



Parenting Concerns for Children of Generation Beta: A Cross-Sectional Study

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Abstract

Generation Beta is the emerging generation born between 2025 and 2039, of older Millennials and early Generation Z. With the advancement of AI and technology, the latest generation is experiencing excessive screen time and limited parent-child bonding, which might pose serious implications on child development and attachment outcomes. This study explores the perception of parenting pertinent to the upbringing and development of Generation Beta. A quantitative cross-sectional survey was conducted using a tailor-made structured questionnaire, with support from generative AI and grey literature, to explore parents' perceptions by recruiting 157 individuals using convenience sampling. The data were analysed using descriptive-inferential statistics in SPSS to examine parental insights on rising concerns in Pakistan. Descriptive statistics were calculated, including frequencies (N) and percentages, along with inferential statistics where p-values were obtained using the Chi-Square test. The results revealed that technology will bring advancement and opportunities for Generation Beta; on the other hand, parents were concerned with more screen time, minimal parent-child bonding, limited outdoor play, parenting strategies in the future upbringing, and challenges faced by the children. Therefore, the study contributes to rising parents' concerns for Generation Beta and the requirement of parental education programs and strategies for their children. It also offers a foundation for future researchers to work towards it.

Keywords

Early childhood development
Generation beta
Parent-child bonding
Parenting strategies
Screen time

INTRODUCTION

Generation Beta is a proposed name for the demographic cohort: children born between 2025 and 2039, children born in the complete AI generation with innovative and technology-based problem solutions (George, 2024). This generation will be the children of the older Millennials and the younger Generation Z people born between 2025 and 2039. This generation will likely pose new challenges and opportunities. Being the parents of Generation Z and late Millennials, the thinking and parenting strategies are opposite to what is expected for the upbringing of Generation Beta, which is a rising concern (Nagy & Csutorás, 2025). As a result, new parents face rising pressure to understand parenting in today's digital environment because they need to handle screen usage, mental health issues, and the impact of artificial intelligence (AI) on early childhood development. This generation is more towards digital learning with limited social interaction, which is a rising concern for parents of the new generation, since it hinders the creativity, critical thinking, and problem-solving among children with delayed speech and language development (Jourdren et al., 2023).

Furthermore, Generation Beta is equipped to face the challenge with a distinctive combination of creativity, adaptability, and AI-powered innovation. The International Data Corporation (IDC) reported that the global data sphere will reach 175 zettabytes by 2025 (Coughlin, 2018). IDC expects Generation Beta to be a major driver of this increase (Coughlin, 2018). This is due to the high level of incorporation of new technologies like the Internet of Things (IoT), augmented reality (AR), and virtual reality (VR), where traditional divisions of reality and virtuality are becoming less and less evident. Similarly, a study revealed that with Generation Beta on its way, society is witnessing the appearance of a new generational group and the dawn of the next major organisational era of human existence (George, 2024). This generation will grow up in a world with increased use of AI, automation, and a changing nature of work.

On the other hand, the parenting of Generation Beta will not be similar to that of previous generations because of the advancement of technology. The current and younger generations of parents may be more modern than their predecessors in their parenting approach, especially regarding children's screen time and interactions with technology (Willets, 2025). This analysis is further supported by the findings of a recent newsletter in Forbes, which stated that such parents are likely to stress the potential benefits of using the technologies while at the same time embracing the principle of face-to-face interaction (Ratanjee, 2025). This approach captures an emerging understanding of the importance of building one's defences and cultivating empathy in a screen-based communication and AI world. Another category is the economic aspect, which can be described as the current economic environment. In a study, it is mentioned that Generation Beta is likely to encounter problems with finances, for example, low economic

growth, high inflation, high cost of living, and job loss due to automation by smart machines (George, 2024).

Consequently, the emergence of Generation Beta signals a transformative era for both children and parents. The issues of technology, the environment, and economic factors pose a complex challenge. This is the role of parents in technology and AI to provide a safe, nurturing environment for their children, who can be moulded to fit into the future society. This process is difficult and demands a proper approach to using technologies in interpersonal relationships, inculcating environmental responsibility without causing stress, and teaching business skills, creativity, and emotional intelligence. Raising Generation Beta means parents are on the edge of changing traditional ways of thinking and acting, which requires flexibility, self-reflection, and dedication to the child's development. In alignment with this perspective, the present research aims to analyse the role of parenting in the upbringing of Generation Beta.

