ISSN: P-2455-0515
E- 2394-8450

Educreator Research Journal

OPEN ACCESS

VOLUME–XI, ISSUE–III

MAY – JUNE 2024

Original Research Article

COPING LEARNING LOSS, IMPROVING LEARNING ENVIRONMENT AND CONTINUING TEACHER SUPPORT: PRESERVICE TEACHERS' PSYCHOLOGICAL AND LEARNING PREFERENCES IN POST-PANDEMIC EDUCATION

Anagha Mahajan & ** Dr. Ashwini Wadegaonkar

** Assistant Professor, Dr. Vishwanath Karad MIT World Peace University, Pune.*

***Assistant Professor, Symbiosis Teaching Learning resource Centre (STLRC) Symbiosis International (Deemed University), Pune*

Abstract:

Teachers build the future generations, but what if 'teachers to be' have lost the learning? The suspension of physical instruction due to the pandemic, left the preservice teachers with the learning loss and thus led to other psycho-academic issues. It is necessary to know how they have coped up psychologically and academically post-pandemic. With this motive we conducted an online survey on the preservice teachers (n=75), from a teacher education institute in a private university, to understand the psychological and learning issues among the pre-service teachers' and their coping preferences. The research aims to find out (i) the Pre- service teachers' preferences in post-pandemic education regrading: Coping Learning Loss, Improving Learning Environment & Continuing Teacher Support and (ii) the best implemented 'learner and teacher level strategies' to overcome learning loss due to COVID-19. In the light of the objectives, the survey results indicate that pre-service teachers made to cope up with the learning loss incurred due to COVID 19 pandemic by altering their study habits, increased focus on mental and physical health, self-motivation activities, learning new technology skills, managing digital resources, and developing group work skills. Improving learning environment can be effective in coping up, by providing infrastructural, physical and technology resources, communication clarity in expectations, teacher training, and capacity building of learners for hybrid education. The learners' expectations from teachers to cope up with learning loss includes curriculum reforms for hybrid learning, project-based methods, flexible approach, game-based learning, academic support, personal consultation, personalized teaching and flexibility in assessments.

Key words: *Coping Strategies, Learning Environment, Preservice Teachers, Learning Loss, Post -Pandemic Education.*

Introduction:

The learning loss in the pandemic occurred due to the disruption in face-to-face teaching learning process, caused due to the COVID 19, is a significant issue of concern globally. There were both positive and negative changes experienced by the teaching community, in the post- pandemic period. Post-pandemic education refers to the significant shifts from the conventional teaching-learning to the unforeseen education system, provided a new perspective to learning and development of students, with more openness and flexibility. The huge learning loss experienced by the learners, affected mental health, learning abilities, attention, focus, and most importantly the overall learning environment. The term learning loss is used to describe the declines in knowledge and skills of learners (Pier, et al., 2021). Compare to previous year, when there is no academic progress, the learning loss occurs (Donnelly & Patrinos, 2021, Pier et al., 2021).

Due to the limitations in the curriculum transaction, especially for the skill-based professional programmes in the post-pandemic period was challenging, as teachers and learners were not fully trained to adapt the online

ISSN: P-2455-0515
E- 2394-8450

Educreator Research Journal

OPEN ACCESS

VOLUME–XI, ISSUE–III

MAY – JUNE 2024

Original Research Article

learning. Teacher education courses also witnessed unpreparedness of teachers and learners to cope up with the expected technology integration in day-to-day education. The suspension of physical instruction due to the pandemic, left the preservice teachers with the learning loss and thus led to other psycho-academic issues. Learnings from the post-pandemic education highlighted the importance of coping strategies, overcoming learning loss by putting in efforts from learners with the teachers' support to bridge the skills and knowledge gaps. The pandemic thus underscored the importance of psychological and academic modifications at individual level. With the purpose of understanding the long- term adjustments initiated by learners in their learning practices and post-pandemic expectations of learners from the system, the researchers conducted the survey with research questions -

1. What are the Preservice teachers' preferences in the post-pandemic education regrading: Coping Learning Loss, Improving Learning Environment, Continuing Teacher Support
2. What can be the best implemented 'learner and teacher level strategies' to overcome learning loss due to COVID-19?

