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Review Paper

Cognitive Development in Preschool and Early Childhood Education: An Empirical Literature Review

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ABSTRACT

Cognitive development is vital for the knowledge and growth of children, with thinking, reasoning, and understanding. It indicates the framework of conditions, including the normal level for chronological age. The objective of the research was to review the key studies and research gaps by reviewing, summarizing, and synthesizing the empirical study findings related to cognitive development of children. The paper was prepared with review of the empirical literature from Google Scholar, peer-reviewed journal articles, and reports. The paper reviewed the key international and national context and research gaps in cognitive development among children in pre-school and ECD centers. The early years of life greatly affect children's future health, overall well-being, and their growth in thinking and emotional abilities. A learning environment and school with qualified teachers, learning materials, structure, and adequate food would be good for children's development. Providing structured play in school settings plays an essential role in supporting early childhood education. So, early childhood is the most critical period for holistic development in human life. There are many research gaps, such as the basis for children's cognitive development, differences in school-age children, factors that affect the cognitive development of school-age children, evaluating how the preschool practice relates to cognitive development, and studying on how family background in preschool education influence children's cognitive performance. Evidence suggests that early childhood education promotes the development of cognitive abilities and leads to holistic development.

Keywords: *Cognitive development, School environment, School-age children, ECD, Kathmandu valley*

Cognitive development is significant for knowledge growth with reasoning, thinking, and understanding (Gorev et al., 2016) and the strategy preferred when perceiving, organizing, and utilizing information (Kayılı, 2018). "Early years are the most important in the physical, and cognitive development, emotional, social, of a child" (Baber, 2016). Early childhood is the period from the time a child is in the womb until 8 years of age (UNICEF, 2020). And early childhood development (ECD) is a comprehensive method to programs and policies which is impacted by the qualities of the children, the family, and the more extensive social condition (Anderson et al., 2003). ECD curriculum includes

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knowledge and skills required for the educational program and plans for acquiring knowledge through experiences, activities, and opportunities in children's learning environment (Copple & Bredekamp, 2009).

Early childhood development (ECD) started form preprimary education as the first Montessori School in Kathmandu (Koirala, 2014). Since the 1990s, Nepal has increased its investments to enhance an excellent education for children. The Early Childhood Development (ECD) policy was launched to promote academic achievement and the holistic development of children. There is very little research on cognitive development due to pre-school education following the early childhood development (ECD) curriculum and the traditional education system. In Nepal, about 60% of the early childhood had the experience of ECD curricula who are enrolled in the primary level are concentrated more in urban areas (Khanal et al., 2017).

School-age children means aged from 6 years to 11 years old (UNESCO, 2014). Children's success in primary school relies upon preschool events, for example, physical, intellectual, and social development, knowledge, and learning improvement (Onagh et al., 2016). Early childhood is considered a critical time of human life, which establishes the framework of the future (Kopila, 2009). Early education is intended to assist students with creating and applying rationale for efficient reasoning, seeing, learning, and critical thinking, development of language, proximal development, attention, memory, and problem solving, as a rule, to enhance the cognitive development in school educational plans (Haywood & Haywood, 2020; Ranjitkar et al., 2019). The nature of expression in the early years influences the nature of later life (Megersa, 2019). A meta-analysis showed that the ECD interventions for improving cognitive development showed the largest benefits compared to other interventions and education systems (Rao et. al., 2017). The research is important to measure the cognitive development of children because of a lack of evidence, low priority of the government, stakeholders, and parents. The major objective of this paper is to synthesize empirical issues in the Cognitive development of ECD children with a differential educational background.

METHODS

The research is founded on the empirical literature review. The literature was taken from the Seto Guras, CERID, Ministry of Education, Science and Technology, national and international journals, and various other scientific publications, including books and reports. The literatures were included from 2005 to 2020. The literature related to the cognitive development of early childhood and pre-school, and written in English, was included in the research. The researcher had developed a framework of the essential elements and categories into introduction, objectives, methodology, key studies on international context with methodology, key studies on national context with methodology, debates and discussion, a conceptual framework for research, and conclusions.