Problem Statement

The emergence of Generation Beta children born in the start of 2025 has exposed a substantial research deficit in understanding parental perspectives regarding their expectations, fears, and challenges in raising their children. The research landscape remains scarce regarding Generation Beta areas, although some expert analysis and surveys have started to provide insights. Parents demonstrate worry about regulating screen usage, maintaining psychological well-being, and equipping their offspring for future technological and environmental obstacles. This gap in parenting and the new generation is alarming and concerning, and deep literature is required to upgrade parenting strategies. Considering this, the research will guide the development of solutions that address the specific needs of Generation Beta parents.

Research Objectives

This research aims to analyse the role of parenting in the upbringing and development of Generation Beta.

- To explore parental concerns and challenges regarding Generation Beta parenting
- To assess the perceived impact of technology and climate from Generation Beta parents' perspectives
- To examine parental expectations of future skills for Generation Beta

LITERATURE REVIEW

Health Issues

The Generation Beta children born starting from 2025 must tackle novel health issues because of fast technological progress and changing social patterns. Digital exposure throughout society presents a major mental health risk among the new generation. The continual connection to social media platforms alongside their usage leads to rising depression, anxiety, and social disconnect among young people, according to research findings (Sharma et al., 2024). One in five children and young people experience common mental health problems according to the Centre for Mental Health, and this condition will result in significant economic costs through reduced productivity and health-related absences (Dorling, 2009). Furthermore, physical health is under threat because people spend more time being inactive. Obesity, alongside various health problems, develops because children spend too much time on screens instead of outdoor play. The solution proposed by experts involves outdoor nature activities because they enhance brain performance and decrease anxiety symptoms (Kumar et al., 2025). It is vital to develop emotional intelligence in addition to other factors. Teaching children emotional self-expression helps build their resilience skills while enhancing their social abilities. Conclusively, the guidance for parents includes demonstrating positive interaction styles and designing settings that help children grow emotionally.

Developmental Growth

In the early years of development, outdoor play plays a key role in physical, social, and emotional development (Bento & Dias, 2017). In early years, especially among children of 0-8 years, the first crucial

years of brain development, during which child observes and learns from their environment. Only 7% of children have playgrounds in their schools and communities, while 60% lack regular active play facilities, impacting their brain's physical growth and emotional development (Bento & Dias, 2017). In Pakistan, however, children have limited outdoor active play options due to poor infrastructure, increasing pollution, increasing traffic, and increasing security issues for children (Clements, 2023). Due to these concerns, there is a rise in screen time due to a lack of physical outdoor play, impacting immediate developmental growth, and poorer motor and social skills, resulting in rising obesity and health concerns among children. If it stays the same in the future, it will be an alarming situation for children and the economy (Cardon et al., 2014). Therefore, the importance of outdoor active play is recognised by stakeholders, government bodies, and policymakers of Pakistan, as this is a vital step for the upcoming children of Generation Beta for their physical, social, cognitive, and emotional development, and reducing health concerns in the future.

Education and Learning

Education and learning are important factors that influence children's environmental awareness and parents' economic literacy. Young children can adapt and learn, which makes them unique and smart with proper education and a learning environment, according to Artipah et al., (2024). Children & Nature Network stated that children tend to follow their parents in environmental behaviours, indicating that parental behaviours strongly impact children's ecological beliefs (Aghayeeabianeh, 2020). Peer pressure might be as influential or even more than parental influence, especially as the child grows. This shift implies the need to address families and peer groups as the right intervention units to foster long-term positive environmental behaviours among children. Concerning the economic socialisation process, parents play a significant role in building children's financial literacy and savings skills (Phung, 2023). Students who have responsibilities in handling their household finances tend to be more financially literate and inclined toward budgeting. This supports the argument that parents should set the pace for their children to manage their finances in the future by being role models, since there is only a 26% literacy rate among adults in Pakistan (Madinaxon, 2025). Due to the lack of awareness of the poor economic literacy rate in Pakistan, financial education has had minimal involvement in the early years of school curriculum development, so that parents can receive a minimal concept of financial education for their future savings and economic growth for their children. From the study findings, it is evident that parents are the primary educators of children in financial matters (Phung, 2023). Parents are concerned that their children will face problems and challenges in their future, including problem-solving, without financial literacy. For this reason, different public stakeholders and policymakers are now focusing on financial literacy in the curriculum, seeing it as an important step in improving long-term financial resilience in an unstable economy and child development for future children (Madinaxon, 2025).

