International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 25 (June 2025) PP. 492-515
DOI: 10.35631/IJMOE.725035

INTERNATIONAL JOURNAL OF MODERN EDUCATION (IJMOE)
www.ijmoe.com

GLOBAL ACADEMIC EXCELLENCE

DIGITAL SAFETY FOR PRESCHOOL CHILDREN: A SCOPING REVIEW OF DIGITAL SAFETY FRAMEWORKS

'Aisyah 'Inani Mohd. Saad[1*], Mohd Nazri Abdul Rahman[2], Siti Nor Khalis Harun Narasid[3]

[1] Department of Educational Psychology and Counselling, Faculty of Education, University Malaya
Email: 24052802@siswa.um.edu.my
[2] Department of Educational Psychology and Counselling, Faculty of Education, University Malaya
Email: mohdnazri_ar@um.edu.my
[3] Department of Educational Psychology and Counselling, Faculty of Education, University Malaya
Email: 170123880@siswa.um.edu.my
[*] Corresponding Author

Article Info:

Article history:
Received date: 27.03.2025
Revised date: 14.04.2025
Accepted date: 15.05.2025
Published date: 16.06.2025

To cite this document:

Saad, 'A. 'I. M., Abdul Rahman, M. N., & Narasid, S. N. K. H. (2025). Digital Safety For Preschool Children: A Scoping Review Of Digital Safety Frameworks. *International Journal of Modern Education, 7* (25), 492-515.

DOI: 10.35631/IJMOE.725035.

Abstract:

The use of technology among young children are increasing throughout time. The issues on digital safety that related to the children showed the high significant numbers. Therefore, in promoting the digital safety awareness to young children, the customized framework is needed due to young children is in the complex stage of development. This scoping review exploring the digital safety existing frameworks through literature search and mapping the digital safety relevant structure to preschool education children. The review highlights several frameworks in various elements and comparing the review with few countries. The insight from this review aim to develop the digital safety module especially for young children in Malaysia.

Keywords:

Digital Safety, Cyber Security, Preschool Education, Digital Safety Framework, Young Children

Introduction

The usage of digital to the world has found as giving lot of beneficial impact to the human especially in the context of education. Through the digital platform, student and teacher can connect to each other in virtual environment (Alshehri, 2024), explore the learning without

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 25 (June 2025) PP. 492-515
DOI: 10.35631/IJMOE.725035

walls (Fareen, 2022), teacher can prepare the learning materials in attractive ways and assessed the student in real time assessment (Sarva et al., 2023). Since 2014, the Ministry of Education (MOE) in Malaysia had introduced Information and Communication Technology (ICT) into teaching and learning in the classroom. The implementation was started with producing a digitally literate generation, enhancing the competencies and professional development of stakeholders and bridging the digital divide between the rural and urban area (Saidah et al., 2023).

The effort of digitalizing education starting through the project of 1 BestariNet at 2011 which the MOE and YTL Communication collaborating in providing the wireless broadband services with 4G technology to 10,000 schools aimed at increasing the level of education and compliment students with ICT skills. Through this project every school in Malaysia providing the ICT and integrated with the Virtual Learning Environment (VLE) application or also known as the "Frog Virtual Learning Environment" (Frog VLE) (Hamid et al., 2018). Gradually the development of ICT in Malaysia education has contributed to the implementation of Primary School Standard Curriculum (KSSR) and Secondary School Standard Curriculum (KSSM) which emphasized on the skills for 21st century to the students and teachers (Hamid et al., 2018). The skills are critical thinking, creative thinking, analytical skills, problem solving, communication, teamwork, collaboration, multidisciplinary knowledge management, and technology use (Safri & Jamaludin, 2022).

The infrastructure of the digital technology in Malaysia has been improved through MOE ICT Transformation Plan (2019 – 2023) which providing the data network, data centre, ICT security, server and data storage (Saidah et al., 2023). Improvising the internet server and enhancing the connectivity at school is one of the biggest efforts done by MOE in order to support the teachers and students in mastering the digital skills (Abdullah et al., 2023). At this point, the use of applications such as Google Classroom, the Digital Educational Learning Initiative Malaysia (DELIMa), the preparation of learning materials through CikgooTube, and the launch of Educational TV have been implemented in Malaysia. The process of mastering digital tools has increased and improved, especially during the pandemic (Kementerian Pendidikan, 2023).

In 2023, the implementation of Digital Education Policy has been introduced to the Malaysia education system. The objective of the policy is to enhance the educators and students' digital competencies and to foster a digitally literate generation for being capable to navigate the global challenges (Noornadiah Md Sari, 2024). This policy is still in the implementation phase; thus, it needs lot of strong efforts from various parties such as government, school, administration, teacher, student and parent (Alshehri, 2024).

