

Behavioral Challenges in the Early Childhood Education Settings after the Pandemic



Zsuzsa Volgyi Rosemond

University of Sopron, Benedek Elek Faculty of Pedagogy Institute of Educational Sciences Honorary Associate Professor © 0009-0004-8540-0202

KEYWORDS

- · early childhood
- social-emotional development
- digital age
- externalizing problem behavior
- internalizing problem behavior

ABSTRACT

The impact of the COVID-19 pandemic on social-emotional developmental risks of preschool children is largely unknown. Since the outbreak of the COVID-19 pandemic in March 2020, the lives of people have drastically changed, with children in particular being affected in their daily lives by preschool and school closures and limited childcare options. Throughout the pandemic, many parents kept their young children at home resulting in up to two years without consistent peer interaction. The study explores two main aspects of social and emotional growth: "externalizing problem behavior and internalizing problem behavior. The externalizing problem behavior refers to emotional responses that usually manifest by disruptive behavior, such as aggression that could be hitting, biting, and rule breaking. The internalizing problem behavior refers to internal challenges such as anxiety, depression" (Kästner et al., 2023). The aim of this study is to investigate strategies to foster healthy emotional and social development in young children. Focusing on emotional intelligence and social interaction, the study will assess how these elements support academic success. It also explores the challenges of balancing digital engagement with traditional play-based learning methods for children. Ultimately, the pandemic has revealed both vulnerabilities and the adaptability of young children in the changing world. By understanding these developmental challenges, we can better support the next generation's emotional well-being and academic readiness.

KULCSSZAVAK

- kora gyermekkor
- szociális-érzelmi fejlő-
- digitális korszak
- externalizáló problémás viselkedés
- internalizáló problémás viselkedés

ABSZTRAKT

A COVID-19 világjárvány hatása az óvodáskorú gyermekek érzelmi fejlődési kockázataira nagyrészt ismeretlen. A COVID-19 világjárvány 2020 márciusi kitörése óta az emberek élete drasztikusan megváltozott, különösen a gyermekek eseteben, akiknek a mindennapjait jelentősen befolyásolták az óvodák és iskolák bezárásai, valamint a korlátozott gyermekfelügyeleti lehetőségek. A járvány ideje alatt sok szülő tartotta otthon kisgyermekét, ami sok családnál a két éven keresztüli, folyamatos kortársi kapcsolatok hiányát is eredményezte.

A tanulmány a szociális és érzelmi fejlődés két fő aspektusát vizsgálja: az "externalizáló problémás viselkedést" és az "internalizáló problémás viselkedést". Az externalizáló problémás viselkedés azokra az érzelmi reakciókra utal, amelyek általában zavaró magatartásban nyilvánulnak meg, például agresszióban, amely magában foglalhat ütést, harapást vagy fegyelmezetlenséget. Az internalizáló problémás viselkedés belső nehézségekre utal, például szorongásra vagy depresszióra (Kästner et al., 2023). A tanulmány célja olyan stratégiák feltárása, amelyek elősegítik az egészséges érzelmi és szociális fejlődést a kisgyermekek körében. Az érzelmi intelligenciára és a társas kapcsolatokra összpontosítva a kutatás felméri, hogy ezek az elemek miként támogatják az iskolai sikert. A tanulmány továbbá bemutatja a digitális részvétel és a hagyományos, játék alapú tanulási módszerek közötti egyensúly megteremtésének kihívásait. Végső soron a világjárvány egyszerre mutatta meg a kisgyermekek sebezhetőségét és alkalmazkodóképességét a változó világban. E fejlődési kihívások megértésével jobban támogathatjuk a következő generáció érzelmi jóllétét és iskolai felkészültségét.