A book by Ahmet Fidan stated that, regarding the technological context, there is an implication of extensive utilisation of AI and ML amongst Generation Beta, which is used for a personalised learning perspective for children (Fidan, 2022). Further, the effective implementation of modern-day technologies also has severe positive impacts on boosting personal and professional development within the education field. In line with that, the implication of the Internet of Things (IoT) within classrooms of Generation Beta significantly enhances the importance of using various sensors, as by this particular approach, it becomes convenient for them to understand the importance of modern education (Ahuja & Bala, 2021). A report stated that education related to robotics and the integration of AI within it is another meaningful aspect of education, which Generation Beta children quite positively experience in the modern world. This educational perspective of modern-day technologies plays an important role in the overall academic, educational, and professional development. By analysing the results of both previous studies, it is observed that there is a significant relationship between Generation Beta and education, which is strongly bonded through the effective utilisation of modern-day technologies like AI, ML, and IoT, which enhances the importance of education amongst Generation Beta (Swargiary, 2025). Therefore, effective usage of modern-day technologies plays an important role in bridging the gap between Generation Beta and education in the modern world.

AI & Technology

Since AI and the latest technology are advancing daily, current education lags behind Generation Beta's need for developmental learning. Early Childhood Education (ECE) systems lag behind Generation Beta due to the present curriculum and outdated teaching methodology, with the development of children and future societal demand for children of tomorrow (Nayyar, 2020). Currently, schools and educational systems of Pakistan focus on memorisation, traditional teaching methodologies, and academic-focused content, and often lack play-based, exploratory learning, which hinders the holistic development of children. Pakistan introduced a Single National Curriculum in 2020 by the Federal Ministry of Education, which focused on unifying standards but fell apart due to a poor fit for everyone. A previous study revealed a significant gap in old teaching practices, with resources-rich private preschools compared to public preschools, with limited ICT tools and proper teacher training for advanced teaching methodologies, will result in a limited cognitive and problem-solving capacity in young children in the future (Qayyum et al., 2024). Not only is this in the context of Pakistan's urban-rural disparities, but there is also a lack of proper distribution of schools in the curriculum. Education is the fundamental right of every child, and there is a lack of schools in urban communities, resulting in multi-grade overcrowding, which is the biggest challenge and will impact children in the future. Moreover, there is insufficient teacher training for future-oriented learning and play-based pedagogy, which is alarming and will affect the children of Pakistan if not resolved promptly.

A study stated that in the current developmental era, usage of modern-day technologies amongst children has increased drastically, which has also become a source affecting their mental and physical health by not allowing them to participate in any physical activity. It is observed that parents are experiencing their children growing up with the developmental period of the latest technology, which negatively impacts their mental and physical health, and makes them lazy (Coolsaet, 2024). To support the previous statement, it is reflected that due to a lack of parental guidance towards the effective utilisation of AI and ML amongst Generation Beta, it becomes difficult for children to develop a meaningful understanding of the current psychological and mental health conditions of their children (Spasova, 2022). A comparison of both previous studies reflected that due to extensive usage of technologies in daily life routine, it becomes difficult for Generation Beta to strike a balance between their personal and professional lives, which severely negatively impacts the overall development of Generation Beta children. Thus, modern-day technology significantly impacts the overall health development within Generation Beta.

