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Editorial: Digital transformation of education in the COVID-19 process and its psychological effects on children

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Editorial on the Research Topic

[Digital transformation of education in the COVID-19 process and its psychological effects on children](#)

Introduction

The declaration of COVID-19 as a pandemic by the World Health Organization (WHO) gave the entire world a clearer picture of the threat posed by the virus to the existence of humanity. The danger posed by this virus cuts across all works of life and geographical borders. Several measures such as physical/social distancing, constant use of masks, washing of hands, and application of hand sanitizers were taken to curb the increasing rate of transfer of this virus from person to person. The field of education cannot be isolated from the sectors affected by the pandemic, causing total physical closure of schools and this resulted in numerous innovative strides by educators, technologists, and all concerned stakeholders. One of these innovative strides was online learning through the digital transformation of education. Distance education, online learning, and remote learning are not novel concepts in education, based on the fact that these concepts have been in existence and in practice prior to the COVID-19 period but not all citadels of learning, educators, and even students supported these concepts due to several reasons such as technology reliance, low motivation, economic factors, etc. However, several scholars have highlighted the merits and potential of these concepts.

The global closure of schools for a long period of time due to the COVID-19 pandemic gave birth to the emergence of various strategies in the quest to continue to support and educate children, and these strategies include the provision of instructional services in-person, distance learning, and various hybrid configurations like remote/distance strategies.

Currently, online education has emerged as a reality for everyone, and the digitalization of the instructional environment has been a challenging process for each and every stakeholder in education making educational psychology integrate all aspects of training, practice, and research as a result of this difficulty. This necessitates the academic discourse that concentrates on psychology and the digital transformation of instructional settings that will incorporate the areas of intervention, assessment, consultation, and other forms of educational service and practices in the foreseeable future.

This collection welcomes articles that addressed emerging and highly significant topics on the changing psychology of children and the digitalization of education. The arguments for and against this digital transformation during the COVID-19 pandemic period seek to contribute to the literature on educational technology and educational psychology. Our Research Topic gathered significant and interesting articles related to documenting the impact of the COVID-19 pandemic on education, and recommendations for solutions with scientific research that are likely to support youth, families, educators, and allied professionals during this unprecedented time. Discussion of new educational technologies and negativistic psychology generated by the quarantined youth are believed to address a wide range of problems that need to be tackled.

The main scope of the collection was basically centered on the digitalization of the school environment and the psychological effects of COVID-19 on children with provisions to attract related articles on the integration of educational data into classrooms, development of modern e-learning systems, flipped classrooms and flipped learning, digitalization of classroom models, educational psychology, effective application of Web 2.0 tools, innovative learning analytics and educational data mining, school psychology, e-reading and importance of technology application in Language learning, and technological leadership. This collection started from the call for articles that lasted for (insert data) months, between (insert day and month) 2021 to (insert day and month) 2022, receiving (insert data) articles, and after a rigorous and constructive review process, (insert data) articles were accepted for publication.

Digitalization for safe school environment, students' financial awareness and financial behavior, and language learning

One of the new significant concepts in education during the post-COVID-19 era is the concept of a safe school environment as a result of the adverse of COVID-19 on education. Technology integration into the teaching and learning process has been highlighted by [McBrayer et al. \(2020\)](#) and [Paci-Green et al. \(2020\)](#) as one of the major avenues to intensify the awareness of the concept of safety in pedagogical practices. [Akdag and Altinay](#) evaluated the effects of digital stories in the context of learning-based themes of safe schools and the perceptions of special educational needs in safe school environments by training school administrators (i.e., principals) and teachers-in-charge with educational videos created for the effectiveness of this process which was assessed *via* reflective opinion forms. Findings from the study revealed the need for schools to have satisfactory safe school features and the need for all stakeholders to take proactive measures to promote coordination in creating a safe school environment. Money-related behavior is something most people engage in on daily bases in life, having sufficient financial proficiency becomes a necessity to effectively manage day-to-day financial activities that include the transformation of large or small assets or debts and expenditures but the degree of this financial knowledge probably differs among people. [Liu and Lin](#)

digitalized an integrated financial education course for 217 students from departments of finance in universities in Fujian through the internet. These students completed this integrated financial education course within 18 weeks, and the results indicated that the digitalization of this course is effective for instructional delivery that circumvents the problems of getting lost in the real-life investment market.

As a result of the COVID-19 pandemic and the swift technological advancement in our contemporary world, the digitalization of education has offered ubiquitous access to educational content irrespective of location and time, and people that are interested in learning new languages but confronted with several challenges such as financial difficulty and the closure of schools during the COVID-19 pandemic have been adopting mobile learning methods. [Betoncu et al.](#) developed a mobile application called "YIT101" for teaching Turkish as a foreign language irrespective of location and time, with a focus on basic Turkish A1-level course content. [Betoncu et al.](#) study highlighted the topical areas to concentrate on with respect to interaction, usability, and content when creating interactive mobile applications learning Turkish as a foreign language.

