


## VYGOTSKY'S THEORY IN THE DEVELOPMENT OF SOCIAL AND COGNITIVE SKILLS OF THE ALPHA GENERATION

Muh Syauqi Malik<sup>1</sup>, Masalahah<sup>2</sup>, Arina Zulva Maulida<sup>3</sup>, Lutfiyatun Nikmah<sup>4</sup>, Ahmad Hashinuddin<sup>5</sup>

<sup>1,3</sup>Universitas Negeri Surabaya, <sup>2</sup>MI Salafiyah Tajungsari, <sup>4,5</sup>IAIN Kudus  
[muhmalik@unesa.ac.id](mailto:muhmalik@unesa.ac.id)

Submit : 22 Mar. 2025	Review : 14 April 2025	Accepted : 14 April 2025
	DOI : <a href="https://doi.org/10.47625/fashluna.v6i1.968">https://doi.org/10.47625/fashluna.v6i1.968</a>	

### ABSTRACT

Quality education is a global challenge, especially for Generation Alpha, which faces difficulties in social and cognitive skills due to a lack of direct interaction. To address this problem, this study proposes modeling learning methods based on Vygotsky's theory that emphasizes structured social interaction and the use of technology as learning aids. This method involves an in-depth analysis of more than 20 relevant Scopus-indexed journals, with a qualitative approach that emphasizes document analysis techniques and thematic analysis to identify emerging themes and patterns. The novelty value of this research lies in the application of Vygotsky's theory in the context of modern education, which has not been explored much, as well as the emphasis on collaboration and group discussion as an effective learning method. The results show that the application of Vygotsky's principles, such as social interaction and emotional experience, can improve the social and cognitive skills of Generation Alpha, as well as support better academic achievement. As such, this research makes a significant contribution to educational literature and offers practical recommendations for educators and policymakers to create more effective and meaningful learning environments.

### ABSTRAK

Pendidikan yang berkualitas merupakan tantangan global, terutama bagi Generasi Alfa, yang menghadapi kesulitan dalam keterampilan sosial dan kognitif karena kurangnya interaksi langsung. Untuk mengatasi masalah ini, penelitian ini mengusulkan pemodelan metode pembelajaran berdasarkan teori Vygotsky yang menekankan pada interaksi sosial yang terstruktur dan penggunaan teknologi sebagai alat bantu pembelajaran. Metode ini melibatkan analisis mendalam terhadap lebih dari 20 jurnal terindeks Scopus yang relevan, dengan pendekatan kualitatif yang menekankan pada teknik analisis dokumen dan analisis tematik untuk mengidentifikasi tema dan pola yang muncul. Nilai kebaruan dari penelitian ini terletak pada penerapan teori Vygotsky dalam konteks pendidikan modern yang belum banyak dieksplorasi, serta penekanan pada kolaborasi dan diskusi kelompok sebagai metode pembelajaran yang efektif. Hasil penelitian menunjukkan bahwa penerapan prinsip-prinsip Vygotsky, seperti interaksi sosial dan pengalaman emosional, dapat meningkatkan keterampilan sosial dan kognitif Generasi Alfa, serta mendukung pencapaian akademik yang lebih baik. Dengan demikian, penelitian ini memberikan kontribusi yang signifikan terhadap literatur pendidikan dan menawarkan rekomendasi praktis bagi para pendidik dan pembuat kebijakan untuk menciptakan lingkungan belajar yang lebih efektif dan bermakna.

**Keywords:** Alpha Generation, Cognitive Skills, Social Skills, Vygotsky's Theory

### INTRODUCTION

Quality education is one of the main indicators of a country's progress. In this context, the existence of teachers who have quality human resources and a deep understanding of the psychology of students is crucial. According to data from UNESCO, about 258 million children worldwide are out of school, and many do not receive adequate education. This shows that the

issue of education is an urgent global issue that needs to be solved. Without good education, future generations will find it difficult to face future challenges, so the urgency to improve the quality of education cannot be ignored.<sup>1</sup>

Generation Alpha, which includes children born from 2010 to 2025, faces unique challenges in their learning process. They grew up in a very different digital era compared to previous generations, where technology became an integral part of daily life. Research shows that children in this generation are more likely to experience difficulties in social and cognitive skills due to a lack of direct interaction.<sup>2</sup> Therefore, it is important to identify and address these issues so that they can thrive well in an increasingly complex environment.

