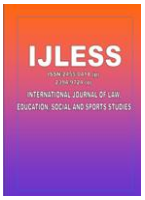
International Journal of Law, Education, Social and Sports Studies (IJLESS)

Volume: 12, Issue S1, 2025 (Special issue-1),
ISSN: 2455-0418 (Print), 2394-9724 (online) [Impact Factor: 6.0176 (ICI)]

Role of Technology Usage Among School Children and Its Relationship with Life Skills Assessment

Meenakshi G[1], Dr. Vanishree Koppad [2]

[1]Research Scholar, Department of Education, Bangalore University, Jnanabharathi, Bengaluru 560 056
Email ID: meena.gfish@gmail.com
[2]Research Guide, Assistant Professor, Department of Education, Bangalore University Jnanabharathi, Bengaluru 560 056,
Email ID: vanishreebubedu@gmail.com
DOI: 10.33329/ijless.12.S1.92



ABSTRACT

As the proliferation of technology continues to reshape the modern educational setting, understanding the role of technology usage among school children and its impact on their life skills development becomes increasingly critical. This study seeks to investigate the multifaceted relationship between technology use, specifically digital devices and the internet, and the assessment of life skills in school-aged children. The objectives are to explore the extent and patterns of technology usage among school children, as well as to assess how this usage correlates with the development of essential life skills. Findings from this study will shed light on the positive and negative impacts of technology usage on children's life skills development. It will also address potential differences in technology access, exposure, and usage among various demographic groups and how these disparities may influence life skills acquisition. The implications of this research are significant, as it will inform educators, parents, and policymakers about the optimal integration of technology into the classroom and home environments to foster holistic skill development in school children.

Keywords: assessment, education, life skills, school children, technology, usage

INTRODUCTION

In the rapidly evolving setting of education, the integration of technology has become a ubiquitous phenomenon, particularly among school children. In the Indian context, the advent of digital technologies has ushered in a new era in education, transforming traditional learning methodologies and enhancing the educational experience. This intersection between technology usage and the development of life skills among school children is a critical area of study that warrants exploration.

Technology usage among school children in India has witnessed a significant surge over the past decade (Singh & Srivastava, 2020). With the proliferation of smartphones, tablets, and internet connectivity, students are increasingly exposed to a digital environment both within and outside the classroom. This phenomenon has implications for various aspects of their academic and personal development, including the acquisition of essential life skills.

Technology

The term "technology" has been defined and interpreted by various educationists in India. Dr. A.P.J. Abdul Kalam: Former President of India, Dr. A.P.J. Abdul Kalam, emphasized the transformative potential of technology in education. He viewed technology as an enabler for providing equal opportunities in education, stating, "Technology is the key to unlocking the doors of learning and development for students in India, ensuring that they are not left behind in the globalized world." Prof. Anil D. Sahasrabudhe, former Chairman of the All India Council for Technical Education (AICTE), defined technology as a tool for active learning. According to him, "Technology in education is not just about gadgets; it's about creating an ecosystem where students become active participants in their learning process, using technology as a means to explore, create, and collaborate."

Life Skills

Life skills refer to a set of abilities that enable individuals to effectively navigate the challenges of daily life, make informed decisions, and positively interact with others. Psychologists have provided various definitions and perspectives on life skills.

- World Health Organization (WHO): The WHO defines life skills as "abilities for adaptive and positive behavior that enable individuals to deal effectively with the demands and challenges of everyday life" (WHO, 1999). This definition emphasizes the adaptive nature of life skills and their role in promoting positive behavior.
- G. R. Patterson: Psychologist G. R. Patterson, known for his work on social learning theory, described life skills as "behavioral and interpersonal skills that are necessary for successful social functioning" (Patterson, 1974). This definition underscores the social and interpersonal aspects of life skills.
- Daniel Goleman: Psychologist and author Daniel Goleman, renowned for his work on emotional intelligence, includes life skills under the umbrella of emotional intelligence. He defines life skills as "the skills that matter most for human well-being and that have the greatest impact on a person's success in life" (Goleman, 2006). Goleman places a strong emphasis on the connection between emotional intelligence and life skills.

These definitions collectively highlight the multifaceted nature of life skills, encompassing adaptive behavior, positive social functioning, emotional intelligence, and psychosocial abilities. Understanding and fostering life skills are crucial for individuals to lead fulfilling lives and contribute positively to society.