Flow chart of literature search

Entering the keyword cognitive development of preschool and ECD centers children)	Scrutinized literature from the search using a similar methodology	Conceptual papers, books, editorials and commentaries, and policy documents
Online research sites explored	Google Scholar, Research Gate, Article reading center, Knowledge bank, and Social Science Index, as well as the websites of key organizations such as the Seto Guras National child Development services (SGNCDS), CERID, Curriculum Development Center Ministry of Education	
Visited the Seto Guras and other organizations	Published hardcopy of the documents, study reports, strategy and guidelines	

Figure 1. Flow chart of the literature search

RESULTS

In a qualitative school-based case study, interviews were conducted with 25 teachers, including 15 from primary schools and 10 from preschools. Content analysis revealed that primary teachers tended to define and expect school readiness at a higher level than preschool teachers. However, both groups agreed that children's social-emotional progress, motor growth, cognitive skills, and self-care abilities were crucial for beginning school successfully (Kocak & Sema, 2020).

In 2009, the Australian Early Development Census (AEDC) identified participation in preschool programs prior to school entry as a modifiable factor that can reduce developmental vulnerabilities and enhance children's transition into formal schooling (Goldfeld et al., 2016). Grounded in Bronfenbrenner's ecological theory, the study employed a mixed-methods approach with a descriptive research design. The investigation was conducted in Wareng Sub-County of Uasin Gishu County, Kenya, utilizing teacher questionnaires, observation checklists, and photovoice techniques as tools for assessing early childhood education (Syomwene, 2017).

A study consistently reviewed and synthesized evidence on the association between teacher-student interactions and effective functions (EFs). The overall result indicated that teacher-child interactions are associated with general govt functioning, remembering, and inhibition; however, not psychological feature flexibility. This study showed that qualitative teacher-child interactions are necessary for performance in EFs in children. This means that academics will promote the psychological feature processes that are essential in children's learning by ever-changing their behavior to make associates show a positive, structured, and cognitively stimulating classroom setting (Vandenbroucke et al., 2018).

The Young Lives Project in Ethiopia utilized longitudinal data to examine key determinants of preschool access and their influence on children's cognitive outcomes. Findings indicated that preschool attendance had a statistically significant positive impact on cognitive performance, as assessed through receptive vocabulary and mathematics tests. Importantly, these benefits did not diminish over time, as disparities in cognitive abilities evident at age five were still observable at age 8 (Woldehanna, 2016).

South Asian Context

The mixed-methods study in India found that children who went to curriculum-based preschools had higher arithmetic scores and some positive abstract prosperity than those in non-curriculum-based preschools. Moreover, entering preschool before the age of 4 appears to have a significant positive relationship with both intellectual accomplishment and abstract thinking at 12 years old (Singh & Mukherjee, 2019).

Early childhood education (ECE) has been widely recognized for its benefits to children's cognitive growth as well as their social and emotional adjustment. Economic analyses highlight ECE as a highly cost-effective investment, with returns estimated between two to thirteen dollars for every dollar spent on quality programs. Research further indicates that around the age of three, children's brain development is especially responsive, and exposure to stimulating environments can even enhance brain size. Beyond developmental outcomes, ECE has long-term economic advantages, including higher employment prospects, improved labour force participation, and increased earnings (Government of Pakistan, Ministry of Education, 2008). With shifting social and economic dynamics leading to earlier entry into preschool settings, evidence consistently shows that learning during the early years significantly shapes later development and contributions to society (Ahmad, 2011).