Literature review:

1. Covid-19 has triggered significant interruption to the international education system, scholars are concerned with the impact on learning progress and subsequent learning loss. UNESCO (2020) reported that 1.6 billion learners in 94% of the global student population, are affected by the closure of institutions. In response to this disruption, educational researchers analyzed the impact of this on learning progress (Donnelly & Patrinos, 2021). The Center for Research on Education Outcomes (CREDO) at Stanford University measured the extent of student-level learning losses in 19 states, within a post-pandemic school semester. It estimates the loss on student performance, additional adjustments for learning loss, and on school-specific factors (Aldosemani and Al Khateeb, 2022; Brooks et al., 2020). It was stated that it could take years to recover from the losses that occurred in the pandemic. It was also recommended that the rigorous diagnostic assessments at the student level are urgently needed with regular reviews. The loss in studying was observed when there was a closure of schools during the pandemic (Grätz, M., & Lipps, O., 2021). Donnelly & Patrinos, (2021), analyzed recorded evidence of learning loss, through systematic review and most studies found evidence of student learning losses. Turner, et al. (2020), predicted that learners entering undergraduate courses will have weaker subject knowledge than prior cohorts as the teaching got interrupted due to the pndemicdecay and cancellation of their final examinations. This is consistent with the literature on forgetting, and learning loss. Learning loss is the difference between a current level of learning and the ideal or normal state (Aldosemani & Al Khateeb, 2022). Consequently, apparent difficulties in accessing content (Kuhfeld et al., 2020), addresses the performance gaps (Grtz & Lipps, 2021). Chadda I. & Kaur H. (2021), analyzed the perception and acceptability of the transition from offline to online learning among the students of higher education in the Indian context. The study found that both online and offline forms of learning were accepted by students, almost half of the respondents perceived online mode and the other half perceived offline mode. Skar, Graham & Huebner (2021), examined the impact of the pandemic and emergency

ISSN: P-2455-0515
E- 2394-8450

Educreator Research Journal

OPEN ACCESS

VOLUME–XI, ISSUE–III

MAY – JUNE 2024

Original Research Article

distance learning on writing and found that the pandemic and emergency distance learning were negatively impacting writing. A study conducted by Strumpf, n.d., reported that all the stakeholders know the consequences of this period and distant learning increased the depression, anxiety and led to student learning loss.

2. Several studies conducted globally and at local level, recommended that normalizing the education in post-pandemic period can take many years and thus reiterates the significance of understanding learners' perspective in their coping strategies, that may be helpful for the other learners as well as educators. The research gap is identified in the research review specifically considering the coping strategies as well as in the teacher education domain.

Methodology:

1. **Research design:** The survey was conducted to understand how preservice teachers have coped up psychologically and academically post-pandemic. 75 preservice teachers have voluntarily participated, from a teacher education institute in a private university. The written consent was taken for their participation in the survey. The responses on the coping strategies with respect to the psychological and learning coping issues among the preservice teachers were gathered.
2. **Data collection tool:** The online questionnaire was used to collect the responses on coping with learning loss from the 75 preservice teachers of a teacher education institute. The survey instrument was developed based on the insights from the literature review and experts' consultations. The questionnaire includes three sections – Learner level strategies for coping with learning loss, Preferences suggested by respondents for improving the learning environment in post- pandemic education, and Continuing teacher support expected by the preservice teachers from the educators. The structure of the tool is presented in Table 1.

