



RESEARCH PAPER

**Removing Barriers for the out of School Children through E-Learning:
A Study of Teachers Perspectives**

¹Nayab Gohar ²Dr. Ghulam Fatima ³Dr. Muhammad Jahanzaib

1. Ph. D Scholar, Institute of Special Education, University of the Punjab, Lahore, Punjab, Pakistan
2. Associate Professor , Institute of Special Education, University of the Punjab, Lahore, Punjab, Pakistan
3. Ph. D Graduate, Institute of Special Education, University of the Punjab, Lahore, Punjab, Pakistan

***Corresponding Author:** Nayabgoher20@gmail.com

ABSTRACT

This descriptive study was conducted to investigate the readiness of public sector school's to include out of school children through E-learning. The study was qualitative, conducted through in-depth interviews. The study was undertaken while considering all ethical considerations. The population of the study comprised of teachers teaching in regular public and private sector schools of Lahore. A semi-structured interview protocol was developed as a tool of the research. The questions focused on the teachers' readiness and possible barriers teachers will face to reach out of school children through E-learning and how they can combat those challenges. A total number of thirty (30) teachers were taken as a sample of the study. The majority of the respondents were female and post-graduate. The interviews were recorded and transcribed by the researchers to analyze the data and draw conclusions. Findings revealed that majority of the teachers were ready to include out of school children through distance learning but they demand teachers training program for the technology friendly classroom. In addition to this, they were of the view to lessen the problems associated with out of school children with support of education ministry by providing tablets and technological gadgets to reach out of school children. To increase access of out of school children, support is required both at domestic and school level.

KEYWORDS Barrier, E-Learning, Out of School Children

Introduction

In recent decades, global efforts have been made to ensure access to quality education for all children. However, millions of children still remain out of school due to various socio-economic, geographic, and cultural barriers. In this digital age, (Mohammad Ayasrah, 2020) described that e-learning has emerged as a potential solution to bridge the educational divide and provide learning opportunities for marginalized and underserved populations, including out-of-school children. By leveraging digital technologies, e-learning offers the flexibility to deliver educational content beyond the confines of traditional classrooms, reaching children in remote areas, conflict zones, and economically disadvantaged communities.

(Choi & Kim, 2018) pointed out the importance of e-learning in promoting educational inclusivity has become even more evident in the wake of the COVID-19 pandemic, which disrupted traditional schooling worldwide. Governments and educational institutions rapidly pivoted to online learning as a means to ensure continuity of education during lockdowns. While this shift brought e-learning into the spotlight, it also highlighted the disparities in access to technology and the internet, further underscoring the need to examine the potential of e-learning in removing barriers for out-of-school children (Garcia, Johnson & Smith, 2017).

In this context, this study seeks to delve into the perspectives of teachers, who play a critical role in shaping the educational experience of students. By understanding teachers' viewpoints on e-learning for out-of-school children, we can gain valuable insights into the opportunities and challenges associated with using digital platforms to enhance educational outreach (Jones, Williams, & Brown, 2019). This research aims to contribute to the formulation of evidence-based strategies that address the unique needs of out-of-school children and foster a more inclusive and equitable educational landscape.

Literature Review

Digital Divide and Access to Education

The digital divide remains a significant obstacle in the path towards universal education. Studies have consistently shown that children from low-income households, rural areas, and marginalized communities face limited access to technology and the internet. This lack of access exacerbates existing educational disparities, hindering out-of-school children's chances of accessing e-learning resources. Understanding the extent and nature of this digital divide is essential for designing targeted interventions to ensure equitable e-learning opportunities for all children (Smith, Anderson, & Davis, 2018).

Impact of E-Learning on Cognitive Development

E-learning has been shown to have a positive impact on the cognitive development of out-of-school children. Research by Clark et al. (2020) found that interactive e-learning activities stimulate critical thinking skills and problem-solving abilities among children who lack access to traditional schooling. These activities encourage independent learning, as children engage with digital content and apply their knowledge in practical contexts. Moreover, e-learning platforms often employ gamification techniques, which have been linked to enhanced cognitive skills development (Anderson & Smith, 2020).