RELATIONSHIP OF TECHNOLOGY USAGE WITH LIFE SKILLS ASSESSMENT

Life skills encompass a range of abilities that enable individuals to effectively navigate the challenges of daily life. These skills include critical thinking, problem-solving, communication, collaboration, and digital literacy (UNESCO, 2013). The integration of technology in education provides a unique platform for the development and assessment of these life skills among school children.

Digital literacy, for instance, is an essential life skill in today's technologically driven world. As students engage with various digital tools and platforms, they not only acquire technical proficiency but also develop the ability to discern credible information from the vast online landscape.

Additionally, collaborative projects and online communication channels foster teamwork and communication skills.

However, it is crucial to acknowledge that the relationship between technology usage and life skills is multifaceted. Excessive screen time, cyberbullying, and information overload pose potential challenges that may hinder the holistic development of students (Sharma & Rani, 2019). Therefore, a nuanced examination of the impact of technology on life skills is imperative.

The role of technology usage among school children in India and its relationship with life skills assessment is a dynamic and evolving field of study. While technology offers unprecedented opportunities for enhancing educational outcomes and life skills development, it also presents challenges that demand careful consideration. This exploration aims to delve into the intricate interplay between technology, education, and life skills, providing insights that can inform educational policies and practices in the Indian context.

The relationship between life skills and technology usage among school children in India is multifaceted, reflecting both positive and potential challenges. Digital literacy, critical thinking, and information management skills are nurtured through technology access, enabling students to navigate online resources effectively (Singh & Srivastava, 2020). Additionally, communication and collaboration, vital life skills, are enhanced through online platforms and collaborative projects, contributing to interpersonal skill development (UNESCO, 2013). Technology integration often involves problem-solving activities and creative applications, fostering skills in these domains (Mishra & Yadav, 2013). However, cautionary notes arise, emphasizing the need to address challenges such as cyberbullying, digital addiction, and information overload to ensure a balanced and positive impact on students' overall development (Sharma & Rani, 2019). Striking this balance is crucial for harnessing the potential benefits of technology while safeguarding against potential pitfalls, thereby optimizing the relationship between technology usage and the cultivation of essential life skills among school children in the Indian educational landscape. For the latest and specific insights, referring to recent academic journals and educational research databases is recommended.

NEED FOR THE STUDY

The need for a comprehensive study on the relationship between technology usage among school children and its impact on life skills assessment in the Indian context arises from the rapid integration of digital tools in educational settings. As technology becomes increasingly prevalent in classrooms, homes, and students' lives, there is a critical need to understand the nuanced effects on the acquisition of essential life skills. Singh and Srivastava (2020) emphasize the transformative impact of digital learning on education in India, necessitating a closer examination of its implications for life skills development. Additionally, UNESCO's framework for education underscores the importance of life skills, including digital literacy, for sustainable development goals (UNESCO, 2013). However, the potential challenges and drawbacks of technology use, such as cyberbullying and information overload, as highlighted by Sharma and Rani (2019), necessitate a balanced investigation. Thus, this study is imperative to inform educational policies and practices, providing insights into optimizing technology's role in fostering holistic development among school children in the Indian educational landscape.

RESEARCH TOPIC AND AIM OF THE STUDY

The topic identified for the current investigation is **"Role of Technology Usage among School Children and its Relationship with Life Skills Assessment".** The aim and purpose of this investigation is to find out the influence of technology usage among school children on their Life Skills and also compare the Life Skills with regard to gender, type of school management and different levels of technology usage.

OBJECTIVES

1. To find out the relationship between Life Skills and Technology Usage in Learning of school children.
2. To find out the differences in the Life Skills of school children with regard to different levels of technology usage in learning.
3. To find out the differences in the Life Skills of school children with regard to type of school management.
4. To find out the differences in the Life Skills of school children with regard to sex.

RESEARCH HYPOTHESES

The following hypotheses guided the study:

1. There is no significant relationship between Life Skills and Technology Usage in Learning perceived by school children.
2. There is no significant difference in the Life Skills of school children having different levels (low, moderate and high levels) perception about technology usage in learning.
3. There is no significant difference in the Life Skills of school children studying in government, private aided and private unaided schools.
4. There is no significant difference in the Life Skills of school boys and girls.