Table 1: Components of the data collection tool

Dimension	Coping Learning Loss	Improving Learning Environment	Continuing Teacher Support
Components	- Study habits - Mental health - Physical health - Self-motivation - Digital divide - Improving focus/concentration - Teamwork - Rescheduling - Expert help	- Infrastructure and resources - Teacher preparedness - Curriculum - Pedagogy - Skill development - Learning environment - Communication - Teaching Learning Material - Time allotment - Academic support	- Bridging gaps - Flipped classrooms - Flexible alternative assessments - Hybrid model - Technology training - Adjusting pedagogy - Health support
Statements	11	20	7
			Total 38 statements

ISSN: P-2455-0515
E- 2394-8450

Educreator Research Journal

OPEN ACCESS

VOLUME–XI, ISSUE–III

MAY – JUNE 2024

Original Research Article

Data Analysis and Discussion:

Demographic Information: The demographic details of a survey conducted among student- teachers from various academic streams is presented in Table 2.

Table 2: Demographic information of the participants

Demographic Information		
Frequencies of Gender: M/F		
	Counts	% of Total
Female	70	93.30%
Male	5	6.70%
Frequencies of Previous Education: Undergraduate/ Postgraduate		
	Counts	% of Total
Postgraduate	45	60%
Undergraduate	30	40%
Frequencies of Basic Academic Streams: Arts/Commerce/Science		
	Counts	% of Total
Arts	25	33.30%
Commerce	19	25.30%
Science	31	41.3

The survey reveals a predominance of female respondents, accounting for 93% of the total, with male participants making up only 7%. In terms of educational attainment, 60% of the participants reported having postgraduate qualifications, while the remaining 40% had completed undergraduate studies. The academic streams of the respondents are well- represented, with student-teachers coming from arts, commerce, and science backgrounds. Additionally, the science category includes 4% respondents from the engineering stream, underscoring the inclusion of applied sciences within the data set.

The responses to the questions about coping with learning Loss (Learner-level strategies) and study habits reveals several key insights into the perceptions and preferences of the survey participants regarding learning habits as depicted in Figure 1.