Several studies have been conducted to overcome this. One of the most widely discussed approaches is the application of Vygotsky's theory of learning, which emphasizes the importance of social interaction in learning. According to Vygotsky, learning happens through interaction with others. The social environment plays an important role in a child's cognitive development. Learning methods that involve collaboration and group discussions can improve children's understanding and social skills. However, despite the various successes encountered, there are still many challenges to face.<sup>3</sup> Many studies do not consider different cultural and social contexts, so the results may not be universally applicable. In addition, some of the methods used in the research that have been conducted are less accurate in measuring the long-term impact of social interactions on cognitive development. Therefore, it is necessary to ensure that the approach taken can be more effective and relevant to the needs of the Alpha generation.<sup>4</sup>

This article will discuss the cognitive and social development of the alpha generation based on Vygotsky's theory. By looking at various perspectives in foreign countries and the database of Scopus-indexed journals in the last 5 years, this article is expected to be able to provide answers about the relevance of Vygotsky's theory in meeting the needs of the alpha generation so that it can develop the skills needed to face future challenges.

## RESEARCH METHOD

This article was prepared using a qualitative approach to explore and understand the application of Vygotsky's theory in the development of social and cognitive skills of the Alpha generation. The research design used involved an in-depth analysis of more than 20 journals indexed in Scopus, which were selected based on their relevance and contribution to the topic being researched using the Publish or Perish application. The journal selection process has been carried out with database restrictions for the last 5 years so that the information obtained is more current and still relevant.

Data was collected through a document analysis technique, where researchers conducted a literature review of selected articles. Each journal was analyzed to identify key themes, methodologies used, outcomes, and findings relevant to the development of social and

---

<sup>1</sup> Faisal Bin Badar and Jon Mason, "Numbers Are Alarming, Solutions Are Scant: International Conference on Sustainable Development," *Proceedings From ICSD 2020* (November 2020): 1–16.

<sup>2</sup> S. Kaplan-Berkley, "Digital Tools and Streaming Media Converge to Inspire Social Interactions of Generation Alpha," *International Journal of Early Childhood* 54, no. 2 (2022): 185–201.

<sup>3</sup> Özgül Polat, Türker Sezer, and Nevra Atış Akyol, "Collaborative Learning with Mind Mapping in the Development of Social Skills of Children," *Participatory Educational Research* 9, no. 1 (January 1, 2022): 463–480.

<sup>4</sup> Richard D. Lane and Ryan Smith, "Levels of Emotional Awareness: Theory and Measurement of a Socio-Emotional Skill," *Journal of Intelligence* 9, no. 3 (September 2021): 42.

cognitive skills. Then, the author notes the various approaches taken in applying Vygotsky's theory, as well as the challenges faced in its implementation. This process involves critical reading and systematic notetaking to ensure that all important information is covered and can be further analyzed.

The analysis was carried out using thematic analysis techniques. The authors identify patterns and themes that emerge from the data that has been collected, as well as group the information by relevant categories. This process includes data reduction, data presentation, and concluding. The results of this analysis are expected to provide a clear picture of how Vygotsky's theory can be integrated into educational practice to support the development of social and cognitive skills of the Alpha generation.

## RESULT AND DISCUSSION

Lev Vygotsky, an important figure in the world of psychology and education, was born in Russia in 1896 into a non-religious Jewish family. His early life was filled with tragedy, where two of his siblings died because of the German occupation, famine, and the civil war that ravaged his homeland. During these difficult times, Vygotsky lived with his uncle, David Vygotsky, who provided support in his educational journey. He completed his studies at Moscow State University in 1917, and in the mid-1920s, he began contributing to the Institute of Psychology. There, Vygotsky worked intensively in the fields of education and psychology, initiating innovative ideas about cognitive development with his colleagues in Leningrad and Kharkiv.<sup>5</sup> For a decade, Vygotsky produced important works comprising six volumes of journals, including *Psychology of Art and Thought and Language*. With a keen interest in psychology, child development, and education, Vygotsky left a valuable intellectual legacy before dying in Moscow of tuberculosis at the very young age of 37. His works continue to influence educational thought and practice to this day, making him one of the most influential figures in the field.<sup>6</sup>

Lev Vygotsky argues that the social environment plays a crucial role in the learning process, emphasizing that social interaction can transform an individual's learning experience. Therefore, he highlights the importance of society and culture in encouraging cognitive development, so his theory is often referred to as the Sociocultural Perspective.

### Vygotsky's Theory of Language Development

Language development is a complex process and is greatly influenced by the child's social interaction with the surrounding environment.<sup>7</sup> In this context, Lev Vygotsky, a psychologist and educational theorist of Russian origin, provides an in-depth insight into the relationship between language and children's cognitive development. According to Vygotsky, the internalization of cultural values in society plays an important role in providing meaning and context for children, which in turn contributes to the development of thinking and language skills.<sup>8</sup>

---

<sup>5</sup> Guilherme Brockington, Ana Paula Moreira, and Nikolay Veresov, "Neuroscience and Vygotsky: Putting Together Contemporary Evidence and Cultural-Historical Psychology," in *Cognitive Sciences and Education in Non-WEIRD Populations: A Latin American Perspective*, ed. Marcus Vinicius Alves et al. (Cham: Springer International Publishing, 2022), 11–23, accessed March 22, 2025, [https://doi.org/10.1007/978-3-031-06908-6\\_2](https://doi.org/10.1007/978-3-031-06908-6_2).