Parenting Styles

Parenting styles play a critical role in the development of children, especially in the current society where technology is rapidly advancing. A study specified that growing up with AI will be a major part of Generation Beta's everyday existence, including AI-powered toys, gadgets, and systems from an early age of development, which will ultimately impact the early developmental stage of the child (George, 2024). A chapter from a book by Sanvictores and Mendez noted that parenting styles such as authoritative parenting, characterised by warmth and structure, support the balanced use of technology and positive social interactions (Sanvictores & Mendez, 2021). A study showed that children who grow up under authoritative parents show higher psychological development and academic performance (Lee et al., 2022). However, the influence of parenting style on the amount of time children spend on screens may not be as direct. In this regard, the study has shown no relationship between parenting styles and screen time (Rabbani et al., 2022).

Furthermore, there is no interaction between parenting styles and the effects of screen time on psychological well-being. This implies that other factors, such as peer pressure or social class, might profoundly influence children's screen time and its psychological well-being. Considering the study results, it is possible to conclude that the parenting style does not moderate the association between children's screen time and their psychological well-being. Overall, the literature highlights that increasing digital presence has created a correlation between young people's sedentary life habits, limited outdoor play, and mental health deterioration, causing depression, anxiety, obesity, and related health issues, thereby resulting in catastrophic health expenditures. Educational institutions face difficulties matching

technological requirements because they do not teach financial literacy to students, while Pakistani adult financial literacy levels remain at 26%. Children's adaptation to life challenges depends on their parental approaches because well-balanced strategies promote resilience during their development.

Conceptual Framework

When parenting, it is essential to consider the various aspects of child development, including physical, emotional, cognitive, and social growth, particularly in today's technology-driven world. Understanding these developmental areas allows parents to create a nurturing environment that fosters healthy growth and fosters a more developed approach for addressing young children born now and, in the future, for instance, encouraging physical activity promotes motor skills, while engaging in open communication supports emotional intelligence. Parents can better support their child's overall development by being mindful of these domains. Their parents' methods influence a child's capacity to handle life's challenges, as effective strategies promote resilience in their development (Ambert, 2014). As shown in Figure 1, highlighting different factors that impact the generation beta and their future development according to parental perceptions. This study examines the various factors influencing parents' perceptions of how children born in 2025 and beyond can develop and thrive. It considers parents' increasing pressures and concerns regarding health, development, education, technology, and parenting styles, particularly in Pakistan, where uncertainty influences children's ability to adapt to new changes.

METHODOLOGY

Study Design: A cross-sectional quantitative study was designed to explore the parents' perceptions regarding Generation Beta and its nuances in Pakistan. This design is appropriate and feasible for collecting data at a single point in time. It makes it efficient and cost-effective to explore the pattern and trends of the study variable of current data and the parents' perception without changing time-based differences. In this study, 157 participants were recruited who registered for the Parenting Club online webinar conducted by the ECD PREP (Early Childhood Development, Parenting Readiness Education Program) at a tertiary care academic medical centre in Karachi because it combines technological development with cultural diversity in its population, thus granting suitable conditions for assessing how parents shaped Generation Beta's development.

A total of 157 participants participated in the Generation Beta Parenting Webinar. Most female involvement in data indicates that mothers are more actively engaged in parenting discussions or more likely to participate in surveys related to children's future concerns. Out of 1 respondents, 125 were female, and 32 out of 157 were male. The data might be more accurate from the female perspective. The gender of the participants is shown in Table 1. The highest number of respondents falls in the 31-40 age group, and the second highest is in the 20-30 age group. This indicates that the parents of younger children are more engaged in discussions about parenting and education, while the p-value (0.435) indicates no marginal difference in age distribution between genders.

Table 1
Demographic Characteristics of the Participants

Variables		f(%)
Gender	Male	32(20.4)
	Female	125(79.6)
Age Groups	20-30 Years	50(31.8)
	31-40 Years	70(44.6)
	41-50 Years	30(19.1)
	51 and above	7(4.5)
Educational Level	Matric	4(2.5)
	Intermediate	67(42.6)
	Undergraduate degree	15(9.6)
	Graduate degree	71(45.3)
	Postgraduate	0(0)

Data Collection Tool

A tailor-made structured questionnaire was used, taking support from the generative AI and grey literature, and was divided into two sections: demographic and perception questionnaire about parental practices in an efficient manner, including raising concerns among parents of children of Generation Beta. Demographic consisted of basic questions such as gender, contact details, age of parents, and educational level. In contrast, the perception questionnaire consisted of parents' rising concerns, impact of technology, challenges regarding parenting, climate change impact, and related questions related to Generation Beta. The combination of AI tools enables researchers to develop objective survey questions that reduce human error and maintain impartiality in study measurements (Brynjolfsson & McAfee, 2017).