ISSN: P-2455-0515
E- 2394-8450

Educreator Research Journal

OPEN ACCESS

VOLUME–XI, ISSUE–III

MAY – JUNE 2024

Original Research Article

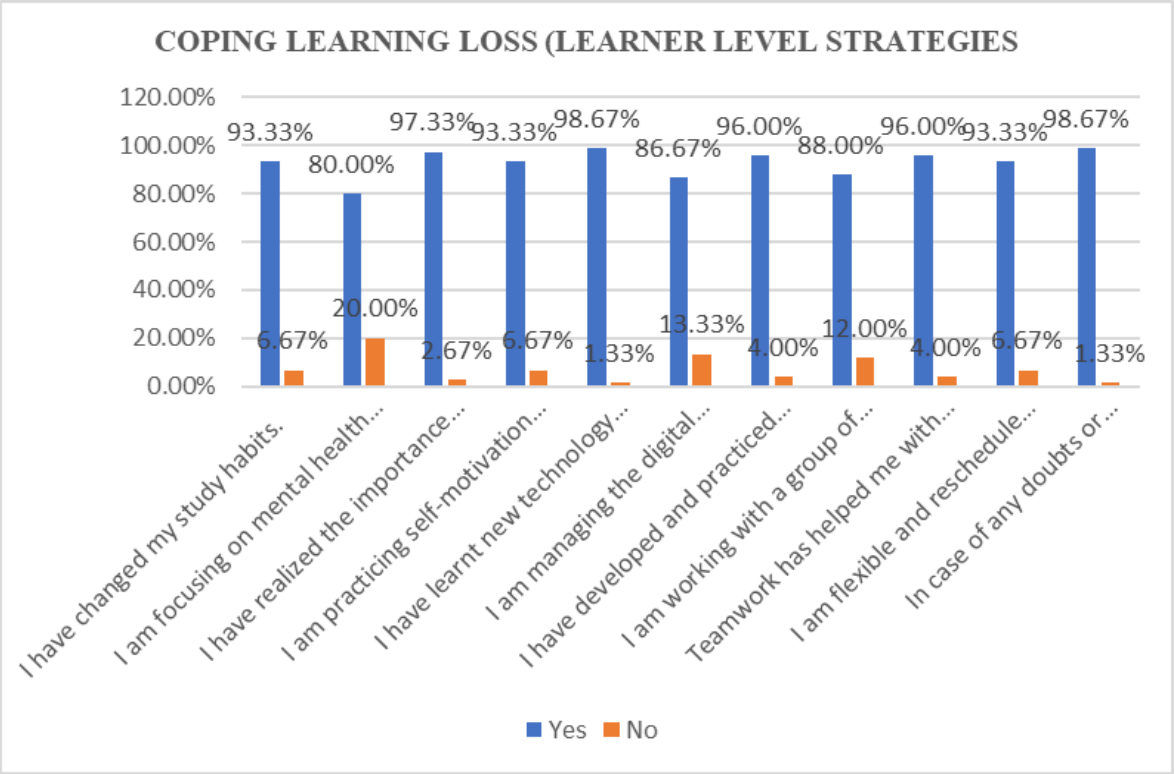

Figure 1: Coping Learning Loss (Learner level strategies)

A significant majority of 9% have modified their study habits considering learning in the new educational context. With 80% focusing on mental health, there's a substantial recognition of its critical role in overall well-being and learning. The 20% not focusing on mental health may have different coping strategies or do not perceive it as an issue. 97% of the participants have gained a renewed appreciation for physical health, and are actively working to improve it. The majority, 93%, are engaging in self-motivation activities to counter learning loss, suggesting an autonomous and determined approach. 99% participants indicate that respondents have embraced the necessity of technology, equipping themselves with new skills for online learning, a critical component of today's educational environment and 87% effectively manage digital resources, although 13% still find this challenging. 96% have devised and practiced strategies to enhance their focus and concentration, a direct response to mitigate learning disruption effects.

Collaboration has been adopted by 88%, those who work with peers to enhance learning and a high percentage (96%) believe that teamwork has been instrumental in improving their academic performance. Flexibility is another key theme, with 93% adjusting their study schedules to optimize their learning, showing adaptability. Seeking assistance from experts or teachers is nearly universal (99%), revealing a strong inclination towards support. Overall, the data suggests that respondents have been highly adaptive, proactive, and collaborative in response to the challenges posed by the pandemic, with a strong focus on health, technology skills, and new learning strategies.

ISSN: P-2455-0515
E- 2394-8450

Educreator Research Journal

OPEN ACCESS

VOLUME–XI, ISSUE–III

MAY – JUNE 2024

Original Research Article

The collective mindset regarding the transition toward a more resilient and effective educational framework is presented in Figure 2.