<sup>6</sup> Elena Bodrova and Deborah Leong, *Tools of the Mind: The Vygotskian Approach to Early Childhood Education* (Taylor & Francis, 2024).

<sup>7</sup> Muh Syauqi Malik and Maemunah Maemunah, "Kemampuan Literasi Baca Tulis Anak Usia Dasar (Studi Analisis Perkembangan Bahasa Anak Usia 7-12 Tahun Di Madrasah Ibtidaiyah (MI) Salafiyah Tajungsari Kecamatan Tlogowungu Kabupaten Pati)," *JIP (Jurnal Ilmiah PGMI)* 6, no. 2 (2020): 195–214.

<sup>8</sup> Sofyan Mustoip et al., "Implementation of Character Education through Children's Language Development in Elementary Schools," *IJECA (International Journal of Education and Curriculum Application)* 6, no. 2 (May 28, 2023): 91–100.

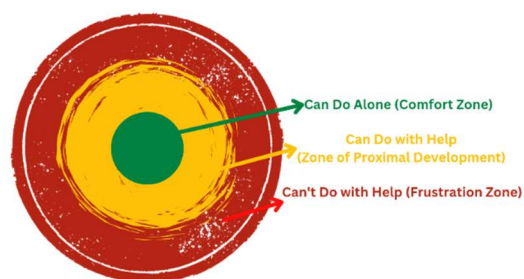
Vygotsky argued that cognitive development and language are inseparable from each other. They both develop simultaneously. Language is not only a means of communication but also a means of thinking and understanding the world. Through language, children can organize their thoughts, express ideas, and interact with others. In the context of the family environment, children interact with their friends, parents, and others. This interaction is very important because children learn through the process of imitating what the people around them say. This process not only enriches a child's vocabulary but also helps them understand the structure of language and the social context that surrounds it. Thus, a social environment rich in linguistic stimulation can accelerate children's language development.<sup>9</sup>

Social interactions and cultural contexts affect a child's language acquisition. Through meaningful interactions, students can support each other in understanding and using language so that they can improve their language skills. The application of Vygotsky's principles in teaching can help create a more inclusive and effective learning environment where students feel encouraged to participate actively in the learning process.<sup>10</sup>

### **Zone of Proximal Development: Concepts and Implications in Learning**

Vygotsky also emphasized the importance of the Zone of Proximal Development, which is the distance between a child's actual developmental level that can be measured through their ability to complete tasks independently, and a potential developmental level that can be achieved with the help of a more competent adult or peer. In this context, social interaction is key because, through guidance and support from others, children can achieve a higher level of language development.<sup>11</sup>

The Proximal Developmental Zone is a basic concept introduced by Lev Vygotsky in his theoretical framework of cognitive development. Zone of Proximal Development refers to a variety of tasks that can be completed by a learner with the support and guidance of other individuals but cannot be completed independently by that learner. This concept highlights the importance of social interaction in the learning process and individual development. The distance between the actual rate of development and the rate of potential growth is known as the Proximal Zone of Development. This zone includes abilities that are not yet fully matured and are still in the process of maturing. Vygotsky argues that effective learning occurs when children are faced with tasks that are slightly more challenging than what they are currently proficient at but are still within the reach of their abilities with help.<sup>12</sup>



**Picture 1. Zone of Proximal Development**

<sup>9</sup> Nikolay Veraksa, "Vygotsky's Theory: Culture as a Prerequisite for Education," in *Piaget and Vygotsky in XXI Century: Discourse in Early Childhood Education*, ed. Nikolay Veraksa and Ingrid Pramling Samuelsson (Cham: Springer International Publishing, 2022), 7–26, accessed March 22, 2025, [https://doi.org/10.1007/978-3-031-05747-2\\_2](https://doi.org/10.1007/978-3-031-05747-2_2).

<sup>10</sup> R. Alkhudiry, "The Contribution of Vygotsky's Sociocultural Theory in Mediating L2 Knowledge Co-Construction," *Theory and Practice in Language Studies* 12, no. 10 (2022): 2117–2123.

<sup>11</sup> Galina Portnova, Rebreikina, Anna, and Olga and Martynova, "The Ages of Zone of Proximal Development for Retrospective Time Assessment and Anticipation of Time Event," *Applied Neuropsychology: Child* 11, no. 4 (October 2, 2022): 761–770.

<sup>12</sup> Lalit Gehlot, "Cognitive Development by Zone of Proximal Development (ZPD)," *The Journal of Education, Culture, and Society* 12, no. 2 (2021): 432–444.