The growth of digital education shows the increasing impact towards tertiary level education, vocational education, secondary and primary education; transforming the landscape of education and opening the new opportunities to the student and teacher (Hanafi et al., 2024). Currently, education in Malaysia is in the final phase of the National Education Development Plan 2013–2025. Through improvements and the outcomes shown, it has proven that the policies and efforts made by the government are producing a digitally literate nation (Abdullah et al., 2023). Because of the usage of technology among Malaysia students and pupils are showing the positive impacts, the expansion of digital technology in the preschool setting has also been enhanced (Nathan et al., 2022).

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 25 (June 2025) PP. 492-515
DOI: 10.35631/IJMOE.725035

The integration of technology for teaching and learning in preschool education system giving lot of arguments among the expert. The nature of the young children to learn by exploring, experiencing and experimenting are slightly contradicting with the learning through digital concept (AlAli et al., 2024). However, many studies have proven that the use of digital technology in the preschool setting improves children's interest in learning (Nikolaeva et al., 2023), gives them the chance to explore real pictures or videos (Stevanović et al., 2024) and opens up opportunities for them to handle and use digital devices (Vinter et al., 2022).

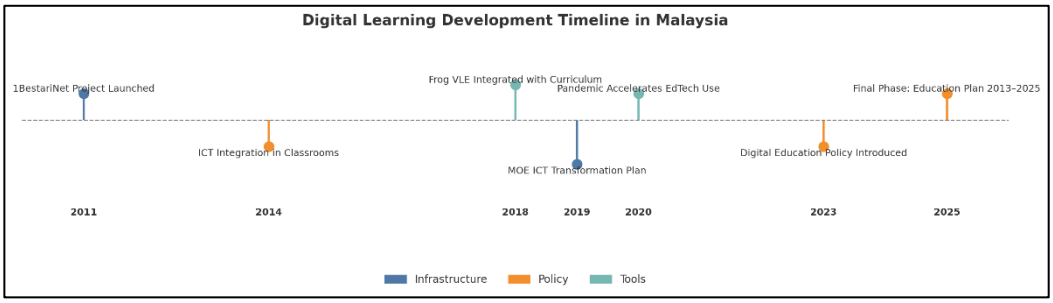


Figure 1: The Development Of Digital Learning In Malaysia

The use of the internet and technology among children under the age of 7 has been increasing over time (Altarturi et al., 2020). One study shows that children at the age of 5 years old able to handling their digital device on their own; switch on the phone, change the video, playing games and taking pictures (Hernández-Martín et al., 2021). Children aged 4-5 years use digital devices for 20 minutes a day (Li et al., 2024). Meanwhile, another report has shown that the duration of digital device use among children is mostly between 30 minutes and 1 hour (UNICEF East Asia and the Pacific Regional Office, 2020) and this number increased during the weekend; around 50.3% of children are spending 1 – 2 hours with the digital device without adult supervision (Neustroeva & Filippova, 2022).

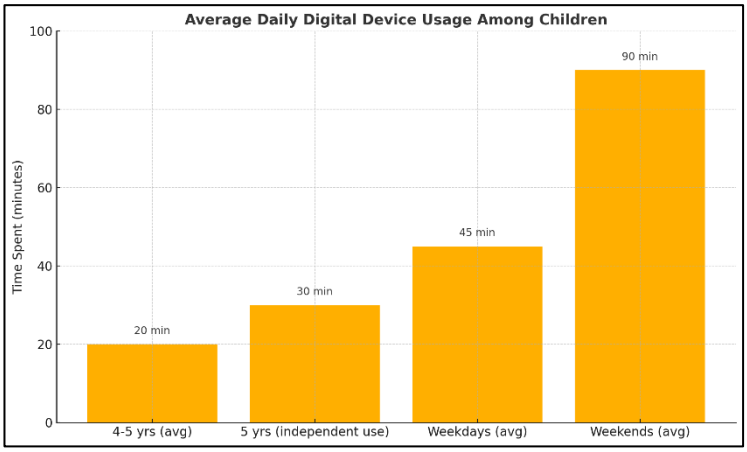


Figure 2: The Average Used Of Digital Device Usage Among Children

The Risk Of Digital Technology To Children

Although the use of the internet and technology can have a positive impact on children, uncontrolled usage can lead to various negative effects on them. Based on UNICEF report on 2022, 100,000 children in East Asia countries are at risk of online sexual abuse and

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 25 (June 2025) PP. 492-515
DOI: 10.35631/IJMOE.725035

exploitation. This number are based on number of children used of social media in Malaysia, Thailand, Indonesia and Cambodia. Besides than this, the number of cyberbully among children also showed the high numbers across the world. According to (Zhu et al., 2021), around 13.99% to 57.5% numbers of children across different studies ever be a victim of cyberbully. In Malaysia, around 28% of children are having the experienced of be the online cyberbully through social media, games application, online learning platform and websites (Laporan Tahunan UNICEF Malaysia, 2023).