METHODOLOGY

The aim and purpose of this investigation is to find out the influence of technology usage in learning of school children on their Life Skills and also compare the Life Skills with regard to gender, type of school management and different levels of technology usage in learning. This research was followed by descriptive survey method along with quantitative approach. The researcher collects, analyzes and interpreted the varied types of numerical data obtained from the selected subjects. The sample comprises of 96 Ninth standard school children from six schools situated at Bengaluru City, Karnataka India. Data was collected by Life Skills Assessment Scale (LSAS) by A. Radhakrishnan Nair, R. Subashree and Sunitha Ranjan (2010) was used to know the students' life skills of school children and self constructed Adolescent Technology Usage I Learning Scale (2023) was used to identify the school children about technology usage in learning in terms of engagement, flexibility, collaboration and academic performance. The collected data was analyzed by utilizing Karl Pearson's Product Moment Coefficient of Correlation, One-way ANOVA along with Scheffe's post hoc analysis and independent 't' test as statistical techniques. In all the cases, the level of significance was fixed at 0.05 and 0.01 confidence level. The results were got with the help of SPSS Package and MS Excel application.

DATA ANALYSIS

Table-1: *Showing Correlation Results between Life Skills and Technology Usage in Learning scores of school children. (N=96, df=94)*

Variable Type	Variable	'r' value	Sig. Level
Dependent	1. Self Awareness	0.227	*
	2. Empathy	0.206	*
	3. Effective Communication	0.188	NS

	4. Interpersonal Relationship	0.133	NS
	5. Creative Thinking	0.185	NS
	6. Critical Thinking	0.185	NS
	7. Decision Making	0.368	*
	8. Problem Solving	0.264	*
	9. Coping with Emotions	0.346	*
	10. Coping with Stress	0.266	*
	Life Skills	0.292	*
Independent	Technology Usage		

* Significant at 0.05 level. (Table value is 0.205 for N=96, df=94)

Table-1 presents the correlation results between life skills and technology usage in the learning scores of school children (N=96, df=94). The 'r' values represent the correlation coefficients, indicating the strength and direction of the relationship, while the significance levels (Sig. Level) help determine the statistical significance of these correlations.

1. Self Awareness ($r=0.227$, $p<0.05$): A positive and statistically significant correlation exists between self-awareness and technology usage, suggesting that as technology usage increases, self-awareness skills also tend to improve among school children.
2. Empathy ($r=0.206$, $p<0.05$): Similar to self-awareness, there is a positive and significant correlation between empathy and technology usage. Increased technology usage is associated with higher levels of empathy among school children.
3. Effective Communication ($r=0.188$, $p>0.05$): The correlation between effective communication and technology usage is positive but not statistically significant. Technology usage may not have a significant impact on effective communication skills in this context.
4. Interpersonal Relationship ($r=0.133$, $p>0.05$): The correlation between interpersonal relationship skills and technology usage is positive but not statistically significant, suggesting that technology usage may not strongly influence interpersonal relationship skills in this sample.
5. Creative Thinking ($r=0.185$, $p>0.05$): The correlation between creative thinking and technology usage is positive but not statistically significant. Creative thinking skills may not be significantly influenced by technology usage in this study.
6. Critical Thinking ($r=0.185$, $p>0.05$): Similar to creative thinking, the correlation between critical thinking and technology usage is positive but not statistically significant. Technology usage may not significantly impact critical thinking skills.
7. Decision Making ($r=0.368$, $p<0.05$): There is a strong positive correlation between decision-making skills and technology usage, indicating that as technology usage increases, the ability to make decisions also improves significantly.
8. Problem Solving ($r=0.264$, $p<0.05$): A positive and statistically significant correlation exists between problem-solving skills and technology usage. Increased technology usage is associated with enhanced problem-solving abilities.

9. Coping with Emotions (r=0.346, p<0.05): There is a strong positive correlation between coping with emotions and technology usage, indicating that as technology usage increases, the ability to cope with emotions improves significantly.
10. Coping with Stress (r=0.266, p<0.05): Similar to coping with emotions, there is a positive and statistically significant correlation between coping with stress and technology usage.
11. Overall Life Skills (r=0.292, p<0.05): The overall life skills score shows a positive and statistically significant correlation with technology usage. Higher technology usage is associated with an overall improvement in life skills among school children.