Cognitive development involves building thought processes by perceiving, processing, and interpreting information from both external and internal sources, including emotions. This growth can be nurtured through four key areas: science and arts, logic and reasoning, numbers and mathematics. Cognitive development encompasses various dimensions of intelligence, reflected in abilities such as observing, exploring, recognizing patterns, organizing and classifying information, forming connections, synthesizing knowledge, and integrating these skills to understand, solve problems, make decisions, and respond appropriately (Bureau et al., 2013).

A key objective of education for school-age children is to foster school readiness, which encompasses the cognitive, social, motor, and emotional development needed to thrive in a learning environment. Early education programs enhance executive and motor skills, contributing to improved school readiness. While research in resource-limited settings is limited, studies in East and South Asia have linked preschool education to higher intelligence, developmental quotients, and academic success. However, these findings often do not account for confounding factors such as undernutrition and low socioeconomic status, which can negatively impact cognitive development, as seen in studies like Pre-Primary School and Cognition in Nepal. Additionally, evidence suggests that children from disadvantaged backgrounds may benefit more from early education due to limited educational stimulation at home. In South Asia, there is a lack of comprehensive studies evaluating the independent impact of early education programs on cognitive development and school readiness (Jaganath et al., 2014).

Key Studies on the National Context

The Early Childhood Development and Education Curriculum seeks to foster the holistic development and learning of young children. According to the National Curriculum Draft of School Education, 2076, basic education spans from Class 1 to Class 8, following a one-year period of ECD and education. Secondary education covers four years, from Class 9 to Class 12. The policy emphasizes that the Early Childhood Development and Education curriculum prioritizes children's engagement in comprehensive developmental activities, fostering

healthy habits, promoting personal safety, hygiene, and social skills, encouraging creative thinking, and enhancing language and communication abilities (Curriculum Development Centre, 2020).

Reports indicate that Nepal currently has more than 35,000 ECD centers of varying quality across its regions, falling well short of the government's target to establish 74,000 such centers. Over the past decade, the proportion of children starting Grade 1 with some ECD exposure is increased from a mere 8% in 2003 to nearly 50% by 2009. However, in rural areas, access to these facilities remains extremely limited. (Gautam, 2013).

In Nepal, Early Childhood Development Curricula (ECDCs) are managed by the government, community, and private sectors, both independently and through partnerships. To enhance coverage and quality, a comprehensive plan is essential. This should include a robust quality assurance mechanism, improved curriculum, teacher development initiatives, and sufficient incentives for facilitators to drive improvements in ECD center quality and outcomes (Khanal et al., 2017).

Early Childhood Development Curriculum (ECDC) facilitators in Nepal require a diverse skill set, including life skills, arts and crafts, singing, dancing, listening, speaking, reading, writing, planning, organizing, coordinating, programming, pronunciation, basic game skills, curriculum development, language instruction, and fostering learning skills. Facilitators often face confusion due to the variety of ECD books available in the market. When preparing curricula, they prioritize the holistic development of children, focusing on their cognitive, social, emotional, and physical growth (Adhikari, 2019).

An ethnographic study was conducted to evaluate the status of Early Childhood Education Development Centers (ECEDs) in community and school settings, based on ECED minimum standards, and to examine teaching pedagogy, infrastructure, and the learning environment. Utilizing a qualitative research design, primary data were collected through interviews and observations. The findings indicate that the learning environment at both home and ECD centers is satisfactory, largely due to effective parental involvement, including assistance with homework, reading with children, and participation in school activities and meetings. Additionally, from an equity perspective, children from marginalized families are able to access quality education at ECD centers, ensuring inclusivity (Koirala, 2014).

DISCUSSION

Early childhood is a crucial period for rapid and holistic motor and cognitive development. Research, including a review of electronic databases up to July 2017, provides causal evidence supporting the positive impact of physical activity programs on motor skills and cognitive growth in preschool children. Of the 10 studies evaluated, 80% reported significant improvements in motor performance (Zeng et al., 2017). Additionally, an assessment of school readiness for children aged 5-6 years examined multiple dimensions: (a) moral and religious values, (b) physical and motor skills, (c) cognitive abilities, (d) language skills, and (e) social-emotional development. Qualitative research findings indicate that children demonstrated readiness in all these areas, enabling them to transition successfully to primary school. These outcomes align with activities outlined in the annual school curriculum plan, supporting their effective integration into primary education (Seran et al., 2017).