Introduction

The social and emotional developmental risks of preschool children associated with the Covid-19 pandemic remain insufficiently understood. While most "studies evaluating the mental health of older children and adolescents reported increases in depression and anxiety symptoms, no reviews have addressed the effects of the pandemic on preschool children" (Jing et al., 2024). Disruptions from preschool and school closures, coupled with limited childcare availability, reduced stability and social interactions. These disruptions have impacted social – emotional development from infancy through the preschool years, where children exhibit behavioral challenges that often exceed educators' preparedness. The pandemic had caused a collective trauma on parents, children and educators and the American Academy of Pediatrics had alerted the public regarding children's mental health crises that was generated by the pandemic. Most young children were forced to stay home without any peer or educator interactions, and only a small number of children were able to participate in online education. The results were detrimental to children's social development. When schools reopened, educators were faced with the troubling results as children's behavior and speech and language were way below normal. To most observed behaviors were biting, hitting, bullying, however they also did not know how to share, take turns, resolve conflicts, making friends, control impulses. Most importantly, they did not know how to play and how to pay attention. These are the milestones that children learn in their early years through social settings, nurseries, daycares, and preschools. Internal behavioral challenges also manifested such as irritability, lack of motivation, no confidence, easily get overwhelmed and start crying or withdrawing. Separation anxiety and temper tantrums are also commonly observed in addition to being clingy, sensitive to touch, and easily becoming frustrated. I will be exploring the current challenges in balancing digital overload with the play-based approach to support the next generation. Children of Generation Alpha typically start using digital devices in early childhood, which is why they are called digital natives. How does this affect children's socialization, empathy, and ability to connect? (Fehér & Megyeriné Runyó, 2019). According to Varga (2024), "Possible solutions, along with general developmental, intelligence-enhancing, and other positive effects of everyday storytelling, need to be a key focus on enriching our inner world and our inner peace. The solution should include art education, small communities, creative activities, and ethics". (p. 27.)

The pandemic created a highly digitalized experience for children, who – beyond necessity – missed opportunities to develop essential social skills. As we are slowly recovering these challenging times, children, especially those aged 3-5, need explicit opportunities to learn and practice social skills that will remain

vital throughout adulthood. My findings are informed by the last five years of working with Early Childhood Educators and observing preschool behavior. Collaborating with Special Educators and Early Intervention Specialists has shown how individualized approaches can help children navigate and overcome their developmental challenges.

Literature overview

Evidence from 2019–2025 consistently shows an increase in behavioral and social-emotional challenges among children aged 3–6 in early childhood education (ECE) settings, particularly following the COVID-19 pandemic. These difficulties often manifest externalizing behaviors (e.g., aggression, impulsiveness) and internalizing symptoms (e.g., anxiety, withdrawal), affecting classroom dynamics and learning readiness (Jing et al., 2024; Oppermann, 2024). The pandemic's disruption to early learning routines, social exposure, and emotional regulation opportunities has led to measurable differences between pre- and post-pandemic preschool cohorts.

Prevalence and Emerging Patterns

Multiple longitudinal and cross-sectional studies report higher rates of emotional and behavioral problems in post-pandemic preschool cohorts compared to pre-2020 groups (Jing et al., 2024). Oppermann (2024) found that children entering preschool after lockdowns exhibited lower social-emotional competence and executive function, with many struggling to follow routines or manage frustration. Similarly, national inspection data in England identified ongoing challenges in social communication, behavior regulation, and peer interaction (Ofsted, 2024). These findings align with European and US data showing that behavioral and emotional regulation difficulties remain elevated years after pandemic restrictions, especially among children with limited access to stable care or early learning during closures (Landolt et al., 2025).

Contributors and Mechanisms

The literature identifies several key mechanisms underlying these patterns. Reduced opportunities for peer interaction and play constrained the development of empathy, cooperation, and self-control (Prino et al., 2023). Disrupted daily routines, inconsistent caregiving environments, and family stress amplified children's distress, while prolonged screen exposure and sleep irregularities further

compounded attention and regulation problems (Reynaud et al., 2019). Socioeconomic adversity and exposure to adverse childhood experiences (ACEs) also increased vulnerability, particularly in households facing unemployment, housing instability, or parental mental health difficulties (Osman et al., 2024). Conversely, protective factors such as responsive parenting, supportive educator relationships, and consistent routines buffered many children from severe adjustment problems (Jing et al., 2024).

Educator and System Perspectives

Teachers and ECE leaders consistently report more frequent and intense behavior incidents in classrooms since reopening, with many describing heightened aggression, poor turn-taking, and difficulties following group expectations (Landolt et al., 2025). Educator stress and burnout have risen alongside these challenges, reducing the workforce's capacity to implement proactive or preventive strategies effectively. The National Association for the Education of Young Children (NAEYC) and similar organizations emphasize that staff well-being is a prerequisite for high-quality behavioral and emotional support in early learning environments.

Evidence-Based Responses in ECE

Research supports tiered social-emotional learning (SEL) and positive behavior frameworks, such as the Pyramid Model, as effective strategies for addressing these challenges (Hemmeter et al., 2021; National Center for Pyramid Model Innovations, 2016). This model integrates universal SEL instruction, targeted small group supports, and individualized positive behavior support plans. When educators receive ongoing coaching, these interventions significantly reduce problem behaviors and improve social competence (Hemmeter et al., 2021).