In summary, the results suggest that technology usage is positively correlated with several specific life skills, including self-awareness, empathy, decision-making, problem-solving, coping with emotions, coping with stress, and overall life skills. However, the impact on communication, interpersonal relationships, creative thinking, and critical thinking is not statistically significant in this study. These findings provide insights into the exact relationship between technology usage and various life skills among school children.

Table-2 **:** Shows ANOVA results on Life Skills of school children with regard to different levels of technology usage in learning.

Technology Usage	**N**	**Mean**	**SD**	**Source**	**Sum of Squares**	**df**	**Mean Squares**	**F Value (Sig.)**
Low	6	209.500	45.911	Between Group	15912.224	2	7956.112	
Moderate	81	254.876	28.233	Within Group	87620.265	93	942.153	8.44*
High	9	275.000	40.789	Total	103532.490	95		

Table value for 0.05 level is (df 2 and 93) 3.10 *Significant at 0.05 level

The above table-2 shows Life Skills of school children with regard to technology usage in learning levels. The obtained 'F' value 8.44 is greater than the table value of 3.10 for df '2 and 93' requested for significance at 0.05 level of confidence. The results of the study indicated that 'there was a significant difference in the Life Skills of school children having different levels (low, moderate and high) of technology usage in learning.' To determine the significant difference in the Life Skills of school children having different levels of technology usage in learning these paired mean scores, the Scheffe's post hoc test was applied and the results are presented in Table-2(a).

Table-2(a): Scheffe's Post Hoc Analysis on Life Skills scores of school children having different levels of technology usage in learning.

Levels of Technology Usage in Learning			**Mean Difference**
Low	**Moderate**	**High**	
209.500	254.876	-	45.376*
-	254.876	275.000	20.123
209.500	-	275.000	65.500*

*Significant at 0.05 level.

Table-2(a) shows significant paired mean difference in the Life Skills of school children having low and moderate; & low and high levels of technology usage in learning and the mean differences are 45.376

and 65.500 respectively which are greater than the critical difference value at 0.05 level of confidence except moderate and high levels of technology usage perception as the mean difference of 20.123 is less than the critical difference. It concludes that 'there was significant difference in the Life Skills of school children having low and moderate, & low and high levels of technology usage in learning.' The school children who had higher usage of technology in learning had better life skills when compared to moderate and low levels of technology usage in learning.

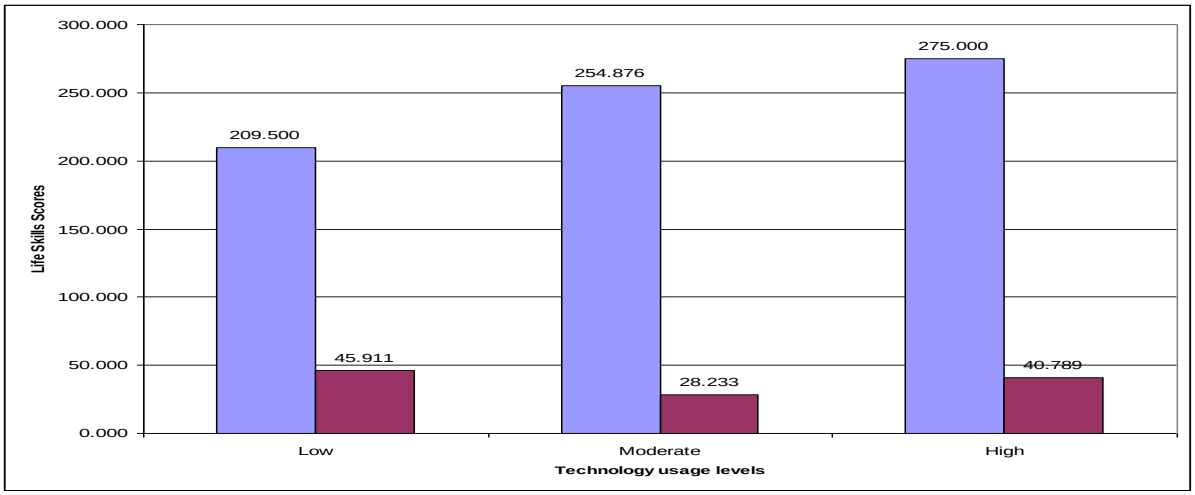


Fig.1: Bar graph shows comparison of Life Skills of school children with regard to technology usage in learning levels.