Challenges confronted by students, parents, instructors, higher institutions, vocational education training (VET), and early childhood schools during the COVID-19 pandemic

[Pradana and Syarifuddin](#) dissected the social issues raised due to a substantial number of school students who do not have access to online learning and teaching facilities during the COVID-19 pandemic period. One of the significant results of a survey conducted by the Indonesian Child Protection Commission (KPAI) on the success of remote learning at home during the COVID-19 pandemic period showed that remote learning challenges should not be overlooked. The weighty pressure put on the people living below the power line as a result of the COVID-19 pandemic has made it difficult for students from low-income earning families to afford digital devices and internet data plans for online education. [Pradana and Syarifuddin](#) surveyed the numerous digital learning challenges confronted by students, parents, and teachers during the COVID-19 pandemic period and the findings revealed that government intervention to subsidize internet data subscriptions was not sufficient because most of the participants claimed that they do not have electronic gadgets such as laptops, smartphones, and computers, etc. Only parents that are able to borrow electronic gadgets such as laptops, smartphones, and computers from relatives benefited partially from the government intervention.

[Alzadjali et al.](#) assessed the effect of education and institutional management on Vocational Education and Training (VET) schools during the COVID-19 pandemic period with the aim to comprehend the effect of the COVID-19 pandemic

and detect potential constraints that may affect its influence on economic growth using qualitative research method. Hundred and eight VET college students and staff were sampled in this study using interviews and questionnaires and the findings revealed that the administration plays a significant part in economic growth. The students noted that the national educational administration of the government plays an essential part in their education and that this in turn churns out industry-ready individuals who will impact economic growth.

Several empirical studies have concentrated on the evaluation of education's responses to the challenges posed by the global shutdown of schools due to the COVID-19 pandemic as a completely novel state of affairs that has resulted in the global acceptance and spread of remoted education as the only form of teaching and learning platform. [Salakhova et al.](#) focused on presenting the findings of socio-psychological research on educational resources, accessibility, applications, and remote education technologies by collecting data to understand the problems of online education confronted by students of higher institutions of learning during the COVID-19 pandemic era. Using qualitative research method with the assistance of in-depth interviews conducted for 160 students from some higher institutions of learning in Moscow, to dissect their perceptions of remote education. Findings from [Salakhova et al.](#) study indicated that technical issues were the major problems of distance education faced by all the students of higher institutions of learning during the COVID-19 pandemic era. These technical issues range from a poor internet connection, unavailability of required facilities for online education, complicated access to remote platforms due to traffic, and unavailability of personalized space for distance education. In addition, the findings also revealed low-quality e-resources, cyber intimidations in remote courses, and pitiable technical readiness on the part of higher institutions of learning during the COVID-19 pandemic era. The hybrid form of education became the preference of a larger percentage of students of higher institutions of learning that participated in this study. The hybrid form of education integrates both the traditional form of instruction (i.e., face-to-face) and remote education.

Like other educational institutions, the early childhood citadel of learning faced profound difficulty in scaling through the COVID-19 pandemic era and the responses to this pandemic have no doubt impacted all segments of daily routine. The agitation for a protracted set of actions has critically affected social relationships and the wellbeing of the people during this unprecedented global state of affairs. [Papatzikis](#) stated that early childhood music education is part of the aspects of early childhood education that the pandemic affected and resulted in the digital migration of instructional activities to maintain educational impetus. This early childhood scholar discussed the context of digital presence for the early years music programs during the COVID-19 pandemic period crisis and considered the advantages and character of these unusual settings. [Papatzikis](#) concluded by recognizing the debate on the intersecting connection between education, music, mental health, and the pandemic while noting that early childhood educators are thus indebted to infants a well-knowledgeable answer to whether or not (and how) to better attend online early years music education classes.

Application of Sharestart, virtual reality, multimedia audio and video, and online problem-solving instruction to enhance the learning attitude and creativity of students, learning motivation, and self-efficacy advancement for employees

The contemporary popularity of student self-directed learning is covered under the context of the global acceptance of e-learning and remote education platforms offered through digital space. There is a growing substantial percentage of local instructors joining this transformational trend and several teaching methods that guaranteed the acquisition of critical thinking skills by the students can be considered as critical thinking learning, learning by doing, multiple assessments, cooperative learning, and team discussion teaching. Sharestart is an active and immersive teaching method with the objective to foster the abilities of students in self-paced learning through thinking, reading, analysis, discussion, expression, writing, and induction, by emphasizing the return of learning power to the students and injecting the vibrant spring of transformation into the teaching and learning process. [Luo et al.](#) evaluated the key factors in the advancement of learning attitude in Sharestart with the expectation to recommend additional positive practice directions for educators planning to adopt Sharestart and give some certain recommendations for the primary movers of Sharestart. The findings of this study indicated that the learner's cognitive adaptation and engagement is the utmost underscored dimension, while professional development of teachers, administration and parental support, and material and teaching strategy followed in sequential order. The leading highlighted indicators are the methodical development of thinking skills and self-paced learning, the building of a professional community for the collaborative lesson study of teachers, the assistance and collaboration of the leaders and the administration, the acceptance of the diverse alliance, and co-learning, cooperative learning, and discussion.