To understand children's cognitive development in depth, Vygotsky suggests that children's abilities be assessed when they work independently as well as when they receive guidance from others. With this approach, it is possible to identify the child in need of additional support and design the right learning experience to encourage their further development. The application of the concept of Zone of Proximal Development in learning practice has significant implications. Teachers and educators are expected to create a learning environment that supports social interaction and collaboration. By providing the right challenges and the right support, educators can help students to reach their maximum potential. Through this approach, learning is not only a process of knowledge transfer but also an experience that enriches student's social and emotional development. Thus, the Zone of Proximal Development is not only a theory but also a practical guide to designing effective and meaningful learning experiences.<sup>13</sup>

The importance of social and environmental interaction in children's learning processes, as well as how games can serve as tools to support children's cognitive and social development. Vygotsky principles, such as the proximal developmental zone and the role of social mediation, can be applied in educational practice to enhance children's learning experiences. Educators can design activities that support children's holistic development, as well as encourage collaboration and communication among them.<sup>14</sup>

### **Scaffolding in Learning**

Scaffolding is a support mechanism designed to assist learners in completing tasks that are within their Zone of Proximal Development. This concept is especially important in educational contexts, where learners are often faced with challenges that exceed their current level of cognitive development. Scaffolding can be interpreted as a form of assistance provided by an adult or a more competent individual to a child. The purpose of this help is to enable the child to work on tasks or problems that have a higher level of complexity compared to their actual cognitive abilities. In other words, scaffolding serves as a bridge that connects current capabilities with achievable potential.<sup>15</sup>

Scaffolding involves providing significant assistance to children in the early stages of learning. As the child's abilities develop, the assistance gradually decreases, providing an opportunity for the child to take over greater responsibilities. The forms of the help supplied can vary, ranging from hints and warnings to encouragement to break down problems into simpler forms so that students can learn independently.<sup>16</sup>

Vygotsky posits that there are three categories of student achievement in their efforts to solve problems: students who achieve success well, students who achieve success with help, and students who fail to achieve success. In this context, scaffolding serves as the teacher's effort to guide students to attain success. The support provided by teachers is essential to ensure that student's achievement can be optimally improved to a higher level.<sup>17</sup>

---

<sup>13</sup> Nikolay Veraksa, Yeshe Colliver, and Vera Sukhikh, "Piaget and Vygotsky's Play Theories: The Profile of Twenty-First-Century Evidence," in *Piaget and Vygotsky in XXI Century: Discourse in Early Childhood Education*, ed. Nikolay Veraksa and Ingrid Pramling Samuelsson (Cham: Springer International Publishing, 2022), 165–190, accessed March 22, 2025, [https://doi.org/10.1007/978-3-031-05747-2\\_10](https://doi.org/10.1007/978-3-031-05747-2_10).

<sup>14</sup> L. Smolucha, "Vygotsky's Theory in-Play: Early Childhood Education," *Early Child Development and Care* 191, no. 7 (2021): 1041–1055.

<sup>15</sup> Sadhana Puntambekar, "Distributed Scaffolding: Scaffolding Students in Classroom Environments," *Educational Psychology Review* 34, no. 1 (March 1, 2022): 451–472.

<sup>16</sup> Yaoying Xu et al., "Supporting Young Spanish Speaking English Learners through Teacher Scaffolding and Reciprocal Peer Tutoring," *Early Child Development and Care* 192, no. 8 (June 11, 2022): 1324–1336.

<sup>17</sup> Tanmay Sinha et al., "Differential Benefits of Explicit Failure-Driven and Success-Driven Scaffolding in Problem-Solving Prior to Instruction," *Journal of Educational Psychology* 113, no. 3 (2021): 530–555.



These scaffolding principles give birth to a guided discovery method in learning, where students are encouraged to find solutions independently with the right guidance from the teacher. This method not only improves student's understanding of the material but also builds their confidence and independence in learning. Overall, scaffolding is a very effective approach in education, as it allows students to develop according to their potential.

### **Alpha Generation Concept**

Generation Alpha, which includes children born 2010 - 2024, is the first generation to grow up in a highly connected digital environment. With rapid technological advancements, Generation Alpha is faced with unique challenges and opportunities. Generation Alpha is known as "screenagers" because they relied on digital technology. They grew up with extensive access to digital devices, such as smartphones, tablets, and computers. Some of the key characteristics of Generation Alpha include:

1. This generation is deeply connected to technology, which affects the way they interact and learn. They tend to be more comfortable using technology to communicate and access information.
2. Alpha Generation shows positive traits such as high curiosity and creativity. They often explore various digital platforms to find information and express themselves.
3. Despite their early childhood, Alpha Generations show a higher level of independence in learning and decision-making, often influenced by the information they find online.<sup>18</sup>