A study involving 100 preschool children in Malaysia utilized the McCarthy Scales of Children's Abilities (MSCA) to assess their psychological capacities. The findings revealed that play requiring insight significantly engaged the children, who remained cheerful throughout the study period (Hutagalung & Isa, 2017). Similarly, another study explored the impact of the Montessori Method on the cognitive development of 4- to 5-year-old children. It demonstrated that the method reduced errors and extended learning time among children in the intervention group, highlighting its positive effect on cognitive development (Kayılı, 2018).

Early childhood education significantly enhances children's self-esteem, self-concept, learning abilities, phonological skills, drawing capabilities, cognitive-linguistic growth, and socioemotional development. Research indicates that the longer children participate in preschool education, the greater their developmental gains across these domains (Polat & Yavuz, 2016). A study in the Republic of Kazakhstan identified challenges in preschool and school development, emphasizing areas such as early childhood development, communication, socialization, creative thinking, and leadership. The study highlighted that fostering innovative thinking, imagination, and diverse ideas is crucial for societal progress, underscoring the need for opportunities to cultivate leadership skills within schools to help students envision future prospects, achieve specific goals, and learn independently (Baikulova et al., 2017). Additionally, technological advancements, particularly the use of augmented reality (AR) in preschool education, have proven transformative. A meta-analysis of twelve studies confirmed that AR applications enhance children's cognitive, social, language, and motivational development by enriching their visualization experiences. (Barkhaya et al., 2018).

Teachers are pivotal in fostering children's ongoing development, with research highlighting that strong teacher-child relationships enhance students' social connectedness in the classroom and foster positive attitudes toward education (Baral, 2011). Transforming Early Childhood Education (ECE) programs is challenging but can be achieved efficiently with clear understanding and robust leadership support (Greaves & Bahous, 2020). Conversely, children who are not yet school-ready are likely to face negative educational experiences, underscoring the importance of effective ECE interventions (Kocak & Sema, 2020).

Nepal boasts a high gross enrollment rate in Grade 1; however, significant dropout and repetition rates in early grades persist, largely due to the proliferation of kindergartens and preschool centers in urban areas and district headquarters. Despite this growth, the quality of these Early Childhood Development (ECD) centers remains compromised (Gautam, 2013). While some ECD centers benefit from trained and experienced facilitators and government funding to cover operational costs (Koirala, 2014), the rapid expansion of centers and enrollment underscores the urgent need for qualitative improvements (Pande, 2009). School principals and teachers face challenges in creating conducive learning environments, grappling with infrastructural limitations and differing parental expectations about children's learning. Additionally, a shortage of skilled personnel to foster an effective atmosphere for child development further complicates these efforts (Subedi & Shrestha, 2020).

Play significantly encourages preschool children, boosting their inspiration, confidence, emotions, and effort (Hutagalung & Isa, 2017). It fosters holistic development across four key domains: physical, cognitive, social, and emotional (Anne & Marcella, 2018). Research consistently highlights that young children benefit more from free play than from structured,

scheduled school environments, supporting their future academic success. Moreover, starting formal schooling before age seven may not yield long-term social or academic benefits (Baber, 2016).

A study revealed that one in three preschool-aged children in low- and middle-income countries (LMICs) fails to achieve key cognitive or socioemotional developmental milestones (McCoy et al., 2016). Preschool education has been shown to enhance intelligence and creativity while reducing aggression in primary school (Onagh et al., 2016). Additionally, preschool attendance accounts for approximately one-third of the direct influence of family wealth, education, and regional location on children's cognitive performance (Woldehanna, 2016). Challenges to effective preschool education implementation often stem from a lack of workbooks, policy documents, manuals, teacher guidance, syllabuses, and inconsistent application across schools.

