



Contribution of Drama Pedagogy to Mental Development in the Digital Age

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Abstract

Digital technologies are changing the way drama is taught and experienced in educational settings. Along with improving learning, these technologies also offer new possibilities for supporting students' mental development. This analytical review aimed to examine the contribution of digital drama pedagogy to mental development in the digital age by synthesising findings from previous empirical studies. Six relevant studies published between 2022 and 2026 were reviewed. The studies included qualitative, experimental, developmental, research and development, conceptual, and longitudinal study protocol designs. The findings suggest that digital drama pedagogy and digital arts interventions can enhance creativity, emotional regulation, engagement, communication, collaboration, and overall psychological well-being. Technologies such as virtual reality, digital storytelling, multimedia theatre, and interactive digital platforms were also found to create meaningful and engaging learning experiences. The review further highlights limited research in the Indian context and a need for more studies involving school-age learners and long-term interventions. Overall, the available evidence indicates that digital drama pedagogy has significant potential to support learners' mental development and provides a strong foundation for future research and educational practice.

Keywords: Digital drama pedagogy, mental development, digital arts, drama education, digital technology, analytical review.

Introduction

The rapid growth of digital technology has transformed the way children and adolescents learn, communicate, and interact with the world. At the same time, there is growing concern about its influence on students' mental well-being. This has increased the need for educational approaches that not only improve learning but also support healthy mental development. In this context, drama pedagogy, combined with digital technologies, has emerged as a promising approach.

Digital Technology in Education

Digital technology has become an integral part of the daily lives of children and adolescents. Social media, digital platforms, virtual reality (VR), artificial intelligence (AI), and other emerging technologies are widely used for learning, communication, and creative expression (UNESCO, 2023). While these technologies offer valuable educational opportunities, excessive or unstructured digital use has also been linked to attention difficulties, anxiety, stress, emotional problems, and other challenges affecting mental development (Office of the U.S. Surgeon General, 2023; Vaquero et al., 2025). As a result, educators are increasingly seeking educational approaches that support both academic learning and students' psychological well-being.

Drama Pedagogy in the Digital Age

Drama pedagogy has emerged as one such learner-centred approach. Through role play, storytelling, improvisation, simulation, and collaborative performance, it actively engages learners in meaningful experiences that encourage reflection, creativity, communication, empathy, emotional regulation, confidence, critical thinking, and problem-solving. These competencies are recognised as important dimensions of children's and adolescents' mental development (Neelands & Goode, 2015; O'Toole & Stinson, 2020). The integration of digital technologies has expanded the scope of drama pedagogy. Digital storytelling, multimedia theatre, virtual reality (VR), and interactive learning platforms create engaging learning experiences that promote creativity, collaboration, and participation (Zakopoulos et al., 2023; He, 2026). As a result, digital drama experiences can support both cognitive and socio-emotional development.

Recent studies have reported that digital drama and digital arts enhance creativity, communication, collaboration, cultural awareness, and psychological well-being (Sheriff et al., 2022; Ripai et al., 2025; Zakopoulos et al., 2026). Although systematic reviews published in 2024 have examined the role of VR in promoting empathy and socio-emotional development, limited attention has been given to the contribution of drama pedagogy and

digital arts to mental development. Accordingly, this analytical review brings together existing research on the contribution of drama pedagogy to mental development in the digital age. It explores how digital technologies support drama-based learning, discusses their benefits and limitations, identifies research gaps, and suggests directions for future research and educational practice.

Research Questions

RQ 1. How are digital technologies used in drama/theatre education to enhance students' sustainability awareness?

RQ 2. What are the educational benefits of integrating digital technologies into drama/theatre education?

RQ :3. What research gaps and future directions have been identified regarding the use of digital technologies in drama/theatre education?

Objectives of the Study:

To examine the use of digital technologies in drama/theatre education for enhancing students' sustainability awareness.

To identify the educational benefits of integrating digital technologies into drama/theatre education.