However, behind these positive characteristics, Generation Alpha also faces emotional and relational challenges. Research shows that they can experience problems such as anxiety and difficulty in building healthy social relationships, often referred to as "screenagers".<sup>19</sup> The development of digital technology has changed the media consumption patterns of Generation Alpha, especially during the COVID-19 pandemic. Research by Šramová and Pavelka shows that the Alpha generation prefers media applications that meet the needs of entertainment, information, education, and gaming. They tend to use interactive and engaging apps, which can increase their engagement in the learning process. However, technology provides access to information and entertainment, increased use of digital gadgets correlates with increased anxiety and decreased children's self-esteem. This suggests that while technology can be a useful tool, its overuse can have a negative impact on a child's mental health.<sup>20</sup>

One of the interesting aspects of Generation Alpha is the influence of cartoon characters on their purchasing decisions. Research by Gupta et al. shows that cartoon characters have a significant impact on influencing Generation Alpha's behavior when making purchasing decisions. The appeal of this character is closely related to the ability to remember, the desire to try, and the intention to buy. Although children influence the purchasing process, the final decision is still influenced by the parents. This shows the importance of marketers understanding these dynamics and creating appeal for cartoon characters among Generation Alpha.<sup>21</sup>

---

<sup>18</sup> R. Ziatdinov, "Generation Alpha: Understanding the Next Cohort of University Students," *European Journal of Contemporary Education* 10, no. 3 (2021): 783–789.

<sup>19</sup> M. Drugaș, "Screenagers or 'Screamagers'? Current Perspectives on Generation Alpha," *Psychological Thought* 15, no. 1 (2022): 1–11.

<sup>20</sup> B. Šramová, "Generation Alpha Media Consumption During Covid-19 and Teachers' Standpoint," *Media and Communication* 11, no. 4 (2023): 227–238.

<sup>21</sup> A. Gupta, "Influence of Cartoon Characters on Generation Alpha in Purchase Decisions," *Young Consumers* 23, no. 2 (2022): 282–303.

Education for the Alpha Generation needs to adapt to their unique characteristics. Some approaches that can be applied include:

1. Gamification and Game-Based Learning: Research by Fernando and Premadasa shows that the use of game elements in education can increase student's interest and aid in the development of important cognitive and social skills. Gamification can create a more engaging and interactive learning experience.<sup>22</sup>
2. Integration of Technology in the Curriculum: A systematic review of the literature shows that although many digital educational tools are being developed, none have yet emerged as dominant. Therefore, educators and policymakers need to consider the effective integration of technology in the curriculum to meet the learning needs of Generation Alpha.<sup>23</sup>

In addition, family strength also plays an important role in the development of the Alpha Generation. Research in Thailand by Kanchana et al. shows that family strengths, including communication, emotional support, and parental involvement, contribute to children's positive development. A strong family can provide the necessary support to help children overcome the challenges they face.<sup>24</sup> Research shows that Generation Alpha children are developing two new forms of recreational activities: virtual and blended activities (a combination of virtual activities and traditional communication with peers). This shows that even though they are digitally connected, social interaction remains important to their development.<sup>25</sup>

Generation Alpha faces unique challenges and opportunities in the context of education and social development. By understanding their characteristics and expectations, educational institutions and parents can create an environment that supports the growth and well-being of the children of this generation. More research is needed to dig deeper into the social and psychological impact of technological developments on Generation Alpha. Collaborative efforts between educators, parents, and researchers are critical to ensuring that Generation Alpha can thrive well in this ever-changing world.

### **The Relevance of Vygotsky's Theory in the Development of Alpha Generation Skills**

Social and cultural interactions affect an individual's cognitive development, as well as the importance of the social environment in the learning process. Vygotsky emphasized that learning happens through interaction with others and that language plays an important role in the development of thought.<sup>26</sup> In addition to the relationship between emotions and cognition in the context of sociocultural theory, Vygotsky views the role of emotions in the learning process and development of the individual. Emotions not only serve as individual responses, but they also play an important role in learning and social interaction. Using a content analysis

---

<sup>22</sup> P.A. Fernando, "Use of Gamification and Game-Based Learning in Educating Generation Alpha: A Systematic Literature Review," *Educational Technology and Society* 27, no. 2 (2024): 114–132.

<sup>23</sup> A. Höfrová, "A Systematic Literature Review of Education for Generation Alpha," *Discover Education* 3, no. 1 (2024),

<sup>24</sup> K. Pattarawiat, "The Measurement Model of Family Strengths for Generation Alpha in the Thai Context," *Behavioral Sciences* 14, no. 10 (2024),

<sup>25</sup> E.V. Astapenko, "Personal Characteristics and Environmentally Responsible Behavior of Children of the Generation Alpha with Different Leisure Orientation," *E3S Web of Conferences* 273, no. Query date: 2025-03-13 10:17:30 (2021),

<sup>26</sup> M. Gauvain, "Vygotsky's Sociocultural Theory," *Encyclopedia of Infant and Early Childhood Development*, no. Query date: 2025-03-13 10:11:53 (2020): 446–454.