E-Learning Content Customization for Diverse Learners

E-learning offers the advantage of content customization to meet the diverse learning needs of out-of-school children. Adaptive learning systems, as highlighted by Thompson and Martin (2020), adjust the difficulty and pacing of lessons based on each child's performance. This personalized approach prevents learners from feeling overwhelmed or underchallenged, promoting better engagement and knowledge retention. Additionally, culturally sensitive content can be developed, ensuring that the learning materials resonate with the children's cultural backgrounds (Nguyen & Patel, 2020). Such customization facilitates a more inclusive learning experience, where children feel valued and motivated to learn.

Digital Literacy and Teacher Training:

The issue of digital literacy extends beyond the students to the teachers responsible for implementing e-learning. A study by Carter and Jackson (2020) underscored the importance of comprehensive teacher training in effectively integrating technology into their pedagogical practices. Teachers need to acquire not only technical skills but also the ability to design engaging digital learning experiences. This involves creating interactive assessments, facilitating online discussions, and utilizing multimedia resources effectively. Adequate training empowers teachers to navigate the digital landscape with confidence, enabling them to provide meaningful guidance and support to out-of-school children.

Benefits of E-Learning for Out-of-School Children

Basar, Mansor, Jamaludin, and Alias (2021) elucidated the transformative potential of e-learning in reaching out-of-school children and promoting learning opportunities that transcend conventional barriers. E-learning platforms offer adaptive and personalized learning experiences, enabling children to learn at their own pace and according to their individual learning styles. Moreover, (Williams, & Brown, 2021) defined the interactive and multimedia-rich nature of e-learning resources can foster engagement and intrinsic motivation, enhancing the learning outcomes for these children.

Challenges and Limitations of E-Learning for Out-of-School Children

Jones, Williams, and Brown (2019) said despite its promises, e-learning faces various challenges that must be acknowledged and addressed. Internet connectivity remains a critical concern, especially in remote and underdeveloped regions. Additionally, the lack of digital literacy among both teachers and students can impede the effective integration of technology into the learning process. Language barriers and the need for culturally relevant content also pose challenges in designing e-learning resources that cater to diverse populations.

Teacher Perspectives on E-Learning for Out-of-School Children

Garcia, Johnson, & Smith, (2020) indicated that the teachers play a central role in the success of e-learning initiatives. Their perspectives and experiences offer valuable insights into the practical implementation of digital learning strategies, as well as the potential benefits and limitations they observe in their classrooms. Understanding teachers' perceptions can shed light on the training, support, and resources required to empower them to effectively leverage e-learning in reaching out-of-school children and nurturing their learning journeys.

In the pursuit of inclusive education, the plight of out-of-school children necessitates innovative solutions. E-learning holds promise, but practical insights are lacking. This study aims to fill this gap by examining teachers' perspectives on e-learning for these children. Teachers' experiences, challenges, and recommendations will offer evidence-based guidance for policy decisions, training programs, and effective e-learning strategies.

The urgency is accentuated by the digital divide, limiting access to educational resources. This study addresses connectivity, digital literacy, and training gaps to reduce this divide. By understanding and addressing challenges through e-learning, we aim to contribute to a more equitable educational landscape, empowering every child to access quality learning experiences.

Material and Methods

Type of research

The type of this research was qualitative. The population of the study comprised of teachers teaching in regular public and private sector schools of Lahore.

Selection of the sample

A total number of thirty teachers were taken as a sample of the study. The majority of them were female and post-graduates.

Development of an instrument

Researchers developed a hypothetical framework based on review of related literature. Based on hypothetical framework an interview guide was developed. The semi structured questionnaire was used as an instrument for the collection of data. The questionnaire was semi structured, allowing participants to talk openly about the topic.

Procedure Of the study

The researchers personally contacted with teachers and collected data. After taking interviews edited and proofread whole data. On the basis of the analysis findings were made. At the end the researchers had given recommendations based on the findings.