Significant disparities exist in defining early childhood age groups, creating challenges in standardizing educational approaches. Additional gaps include inconsistent curriculum implementation in school systems, variations in Early Childhood Development (ECD) and preschool education that lead to differences in children's cognitive growth, and a lack of clarity on factors influencing cognitive development in ECD and preschool children. There is also a need to identify strategies to enhance cognitive development, understand barriers to equitable preschool access, evaluate the impact of preschool experiences on cognitive outcomes, and determine how preschool access mitigates the effects of family background and regional disparities on cognitive performance. Programs must be designed with children's developmental stages in mind and incorporate family education to support school readiness, recognizing its critical role in holistic child development.

Recent research highlights the importance of teacher-child interactions in fostering executive functions, yet this area remains underexplored, representing a key gap in cognitive development studies. Investigating typically developing Nepalese children could provide valuable insights into developmental predictors, though this was not feasible in the current study. Further research is needed, employing detailed developmental assessments across a broader range of low- and middle-income countries (LMICs). Additionally, age-specific measures tailored to diverse cultural and local contexts would more accurately reflect children's developmental capacities, promoting equitable and effective early education strategies.

CONCLUSIONS

Cognitive development helps children to learn the relationships between issues, identify cause and effect, and enhance analytical skills. It depends on the education curriculum and approaches to children. The future of the nation depends on the quality of the education received by children. Early education has long-term effects on a child's social and academic skills. The evidence suggests that the family interaction, an appropriate curriculum for the age group, a positive environment, and classroom interaction improve holistic development, including cognitive development. Early childhood education is mainly impacted by the qualities of the children, the family, and the social conditions. It allows the development of cognitive abilities, new levels of richness, and reflectivity.

Nepal's Constitution has established ECD as a fundamental right of children (2015) and is supported by other policies promoting early childhood education that leads to cognitive development.

REFERENCES

Adhikari, S. P. (2019). Practice of Early Childhood Development Curriculum Preparation. *Interdisciplinary Research in Education*, *4*(1), 43–52.

Ahmad, M. (2011). Early Childhood Education in Pakistan: an international slogan waiting for national attention. *Contemporary Issues in Early Childhood*, *12*. https://doi.org /10.2304/ciec.2011.12.1.86

Anderson, L. M., Shinn, C., Fullilove, M. T., Scrimshaw, S. C., Fielding, J. E., Normand, J., & Carande-Kulis, V. G. (2003). The Effectiveness of Early Childhood Development Programs A Systematic Review. *American Journal of Preventive Medicine*, *24*(3), 32–46. https://doi.org/10.1016/S0749-3797(02)00655-4

Anne, S., & Marcella, M. (2018). *Significance of Play in Early Childhood Education Curriculum*. Kenya Association of Educational and Management. http://www.kaea m.or.ke/articles/v10/Paper5.pdf

Baber, M. A. (2016). Appropriate school starting age: A focus on the cognitive and social development of a child. *Journal of Education and Educational Development*, *3*(2), 277. https://doi.org/10.22555/joeed.v3i2.1065

Baikulova, A. M., Ibrayeva, M. K., Shalabayeva, L. I., Abdigapbarova, U. M., & Mynbayeva, A. P. (2017). The System of Development Programmes on Pre-School and School Education in the Republic of Kazakhstan. *Interchange*, *48*(2), 167–182. https://doi.org/10.1007/s10780-016-9288-4

Baral, R. K. (2011). *Contribution of Child Care Centers to Early Childhood Development A case study from the Kathmandu Valley of Nepal*.