The importance of protecting the personal information data such as geolocation, full name, address, house picture, self-picture and phone number are not being properly teach to the young internet user (Thea Ahlström Signal and Matti Zako, 2024). The children normally will take the device and use as what they want to surf or play, report shows 18% of children reported that they shared the personal information with the strangers through online platform (UNICEF East Asia and the Pacific Regional Office, 2020). This invited many harms in children's daily lives such as being stalk, being extort and being scam by the perpetrator who try to take the advantage from the information leaked.

Besides than this, the young internet user also has the great potential to being exposed to the inappropriate and harmful content for instance pornography, violence graphic photos, political, religious and sensitive issue (ECPAT, 2022). According to this report, around 27% children in Malaysia, who ever used the internet are ever surf the inappropriate content with 17% are actively searched for the material and 10% were exposed to it unintentionally. The children are unable to evaluate the *pros* and *cons* of the content that they surfed, besides their curiosity towards new content also will be the factor of misused on new information searched (Lewis et al., 2024).

The Impact Of Digital Technology To Children

Children are in the phase of building the character and identity through the influence of environment and social. Studies found the children who are ever be the victim of any digital threat either cyberbully or unintentionally surfing the inappropriate content will have the great potential to face the emotional instability (Zahidul Islam et al., 2020). This is because they cannot differentiate the digital and real world scenario and the effect of the online world are giving them pressure in making a new friends, going to school, going out to the public and having the real interaction with the families (Rahamathulla, 2021).

The case of internet addiction among the children and students showed the increasing number of learning setbacks, reduced interest in attending school and lack of focus in classroom (Nurhafizah & Hidayati, 2022). This is the serious phenomena that needs the proper attention and intervention from many parties especially adult like teachers, parents and families. Besides, the used of internet without any foundation on security and safety lead to safety threats like abduction and exploitation (Bacak et al., 2022). There are cases reported in refugee school in Malaysia that is related to a children who cut themselves following the break-up and post the photo through media social as the sign to express the feeling; they did not see the action as harm and risk (UNICEF East Asia and the Pacific Regional Office, 2020).

Besides the above impact, a lack of awareness about digital safety can also pose dangers to children through health-related issues such as obesity, vision problem and behavioural problem (Asad et al., 2023). Children are staying indoor for the long hours while using the digital

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 25 (June 2025) PP. 492-515
DOI: 10.35631/IJMOE.725035
devices either to complete the learning task or playing games, therefore it gives harm to their sight due to focus on screen for the long hours (Palikhe & Adhikari, 2021).

Obviously, the effects of digital use without a proper foundation in safety and security show various impacts on children, especially long-term effects. If this issue continues to be neglected, the nation risks losing valuable future generations. The use of the internet, technology, and digital tools among children has become something inseparable over time; therefore, providing understanding and explaining the importance of using digital devices wisely is an effort that must be carried out before more children fall victim to digital threats.

The Significance Of Digital Safety Framework

Because of the issues reported on digital threat such as; phishing, cyberbullying, online scamming, privacy and data leak and online sexual exploitation are increasing based on data from Malaysia Communication and Multimedia Commission (MCMC), Malaysia education system needs to give special attention on promoting the safe online behaviour to the children and students at the school. As the current generation are moving from digital literate to digital proficient; this will be included in the new curriculum that will presenting on 2027 (Kementerian Pendidikan Malaysia, 2024).

Currently, in teaching and exposing digital safety subject matter to the student in Malaysia, the effort was merely made through campaign and advertisement from media; there is no specific learning course that related to this. The example of effort made regarding to this are *"Klik Dengan Bijak"* (be smart when you click) and the launching of safe digital textbook (Kamaruddin et al., 2023).

Due to all the aforementioned importance, this study will explore frameworks related to digital safety in order to provide a comprehensive and complete perspective on the elements that need to be developed in shaping teaching and learning related to digital safety. As many studies have suggested that digital safety should be introduced to internet users from an early age (Estellés & Doyle, 2025; Altarturi et al., 2020; Cowling et al., 2024) this study will focus on examining and linking digital safety frameworks to preschool children, given that digital usage among school students also includes children at the preschool level.

Methodology

In completing the review of digital safety framework, this research used the scoping framework outlined by Arksey and O'malley (2005). A scoping study aims to broadly map existing literature to provide a comprehensive overview of existing research in a specific area of interest, encompassing a wide range of topics and including different types of study designs. This approach is different with systematic literature in terms of it did not evaluate the quality of literature (Arksey & and O'Malley, 2005).

The methodology was selected because it consists of flexibility to explore a various part of studies on digital safety education without being restricted by rigid methodological assessments. This method is needed while exploring a multifaceted issue like online safety education for preschoolers, where diverse pedagogical and technological approaches coexist.

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 25 (June 2025) PP. 492-515
DOI: 10.35631/IJMOE.725035

Based on this outlined framework, the researchers followed these following five steps:

Define the Research Question

The research question is:
What frameworks are currently used to teach online safety to preschool children and how do the structure and outcomes of these frameworks influence preschool children's learning and behavior regarding online safety?