Table-3: **Showing ANOVA results on Life Skills of school children with regard to different types of school management.**

Type of school Management	N	Mean	SD	Source	Sum of Squares	df	Mean Squares	F Value (Sig.)
Government	32	268.343	26.783	Between Group	10232.333	2	5116.167	5.10*
Private Aided	32	244.718	32.032	Within Group	93300.156	93	1003.227	
private Unaided	32	248.718	33.986	Total	103532.490	95		

Table value for 0.05 level is (df 2 and 93) 3.10 *Significant at 0.05 level

The above table-3 shows Life Skills of school children with regard to school management types. The obtained 'F' value 5.10 is greater than the table value of 3.10 for df '2 and 93' requested for significance at 0.01 level of confidence. The results of the study indicated that 'there was a significant difference in the Life Skills of school children studying in government, private aided and private unaided schools.' To determine the significant difference in the Life Skills of school children having different type of school management these paired mean scores, the Scheffe's post hoc test was applied and the results are presented in Table-3(a).

Table-3(a): Scheffe's Post Hoc Analysis on Life Skills scores of school children studying in different type of school management.

Type of School Management			Mean Difference
Government	**Private Aided**	**Private Unaided**	
268.343	244.718	-	23.625*
-	244.718	248.718	4.000
268.343	-	248.718	19.625

*Significant at 0.05 level.

Table-3(a) shows significant paired mean difference in the Life Skills of school children studying in government and private unaided schools and the mean difference is 23.625 which is greater than the critical difference value at 0.05 level of confidence. But the Life Skills of school children studying in private aided and private unaided & government and private unaided schools and the mean differences are 4.000 and 19.625 respectively which are less than the critical difference value at 0.05 level of confidence. It concludes that 'there was a significant difference in the Life Skills of school children studying in government and private aided schools.' The government school children (M=268.343) had better life skills when compared to private unaided (M=248.718) and private aided school children (M=244.718).

