# COMPARTIMENTUL

# *SOCIOLOGIE*

CZU 37.091(478+662.6):004 DOI https://doi.org/10.52388/1812-2566.2021.4(95).06

# IMPACT OF COVID-19 ON PSYCHO-PEDAGOGICAL ISSUES OF REMOTE TEACHING. A COMPARATIVE STUDY MOLDOVA - NIGERIA

# **Elena RAILEAN**

Doctor of pedagogy, Associate Professor, American University of Moldova, University of Political and Economic European Studies "Constantin Stere" e-mail: *elenarailean32@gmail.com* <u>http://orcid.org/0000-0002-7893-9742</u>

## Ayo GOODNESS

Graduate in Psychology, American University of Moldova e-mail: *luzgstar@gmail.com* <u>http://orcid.org/0000-0002-9435-3768</u>

With the emergence of the COVID-19 pandemic, both teachers and students were forced to acquire competence remotely through online learning environments. This article aims to investigate how COVID-19 influenced the learning outcomes in Moldova and Nigeria from the perspective of educational psychology. Based on the complexity of the questions of the online survey, developed in Romanian and English, the scale for measuring learning outcomes in distance learning is established. The scale is composed of eight dimensions (i.e. the best teaching format, the best teaching method for a contemporary student, the most affordable category of methods, the most important method of learning, the most used digital resources, the most used method to evaluate students' knowledge, the most appropriate statement of assessment and balance of assessment, measurement, and testing tools). It was concluded that respondents from both countries (N=182), choice face-to-face as the best teaching format and paper tests photographed and transmitted, as the most used method to evaluate students' knowledge. The differences are in the perception of learning strategies and the best teaching methodology for achieving lifelong outcomes. Future research could improve understanding of these psycho-pedagogical issues. **Keywords:** COVID-19 pandemic, education, distance teaching, psycho-pedagogical problems, knowledge.

# IMPACTUL COVID-19 ASUPRA PROBLEMELOR PSIHO-PEDAGOGICE ALE PREDĂRII LA DISTANȚĂ. STUDIU COMPARAT MOLDOVA - NIGERIA

Odată cu apariția pandemiei COVID-19, atât profesorii, cât și elevii au fost obligați să dobândească competențe de la distanță prin medii de învățare online. Acest articol își propune să investigheze modul în care COVID-19 a influențat rezultatele învățării în Moldova și Nigeria din perspectiva psihologiei educaționale. În baza complexității întrebărilor sondajului online, elaborat în română și engleză, este stabilită scala de măsurare a rezultatelor învățării în predarea la

2021, nr. 4 (95)

distanță. Scala este compusă din opt dimensiuni (cel mai bun format de predare, cea mai bună metodă de predare pentru un elev contemporan, cea mai abordabilă categorie de metode, cea mai importantă metodă de învățare, cele mai utilizate resurse digitale, cea mai utilizată metodă de evaluare a cunoștințelor elevilor, cea mai adecvată declarație de evaluare și echilibrul instrumentelor de evaluare, măsurare și testare). În sumar, respondenții din ambele țări (N = 182), aleg metoda față în față ca cel mai bun format de predare și testele pe hârtie, fotografiate și transmise, ca cea mai utilizată metodă de evaluare a cunoștințelor elevilor. Diferențele constau în percepția strategiilor de învățare și în metodologia de predare pentru obținerea rezultatelor pentru tot parcursul vieții. Cercetările viitoare ar putea îmbunătăți înțelegerea acestor probleme psihopedagogice.

Cuvinte-cheie: pandemie COVID-19, educație, predare la distanță, probleme psihopedagogice, cunoștințe.

## L'IMPACT DU COVID-19 SUR LES PROBLÈMES PSYCHO-PÉDAGOGIQUES DE L'ENSEIGNEMENT À DISTANCE. ÉTUDE COMPARATIVE MOLDOVA - NIGÉRIA