This question was formulated to align with the objective of identifying not only the presence of frameworks but also their pedagogical effectiveness and behavioral influence. It aimed to mapping the gap on theoretical framework descriptions and practical educational impact, which is underexplored in early childhood digital education.

Identify Relevant Studies

Under the guidance of the corresponding author, relevant studies on digital safety framework were identified through searches in two databases: Scopus and Science Direct, which consists of pertinent and impactful papers. The search and review process spanned four weeks by focusing on article published from 2019 to 2025. A peer-reviewed approach was implemented to ensure this review reliability (Tisdell, Merriam, & Stuckey-Peyrot, 2025).

The database selection was guided by inclusion of a broad range of peer-reviewed academic articles. In addition, search strategies included Boolean operators and controlled vocabulary terms to capture the comprehensive retrieval of relevant literature.

Table 1: Key Search Term

Search term
("digital safety" OR "internet safety education" OR "cyber safety")
("preschool children" OR "early childhood")
("digital competence" OR "safe internet use")
("education" OR "learning" OR "teaching")
("digital safety" OR "preschool children internet habit")

These keywords were iteratively refined during early searches to maximize sensitivity and specificity. Synonyms and domain-specific terms were included to avoid missing relevant studies due to terminological differences.

Table 2: Inclusion and Exclusion Criteria

Criterion	Inclusion	Exclusion
Time	2018 to 2025	Research that is not in the specified date range
Language	English	Studies other than English
Study focus	Digital safety related matters – framework, issues, challenges	Research that mainly focus on digital literacy and digital during Covid-19

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 25 (June 2025) PP. 492-515
DOI: 10.35631/IJMOE.725035