The study utilised Google Forms for data collection at a single point in time, offering inexpensive data collection means, feasible and user-friendly accessibility, as well as time-friendly for participants to complete the survey online with an active social media platform on any accessible device with an internet connection. The questionnaire was developed based on easy, understandable language, and participants were guided on how to complete the questionnaire to reduce errors or biases. Non-probability convenience sampling was used in the study, which included 157 participants. The data collection technique allowed researchers to generate data quickly while at the same time fulfilling their requirements for sample size. Because the research centred on current parenting patterns, convenience sampling offered the best solution to gather various parental insights with minimal time requirements and resources.

The study employed descriptive-inferential statistics to analyse parenting and Generation Beta to determine the rising concern among parents of children of Generation Beta. This approach makes it easier to identify the frequency, rising trends, and concerns among parents of children of Generation Beta. To perform the analysis, the data was analysed by SPSS software version 25, utilising Pearson Correlation at a threshold $p < 0.05$ for statistical significance for the lived experience and rising concern regarding Generation Beta, which offers an extended set of options to interpret the data collected.

Written informed consent was taken from each participant, who had the right to withdraw from the study at any point in time without any consequences. The implemented ethical components safeguard participant safety while maintaining the stability of gathered data and following recommended research protocols. Data was stored in a password-protected system with access only to the core research team to prevent any data breach. These steps ensured that the study maintained rigorous ethical standards to preserve credibility and research integrity.

RESULTS & FINDINGS

Based on objective one, the data indicate that educated parents are more likely to discuss their children's future. The most cited concern is excessive screen time, which is 72%. The most important concern was the loss of social and parental bonding value due to AI-powered technology. In conjunction with that, this shows the rising fear of digital impacts on childhood. Parents' concerns regarding the child's future are shown in Table 2.

Table 2

Parents' Concerns for their Children's Future

Categories	f(%)
Excess screen time	113(72.0)
Lack of quality play time	84(53.5)
AI-driven generation lacking social and parental coordination and bonding	73(46.5)
Climate change and environmental issues	54(34.4)
Technology overuse and addiction	93(59.2)
Social isolation and mental health challenges	88(56.1)
Economic Instability	45(28.7)
Quality of Education	84(53.5)
Global conflicts and security	40(25.5)

The overwhelming portion (83.4%) expresses their belief that their children are likely to face more difficulties than they did, suggesting a strong belief that modern life is becoming ever more challenging. These worries are largely held among participants. Table 3 indicates whether children face more challenges growing up than your generation.

Table 3

Children Face More Challenges Growing Up Compared to Previous Generation

Categories	f(%)
Yes	131(83.4)
No	11(7.0)
Unsure	15(9.6)

Along with highlighting parental concerns and challenges regarding Generation Beta parenting, Objective Two outlined parental perspectives on the perceived impact of technology and climate on this generation. The data suggested that a low percentage of 0.6% signifies minimum concern regarding the impact of technology, while a notable 68.8% of the respondents are very concerned about the impact of technology. Their negative expectation of technology's impact on children, suggesting a statistically significant association. Table 4 shows the concerns of parents regarding the impact of technology.

Table 4

Concerns of Parents Regarding the Impact of Technology

Categories	f(%)
Not very Concerned	1(0.6)
Somewhat concerned	11(7.0)
Neutral	37(23.6)
Very Concerned	108(68.8)

The data suggested that nearly half of parents (48.4%) frequently think about climate change's impact on their children, and 39.5% are not very serious about it. The rest do not believe it is important to care about. Table 5 shows the potential impact of climate change on a child's life.