approach, this article explores three key Vygotsky texts related to emotions, identifying emerging themes and grouping them into an interrelated system of theoretical principles.<sup>27</sup>

The implications of Vygotsky's theory for educational practice include how teachers can create learning environments that support collaboration and social interaction among students. Therefore, sociocultural theories can be applied to enhance the learning experience in the classroom. The integration of the concepts of L.S. Vygotsky and A.V. Petrovsky in the context of developmental social psychology contributes to the understanding of individual development in social and cultural contexts. By combining Vygotsky's ideas about psychological tools and development through social interaction with Petrovsky's approach that emphasizes the social aspects of development, it can be revealed how social psychology can be applied to understand the dynamics of individual development in modern society.<sup>28</sup>

One of the applications of modern learning methods is to use flipped classroom learning and cooperative learning in the context of Vygotsky's theory. There is research examining how both approaches can improve student engagement and learning outcomes, with a focus on social interaction and collaboration, which are at the heart of Vygotsky's theory. The importance of a learning environment that supports interaction between students, as well as how flipped classrooms can facilitate more active and participatory learning. By integrating Vygotsky's theory, learning involving collaboration and social support can improve student's understanding of concepts and critical thinking skills.<sup>29</sup>

There is also the effectiveness of educational strategies based on Vygotsky's theory in improving student's academic achievement and information-processing skills. This has been proven by using an experimental method with a quasi-experimental design involving two equal groups: one control group taught with traditional techniques and one experimental group taught using pillar-based educational strategies. The research sample consisted of 66 female students who were selected deliberately, with attention to equality in their chronological age and math level. The results showed that there was a statistically significant difference between the average scores of the two groups on tests of math achievement and information processing skills, with pillar-based education strategies showing great effectiveness in improving both aspects.<sup>30</sup>

Furthermore, the influence of Vygotsky's theory in teacher education and training examines how Vygotsky's work is often used in the educational literature, especially in the context of sociocultural perspectives and themes such as second language acquisition, mathematics teaching, and teaching and learning approaches. Vygotsky's work has no problem, suggesting that Vygotsky's description of learning and teaching is based on sociocultural themes, but his theoretical account for explaining those descriptions is debatable. The author

---

<sup>27</sup> N. Cong-Lem, "Emotion and Its Relation to Cognition from Vygotsky's Perspective," *European Journal of Psychology of Education* 38, no. 2 (2023): 865–880.

<sup>28</sup> N.N. Tolstykh, "Social Psychology of Development: Integrating the Ideas of L.S. Vygotsky and A.V. Petrovsky," *Cultural-Historical Psychology* 16, no. 1 (2020): 25–34.

<sup>29</sup> D.G. Erbil, "A Review of Flipped Classroom and Cooperative Learning Method Within the Context of Vygotsky Theory," *Frontiers in Psychology* 11, no. Query date: 2025-03-13 10:11:53 (2020), <https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b&scp=85086770845&origin=inward>.

<sup>30</sup> L.F. Jawad, "The Effectiveness of Educational Pillars Based on Vygotsky's Theory in Achievement and Information Processing Among First Intermediate Class Students," *International Journal of Emerging Technologies in Learning* 16, no. 12 (2021): 246–262.



also considers the implications of this view on thinking about child development, learning, teaching, and teacher education.<sup>31</sup>

The relationship between the environment and psychological development, with a focus on the concept of *perezhivanie* developed by Vygotsky, is also important. The research explores how the emotional and social experiences individuals experience in the context of their environment can affect psychological development. This article emphasizes the importance of understanding *perezhivanie* as a key factor in the learning and developmental process, as well as how interactions between individuals and the environment can shape profound and influential experiences. The authors also examine the implications of this concept in the context of child education and development, as well as how a better understanding of *perezhivanie* can help in designing more effective educational strategies.<sup>32</sup>

The theories of cultural-historical activity developed by Vygotsky, Leontiev, and Engeström provide a comprehensive overview of the origins and basic principles of this cultural-historical perspective, as well as compare and evaluate the differences between the three approaches. The authors highlight the importance of understanding these differences to avoid confusion that often occurs in educational research using this framework. By outlining the implications of each theory, there is a better insight into how these theories can be applied in academic and research contexts, as well as how they can aid in understanding the interactions between individuals and their social environment.<sup>33</sup>

## CONCLUSION

Vygotsky's theory is significant in the development of Alpha Generation skills, which are developed in complex social and cultural contexts. Learning occurs through social interaction, where language and emotions play an important role in cognitive processes. Modern learning methods such as flipped classrooms and cooperative learning support Vygotsky's principles by increasing student collaboration and engagement, proving effective in improving academic achievement and information processing skills. The concept of *perezhivanie* emphasizes the importance of emotional experiences in the learning environment. At the same time, the theory of cultural-historical activity provides insight into the interaction of individuals with social contexts. Therefore, the application of Vygotsky's principles in education can shape critical and adaptive individuals, as well as enhance a more meaningful learning experience.