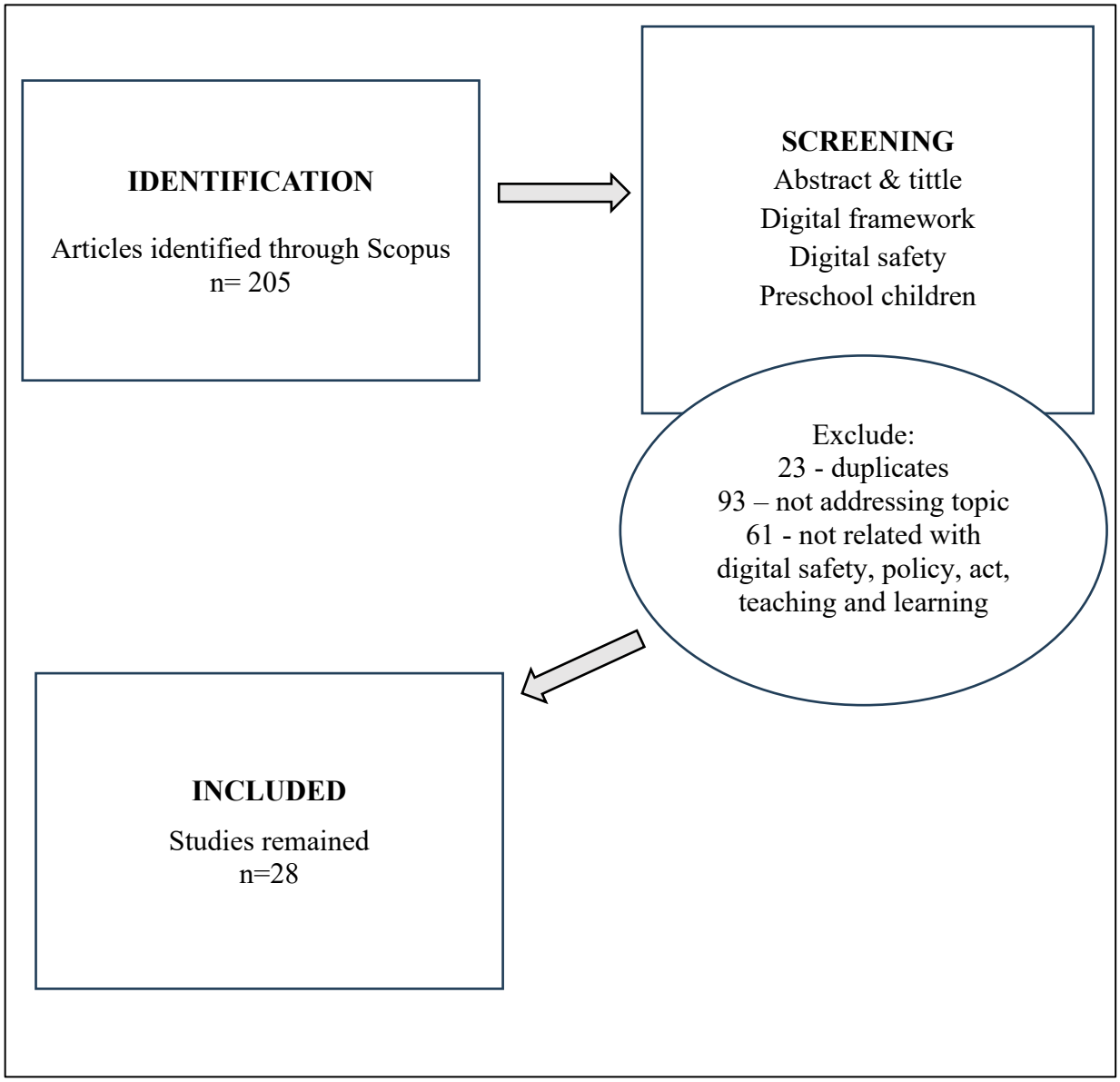
Study Selection

The search procedure concluded on March 15, consists of 205 references. After removing 23 duplicates found across multiple databases, 182 articles remained. Despite "digital safety" being a search criterion, 93 articles were excluded for not addressing topic, leaving 89 articles. After a full review, 61 more articles were excluded for various reason; not related with digital safety, policy, act, teaching and learning.

According to Arksey and O'Malley (2005) suggestion, the excluded literature review also need to be examined but not additional reference that support this suggestion, so we skipped the excluded literature. As a result, 28 were retained for analysis. Figure 3 presented the article selection process and Table 1 provides an overview of each selected article.

The exclusion process involved a two-phase screening: (1) title and abstract screening followed by (2) full-text review. Each article was reviewed independently by three researchers to avoid bias. Then, the discussion made among researchers to resolve the discrepancies.

Figure 3: Flow Program For Article Selection Process



International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 25 (June 2025) PP. 492-515
DOI: 10.35631/IJMOE.725035

Screening of Literature

For the initial screening, non-journal articles and studies without authors were first excluded. Next, after reviewing the titles and abstracts, studies related to digital safety in learning area were considered for further inclusion. For instance, studies focusing on digital safety in different area such as health care, country security, engineering and construction sectors. However, if the article relevant to the research questions, it could still be included in the final list of review articles although it is not strictly meet the researchers' screening criteria.

However, articles that demonstrated cross-sectoral relevance- such as policy or framework designs relatable to educational settings will be included. This ensured that valuable contributions from other disciplines were appropriately considered. The methodological strength of each study and its relevance to early childhood education were assessed through qualitative judgment.

Determining the Final Literature

The first and last authors thoroughly reviewed all 28 articles. Data were extracted from each and recorded in a "data charting form" as presented in Table 1 (Arksey & and O'Malley, 2005). As to begin, the descriptive quantitative data such as author names, publication year, study context, sample characteristic, study design, framework used and the framework impact were extracted and summarized. After that, the article was reviewed multiple times to determine either the framework used in the studies related to learning process or others, then we categorized accordingly.

The mapping process provided a structured format for comparative analysis and thematic categorization. Additional fields were included in the data charting form to capture notes on limitations, implications for practice and relevance to preschool digital safety education.

The articles were grouped into three emergent categories: (1) pedagogical frameworks specific to early childhood; (2) policy-oriented frameworks with educational implications; and (3) interdisciplinary models adaptable to digital safety instruction. As a result, the findings found from the mapping process clearly supported the research objective.

International Journal of Modern Education
IJMOE
EISSN: 2637-0905
Volume 7 Issue 25 (June 2025) PP. 492-515
DOI: 10.35631/IJMOE.725035

Table 1: Literature Review Overview Matrix

No	Years	Authors	Sample characteristic	Country	Study design	Framework related to digital safety	Framework structure	Framework impact
1	2022	Maureen C. Kenny, Haiying Long, Deborah Billings, And Fayeza Malik	2,450 students from miami-dade county 4 to 13 years	Miami-dade county, florida	Quasi-experimental design	Child safety matters (CSM)	• Understanding digital dangers • Safe online behaviour • Technological literacy • Reporting concerns • Digital citizenship	The framework gives the improvement in respondents understanding of digital dangers, promote safe online behaviour and technological literacy
2	2024	Hermawan Setiawan, Nurul Qomariasih, And Herman Kabetta	Children aged 7-9 years old Teachers of these children	Politeknik siber and sandi negara in bogor regency	Quasi-experimental design	Digital game-based learning instructional design (DGBL-ID)	Five key stages of development: 1. Analysis 2. Design 3. Development 4. Quality assurance 5. Implementation and evaluation	The instructional design used for this study is to enhanced the child cyber grooming. It increased children's understanding of child cyber grooming crimes, inviting the higher number of user acceptance rate through "digital adventure" and enhancing the children motivation and