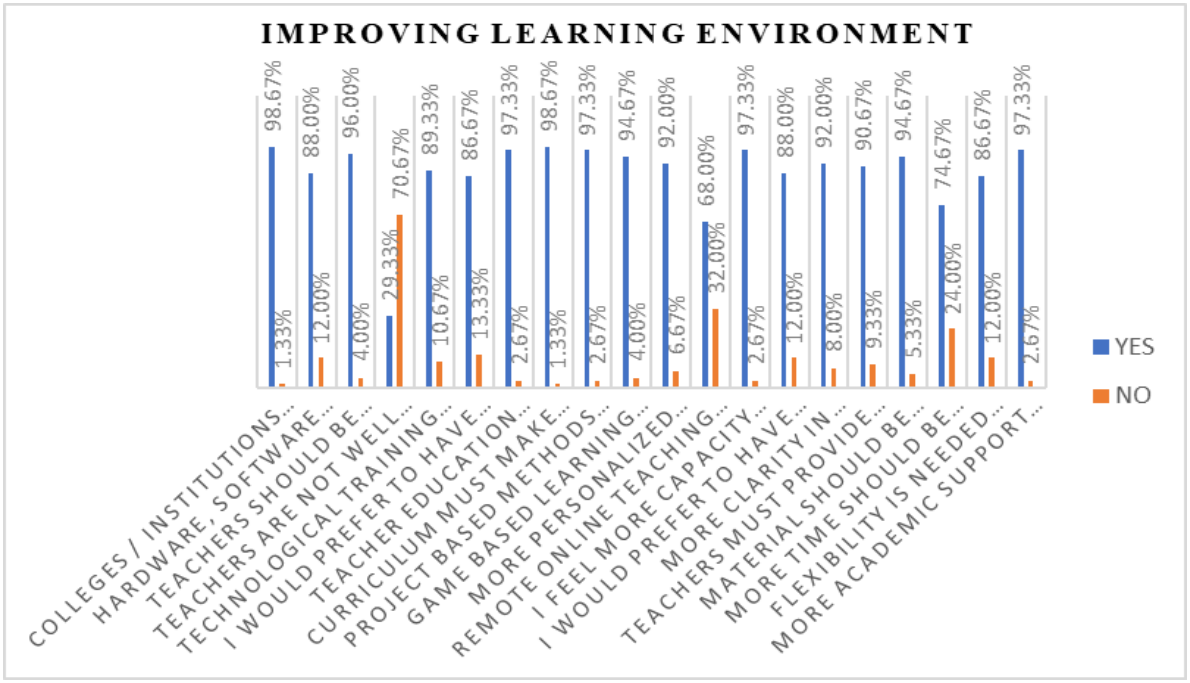

Figure 2: Improving Learning Environment

There is an overwhelming consensus (98%) on the necessity for institutions to provide blended learning infrastructure underscores a significant shift toward hybrid educational models. 88% of them asked for the provision of essential technological resources by educational institution in post-pandemic education. The data signals a pressing need for teacher training in handling blended classes, highlighting the urgency for educators to adapt to new teaching environments.

With a majority 71% on the current technological skill level of teachers, there is a clear message that teacher competency in technology is the area requiring immediate attention and enhancement. The strong agreement (89%) on the need for technological training for teachers emphasizes the gap between current skills and the demands of modern teaching. The preference (86%) for major curricular reform post-pandemic points to a desire for education that is more reflective of current realities and future challenges. The call (97%) for a more skill-based curriculum in teacher education indicates a shift towards practical competencies. The near- unanimous view (99%) on preparing teachers for future generations through the curriculum suggests a forward-thinking attitude. The strong support for project-based (97%) and game- based learning (95%) illustrates an endorsement of engaging and interactive teaching methods that can enhance the learning experience and outcomes. Majority (92%) advocating for personalized teaching, highlights the perceived need for education that can be tailored to individual learning styles and needs. While a significant majority (68%) express a preference for remote online teaching, a substantial minority value in-person interaction. The overwhelming agreement (97%) on the need

ISSN: P-2455-0515
E- 2394-8450

Educreator Research Journal

OPEN ACCESS

VOLUME–XI, ISSUE–III

MAY – JUNE 2024

Original Research Article

for capacity building in areas such as communication, technology, and self-learning skills underscores the evolving requirements for student competencies in a post-pandemic world. There is a strong call (88%) for increased flexibility in educational practices, including timing and assessments. The high expectation (92%) for clear communication from educational institutions reflects a demand for transparency and the efficient relay of information.

The majority (91%) believe that the provision of learning materials before class is necessary, while 95% of them need the self-explanatory materials. The majority (75%) calling for more time for assignments reflects concerns about the workload and stress, while the strong preference (87%) for flexible timelines over rigid scheduling. Nearly unanimous agreement (97%) on the need for more academic support, including expert lectures and personal consultation, demonstrates a widespread recognition of the value of supplemental educational assistance.