## BIBLIOGRAPHY

- Alkhudiry, R. "The Contribution of Vygotsky's Sociocultural Theory in Mediating L2 Knowledge Co-Construction." *Theory and Practice in Language Studies* 12, no. 10 (2022): 2117–2123.
- Astapenko, E.V. "Personal Characteristics and Environmentally Responsible Behavior of Children of the Generation Alpha with Different Leisure Orientation." *E3S Web of*

---

<sup>31</sup> S. Newman, "Vygotsky, Education, and Teacher Education," *Journal of Education for Teaching* 47, no. 1 (2021): 4–17.

<sup>32</sup> N. Cong-Lem, "The Relation Between Environment and Psychological Development: Unpacking Vygotsky's Influential Concept of *Perezhivanie*," *Human Arenas*, no. Query date: 2025-03-13 10:11:53 (2022), <https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b&scp=85139986263&origin=inward>.

<sup>33</sup> N. Cong-Lem, "Vygotsky's, Leontiev's and Engeström's Cultural-Historical (Activity) Theories: Overview, Clarifications and Implications," *Integrative Psychological and Behavioral Science* 56, no. 4 (2022): 1091–1112.

- Conferences* 273, no. Query date: 2025-03-13 10:17:30 (2021).  
<https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b&scp=85108647397&origin=inward>.
- Badar, Faisal Bin, and Jon Mason. "Numbers Are Alarming, Solutions Are Scant: International Conference on Sustainable Development." *Proceedings From ICSD 2020* (November 2020): 1–16.
- Bodrova, Elena, and Deborah Leong. *Tools of the Mind: The Vygotskian Approach to Early Childhood Education*. Taylor & Francis, 2024.
- Brockington, Guilherme, Ana Paula Moreira, and Nikolay Veresov. "Neuroscience and Vygotsky: Putting Together Contemporary Evidence and Cultural-Historical Psychology." In *Cognitive Sciences and Education in Non-WEIRD Populations: A Latin American Perspective*, edited by Marcus Vinicius Alves, Roberta Ekuni, Maria Julia Hermida, and Juan Valle-Lisboa, 11–23. Cham: Springer International Publishing, 2022. Accessed March 22, 2025. [https://doi.org/10.1007/978-3-031-06908-6\\_2](https://doi.org/10.1007/978-3-031-06908-6_2).
- Cong-Lem, N. "Emotion and Its Relation to Cognition from Vygotsky's Perspective." *European Journal of Psychology of Education* 38, no. 2 (2023): 865–880.
- . "The Relation Between Environment and Psychological Development: Unpacking Vygotsky's Influential Concept of *Perezhivanie*." *Human Arenas*, no. Query date: 2025-03-13 10:11:53 (2022).  
<https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b&scp=85139986263&origin=inward>.
- . "Vygotsky's, Leontiev's and Engeström's Cultural-Historical (Activity) Theories: Overview, Clarifications and Implications." *Integrative Psychological and Behavioral Science* 56, no. 4 (2022): 1091–1112.
- Drugaş, M. "Screenagers or 'Screamagers'? Current Perspectives on Generation Alpha." *Psychological Thought* 15, no. 1 (2022): 1–11.
- Erbil, D.G. "A Review of Flipped Classroom and Cooperative Learning Method Within the Context of Vygotsky Theory." *Frontiers in Psychology* 11, no. Query date: 2025-03-13 10:11:53 (2020).  
<https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b&scp=85086770845&origin=inward>.
- Fernando, P.A. "Use of Gamification and Game-Based Learning in Educating Generation Alpha: A Systematic Literature Review." *Educational Technology and Society* 27, no. 2 (2024): 114–132.
- Gauvain, M. "Vygotsky's Sociocultural Theory." *Encyclopedia of Infant and Early Childhood Development*, no. Query date: 2025-03-13 10:11:53 (2020): 446–454.
- Gehlot, Lalit. "Cognitive Development by Zone of Proximal Development (ZPD)." *The Journal of Education, Culture, and Society* 12, no. 2 (2021): 432–444.
- Gupta, A. "Influence of Cartoon Characters on Generation Alpha in Purchase Decisions." *Young Consumers* 23, no. 2 (2022): 282–303.
- Höfrová, A. "A Systematic Literature Review of Education for Generation Alpha." *Discover Education* 3, no. 1 (2024).  
<https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b&scp=85208124395&origin=inward>.
- Jawad, L.F. "The Effectiveness of Educational Pillars Based on Vygotsky's Theory in Achievement and Information Processing Among First Intermediate Class Students." *International Journal of Emerging Technologies in Learning* 16, no. 12 (2021): 246–262.