International Journal of Modern Education
IJMOE
EISSN: 2637-0905
Volume 7 Issue 25 (June 2025) PP. 492-515
DOI: 10.35631/IJMOE.725035

								engagement in understanding child cyber grooming.
3	2023	Florence Martin, Julie Bacak, Drew Polly, Weichao Wang, Lynn Ahlgrim-Delzel	10 female teachers who had varying years of teaching experience, ranging from 1 to over 15 years	Southeastern state in the United States	Qualitative research design (gain insights on teachers' experiences regarding students' digital safety)	International society for technology in education (ISTE) standard 2 Refer on 4c's framework Content risk Contact risk Conduct risk Contract risk	Digital netiquette Digital identity Digital security Digital privacy Cyberbullying	It emphasizes the importance of recognizing rights, responsibilities, highlight on concepts like digital footprint and smart online behaviour and provide a structured approach for teaching related to digital identity, privacy, security, and netiquette.
4	2024	M. Gómez-Puerta And E. Chiner	550 teachers from public and private school	Spain	Descriptive, cross-sectional survey design	European framework for the digital competence of educators (DIGCOMPEDU)	Technology for education Digital safety Pedagogical knowledge Digital interaction Digital content creation	The framework provides the holistic development of educators in educating the digital competencies, improved digital safety education and guidelines for teacher training programs.
5	2025	Reem Alhajji, Afra Al	Ten participants;	United arab emirates (uae)	Qualitative research design, case	Ecological techno-	Microsystem Technological environment	The framework allows the comprehensive analysis on

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 25 (June 2025) PP. 492-515
DOI: 10.35631/IJMOE.725035

		Mansoori, Ahmet Sami Konca, Ahmet Simsar	primarily mothers.		study approach	microsystem framework	Interplay influences Contextual factors	understanding contextual influence, guiding parental mediation strategies and identify risks and opportunities to the digital media consumptions.
6	2025	Marta Estellés And Andrew Doyle	Previous literature	Internationa l	Systematic review	Online safety education (OSE)	Safeguarding Equipping Empowering Resisting	It is linking the concept digital citizenship and narrative of technology, connecting certain approach like safeguarding and equipping and addressing social-political issues.
7	2024	Antoinette Raffaela Huber	Random sample of 200 cases	England and wales	Mixed-methods design	Online safety act (OSA)	Duties of care Service categories Regulatory authority New offences Accountability measures	Through this framework, it prevented the harmful content, enhanced protection and opened space and platform form victim.
8	2020	Dorothy Scholtz, Elmarie Kritzinger, And Adele Botha	Search from literature review	South africa	Comprehensi ve analysis from cyber safety awareness research	Cyber security framework developed by national institute of standards and	Framework core Implementation tiers Framework profiles	This framework helps the south africa school in terms of establishing the cyber safety culture, enhancing the cyber safety awareness

International Journal of Modern Education
IJMOE
EISSN: 2637-0905
Volume 7 Issue 25 (June 2025) PP. 492-515
DOI: 10.35631/IJMOE.725035

						technology (NIST)		and structuring the cyber safety policies.
9	2024	Basel Hammoda	Integrative review methodology	European context	Six main empirical frameworks	Digcomp 2.0	Protecting devices Protecting personal data and privacy Protecting health and well-being	This framework provides the clear guidance to educational institutions in assessing digital skills among learner and providing the vast range of competencies such as device and software operation, problem-solving and career-related skills.
10	2018	Dr. Miroslava Černochová, Dr. Tarek Chehidi, And Dr. Julian Fraillon	Systematic review	47 countries that exhibit diverse approaches to digital literacy	Systematic approach: mapping digital literacy frameworks across different countries.	DLGF (Digital Literacy Global Framework)	On digital security part: - Understanding diigtal risk - Protective measure - Safe digital practise - Inicident response - Digital footprint awareness	The digital security part from this framework provides structured pathway for developing digital literacy skill that emphasize security as main component.

International Journal of Modern Education
IJMOE
EISSN: 2637-0905
Volume 7 Issue 25 (June 2025) PP. 492-515
DOI: 10.35631/IJMOE.725035

11	2020	Hamza H.M. Altarturi, Muntadher Saadoon, Nor Badrul Anuar	-	Malaysia	Bibliometric study	Cyber parental control	Methods of parental control on content categorization, methods and techniques, filtering approaches, parenting styles, online risks	Provide the inputs for future research on cyber safety and parental controls
12	2020	Emily A. Greene-Colozzi, Georgia M. Winters, Brandy Blasko, Elizabeth L. Jeglic	1,133 college students	USA	Retrospective survey study	Online sexual grooming	Survey on common search items among college students – grooming experiences and perceptions	Emphasizes on adult supervision; educate on sexual grooming through education and policy.
13	2021	Sanna Spia	-	Finland	Critical discourse analysis	Digital sexual safety, mediated sexuality	-	-
14	2024	Mustafa Osman I. Elamin	-	Qatar	Applied research	Ai-driven digital safety in charitable sector	Ai model framework for many sectors such as disaster prediction, education, public health, digital safety	The ethical ai framework proposed for enhance efficiency and protect children from online harms

International Journal of Modern Education
IJMOE
EISSN: 2637-0905
Volume 7 Issue 25 (June 2025) PP. 492-515
DOI: 10.35631/IJMOE.725035