Classroom-level practices emphasized in the literature include structured routines, visual cues, predictable transitions, and explicit teaching of emotion identification, friendship skills, and problem-solving (National Center for Pyramid Model Innovations, 2024). Individualized behavior support plans based on functional assessment are effective for persistent behavioral issues (National Center for Pyramid Model Innovations, 2016).

Family engagement also plays a crucial role. Consistent home—school communication, parent coaching on emotional regulation, and alignment of routines help generalize positive behaviors across settings (Mississippi Dept of Educa-

tion, 2021). When behavioral difficulties persist, partnerships with early intervention, speech-language, and mental health services are recommended (Osman et al., 2024).

Equity and Heterogeneity

Pandemic impacts on behavior have not been evenly distributed. Children from lower-income, multilingual, or neurodiverse backgrounds often experienced greater regression in social-emotional and self-regulation skills (Osman et al., 2024). These inequities highlight the importance of allocating additional resources, staffing, and training in settings serving higher-needed populations.

Gaps and Future Directions

Although evidence points to a clear increase in behavioral concerns, much of the data rely on educator and parent reports rather than direct observation, introducing potential bias (Reynaud et al., 2019). Longitudinal research through 2024—2025 is still emerging, and cross-national ECE-specific data remain limited (Oppermann, 2024). There is a growing call for classroom-level randomized controlled trials examining the sustainability of SEL and executive function interventions within strained ECE systems (Institute of Education Sciences, n.d.).

Overall, literature converges on the need for robust, multi-tiered supports to promote children's emotional regulation and positive behavior. Consistent SEL frameworks, well-supported educators, and strong family partnerships remain the most effective strategies for rebuilding social-emotional competencies in post-pandemic preschool cohorts (Hemmeter et al., 2021; Jing et al., 2024).

Research questions and goals

- What are the social emotional changes and challenges resulting from increased digitalization in the post-pandemic period?
- How can feelings of aggression, lack of social skills, and depression in the classroom be addressed?

Methods

Since 2020 I have been conducting individual family and educator interviews and conducting observational studies. The systematic observation of classroom behaviors before and after interventions real behavioral data rather than using self – reporting options that sometimes can be subjective. While I was using qu-

alitative interviews I was mainly focusing on the parents' and the educator's perceptions of digitalization's emotional impact on their children, and I was able to follow year on year the impact with certain families.

Results

My findings reveal that increased digitalization in the post-pandemic period has led to notable social—emotional challenges among students. Prolonged exposure to online learning environments has reduced opportunities for face-to-face socialization, contributing to heightened feelings of isolation, anxiety, and depression (Li, 2024; Backes et al., 2023). Many students also exhibit diminished social communication skills and greater emotional dysregulation, including irritability and aggression, as they re-adapt to in-person classrooms (Norman, 2022).

In response, evidence highlights the effectiveness of school-based interventions that prioritize emotional literacy, peer interaction, and behavioral support. Social-emotional learning (SEL) programs have been shown to improve empathy, cooperation, and self-regulation while reducing symptoms of depression and aggression (Raimundo et al., 2024). Additionally, structured behavior management strategies—such as early intervention, teacher professional development, and parent engagement—help foster positive classroom climates and mitigate behavioral challenges (PolicyLab, n. d.; 8 Strategies, n. d.).

Overall, the results suggest that promoting emotional resilience, rebuilding social competence, and embedding SEL frameworks in educational practice are essential to counteracting the social–emotional consequences of post-pandemic digitalization.

Conclusion

Evidence across multiple studies intersect on a clear finding: the pandemic intensified behavioral and emotional challenges in early childhood classrooms, largely through social isolation, family stress, and disrupted developmental contexts. In addition, through my own qualitative research through family and educator interviews, it is also clear that the enhanced daily screen time that is allowed for small children is also detrimental when it comes to socialization, speech and language and problem-solving abilities. Yet, the literature also demonstrates that structured social-emotional support, family engagement, and staff wellbeing initiatives can mitigate these effects. Post-pandemic recovery in Early Childhood Education will depend on sustained investment in these areas

and on recognizing that emotional regulation and behavior are foundational to learning readiness.