Barkhaya, N. M. M., Halim, N. D. A., & Yahaya, N. (2018). The Importance of Augmented Reality Application for Children's Development During Preschool Years. *Advanced Science Letters*, *24*(11), 7935–7938. https://doi.org/10.1166/asl.2018.12460

Bureau, F. H., Ministry of Health Sri Lanka, & UNICEF. (2013). *Early Child Developmental Standards for Sri Lankan Infants and Toddlers*.

Curriculum Development Centre. (2020). *Early Child Development (ECD) Curriculum | Collegenp*. Nepal Government, Education, Science and Technology Ministry, Curriculum Development Centre. https://www.collegenp.com/article/early-child-development-ecd-curriculum/

Gautam, Kul C. (2013). *Enhancing Quality Education for All in Nepal*. http://kulgautam.org/ 2013/04/06/enhancing-quality-education-for-all-in-nepal/

Gorev, P. M., Bichurina, S. Y., Yakupova, R. M., & Khairova, I. V. (2016). Estimation of the Level of Cognitive Development of a Preschool Child Using the System of Situations with Mathematical Contents. *International Journal of Environmental & Science Education*, *11*(5), 693–702. https://doi.org/10.12973/ijese.2016.342a

Greaves, M., & Bahous, R. (2020). Adapting to Change; Exploring Early Childhood Educators' Perceptions of a Child-Centered Curriculum. *Early Childhood Education Journal*, 1–12. https://doi.org/10.1007/s10643-020-01077-x

Haywood, H. C., & Haywood, H. C. (2020). Cognitive Early Education. In *Oxford Research Encyclopedia of Education*. Oxford University Press. https://doi.org/10.1093/acrefor e/9780190264093.013.971

Hutagalung, F. D., & Isa, Z. M. (2017). Cognitive ability among preschool children in Kuala Lumpur Malaysia. In *Social Interactions and Networking in Cyber Society* (pp. 15–25). Springer Singapore. https://doi.org/10.1007/978-981-10-4190-7_2

Jaganath, D., Khatry, S. K., Murray-Kolb, L. E., LeClerq, S. C., & Christian, P. (2014). Pre-Primary School and Cognition in Nepal 1 Edited by SL and WFB The Role of Pre-Primary Classes on School-Age Cognition in Rural Nepal. *The Journal of Pediatrics*, 4–5. https://doi.org/10.1016/j.jpeds.2014.11.031

Kayılı, G. (2018). The effect of Montessori Method on cognitive tempo of Kindergarten children. *Early Child Development and Care*, *188*(3), 327–335. https://doi.org/10.1080/03004430.2016.1217849

Khanal, S. K., Paudyal, B. R., & Dangal, S. (2017). Early Childhood Development Policies in Nepal: Achievements, Learning, and Implications. In *Education in the Asia-Pacific Region* (Vol. 35, pp. 135–161). Springer Nature. https://doi.org/10.1007/978-981-10-1528-1_7

Kocak, D. I., & Sema. (2020). Determination of Primary Education Teachers' and Preschool Education Teachers' Views on School Readiness. *Journal of Theoretical Educational Science*, *13*(1), 170–190.

Koirala, A. (2014). Early Childhood and Education Development Center in Kathmandu Valley. *International Journal of Social Sciences and Management*, *1*(3), 103–107. https://doi.org/10.3126/ijssm.v1i3.10585

Kopila. (2009). *A newsletter on Early Childhood Development*. CERID/TU with the support of UNICEF/Nepal 14

Lorina. (2018). *Child Theorists and Their Theories in Practice - Aussie Childcare Network*. Aussie Child Network. https://aussiechildcarenetwork.com.au/articles/childcare-articles/child-theorists-and-their-theories-in-practice

Louis, A. (2018, November 30). *Preschool Cognitive Development Overview & Techniques*. Early Childhood Education Blog. https://blog.himama.com/preschool-cognitive-activities-overview/