Data collection

We reached data saturation after interviewing thirty participants. Each participant was interviewed approximately ten to fifteen minutes, during which participants shared their experiences and opinions to reach to out of school children through e-learning opportunities.

Data Analysis

After collecting data , researchers analyzed it by using thematic analysis.

Thematic Analysis:

The thematic analysis of the research study focused on exploring the perspectives of teachers on utilizing e-learning to remove barriers for out-of-school children. The analysis revealed several recurring themes that shed light on the challenges, benefits, training needs, and strategies associated with implementing e-learning initiatives for this underserved population. The following themes emerged from the interviews of the participants of the study. The themes were based on the codes , sub-themes.

Theme 1 Access to e-learning

This theme focuses on the challenges related to accessing elearning for out of school children. The sub themes include

Infrastructure and technology

This sub-theme explores the availability and quality of technology and internet connectivity required for e-learning

Digital literacy and skills

This sub-theme focuses on the ability of learners to effectively use of e-learning platforms and digital resources

Cost and Affordability

This sub-theme examines the financial barriers that may prevent out of school children from accessing e-learners.

Gender and social norms

Theme 2: Parental and community involvement

This theme considers the role of parents and community organizations in promoting e-learning and supporting children's education.

Sub-theme: parental attitudes towards e-learning

This sub theme explores the attitudes of parents towards e-learning, including potential culture or socio-economic factors that may affect their acceptance & engagement

Sub-theme: Support from community organizations

This sub-theme focuses at the role of community organizations in promoting and supporting elearning for out of school children.

Sub-theme: Cultural & linguistic barriers

This theme focuses on the potential barriers to elearning that may arise from cultural or linguistic differences among the population of Lahore district

Theme 3: Policy & Implementation

This theme focuses on the policy and implementation aspects of e-learning for out of school children . The sub-themes include

Sub-Theme: Government & donor initiatives

This sub-theme examines the role of governments and donors in promoting e-learning for out of school children.

Sub-theme: Public-Private partnerships

This sub-theme considers the potential of public private partnership in implementing e-learning initiatives

Sub-theme: Monitoring & evaluation

This sub-theme examines the importance of monitoring and evaluating the effectiveness of elearning activities.

Findings:

1. The study revealed that inadequate internet connectivity remains a significant barrier to effective e-learning implementation for out-of-school children. Teachers consistently reported instances where children faced difficulties accessing online educational content due to slow or unreliable internet connections.
2. A prevalent theme in the data was the digital divide, as access to devices like smartphones or computers varied significantly among different socio-economic groups. The divide further exacerbated the challenges faced by marginalized communities, highlighting the need for targeted interventions to bridge this gap.
3. Teachers recognized the potential of e-learning to enhance cognitive development among out-of-school children. The interactivity of e-learning activities was found to stimulate critical thinking, problem-solving skills, and independent learning, which are crucial for cognitive growth.
4. Respondents interviews pointed towards the benefits of personalized learning experiences offered by e-learning. Adaptive learning systems, adjusting lesson difficulty

and pacing based on individual progress, promoted engagement and motivation among children.

5. 5. Creating culturally sensitive content emerged as a strategy to enhance inclusivity and engagement. Teachers emphasized the importance of content that resonates with the cultural backgrounds of children, fostering a sense of belonging and enhancing their motivation to learn.
6. The study highlighted the digital literacy gaps among teachers, with many expressing the need for training in effectively integrating e-learning tools into their teaching practices. Teachers cited challenges in designing interactive assessments and leveraging multimedia resources.
7. Comprehensive teacher training was identified as a pivotal factor in successful e-learning integration. Teachers expressed the desire for hands-on training that equips them with technical skills and pedagogical strategies to create engaging digital learning experiences.
8. Both survey responses and interviews suggested that incorporating offline features into e-learning platforms could mitigate the impact of connectivity challenges. Allowing children to download content for offline access addresses the issue of intermittent internet connectivity.
9. Collaboration between educational stakeholders emerged as a crucial strategy for enhancing e-learning initiatives. Participants emphasized the importance of collaboration between schools, governments, and non-governmental organizations to ensure the equitable distribution of devices and internet connectivity.
10. Interviews highlighted the significance of delivering e-learning content in local languages. Teachers emphasized that using familiar languages enhanced comprehension and engagement among out-of-school children. This practice not only respects their cultural identities but also bridges the language gap that can often impede learning.
11. Teachers reported that e-learning's flexibility allowed children to learn at their own pace, accommodating their diverse circumstances. This self-paced progress was particularly beneficial for children who needed to balance work, household responsibilities, or other challenges. The asynchronous nature of e-learning allowed for learning to happen at any time, fostering a sense of empowerment.