Avec l'avènement de la pandémie de COVID-19, les enseignants et les élèves ont été contraints d'acquérir des compétences à distance grâce à des environnements d'apprentissage en ligne. Cet article vise à étudier comment COVID-19 a influencé les résultats d'apprentissage en Moldava et au Nigeria du point de vue de la psychologie de l'éducation. Sur la base de la complexité des questions de l'enquête en ligne, élaborées en roumain et en anglais, l'échelle de mesure des résultats d'apprentissage dans l'enseignement à distance est établie. L'échelle est composée de huit dimensions (le meilleur format d'enseignement, la meilleure méthode d'enseignement pour un étudiant contemporain, la catégorie de méthodes la plus accessible, la méthode d'apprentissage la plus importante, les ressources numériques les plus utilisées, la méthode d'évaluation des connaissances des étudiants la plus utilisée, l'énoncé d'évaluation le plus approprié et l'équilibre des outils d'évaluation, de mesure et de test). En résumé, les répondants des deux pays (N - 182) choisissent le choix en face à face, comme le meilleur format d'enseignement et de tests sur papier photographiés et transmis, comme la méthode la plus utilisée pour évaluer les connaissances des élèves. Les différences résident dans la perception des stratégies d'apprentissage et dans la méthodologie d'enseignement pour les résultats tout au long de la vie. Des recherches futures pourraient améliorer la compréhension de ces problèmes psychopédagogiques.

Mots-clés: pandémie COVID-19, éducation, enseignement à distance, problèmes psychopédagogiques, connaissances.

### ВЛИЯНИЕ COVID-19 НА ПСИХО-ПЕДАГОГИЧЕСКИЕ ЗАДАЧИ ДИСТАНЦИОННОГО ОБУЧЕНИЯ. СРАВНИТЕЛЬНОЕ ИССЛЕДОВАНИЕ МОЛДОВА - НИГЕРИЯ

С наступлением пандемии COVID-19 и учителя, и ученики были вынуждены приобретать навыки дистанционного обучения в среде онлайн-обучения. Данная статья направлена на исследование влияния COVID-19 на результаты обучения в Молдове и Нигерии с точки зрения педагогической психологии. На основе комплексных вопросов онлайн-опроса, проведенного на румынском и английском языках, была установлена шкала для измерения результатов обучения при дистанционном обучении. Шкала состоит из восьми измерений (лучший формат обучения, лучший метод обучения для современного студента, наиболее доступная категория методов, самый важный метод обучения, наиболее используемые цифровые ресурсы, наиболее используемый метод оценки знаний студентов, наиболее подходящее заявление об оценке и баланс инструментов оценки, измерения и тестирования). Таким образом, респонденты из обеих стран (N = 182) выбрали очный вариант как лучший, а бумажные тесты с фотографией и передачей - как наиболее распространенный метод оценки знаний студентов. Различия состоят в восприятии стратегий обучения и методики обучения для достижения результатов на всю жизнь. Будущие исследования могли бы улучшить понимание этих психо-педагогических вопросов.

Ключевые слова: пандемия COVID-19, образование, дистанционное обучение, психо-педагогические вопросы, знания.

#### Introduction

In 2020 began one of the most severe global health crises ever declared by the World Health Organisation, known as COVID-19. The COVID-19 pandemic has affected people regardless of nationality, level of education, and income. However, as was noted by Christian Lowe [1], students from privileged backgrounds, supported by their parents and able to learn, could find their way past closed school doors to alternative learning opportunities, but those from disadvantaged backgrounds often remained shut out when their schools shut down. As a result, disruption to schooling stemming from the COVID-19 epidemic will cause a skill loss that could result in a 1.5% drop in global economic output for the rest of this century.

The COVID-19 crisis has exposed the many inadequacies and inequities in all education systems around the world – from access to the broadband and computers needed for remote learning and the supportive environments needed to focus on learning, up to the misalignment between resources and needs. While the community has made concerted efforts to maintain continuity during this period, children and students have had to rely more on their resources to continue learning remotely through the Internet, television, or radio.

School closure affected students and teachers in third-world countries. In the Republic of Moldova, where online teaching, learning, and assessment were not an innovation, the only downside was "to celebrate" socially distant in specific situations. For Nigeria, especially in its rural areas, students left school and stayed home, putting a pause on their learning and waiting for Internet access. In most successful situations, remote learning was a sort of new experience in sense of having the classes online via Google Classroom, Zoom meeting, Duo meets, and Skype. Moreover, the country has its educational system built around the premise of face-to-face education, so the pandemic has exposed these flaws in the system.

The *goal* of this article is to analyze the impact of COVID-19 on learning outcomes. It offers an in-depth look at the results of an online survey conducted in Moldova and Nigeria to gain a better understanding of how well remote teaching and innovative models of assessment are adopted by both teachers and students. This will allow identifying issues facing the global situation of remote learning and solutions for future trends. The online survey was conducted during a time when the COVID-19 epidemic was spreading over the world.