15	2024	Fivia Eliza, Radinal Fadli, M. Agphin Ramadhan, Valiant Lukad Perdana Sutrisno, Yayuk Hidayah, Muhammad Hakiki, Deden Dicky Dermawan	150 electrical engineering students	Indonesia	Quantitative descriptive study (survey)	Cybersecurity awareness learning through mobile	Assessment across 10 cyber awareness indicators - phishing, device protection, ethics	Find out the weak areas in student cyber readiness for curriculum planning.
16	2025	Michael Cowling, Kwong Nui Sim, Joanne Orlando, Jafar Hamra	Review of 24 studies – student aged 10 to 14 years old	Australia	Systematic literature review	Digital safety, literacy, and wellbeing in middle school	Comprehensive analysis on digital engagement includes literacy, wellbeing, communication and online habits post-covid	The call for integrated digital safety education
17	2025	Sofia Castro Lopes, Louise Holly, Ilona Kickbusch	-	Analysis of 27 countries policy on digital safety	Policy analysis	Digital policy linking for child online safety	Linking on laws and national strategies covering risks like cyberbullying, exploitation, addiction	Mentioned on the lack of health sector involvement in digital safety especially for children

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 25 (June 2025) PP. 492-515
DOI: 10.35631/IJMOE.725035

18	2024	Dwi Nur Fauziah, R. Andri Putra	-	Indonesia	Normative legal research	Legal analysis for children digital protection	Review of national laws and challenges related to digital safety and child protection	Suggest the serious action must be taken in addressing child digital abuse – the law must align with tec realities
19	2025	Noluxolo Gcaza, Kerry-Lynn Thomson	Systematic review of 25 studies focused on children aged 5 to 12	South Africa	Systematic literature review	Cyber safety education for foundation phase children	Categorized into six-category framework including content, context, evaluation, stakeholder, rigour, resources	Provides structured criteria for effective cyber safety education to young children
20	2025	Louise La Sala, Amanda Sabo, Maria Michail, Pinar Thorn, Michelle Lamblin, Vivienne Browne, Jo Robinson	6 focus groups (n=28) with youth, policy makers and social media professionals	Australia and international	Focus group study	Online safety related to self-harm and suicide content	Thematic analysis framework: challenges, roles/responsibility, future innovations	Emphasize on policy gaps, proposes multi-stakeholder responsibility and ai-based detection solutions
21	2025	Maria Josã Rubio Hurtado, Ruth Vilã Baã± Os, Trinidad Donoso Vã¡Zquez	94 young offenders aged 13 - 22	Spain, Finland, Italy, Portugal, Romania	Mixed-method intervention evaluation (pre-post, interviews)	Gender-based cyber violence prevention education	Training on 5 modules such as sexual cyberviolence, online hate speech, intersectionality	Improved recognition of violence, stereotypes, and digital safety actions for study respondents

International Journal of Modern Education
IJMOE
EISSN: 2637-0905
Volume 7 Issue 25 (June 2025) PP. 492-515
DOI: 10.35631/IJMOE.725035

22	2024	Noornadiah Md Sari	-	Malaysia	Concept paper	Digital competence and cyber safety in Malaysia	Highlight on digital competency gaps, teacher training needs, and digital safety awareness	Highlights need for digital safety integration in teaching.
23	2022	Umi Syahira Aini Safri, Khairul Azhar Jamaludin	-	Malaysia	Review study	21st century skills (PAK21) with some parts of digital safety	Skills listed are based national standards and workplace readiness: personal, social, digital, and career skills	Suggested the curriculum and pedagogical reforms to integrate digital ethics, ict literacy, and cybersecurity skills
24	2023	Aminamul Saidah Mad Nordin, Bity Salwana Alias, Zamri Mahamod	-	Malaysia	Concept paper	Digital education development in malaysia	Malaysia digital education develops through digital initiatives (PEDI, JENDELA, CERDIK, etc.) digital readiness factors (knowledge, infrastructure, economy, society)	Highlight on digital divide and student access issues
25	2023	Ed¯Ite Sarva, Gatis L¯Ama, Alise Ol˘esika, Linda Daniela, And Zanda Rubene	161 master and 43 doctoral students in latvia	Latvia	Mixed-method study (survey & focus group)	Digital and pedagogical-digital competences in higher education	Digital competence framework for citizens (DIGCOMP).	Suggesting teacher digital skills should be beyond the student; safe learning environment.