The inquisitiveness and the desire for knowledge by learners should be promoted to assist them to build autonomous thinking skills and problem-solving abilities since problem-solving abilities are a significant part of human life on a daily basis. In combination with active characters and positive attitudes that are required to solve difficulties in the lifecycle of humans and develop self-confidence. Problem-solving abilities that involve creative and critical thinking skills are pivotal and fundamental requirements for humans to generate competitive advantages that can be accomplished through educational goals in a global context. Integration of creativity into teaching should be considered to develop students' creative attitudes and lifelong learning. [Wang](#) focused on student creativity and how its influenced by online problem-solving instruction and the identification of attitudes toward instructional strategies with the aim to assist the new generation to develop creativity and rich imagination to integrate the power of technology, nature, and humanities through the lens of quantitative research method, and findings indicated that the new generation needs high levels of support to develop creativity and

combine different subjects like technology, nature, and humanities. To support creativity in the new generation, a rich mind is also required.

The transformational wave in education moves across numerous countries due to the need to improve the human resources essential for national development to deal with changes. Several countries have financed education based on the potential of national education in building a new generation of citizens that will possess the new skills, abilities, and character to handle the likely effects and problems of a new era in the new century. [Hsiao](#) applied Virtual Reality to experiential education due to the contemporary recognition of the experiential learning model as alternative teaching and learning movement by non-profit and profit establishments in the education, business, and social workers domain. This study took social workers in southern Taiwan as samples for experimental research and the findings revealed that the application of virtual reality in experiential education will have impacts on self-efficacy and learning motivation. Self-efficacy showed noteworthy positive impacts on learning motivation. The practical implication of these findings is that there is a likelihood of the application of virtual reality in experiential education to enhance relationships among social workers *via* the learning activity and internalize the experience in the practical learning process of problem-solving, interaction, and extrinsic relationships to accomplish a better life.

[Huang and Hung](#) investigated the instructional efficacy of multimedia audio and video-integrated pre-service training and the impacts of pre-service orientation training (i.e., education) on organizational identification and self-efficacy advancement using 264 supervisors and employees in the high-tech industry as research samples. Results from this study indicated statistically significant positive impacts of pre-service education on employees' organizational identification and self-efficacy and the impact of employees' organizational identification on self-efficacy advancement was significantly positive as well.

Implementation of risk awareness education and the effect of students' crisis awareness on emotion during the COVID-19 pandemic

The hidden elements in campus safety are growing as a result of social modifications, and addressing these factors has become additionally problematic. Students are saddled with the responsibility of coping with the changes in internal and external environments based on the challenges of a multicultural society. There is a consistent occurrence of new events that might result in campus risk and the recent occurrence of new events on the campus has created problems for school organizational components. This necessitates the implementation of campus risk management strategies and risk awareness education movements. The reality of this technologically dynamic era is another factor that requires risk awareness and appropriate risk management for the justifiable development of organizations and personal existence. [Liu et al.](#) discussed the factors in implementing risk awareness education with the hope that school administrators will take charge and limit

the prospect of school members being harmed or endangered by the risk factor and that educators will be well-informed in making a swift intervention to upturn risk into opportunities which are the significant roles. The findings of this study revealed life education to be the most highlighted dimension, trailed by curriculum and instruction, and environmental planning. Other most highlighted indicators are physical activity, role-play, opportunity education, learning area planning, and team competition.

The impacts of crises differ among persons, communities, and countries and the same applies to crisis management by governments and non-governmental organizations, particularly with respect to "publicity," because it involves bureaucracy to deal with people's accountability concerns. [Yang and Miao](#) examined the connection between students' crisis awareness, trust, and emotions during an epidemic (i.e., a major public health emergency) with a structural equation model (SEM) for statistical analyses. The findings from this study reveal that; people can simply fall into adverse emotions at the epidemic spread stage; communities that boost of a good trust relationship see schools less responsible for perilous occurrences and more supportive of crisis communication; reducing the bad emotions of the public after the occurrence of dangerous events may efficiently diminish the mutilation of dangerous events to the organization. Other factors that can aid students to develop improved trust in school are the protection of school status, avoidance of a loss of student confidence and increasing anger, maintaining a good communication outcome, and lessening the effect of the crisis. In times of crisis within the school, the findings of this study can diminish the likelihood of learners' displaying bad emotions and spreading rumors.

Conclusion

It is clear that education can be affected by unforeseen external attacks like the COVID-19 pandemic, one major headway is that educators have been furnished with major challenges faced by students and teachers, and the likely solutions *via* technological innovations such "YIT101" for teaching Turkish as a foreign language irrespective of location and time, integration of novel innovations for the advancement of remote education and numerous empirical studies. It is essential that the government of every country should be well aware of the social welfare gap which has been one of the major constraints responsible for the non-affordance of technological devices, internet subscriptions, etc., and efforts should be geared toward the reduction of this gap if not total eradication. This Research Topic has been to provide direction on optimizing the administration of schools, public health, and campus crisis situations and improvement of students' mental health.

Author contributions

MB and ES wrote the first draft of this editorial. AÇ carried out the supervision and the final edits of the draft. All authors contributed to the article and approved the submitted version.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships

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