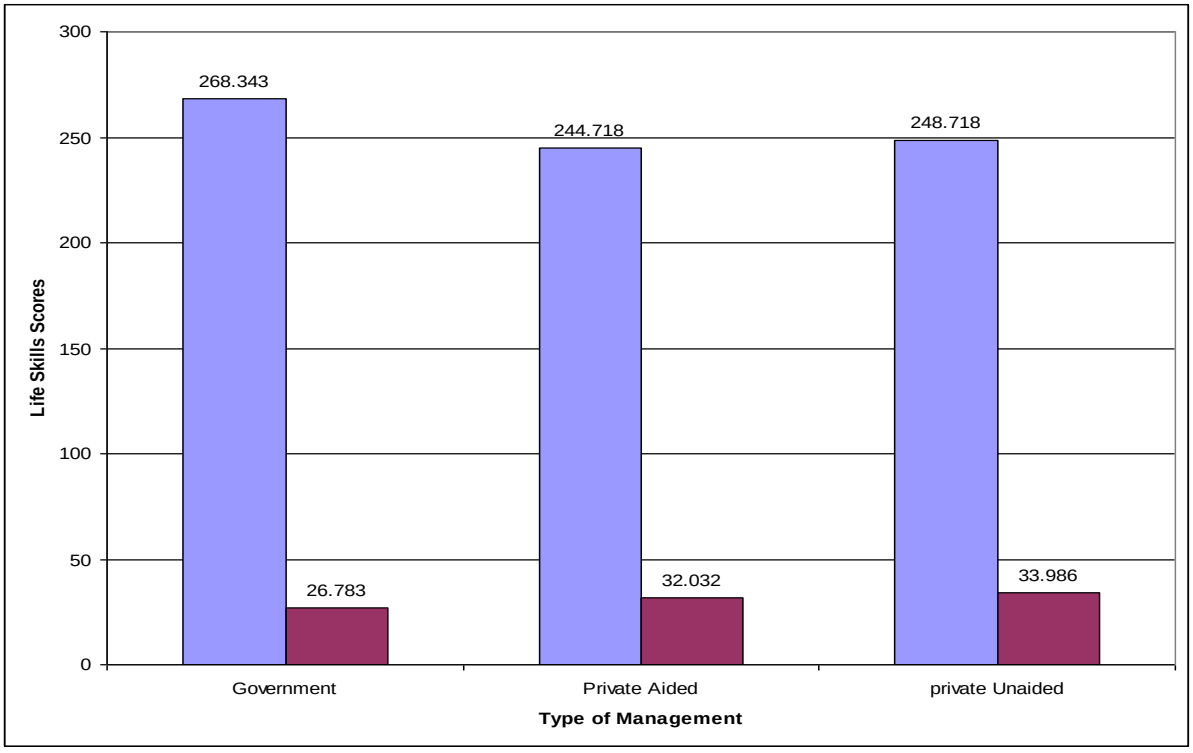


Fig.2: Bar graph shows comparison of Life Skills of school children with regard to type of school management.

Table-4: *Showing Independent 't' test results related to Life Skills scores of school children with regard to sex.*

Sex	Sample	Mean	Std. Deviation	't' Value	Sig. level
Boys	48	247.125	33.399	2.05	*
Girls	48	260.729	31.508		

Table value for 0.05 level is (df 94) 1.99 *Significant at 0.05 level

Table-4 inferred that variable, sample, mean, standard deviation, 't' value and significance level related to Life Skills of school children with regard to sex. The independent 't' value for Life Skills of school boys and girls is found to be 2.05 (df=94, table value 1.99 at 0.05 level) which is significant at 0.05 level of significance. This means 'there is a significant difference in the Life Skills of school boys and girls.' The school girls (M=260.729) had better life skills when compared with school boys (M=247.125).

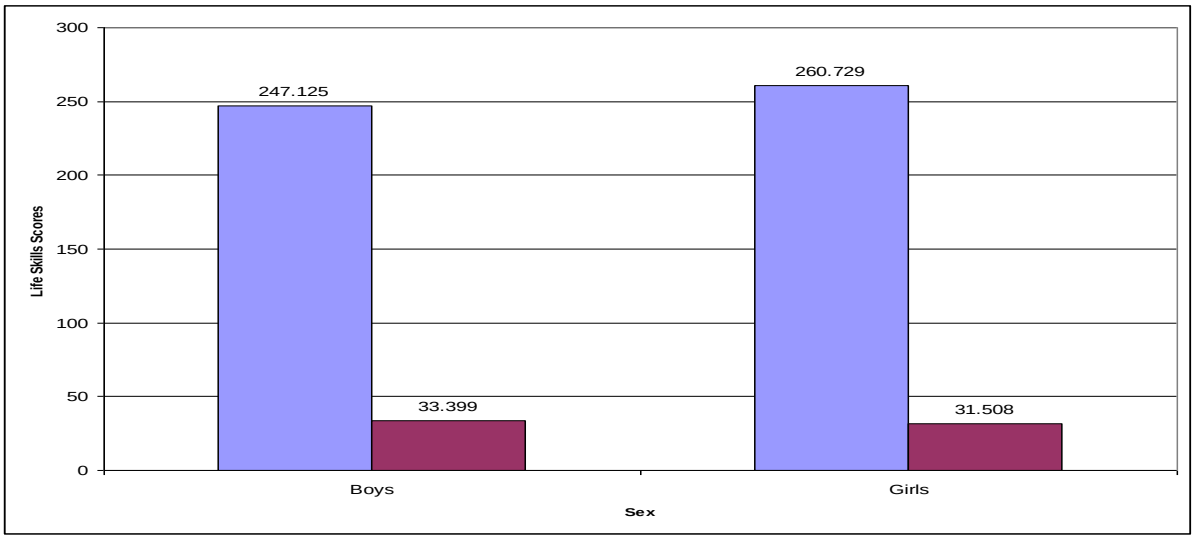


Fig.3: *Bar graph shows comparison of Life Skills mean scores of school children with regard to sex.*

FINDINGS

1. There was a significant positive relationship between technology usage and several specific life skills namely self-awareness, empathy, decision-making, problem-solving, coping with emotions, coping with stress, and overall life skills except communication, interpersonal relationships, creative thinking, and critical thinking aspects.
2. There was significant difference in the Life Skills of school children having different levels of perception about technology usage in learning. The school children who had higher perception about technology usage had better life skills when compared to moderate and low levels of technology usage in learning.
3. There was a significant difference in the Life Skills of school children studying in government and private aided schools.' The government school children had better life skills when compared to private unaided and private aided school children.
4. There was a significant difference in the Life Skills of school boys and girls. The school girls had better life skills when compared with school boys.