McCoy, D. C., Peet, E. D., Ezzati, M., Danaei, G., Black, M. M., Sudfeld, C. R., Fawzi, W., & Fink, G. (2016). Early Childhood Developmental Status in Low- and Middle-Income Countries: National, Regional, and Global Prevalence Estimates Using Predictive Modeling. *PLOS Medicine*, *13*(6), e1002034. https://doi.org/10.1371/journal.pmed.1002034

Megersa, A. K. (2019). Preschool curriculum implementation in Ethiopia: The case of selected woredas preschools. In *Cypriot Journal of Educational Sciences* (Vol. 14, Issue 2). www.cjes.eu

Onagh, K., Sanagoo, A., Jouybari, L., & Azimi, M. (2016). Comparing intelligence, creativity and aggressiveness in children with and without preschool education. *Navid No*, *18*(61), 43–55. https://doi.org/10.22038/NNJ.2016.7368

Pande, B. D. (2009). Improving Quality of Early Childhood Development Programs in Nepal. *Journal of Early Childhood Development*, 38–45. http://www.cerid.org

Polat, Ö., & Yavuz, E. A. (2016). The Relationship Between the Duration of Preschool Education and Primary School Readiness. *Childhood Education*, *92*(5), 396–404. https://doi.org/10.1080/00094056.2016.1226115

Ranjitkar, S., Hysing, M., Kvestad, I., Shrestha, M., Ulak, M., Shilpakar, J. S., Sintakala, R., Chandyo, R. K., Shrestha, L., & Strand, T. A. (2019). Determinants of Cognitive Development in the Early Life of Children in Bhaktapur, Nepal. *Frontiers in Psychology*, *10*, 2739. https://doi.org/10.3389/fpsyg.2019.02739

Seran, T. N., Haryono, & Anni, C. T. (2017). School Readiness: Readiness Children Seen from The Whole Aspect of Early Childhood Development Article Info. *Journel of Primary Education*, *6*(3), 224–232. http://journal.unnes.ac.id/sju/index.php/jpe

Subedi, R., & Shrestha, M. (2020). Enabling Environment for Early Childhood Development: A Narrative Study of Preschools in Nepal. *International Journal of Emerging Issues in Early Childhood Education*, *2*(1), 58–72. https://doi.org/10.31098/ijeiece.v2i1.178

Syomwene, A. (2017). Teacher Support and School Environment Factors Influencing Children's Outdoor Play in Early Childhood Curriculum in Pre-schools in Kenya. *Journal of Scientific Research and Reports*, *14*(4), 1–13. https://doi.org/10.9734/jsrr/2017/33594

UNESCO. (2014). *Progress in getting all children to school stalls but some countries show the way forward; 2014*.

UNICEF. (2020). *Building Futures: Early Childhood Development Service Quality Standards for South Asia*. www.unicef.org/rosa

Vandenbroucke, L., Spilt, J., Verschueren, K., Piccinin, C., & Baeyens, D. (2018). The classroom as a developmental context for cognitive development: A meta-analysis on the importance of teacher–student interactions for children's executive functions. *Review of Educational Research*, *88*(1), 125–164. https://doi.org/10.3102/0034654317743200

Whitebread, D., Neale, D., Jensen, H., Liu, C., Solis, S. L., Hopkins, E., Hirsh-Pasek, K., & Zosh, J. (2017). *The role of play in children's development: a review of the evidence white paper*.

Woldehanna, T. (2016). Inequality, preschool education and cognitive development in Ethiopia. *International Journal of Behavioral Development*, *40*(6), 509–516. https://doi.org/10.1177/0165025415627700

Zeng, N., Ayyub, M., Sun, H., Wen, X., Xiang, P., & Gao, Z. (2017). Effects of Physical Activity on Motor Skills and Cognitive Development in Early Childhood: A Systematic Review. *BioMed Research International*, *2017*, 2760716. https://doi.org/10.1155/2017/2760716

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Conflict of Interest

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