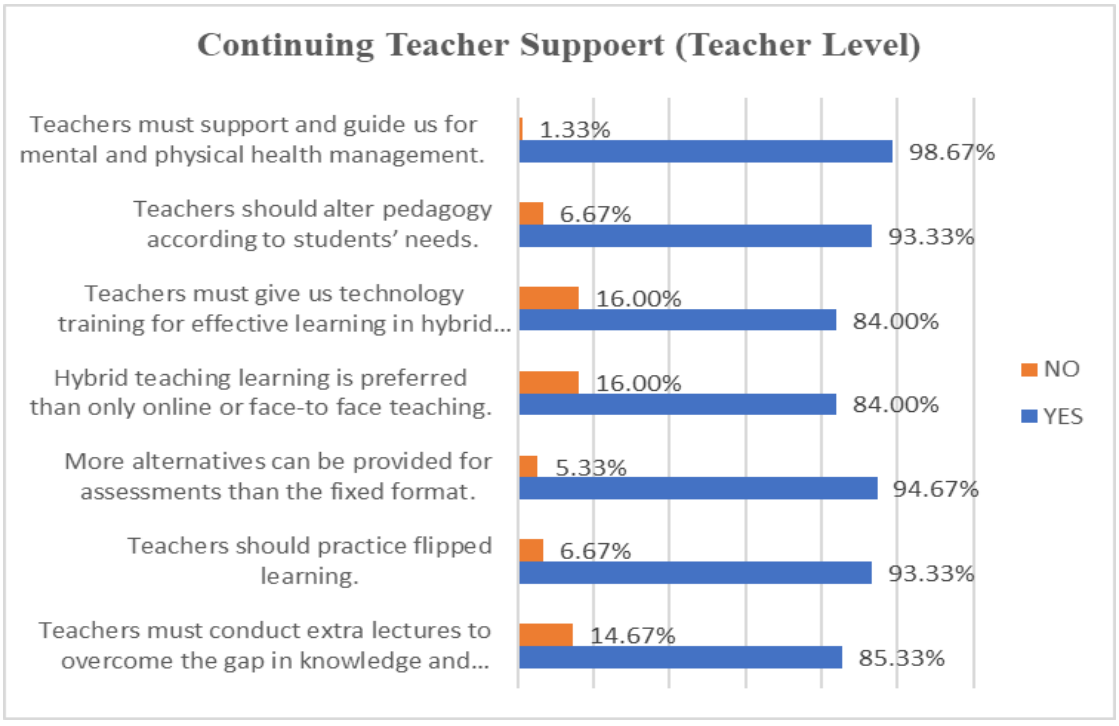

Figure 3: Continuing teacher support

Student and teacher preferences for support in a post-pandemic educational environment underscore the need for holistic teacher engagement, both in academics and in health management. 99% want advice on mental and physical well-being. The desire for tailor-made teaching methods is great: 93% of those surveyed demand teaching that meets the different needs of students. Additionally, 84% recognize the importance of technological competency in hybrid learning scenarios. A significant proportion of 95% advocate for diverse assessment options over traditional methods, indicating the need for assessment systems that capture a range of student abilities. Support for flipped learning is also significant at 93%, indicating that they prefer to engage with content before class, followed by interactive teaching applications. Additionally, 86% support additional lectures to

ISSN: P-2455-0515
E- 2394-8450

Educreator Research Journal

OPEN ACCESS

VOLUME–XI, ISSUE–III

MAY – JUNE 2024

Original Research Article

address learning disruptions caused by the pandemic and would like to see more academic support. Overall, the preferences illustrate a shift toward dynamic, student-centered educational strategies that prioritize well-being and leverage technology for a more immersive learning experience.

Discussion & Conclusion:

A clear majority on preferences for learning methods, express a preference for project-based methods, game-based learning, and flipped classrooms, indicating a shift towards more interactive and student-centered learning approaches. Over 96% of respondents believe that colleges and institutions need to provide infrastructure suitable for blended learning, indicating a clear need for improved educational technology and resources. There is a strong call for more flexibility in education, better clarity of communication from institutions and the provision of self-explanatory materials, reflecting the need for adaptability and clear guidance in learning processes. The results reflect a broad consensus for certain teacher support, particularly the need for additional lectures and the use of flipped learning.