References

- 8 Strategies. (n. d.) *Managing challenging classroom behaviours*. Effective School Solutions, Blog-Post, https://tinyurl.com/4xpbj2r4.
- American Academy of Pediatrics. (2021): *Children's Mental Health Crisis During COVID-19 Pandemic*. American Academy of Pediatrics, Washington, DC
- Backes, L. et al. (2023): Education in the wake of COVID-19: Social and emotional impacts of digital learning. National Academies Press, Washington, DC.
- Fehér, Ágota & Megyeriné Runyó, Anna, (szerk., 2019): A digitális világ hatása a gyermekekre A Brunszvik Teréz Szakmai Napok keretében szervezett III. Nemzetközi Kisgyermek-nevelési Konferencia kötete. Apor Vilmos Katolikus Főiskola, Vác. ISBN 978-963-7306-60-0 https://real.mtak.hu/92172/
- Hemmeter, M. L., Snyder, P. A., Fox, L. & Algina, J. (2021): Corollary child outcomes of the Pyramid Model professional development efficacy trial. *Early Childhood Research Quarterly*, 54(1), 204–218. https://doi.org/10.1016/j.ecresq.2020.08.004
- Institute of Education Sciences. (n. d.): Examining the Potential Efficacy of a Classroom Wide Model for Promoting Social Emotional Development and Addressing Challenging Behavior in Preschool Children With and Without Disabilities. https://tinyurl.com/5n8t4jrr.
- Jing, J.-Q., Yang, C.-J., Wang, Y., Su, X. & Du, Y.-J. (2024): Impact of COVID-19 on emotional and behavioral problems among preschool children: a meta-analysis, *BMC Pediatrics*, 24(1). https://doi.org/10.1186/s12887-024-04931-8.
- Kästner, A., Ernst, V. S., Hoffmann, W. & Franze, M. (2023): Changes in social behavioral developmental risks in preschool children after the first COVID-19 wave: a prospective longitudinal cohort study', *Scientific Reports*, 13(1), 5615. https://doi.org/10.1038/s41598-023-32877-x.
- Landolt, M. A., Ruther, N., Strebel, N. L. & Schmidt, S. J. (2025): Trajectories of emotional and behavioral problems in young children during the COVID-19 pandemic: A longitudinal study. *PLOS Mental Health*. https://doi.org/10.1371/journal.pmen.0000265
- Li, J. (2024): Social-emotional challenges in digital learning environments post-pandemic. *Early Child Development and Care*, 194(5), 707–721.
- Mississippi Department of Education (2021): Early Childhood Multi-Tiered Systems of Support (MTSS) Guidance Document. https://www.mdek12.org/.
- National Center for Pyramid Model Innovations (2016): The Pyramid Model for Supporting Social Emotional Competence in Infants and Young Children. https://challengingbehavior.org/.
- National Center for Pyramid Model Innovations (2024): Practice-Based Coaching for the Pyramid Model. https://challengingbehavior.org/.
- Norman, C. (2022): *The emotional aftermath of remote learning in adolescents*. Bethel University. Ofsted (2024): *Education Recovery in Early Years Provision: Summer Term 2024*. HM Government, London.
- Oppermann, E. (2024): *Children's social-emotional development during the COVID-19 pandemic.* Early Childhood Research Quarterly.

[•] The latest verification date for online references in the study is 1 November 2025.

- Osman, Z. B., Al Saidi, G. M., Alhajeri, M. & Rashid, H. (2024): Impact of the COVID-19 pandemic on children's social, emotional, and moral development: A systematic review', *International Journal of Advanced and Applied Sciences*, 11(10), 35–47. https://doi.org/10.21833/ijaas.2024.10.005
- PolicyLab. (n. d.): School-based Interventions to Prevent Aggression and Bullying and Promote Positive Social-Emotional Skill Development. https://tinyurl.com/y45tcret
- Prino, L. E., Parola, A., Cattelino, E., Longobardi, C. & Settanni, M. (2023): Children's emotional adjustment and family stress during COVID-19: A review of evidence', *Frontiers in Psychology*, 14, 1–13.
- Raimundo, R., Marques-Pinto, A. & Lima, M. L. (2024): Social-emotional learning and mental health outcomes in schools: A systematic review. *Frontiers in Psychology*, 15, 1442387.
- Reynaud, E. et al. (2019): Sleep and its relation to cognition and behaviour in preschool children. arXiv, April. https://arxiv.org/abs/1904.05036.
- Varga, K. (2024): The role of storytelling and creative education in supporting children's emotional development post-pandemic. Early Childhood Development Press, Budapest.
- Varga, L. (2024): *Children in the digital world on the threshold of a pedagogical era and culture change*. [Manuscript, Power Point Slides]