To identify research gaps and future directions related to digital technologies in drama/theatre education.

Methodology

The inclusion and exclusion criteria were developed to select studies that were relevant to the objectives of this review.

Inclusion Criteria

Variables: Studies examining digital drama pedagogy/digital arts interventions and their effects on mental development or mental health outcomes.

Searching Strategy: Studies identified through electronic databases using keywords related to “drama pedagogy”, “digital drama”, “digital arts”, “theatre education”, “virtual reality”, “digital technology”, “mental development”, “mental health”, “cognitive development”, and “digital learning”.

Target Population: Studies involving children, adolescents, young adults, university students, or individuals participating in digital arts, drama, theatre, or mental health interventions.

Geographical Search: Studies conducted in any country without geographical restrictions

Type of Document: Peer-reviewed journal articles, conference papers, original research articles, qualitative studies, experimental studies, research and development (R&D) studies, study protocols, and literature/systematic reviews.

Time Period: Studies published between 2022 and 2026.

Language: Studies published in English.

Exclusion Criteria:

Searching Strategy: Studies retrieved using unrelated keywords or not relevant to the review objectives.

Target Population: Studies focusing on unrelated populations or not involving digital arts, drama, theatre, or mental development

Geographical Search: None based on geographical location.

Type of Document: Editorials, opinion papers, book reviews, dissertations, magazine articles, unpublished manuscripts, and conference abstracts without full text.

Language: Studies published in languages other than English.

Summary of Literature Review

The selected studies were analysed by extracting information on the author(s), year of publication, country, document type, research title, main aim, research methodology, and key findings.

The extracted information is summarised in Table 1. Summary of Empirical Studies on Digital Drama Pedagogy and Mental Development

Sr. No.	Author(s) & Year	Title	Country	Target Population	Document Type	Main Aim	Research Methodology	Results
1	Rebecca Syed Sheriff, Laura Bergin, Laura Bonsaver, Evgenia Riga, Bessie O'Dell, Helen Adams, & Margaret Glogowska (2022)	<i>Digital Arts and Culture for Mental Health in People Aged 16–24: A Qualitative Interview Study</i>	United Kingdom (University of Oxford, England)	Young people aged 16–24 years	Research Article (Qualitative Interview Study)	To explore the potential utility of Digital Arts and Culture (DAC) in supporting the mental health of young people aged 16–24 years.	Qualitative research using purposive sampling and semi-structured interviews. Data were analysed using reflexive thematic analysis.	Participants perceived Digital Arts and Culture as beneficial for mental health. Regular engagement, relatable human stories, diverse perspectives, and online accessibility promoted reflection, learning, creativity, mood improvement, calmness, reduced negative thinking, and increased motivation.