CONCLUSION

In conclusion, the study reveals compelling insights into the relationship between technology usage and various life skills among school children. Notably, a positive and statistically significant correlation was observed between technology usage and self-awareness, empathy, decision-making, problem-

solving, coping with emotions, coping with stress, and overall life skills. These findings suggest that increased engagement with technology is associated with improvements in crucial aspects of emotional intelligence, decision-making, and problem-solving abilities. However, the study also indicates that technology usage may not significantly influence effective communication, interpersonal relationship skills, creative thinking, and critical thinking in the specific context examined. Nevertheless, the overall positive correlation with a wide array of life skills highlights the potential benefits of integrating technology into educational practices for the holistic development of school children.

The study revealed significant differences in the life skills of school children based on their levels of technology usage in learning. Those with higher technology usage demonstrated better life skills compared to those with moderate and low levels of technology engagement. Additionally, significant disparities were identified based on school type, with government school children exhibiting superior life skills compared to their counterparts in private unaided and private aided schools. Furthermore, a notable difference was found between genders, with school girls exhibiting better life skills than school boys.

IMPLICATIONS

The study's findings carry several implications for educators, policymakers, and stakeholders involved in shaping the educational environment:

1. Incorporating Technology for Targeted Skill Development: Educators can leverage technology to enhance specific life skills such as self-awareness, empathy, decision-making, and problem-solving, which demonstrated positive correlations with technology usage. Tailoring educational technology interventions to address these skills could be beneficial.
2. Balanced Approach to Skill Enhancement: Given that technology usage did not significantly influence effective communication, interpersonal relationship skills, creative thinking, and critical thinking, educators should adopt a balanced approach. Integrating traditional teaching methods alongside technology could be essential for a comprehensive skill development strategy.
3. Strategic Technology Integration in Education: Policymakers may consider developing guidelines for strategic technology integration in schools. Understanding the positive correlations with a variety of life skills, policymakers can support initiatives that ensure responsible and purposeful technology usage in educational settings.
4. Addressing Disparities Based on Technology Access: The significant differences in life skills based on technology usage levels underscore the need to address disparities in access to technology. Policymakers can focus on initiatives that provide equitable access to technology, ensuring all students have the opportunity to benefit from its positive effects on life skills development.
5. Supporting Government Schools: Given the findings that government school children exhibited superior life skills compared to private unaided and private aided schools, policymakers might explore strategies to support and enhance the educational environment in government schools.
6. Promoting Gender-Inclusive Educational Technologies: The observed difference in life skills between genders emphasizes the importance of considering gender-inclusive approaches in educational technology development. Ensuring that technology tools cater to the diverse needs and learning styles of both boys and girls is crucial for comprehensive skill development.

In conclusion, it's important to approach the use of technology in education carefully, taking into account its different effects on various life skills and working to bridge any gaps to support the overall development of students.

REFERENCES

[1]. Goleman, D. (2006). Social intelligence: The new science of human relationships. Random House.
[2]. Mishra, P., & Yadav, A. (2013). Challenges in adopting technologies for learning and teaching: The case of the Flipped Classroom. European Journal of Open, Distance and E-Learning, 16(1), 1-10.
[3]. Patterson, G. R. (1974). Interventions for boys with conduct problems: Multiple settings, treatments, and criteria. Journal of Consulting and Clinical Psychology, 42(4), 471-481.
[4]. Sharma, P., & Rani, A. (2019). Impact of technology on education. International Journal of Research in Advent Technology, 7(1), 120-124.
[5]. Singh, A., & Srivastava, N. (2020). Digital learning and its impact on education in India. Journal of Educational Technology Systems, 49(3), 363-384.
[6]. UNESCO. (1999). Life skills education in schools. Retrieved from https://unesdoc.unesco.org /ark:/48223/pf0000120352
[7]. UNESCO. (2013). Education for sustainable development goals: Learning objectives. United Nations Educational, Scientific and Cultural Organization. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000227035
[8]. World Health Organization (WHO). (1999). Life skills education for children and adolescents in schools. Retrieved from https://apps.who.int/iris/bitstream/handle/10665/ 42190/9241590353.pdf