Table 5

Potential Impact of Climate Change on a Child's Life

Categories	f(%)
Frequently	76(48.4)
Occasionally	62(39.5)
Rarely	16(10.2)
Never	3(1.9)

The data associated with objective three indicated parental expectations for Generation Beta's future skills, showing that 42% of parents believe Generation Beta will prioritise individual success. In comparison, 38.2% think collaboration and individual success will be equally important. This reflects an uncertain view of whether future generations will emphasize teamwork or personal achievement. Generation Beta prioritization is shown in Table 6.

Table 6

Generation Beta Prioritization

Categories	f(%)
Collaboration and inclusivity	22(14.0)
Individual success and coemption	66(42.0)
Both equally	60(38.2)
Neither	9(5.7)

Most parents (51.6%) believe technological advancements will positively impact career opportunities, while 35% see a negative impact indicating a strong association, suggesting that opinions about technology's role in career development are highly polarised. Creativity (32.5%) and critical thinking

(19.1%) are the most important skills parents wish to instil, followed by adaptability and resilience. This suggests an understanding that success in a rapidly evolving world requires innovation and problem-solving abilities.

Table 7

Influence of Advancements in Technology on Children's Future Career Opportunities

Categories	f(%)
Positively	81(51.6)
Negatively	55(35.0)
Neutral	21(13.4)

Table 8 shows how technological advancements will influence children's future career opportunities, while Table 8 shows what values parents instill in their children to help them succeed.

Table 8

Values Parents Prioritize to Instill in Their Children to Help Them Succeed in the Future

Categories	f(%)
Resilience	27(17.2)
Empathy	21(13.4)
Adaptability	28(17.8)
Creativity	51(32.5)
Critical thinking	30(19.1)

A significant number of respondents (47.1%) feel that the current education system is only partially preparing children for the future. This suggests concerns about whether traditional education methods are keeping pace with evolving societal and technological demands. As shown in Table 9, what parents believe about today's education system's role and whether it is adequate for the children of the future.

Table 9

Parents' Beliefs about Today's Education System's Role

Categories	f(%)
Yes	30(19.1)
No	46(29.3)
Partially	74(47.1)
Unsure	7(4.5)

Discussion

The study results for objective one, based on a study from New Zealand, revealed that fathers' engagement in parenting programs was low or non-existent, and even fathers had little experience with or understanding of the available parenting programs. Upon inquiring about the factors that will engage them in a parenting program, the mentioned factors are fostering a healthy parent-child bond, boosting kids' self-esteem and social skills, and child development (Frank et al., 2015). This study also highlighted that educated parents and parents of younger children are more engaged in discussions about parenting and education which is backed by Breiner et al., (2016) which mentions that parents with higher education and those who have young children engage more comparatively to enhance parent child bond, learn about development and growth of their children and to provide high quality child care. The most cited concern was excessive screen time (72%). The most significant problem was the loss of social and parental bonding value due to AI-powered technology. A notable 68.8% of the respondents are very concerned about the impact of technology. The responses were divided between those who believe Gen Beta can prioritise individual success (42%) and those who think collaboration and success will be equally important (38.2%).

The role of parenting for the generations Beta, Z, and other upcoming generations should be changed. The traditional way should be transformed into a technologically based method. This can be applied to change in a responsible and all-encompassing way. Although the emphasis has been on instruction,

parents who must support their children's learning in the twenty-first century can also benefit from the generational insights. Therefore, parental education programs must be developed, and parents should engage in those programs to understand the change in parenting for a new generation of kids (Wiedmer, 2015). Livingstone and Blum-Ross (2020) mention that parents were more worried about their children's screen time than other online activities. Lauricella et al. (2015) found that there was a considerable correlation between children's screen time and parents' screen time. Subsequent analyses show that parental attitudes significantly impact children's screen time. Moreover, the study informed that parents lamented regarding the social and parental bonding value loss due to AI-powered technology and excessive screen time was the most significant concern stipulated in objective two of the study thereby, supporting parental perceptions regarding the perceived impact of technology and climate on Generation Beta. Half of the parents (51.6%) believed technological advancements would positively impact career opportunities, while 35% reported a negative impact. Creativity (32.5%) and critical thinking (19.1%) are the most important skills parents wish to instil in their children. Nearly half of them (47.1%) felt the current education system partially prepares their children for the future.