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2	Jing, Z. & Bakhir, N. M. (2024)	<i>Digital Art and Mental Health: A Study on Art Therapy in Virtual Reality Environments</i>	Malaysia	Individuals receiving Virtual Reality (VR) Art Therapy for mental health	Conference Research Paper	To examine the effects of Virtual Reality (VR) art therapy on anxiety, depression, emotional regulation, and physiological responses.	Quantitative experimental study using VR-based digital painting and sculpting with pre- and post-intervention assessment.	VR art therapy significantly reduced anxiety ($p < .05$) and depression ($p < .05$) while improving emotional regulation ($p < .01$). Heart rate decreased by approximately 10–15 beats/minute, and skin conductance also declined, indicating reduced physiological stress. The findings suggest that VR-based digital art therapy is an effective intervention for improving emotional well-being and supporting mental health rehabilitation.
3	Kim, H. & Choi, Y. (2023)	A Practical Development Protocol for Evidence-Based Digital Integrative Arts Therapy Content in Public Mental Health Services: Digital Transformation of Mandala Art Therapy	South Korea	Individuals using public mental health services, particularly young adults requiring depression management	Original Research Article	To develop an evidence-based protocol for transforming traditional mandala art therapy into digital integrative arts therapy for public mental health services and personalized depression management.	Developmental research using a Living Lab approach developed the Digital Mandala mobile application.	The study developed an evidence-based Digital Mandala protocol integrating art, music, and reflective writing for depression management. Three key components were identified: clinical factors, integrative arts therapy factors, and digital data factors. The protocol enables standardized digital mental health services, quantitative evaluation through data collection, and future AI-based analysis of large-scale mental health data. The authors conclude that digital transformation can improve the accessibility, standardization, and future evaluation of art therapy in public mental health services.
4	Ripai, A., Andayani, & Wardani, N. E. (2025)	Digital Textbooks in Drama Education: Improving Accessibility and Quality of Literature Learning through Integration of Local Wisdom	Indonesia	University students studying drama from five universities in Central Java	Research and Development (R&D)	To develop and evaluate digital textbooks based on local wisdom and examine their effectiveness in improving drama learning, student engagement, and understanding of local culture.	Research and Development (R&D) based on the Borg and Gall model, including design, validation, implementation, and evaluation using tests, questionnaires, observations, and interviews.	Students using digital textbooks achieved significantly higher learning outcomes than those using conventional textbooks ($t = 9.23$, $p < .001$, $d = 1.51$). They also showed greater engagement, improved cognitive, affective, and psychomotor skills, and a stronger understanding of local culture ($r = 0.82-0.87$).
5	He, Z. (2026)	The Evolution of Digital Drama in the Context of Cultural Virtualization	China	Digital drama, virtual theatre, and cultural virtualization literature	Conference Paper	To examine the evolution of digital drama and develop a theoretical framework for its transformation from traditional theatre to AI-driven virtual performances.	Qualitative conceptual study reviewing the evolution of digital drama and developing a classification framework.	The study found that digital drama has evolved from traditional theatre to multimedia, VR, and AI-driven performances. These technologies enhance audience interaction, support cultural preservation and drama education, and highlight the need for ethical guidelines and interdisciplinary collaboration.

6	Vaquero, L., Groves, K., Muñoz-Vidal, E. L., James, K., Marlor, J. L., McIntyre, C., Ostia, L., Sirota, S., Shields, L., Degé, F., García-Mingo, E., & Ripollés, P. (2025)	Studies examining digital arts-based interventions and their effects on adolescents' social media use, brain connectivity, attention, and mental health.	United States (New York City)	Teenagers aged 13–16 years attending public high schools	Study Protocol	To investigate whether digital arts interventions improve social media use, attention, brain connectivity, and adolescents' mental health.	Longitudinal pre-post intervention study with a 12-week digital arts programme and pre- and post-intervention assessments.	As a study protocol, no empirical findings were reported. The study expects digital music and photography interventions to improve mental well-being, promote healthier social media use, and reduce the negative effects of excessive social media use among adolescents.
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Analysis of the Reviewed Literature

The studies included in the review were analysed with reference to their objectives, research methodology, and major findings. As presented in Table 1, all six studies were conducted outside India, indicating the absence of empirical evidence on the contribution of digital drama pedagogy to mental development in the Indian context. Geographically, the studies represent diverse settings, with one study each conducted in the United Kingdom, Malaysia, South Korea, Indonesia, China, and the United States. This distribution demonstrates that research in this field has gained international attention, although evidence from developing countries remains limited.

An examination of the publication years reveals that the selected studies were published between 2022 and 2026, reflecting the recent emergence of digital technologies in drama education and mental health research. The growing number of publications during this period suggests increasing scholarly interest in the educational and psychological applications of virtual reality, digital arts, artificial intelligence, and other technology-enabled creative interventions. With regard to authorship, collaborative research was predominant, as most studies were conducted by multidisciplinary teams comprising experts from education, psychology, mental health, and digital technology.