The potential impact of closure of educational institutions may result in a setback to achieve goals and requires a remedial action to be taken to reduce the percent of learning poor (Azevedo, J. P. et al., 2021). To reduce the negative consequences of the learning loss occurred due to the pandemic, adaptive learning and self-regulated learning can be practiced (Aldosemani, T. I., & Al Khateeb, A., 2022). Aligned with the findings of earlier researches, results of this study demonstrate a clear stance toward introducing a future-oriented educational paradigm that is robust, technologically savvy, and responsive to individual needs. These results suggest a broad consensus among respondents for adopting new teaching methods, enhancing technological infrastructure, and revising curricula to better prepare for future educational challenges. The high value placed on mental and physical health support, alongside a call for more personalized and flexible learning environments, underscores the evolving expectations of students and educators in the post-pandemic era.

Acknowledgement:

The authors would like to acknowledge all the students who participated willingly in this study and appreciate their time and efforts. We also appreciate their understanding and cooperation in providing written consent, which ensured ethical standards were maintained throughout the study. Additionally, we acknowledge the Program Director, School of Education, MIT WPU for granting us the necessary permissions and supporting us throughout the data collection process.

Disclosure statement:

The author reports there are no competing interests to declare.

References:

Aldosemani, T. I., & Al Khateeb, A. (2022). Learning loss recovery dashboard: A proposed design to mitigate learning loss post schools closure. Sustainability, 14(10), 5944. https://doi.org/10.3390/su14105944

Azevedo, J. P., Hasan, A., Goldemberg, D., Geven, K., & Iqbal, S. A. (2021). Simulating the potential impacts of COVID-19 school closures on schooling and learning outcomes: A set of global estimates. The World Bank Research Observer, 36(1), 1-40.

ISSN: P-2455-0515
E- 2394-8450

Educreator Research Journal

OPEN ACCESS

VOLUME–XI, ISSUE–III

MAY – JUNE 2024

Original Research Article

Brooks, S. K., Smith, L. E., Webster, R. K., Weston, D., Woodland, L., Hall, I., & Rubin, G. J. (2020). The impact of unplanned school closure on children's social contact: Rapid evidence review. Eurosurveillance, 25(13). https://doi.org/10.2807/1560-7917.es.2020.25.13.2000188

Chadda, I., & Kaur, H. (2021). COVID pandemic and virtual classes: A study of students from Punjab. Asian Association of Open Universities Journal, 16(2), 193–210. https://doi.org/10.1108/aaouj-02-2021-0017

Donnelly, R., & Patrinos, H. A. (2021). Learning loss during Covid-19: An early systematic review. PROSPECTS. https://doi.org/10.1007/s11125-021-09582-6

Dorn, E., Hancock, B., Sarakatsannis, J., & Viruleg, E. (2020). COVID-19 and learning loss— disparities grow and students need help. McKinsey & Company, December, 8, 224-228.

Grätz, M., & Lipps, O. (2021). Large loss in studying time during the closure of schools in Switzerland in 2020. Research in Social Stratification and Mobility, 71, 100554. https://doi.org/10.1016/j.rssm.2020.100554

Kuhfeld, M., Soland, J., Tarasawa, B., Johnson, A., Ruzek, E., & Liu, J. (2020b). Projecting the potential impact of COVID-19 school closures on academic achievement. Educational Researcher, 49(8), 549–565. https://doi.org/10.3102/0013189x20965918

Skar, G. B. U., Graham, S., & Huebner, A. (2021). Learning loss during the COVID-19 pandemic and the impact of emergency remote instruction on first grade students' writing: A natural experiment. Journal of Educational Psychology. https://doi.org/10.1037/edu0000701

Turner, K. L., Hughes, M., & Presland, K. (2020). Learning loss, a potential challenge for transition to undergraduate study following COVID19 school disruption. Journal of Chemical Education, 97(9), 3346–3352. https://doi.org/10.1021/acs.jchemed.0c00705

Cite This Article:

Mahajan A. & Dr. Wadegaonkar A.* (2024).** *Coping Learning Loss, Improving Learning Environment and Continuing Teacher Support: Preservice teachers' psychological and learning preferences in post-pandemic education. In VUCA Environment.* In Educreator Research Journal: Vol. XI (Issue III), pp. 1–9. **DOI:** ***https://doi.org/10.5281/zenodo.11348301