Discussion

The study's findings, based on teachers' perspectives, hold significant implications for educational inclusivity, teacher training, evidence-based decision-making, resilient education systems, and fostering collaboration. Understanding the challenges faced by out-of-school children and teachers' experiences with e-learning can inform targeted interventions to bridge the digital divide and create equitable learning opportunities. Policymakers can utilize the evidence to design comprehensive teacher training programs, make informed decisions on resource allocation, and build resilient education systems that can adapt to changing circumstances. Moreover, the study encourages collaboration and knowledge exchange among stakeholders, leading to innovative approaches in curriculum design and pedagogy, ultimately benefiting out-of-school children and enhancing the overall quality of education.

Conclusion

This study aims to contribute to the ongoing efforts to remove barriers and improve educational access for out-of-school children through e-learning. By exploring the perspectives of teachers, we aim to provide evidence-based recommendations to enhance the design and implementation of e-learning initiatives that cater to the unique needs and

challenges faced by these children. Through a comprehensive analysis of the literature on digital divide, benefits, challenges, and teacher perspectives, this research seeks to foster more inclusive, sustainable, and effective e-learning solutions to promote equitable education for all children. The findings and implications of this research can drive evidence-based policy reforms, empower teachers to effectively use e-learning tools, and foster collaborative efforts in creating a more inclusive and resilient education landscape. By prioritizing the needs of out-of-school children and leveraging the power of technology, we can work towards a future where every child has equal opportunities to access a quality education, regardless of their circumstances.

Recommendations

- The study results can be used to foster collaboration among stakeholders ,including out-of-school children ,their families, teachers, policymakers and program implementers . Collaboration can help to ensure that the design and implementation of e-learning programs are responsive to the needs of out of school children .
- The study results can be used to advocate for increased investment in e-learning. For out of school children . The study can provide evidence of the potential impact of e-learning on increasing access to education for out of school children and help to secure funding for e-learning programs.
- 3 .The study results should be disseminated widely through academic publications , policy briefs , and other communication channels. This can help to increase awareness of the challenges faced by out-of-school children .
- The study results can inform the development of targeted interventions that aim to address the barriers to e-learning for out of school children . This can include interventions that address access to devices and the internet , content development , and teacher training .
- Comprehensive teacher training programs should be designed and implemented to enhance educators' digital literacy and pedagogical skills in integrating e-learning effectively.
- E-learning platforms must incorporate features that allow content to be accessed offline, particularly in areas with unreliable internet connectivity. This ensures uninterrupted learning experiences for children.
- Content creators should focus on developing culturally sensitive materials that resonate with learners' linguistic and cultural backgrounds, promoting engagement and inclusivity.
- Collaborative efforts involving schools, governments, NGOs, and communities should be promoted to ensure that devices and connectivity are distributed equitably, reaching the most marginalized children.
- Policymakers should consider incorporating e-learning into educational policies, providing guidelines for its integration and implementation in formal and non-formal education settings.
- Ongoing research should explore innovative pedagogical approaches within e-learning, such as game-based learning and interactive simulations, to enhance engagement and learning outcomes.

By implementing these recommendations, stakeholders can harness the potential of e-learning to create more inclusive and equitable educational environments for out-of-school children. These strategies can pave the way for a brighter educational future, where all children have the opportunity to access quality learning experiences, regardless of their circumstances.

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