The primary objectives of the reviewed studies varied according to their research focus. Three studies investigated the effectiveness of digital arts interventions in promoting mental health and emotional well-being through creative engagement. One study developed an evidence-based digital mandala protocol to improve the accessibility and standardisation of public mental health services. Another study evaluated the effectiveness of digital textbooks in

enhancing drama education through the integration of local cultural knowledge. One conceptual study examined the evolution of digital drama from traditional theatrical practices to virtual reality and artificial intelligence-supported performances, while another proposed a longitudinal research protocol to investigate the potential influence of digital arts interventions on adolescents' mental health, brain connectivity, attention, and patterns of social media use.

Methodologically, the reviewed literature demonstrates considerable diversity. Qualitative approaches, quantitative experimental designs, developmental research, research and development methodology, conceptual analysis, and longitudinal intervention designs were employed according to the objectives of each investigation. Qualitative studies relied on semi-structured interviews and thematic analysis to explore participants' experiences, whereas experimental studies adopted pre- and post-intervention designs to assess psychological outcomes. Developmental and R&D studies focused on designing and validating digital interventions, while the study protocol outlined a structured framework for evaluating the long-term effects of digital arts programmes.

The findings consistently indicate that technology-supported arts and drama interventions contribute positively to mental development. Digital arts participation was associated with enhanced creativity, self-reflection, motivation, emotional expression, positive mood, and reduced negative thinking. Virtual reality-based art therapy demonstrated significant reductions in anxiety, depression, and physiological stress, together with improvements in emotional regulation. The Digital Mandala protocol established a structured framework for delivering accessible and evidence-based mental health services through digital platforms. Digital textbooks strengthened learner engagement, academic performance, and cultural understanding in drama education. Furthermore, the conceptual analysis highlighted that advances in multimedia, virtual reality, and artificial intelligence have transformed digital drama into a more interactive and immersive educational medium while supporting cultural preservation and creative learning. Although the SMART Project has not yet produced empirical findings, its proposed intervention reflects the growing recognition of digital arts as a promising approach for enhancing adolescents' mental well-being and encouraging healthier digital behaviour.

Overall, the reviewed literature demonstrates that the integration of digital technologies with drama pedagogy extends its educational role beyond performance-based learning to include psychological, emotional, and cognitive development. Nevertheless, the lack of empirical research conducted in India indicates a significant gap in the existing literature and highlights

the need for context-specific studies examining the contribution of digital drama pedagogy to the mental development of school-age learners.

Research Gaps

After reviewing the literature, the following research gaps were identified:

Limited research has specifically examined the contribution of digital drama pedagogy to mental development.

Research on this topic in the Indian context is limited.

Research involving school-age learners, particularly secondary school students, is limited.

Most studies focused on short-term interventions or conceptual frameworks. Longitudinal studies are scarce.

Systematic reviews, meta-analyses, and bibliometric studies on this topic are limited.

More evidence is needed to support the implementation of digital drama pedagogy in educational settings.

Scope for Future Research

Future studies may be conducted in the Indian context.

More research may involve school-age learners, particularly secondary school students.

Future studies may use larger and more diverse samples.

Longitudinal and experimental studies may be conducted to examine long-term effects.

Future research may explore the challenges of implementing digital drama pedagogy in schools.

Systematic reviews, bibliometric analyses, and meta-analyses may be conducted to strengthen the evidence base.

Conclusion

The present study reviewed the empirical literature on the contribution of digital drama pedagogy to mental development in the digital age. It also synthesised evidence on the role of digital drama, digital arts, and technology-supported interventions in promoting learners' mental well-being. Six relevant studies published between 2022 and 2026 from different countries were reviewed. The review showed that qualitative, experimental, developmental, research and development, and longitudinal approaches were commonly adopted. The findings consistently indicate that digital drama pedagogy and digital arts interventions enhance creativity, emotional well-being, engagement, and overall mental development. Therefore, integrating digital technologies into drama pedagogy can play an important role in supporting learners' mental development in the digital age.

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