Education, a crucial social structure, has changed because of global economic and social developments. Parental responsibilities have changed due to the perception that education is easily available. Today's parents have higher expectations for their kids and educational institutions because of the changing generations. These overly intrusive technological and educational advancements adversely affect children's social, psychological, and intellectual development. This also acts as a significant factor that impacts parent-child relationships. Efforts have been made to investigate how parent education might empower parents to reconstruct parenthood and modify parental lives, even though the proliferation and complexity of parental roles and choices have been brought about by the increased knowledge of risk in late modernity (Uyan et al., 2024). Literature explores the potential outcomes and experiences of a parent education program that mentions parents' holistic growth in coping with the prevalent culture of intensive parenting (Schiffrin et al., 2015). The traditional teaching methods that are still pushed on this generation may be countered by the younger generation's superior technological capabilities. Overcoming numerous obstacles, such as social, environmental, and economic, will require the generation to have problem-solving skills, creativity, judgment, critical thinking, adaptability, and self-control (Marrero Galván et al., 2023).

Furthermore, this study reported that half of the parents (51.6%) believed technological advancements would positively impact career opportunities, while 35% reported a negative impact. A study from Greece mentioned that parents think modern technologies are good for their kids and aid them in their educational journey. Parents do not want their children to spend much time on computers because they worry that it will hinder their socialising ability, even if they exclusively embrace new technologies in their children's lives for educational purposes (Kaltsidou et al., 2020). Zvieli-Girshin et al. (2024) discovered an intriguing phenomenon: parents are evolving into new, twenty-first-century parents rather than passive recipients of the educational system. The study validates parents' contentment with their children's involvement in an Early Age Robotics (EAR) program, their readiness to learn more about robotics, and their satisfaction with technology.

This study showed that mothers are more actively engaged in parenting discussions and are more likely to participate in surveys related to children's concerns, emphasising the third objective of parental expectations for future skills for Generation Beta. Parents of younger children are more engaged in discussions about parenting and education. The data suggests that educated parents are more likely to discuss their children's futures. A study indicates that children learn and develop in various ways, including through formal education. The learning trajectory starts long before kids start school, and they keep learning at home and in the community after school. To provide learning opportunities at home, parental education is essential to connect what children learn in school and what occurs outside of it.

CONCLUSION

As Generation Beta was born, a new generation has begun to emerge; hence, in this study, we aim to explore the role of parenting in the upbringing and development of Generation Beta. Therefore, parents must be informed and involved about today's rapid technological advancements, parenting strategies, and rising concerns that significantly impact young children's lives. Our findings demonstrate that due to the advancement of technologies, parental engagement is decreasing among young children in Pakistan due to their perception and response to the emerging technological landscape deeply rooted in their lives. This study's findings suggest that while parents have some general awareness, a comprehensive understanding of parents' knowledge regarding AI and digital literacy is limited. Therefore, further research is required to understand parental knowledge and readiness across the diverse socio-cultural groups for parenting and strong engagement between parent-child interaction for broader implications, application, and future directions for parents to understand Generation Beta. The study underscores critical concerns related to parenting considering advancing technology and its effects on children. It stresses the importance of greater engagement from teachers and schools in creating more effective and accessible strategies for parental education. This involvement is vital for equipping parents to navigate the evolving social media and technology trends, ultimately enhancing their parenting skills and their children's overall upbringing. Furthermore, Pakistan currently lacks a structured curriculum for parental education, which is essential for addressing the challenges faced by the new generation. A comprehensive parental education program would substantially improve parenting practices and address children's holistic development needs.

Limitations

This is one of the studies in Pakistan highlighting the responses of Generation Beta (new generation) parents and their challenges. This study also mentions significant factors, including technology, skills, and the educational system, that have the potential for the development of the new generation. However, this study has a small sample size and was conducted in a single center; therefore, it lacks generalizability.

Competing Interest

The authors declare no conflict of interest.

Authors' Biography

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