# Rising a new model of research in digital learning

Research in digital learning has been to respond to the COVID-19 pandemic with "emergency eLearning" protocols, allowing remote teaching, learning, and assessment. "The campus closure and sudden switch from in-person face-to-face education to remote instructions is just a baby step experiment in the long journey to offering online education which includes effective student engagement tools and teacher training. This may pave for stronger bonds between universities, online education companies, and technology providers post-pandemic. The universities will need to pay serious attention to having educators trained and equipped with digital technology for a smooth teaching-learning process" [2].

Yu [4] notes that disadvantages of online learning exist in learner engagement, academic success, and time consumption, despite that numerous studies have reported the effectiveness of online learning compared with traditional learning. Many teachers still resisted the use of innovative pedagogical approaches recommended for online learning environments and believed that online learning could decrease the engagement of students. On the other hand, digitalization of teaching, interactive assessment, and remote communication may become a norm for the post-pandemic period. The problem is that pandemic has exposed the vulnerabilities and shortcomings of the current digital learning models and knowledge management systems and focus on digital competence development, but not on psychological aspects of learning in digital environments. Such aspects as interest, motivation, curiosity, creativity, intelligence, cognition, metacognition, cognitive ergonomics, and others remain under the focus of training programs.

A not less important problem is poverty. Children entering school in 2019 and 2020 in the future need to abandon the idea that educational resources are limited for those from third-world countries. They will live in the more and more globalized and technologized world and, therefore, "they will need to be responsible and empowered, placing collaboration above division and sustainability above short-term gain. In the face of an increasingly volatile, uncertain, complex and ambiguous world, education can make the difference as to whether people embrace the challenges they are confronted with or whether they are defeated by them" [3].

COVID-19 pandemic lockdown affected the learning outcomes. First, remote teaching helps to keep the students up and running with an opportunity for self-study. Second, the learning process is in other conditions emplacing the importance of ergonomic learning spaces. However, the main challenge remote education faces is how to give lessons in an online/offline environment with everyday stressful news. Therefore, at least two more issues appear in teacher training: *content delivery* or/and *learning outcomes*. Due to the prevalence of remote teaching, educational activities have been limited in time. Concerns are being raised, but attempts are being taken to ensure that the academic year does not be interrupted by changing to a remote online manner. For this investigation, from the best of our knowledge, it was established the scale of measurement of the learning outcomes in forced remote teaching, learning, and assessment, which is composed of eight dimensions:

• the best teaching format

• the best teaching method for a contemporary student

• the most comprehensive category of methods

• the most important method of learning

• the most used digital resources

• the most used method to evaluate students' knowledge

• the most appropriate statement of assessment

• balance of assessment, measurement, and testing tools.

Nevertheless, few previous studies have examined the effect of COVID-19 on learning outcomes, the specifics of logotherapy, and the effectiveness of online assessment in new conditions [4; 5]. This study, centering on the impact of the COVID-19 pandemic on learning outcomes and the psychological and pedagogical aspects of a remote teaching in the global education context, is thus considered meaningful and important.

# Method of research

This investigation adopted a mixed-design research method to analyze both quantitative and qualitative data obtained from two online surveys, developed in Romanian and English. The dependent variable is learning outcomes, and the independent ones are effective methods for teaching, the most comprehensive category of methods, the most important method of learning, digital resources used to convey the teaching messages in the pandemic period, psychological and pedagogical aspects of online assessment protocol, and self-evaluation of the learning experience.

Respondents of online survey (N=64) were re-

cruited via Social Media. Google Form questionnaire worksheet was utilized for data gathering and statistical analyses. The research instrument is an online survey consisting of 16 questions, as follows:

# 1. General questions

1.1. Are you a pre-university student, a university student, a college student, or a teacher?

1.2. How old are you?

1.3. What is the last stage of school completed?

1.4. Where do you do the core activity?

# 2. Specific questions

2.1. In what format are you currently teach/le-arn?

a) face- to face (school classroom)

b) remote learning

c) flipped learning

2.2. In your opinion, what is the best teaching method for a contemporary student?

a) working with the textbook in real school setting

b) comprehensive reading

c) teacher's lecture

d) interactive discussion with peers

Other

2.3. Which, in your opinion, is the most comprehensive category of methods?

a) methods of acquiring and transmitting knowledge

b) methods of exploring reality (based on direct or indirect contact with reality)

c) action-based methods (role play, project, etc.)

