cueva, J. Z., Rivera-Chavez, M., & Fialho, F. (2021). A review of 20 years of adaptive e-learning. Challenges and opportunities of online learning (pp. 275-315) Retrieved from www.scopus.com
- [40] Alfaro, L., Rivera, C., Luna-Urquizo, J., Castaneda, E., Zuniga-Cueva, J., & Rivera-Chavez, M. (2021). New trends in e-technologies and e-learning. Paper presented at the EDUNINE 2021 - 5th IEEE World Engineering Education Conference: The Future of Engineering Education: Current Challenges and Opportunities, Proceedings, doi:10.1109/EDUNINE51952.2021.9429120 Retrieved from www.scopus.com
- [41] Ali Shah, S. T., Mansoor, M., Mirza, A. F., Dilshad, M., Khan, M. I., Farwa, R., . . . Iqbal, H. M. N. (2020). Predicting COVID-19 spread in pakistan using the siR model. *Journal of Pure and Applied Microbiology*, 14(2), 1423-1430. doi:10.22207/JPAM.14.2.40
- [42] Ali, M., de Azevedo, A. R. G., Marvila, M. T., Khan, M. I., Memon, A. M., Masood, F., . . . Haq, I. U. (2021). The influence of covid-19-induced daily activities on health parameters—a case study in malaysia. *Sustainability (Switzerland)*, 13(13) doi:10.3390/su13137465
- [43] Alkhaldi, G., Aljuraiban, G. S., Alhurishi, S., De Souza, R., Lamahewa, K., Lau, R., & Alshaikh, F. (2021). Perceptions towards COVID-19 and adoption of preventive measures among the public in saudi arabia: A cross sectional study. *BMC Public Health*, 21(1), 1251. doi:10.1186/s12889-021-11223-8
- [44] Alkire, S., Nogales, R., Quinn, N. N., & Suppa, N. (2021). Global multidimensional poverty and COVID-19: A decade of progress at risk? *Social Science and Medicine*, 291 doi:10.1016/j.socscimed.2021.114457
- [45] Alkmim, M. B. M., Marcolino, M. S., de Oliveira, C. R. A., Borges, I. N., Cardoso, C. S., Rocha, G. M., . . . Ribeiro, A. L. P. (2021). TeleCOVID-19: A multifaceted strategy from a public brazilian telehealth service during the COVID-19 pandemic. *Telehealth innovations in remote healthcare services delivery: Global telehealth 2020* (pp. 1-10) doi:10.3233/SHTI210022 Retrieved from www.scopus.com
- [46] Alkmim, M. B. M., Marcolino, M. S., De Oliveira, C. R. A., Borges, I. N., Cardoso, C. S., Rocha, G. M., . . . Ribeiro, A. L. P. (2021). TeleCOVID-19: A multifaceted strategy from a public brazilian telehealth service during the COVID-19 pandemic doi:10.3233/SHTI210022 Retrieved from www.scopus.com
- [47] Allande-Cussó, R., Linares Manrique, M., Gómez-Salgado, J., Romero Ruiz, A., Romero-Martín, M., García-Iglesias, J. J., & Ruiz-Frutos, C. (2021). Anxiety and fear related to coronavirus disease 2019

- assessment in the spanish population: A cross-sectional study. *Science Progress*, 104(3) doi:10.1177/00368504211038191
- [48] Almeida, A., & Silva, Y. F. O. (2021). Distance education and covid-19: Reports of professionals from a network education center in goiás. [Ead e covid-19: relatos de profissionais de um centro de ensino em rede de goias] *Praksis*, 3, 223-237. doi:10.25112/RPR.V3.2577