- Kaplan-Berkley, S. "Digital Tools and Streaming Media Converge to Inspire Social Interactions of Generation Alpha." *International Journal of Early Childhood* 54, no. 2 (2022): 185–201.
- Lane, Richard D., and Ryan Smith. "Levels of Emotional Awareness: Theory and Measurement of a Socio-Emotional Skill." *Journal of Intelligence* 9, no. 3 (September 2021): 42.
- Malik, Muh Syauqi, and Maemunah Maemunah. "Kemampuan Literasi Baca Tulis Anak Usia Dasar (Studi Analisis Perkembangan Bahasa Anak Usia 7-12 Tahun Di Madrasah Ibtidaiyah (MI) Salafiyah Tajungsari Kecamatan Tlogowungu Kabupaten Pati)." *JIP (Jurnal Ilmiah PGMI)* 6, no. 2 (2020): 195–214.
- Mustoip, Sofyan, Muhammad Iqbal Al Ghozali, Umi Sumiati As, and Saleh Youssef Sanhaji. "Implementation of Character Education through Children's Language Development in Elementary Schools." *IJECA (International Journal of Education and Curriculum Application)* 6, no. 2 (May 28, 2023): 91–100.
- Newman, S. "Vygotsky, Education, and Teacher Education." *Journal of Education for Teaching* 47, no. 1 (2021): 4–17.
- Pattrawiwat, K. "The Measurement Model of Family Strengths for Generation Alpha in the Thai Context." *Behavioral Sciences* 14, no. 10 (2024). <https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b&scp=85207240829&origin=inward>.
- Polat, Özgül, Türker Sezer, and Nevra Atış Akyol. "Collaborative Learning with Mind Mapping in the Development of Social Skills of Children." *Participatory Educational Research* 9, no. 1 (January 1, 2022): 463–480.
- Portnova, Galina, Rebreikina ,Anna, and Olga and Martynova. "The Ages of Zone of Proximal Development for Retrospective Time Assessment and Anticipation of Time Event." *Applied Neuropsychology: Child* 11, no. 4 (October 2, 2022): 761–770.
- Puntambekar, Sadhana. "Distributed Scaffolding: Scaffolding Students in Classroom Environments." *Educational Psychology Review* 34, no. 1 (March 1, 2022): 451–472.
- Sinha, Tanmay, Manu Kapur, Robert West, Michele Catasta, Matthias Hauswirth, and Dragan Trninic. "Differential Benefits of Explicit Failure-Driven and Success-Driven Scaffolding in Problem-Solving Prior to Instruction." *Journal of Educational Psychology* 113, no. 3 (2021): 530–555.
- Smolucha, L. "Vygotsky's Theory in-Play: Early Childhood Education." *Early Child Development and Care* 191, no. 7 (2021): 1041–1055.
- Šramová, B. "Generation Alpha Media Consumption During Covid-19 and Teachers' Standpoint." *Media and Communication* 11, no. 4 (2023): 227–238.
- Tolstyykh, N.N. "Social Psychology of Development: Integrating the Ideas of L.S. Vygotsky and A.V. Petrovsky." *Cultural-Historical Psychology* 16, no. 1 (2020): 25–34.
- Veraksa, Nikolay. "Vygotsky's Theory: Culture as a Prerequisite for Education." In *Piaget and Vygotsky in XXI Century: Discourse in Early Childhood Education*, edited by Nikolay Veraksa and Ingrid Pramling Samuelsson, 7–26. Cham: Springer International Publishing, 2022. Accessed March 22, 2025. [https://doi.org/10.1007/978-3-031-05747-2\\_2](https://doi.org/10.1007/978-3-031-05747-2_2).
- Veraksa, Nikolay, Yeshe Colliver, and Vera Sukhikh. "Piaget and Vygotsky's Play Theories: The Profile of Twenty-First-Century Evidence." In *Piaget and Vygotsky in XXI Century: Discourse in Early Childhood Education*, edited by Nikolay Veraksa and Ingrid Pramling Samuelsson, 165–190. Cham: Springer International Publishing, 2022. Accessed March 22, 2025. [https://doi.org/10.1007/978-3-031-05747-2\\_10](https://doi.org/10.1007/978-3-031-05747-2_10).

Xu, Yaoying, Chen ,Chin-Chih, Spence ,Christine, Washington-Nortey ,Melissa, Zhang ,Fa, and Amber and Brown. “Supporting Young Spanish Speaking English Learners through Teacher Scaffolding and Reciprocal Peer Tutoring.” *Early Child Development and Care* 192, no. 8 (June 11, 2022): 1324–1336.

Ziatdinov, R. “Generation Alpha: Understanding the Next Cohort of University Students.” *European Journal of Contemporary Education* 10, no. 3 (2021): 783–789.