d) scheduled training/evaluation

Other

2.4. What, in your opinion, is the most important method of learning?

a) story telling

b) practical work

c) description

d) experiment

Other

2.5. What digital resources were used to convey the teacher's message?

a) simulations with educational software

b) video/audio files

c) images from Internet

d) photos/videos made personally

Other

2.6. How was evaluated the student's activity in a situation of remote teaching?

a) tests on paper photographed and transmitted

b) computer interactive tests

c) oral communication

Other

2.7. Which of the following statements, in your opinion, is the most appropriate for the pandemic situation?

a) assessment measures the learning outcomes

b) assessment measures the quality of the teaching process

c) assessment is a unique opportunity to construct learning

2.8. Educational assessments are fair if they are

a) correct - sensitive to the psycho-pedagogical characteristics of students

b) accurate - the measurement error of competencies is minimized

c) valid - obtains and provides the same results for all situation

2.9. The assessment, measurement, and testing tools are balanced if

a) are based on the principles of coherence, comprehensiveness, and continuity

b) the state and schools work together for the most successful strategies

c) include diagnostic activities as well as a formative and summative assessment.

2.10. How do you evaluate your learning experience within COVID-19?

a) interesting

b) stressful

c) challenged

2.11. How do you rank the impact of educational strategies, methodologies, and practices on learning outcomes within COVID-19? (from 1 to 5).

# Results

In this section, it is presented responses for specific questions answered through two online surveys, with respondents from Moldova and Nigeria (Table 1).

# Table 1. Eight dimensions of learning outcomes in forced remote teaching/learning

	Responses	
Questions	<b>Republic of Moldova</b>	Nigeria
the best teaching format	face-to face (school classroom)	face- to face (school classroom)
the best teaching method for a contemporary student	interactive discussions with peers	working with the textbook in the real school setting
the most comprehensive category of methods	action-based methods (i.e. role- play, project-based learning, etc.)	methods of exploring reality (based on direct or indirect contact with reality)
the most important method of learning	problematization	practical work
the most used digital resources	video / audio files	video / audio files
the most used method to evaluate students' knowledge	tests on paper photographed and transmitted	tests on paper photographed and transmitted
the most appropriate statement of assessment	assessment measures learning outcomes	assessment measures the quality of the teaching process
the assessment, measurement, and testing tools are balanced if	are based on the principles of coherence, comprehensiveness, and continuity	are based on the principles of coherence, comprehensiveness, and continuity

Source: developed by the authors.

According to the table, in both countries, online learning is under the full comprehension of their users. The most of respondents prefer face-to-face in the classroom even digital technologies offer interesting opportunities for interactive teaching, learning, and assessment. This idea is proved by choosing the most used method to evaluate students' knowledge in the form of tests on paper photographed and transmitted.

### Limitations of study

There are at least two limitations to this study. First, the respondents were limited to the Republic of Moldova and Nigeria. Second, this investigation was conducted during the COVID-19 pandemic and some of the respondents may be under stress, fear, or panic. This finding might not be generalizable to global contexts.

# Conclusions

The COVID-19 has created an opportunity to explore online learning as an alternative to the classical face-to-face model. The conducted study revealed that although the Governments of Moldova and Nigeria have taken important steps to ensure the continuity of the didactic process in the context of the COVID-19 pandemic, there is still a long way until we have successfully implemented an effective online educational system.

The research gave a clear prediction to the future of education impacted by global context and based on lifelong learning methods. The established scale for the measurement of the learning outcomes in forced remote teaching, learning, and assessment and its eight dimensions could be an important tool for investigation for emerging situations in learning processes.

### **Bibliographical references**

1. LOWE, C. (2020). Skills lost due to COVID school closures will hit output for generations: OECD. Reuters. – https://www.reuters.com/article/us-health-coronavirus-education-impact-idUSKBN25Z1BC (accesat - noiembrie 2021).

2. RASHID, S., YADAV, S. (2020). *Impact of Co-vid-19 Pandemic on Higher Education and Research.* // In: Indian Journal of Human Development. https://journals.sagepub.com/doi/10.1177/0973703020946700 (accesat - noiembrie 2021).

3. OECD. (2018). The future of education and skills. Towards the future 2030. – https://www.oecd.org/ education/2030/E2030%20Position%20Paper%20 (05.04.2018).pdf (accesat - noiembrie 2021).

4. YU, Z. (2021). The effects of gender, educational level, and personality on online learning outcomes during the COVID-19 pandemic. // In: International Journal of Educational Technology in High Education 18, 14. – https://doi.org/10.1186/s41239-021-00252-3 (accesat - noiembrie 2021).

5. RAILEAN, E., PAVALACHI, D. (2021). *Studying the syndrome of Meaning In Life during the pandemic.* // In: Studia Universitatis Moldaviae (Seria Științe ale Educației). pp. 172-182. DOI: http://doi.org/10.5281/ zenodo.4889214. (accesat - noiembrie 2021).