International Journal of Modern Education
IJMOE
EISSN: 2637-0905
Volume 7 Issue 25 (June 2025) PP. 492-515
DOI: 10.35631/IJMOE.725035

26	2021	Chengyan Zhu, Shiqing Huang, Richard Evans, Wei Zhang	Systematic review of 63 studies involving children and adolescents	Global	Systematic literature review	Cyberbullying among children and adolescents	General aggression model (gam): personal and situational risk/protective factors	Listed the prevalence rates and protective factors; need further collaboration and intervention across country
27	2022	Jabbar Al Muzzamil Fareen	-	India	Theoretical paper	Digital learning in higher education	Focus on E-pedagogy, ICT integration, online learning platforms during covid-19	Mentioned on digital divide, promotes ict readiness and recommend digital pedagogical in university
28	2023	Sami M. Alshehri	-	Global	Literature review	Digital education and institutional reform	Blended learning models, digital tools, digital identity, 21st-century competencies, personalization	Deep exploration on digital education redefines learning environments, enhances accessibility, efficiency, and personal growth

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 25 (June 2025) PP. 492-515
DOI: 10.35631/IJMOE.725035

Findings

In exploring the existing literature on digital safety frameworks, there are few general analyses can be made based on the final article reviewed. Based on the target population that has been reviewed and analysed, around 7 studies did the research on the early to middle years children; aged 4 years old to 10 years old. Then followed by teachers and educators, college and university students, parent and policy makers and institutions. There is one study that focused on young offenders in exploring the issue on digital safety across different countries.

The next analyses are on study design used in the articles reviewed which can be concluded as most of the article reviewed are using the systematic literature reviews, then followed by the quantitative method, qualitative approach, mixed methods and conceptual papers. There are four papers that had been reviewed are using the policy analysis and quasi-experimental in understanding the roots of digital safety issue globally.

In general, based on the article reviewed the key topics that had been discussed in the paper are cyberbullying and online grooming, digital competency and literacy, cybersecurity awareness, digital ethics, parental control, policy and legal approaches, digital identity, digital privacy, digital access and digital divide.

Next is regarding with the countries involved in the article reviewed which it consists of various countries such as United States of America, Malaysia, South Africa, Spain, Finland, Italy, Portugal, Romania, Australia, Indonesia, England, India and Qatar. In general, the exploration of various countries around the world has been made in reviewing the digital safety related issues.

There are several digital safety frameworks that can be taken out from the articles searched; which including DIGCOMP/ DIGCOMPEDU, Online Safety Act, Child Safety Matters (CSM), Cyber Security Framework, Online Safety Education (OSE), Digital Literacy Global Framework (DLGF), General Aggression Model (GAM) and Ecological Techno-Microsystem. These are the numbers of framework that clearly highlight the importance of integrating the framework and education program and planning.

International Journal of Modern Education
IJMOE
EISSN: 2637-0905
Volume 7 Issue 25 (June 2025) PP. 492-515
DOI: 10.35631/IJMOE.725035

Figure 4: The Key Framework For Digital Safety

The last analyses are regarding with the impact of the digital safety framework that is tabled in the study. The papers that have been reviewed did mentioned on the framework had improved awareness and knowledge of the target population from the studies. Besides based on the impact listed, some paper showed the needed of curriculum enhancement especially integrating the digital safety in a class and training recommendation for the teachers in helping the future generation in handling the digital devices. The next impact of the framework used in the studies are suggesting on policy and structural reformation related to the digital safety matters. The last impact that had been listed through the papers reviewed are behaviour changed and then it lesser the risk of the cyber and online threats.

Discussion

The review aimed to explore the digital safety existing framework globally and mapping the digital safety framework to the preschool education teaching on safe internet and digital use. Based on the frameworks listed in this study, there are two framework that mainly focus on children and young learner which are Children Safety Matter (CSM) and Digital Game Based Learning Instructional Design (DGBL-ID). The both frameworks agreed on the digital etiquette and safety matters related to internet should be introduced to the young children at the early age (Kenny et al., 2022 & Raihana et al., 2024). The two studies listed the potential risks that involved the young internet user such online cyber grooming, exposed to the inappropriate content and involving in internet addiction behaviour and impacts. Thus, it is essential to ensure the young internet user able to identify the online danger, promote the online safety behaviour and able to share the dangers faced through the online surfing (Kenny et al., 2022). This is aligned with Gcaza and Thomson (2025), who's agree that the information and knowledge regarding digital safety must be teach at the early age to ensure the user understand the ethics, able to protect themselves while surfing, less exposed to the online threats and use the internet accordingly.

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 25 (June 2025) PP. 492-515
DOI: 10.35631/IJMOE.725035

In some other frameworks use in developing the digital safety awareness to the user, it is integrated with the subject of digital literacy in order to promote the online safe environment; for instance, DIGCOMPEDU and International Society for Technology Education (ISTE). The framework provides the holistic approach on the use of digital-related matters such as digital netiquette, digital identity, digital security and digital privacy (Martin et al., 2021). The DIGCOMPEDU structures comprised of a variety of elements on guiding children in the digital world; thus, considering this framework in developing a digital safety module for preschool children is relevant and essential in ensuring that young learners are introduced to safe digital habits from an early age. It helps build their awareness of responsible technology use, data privacy, and online safety in a developmentally appropriate manner (Gcaza & Thomson, 2025).

Since young children are minors who require proper guidance and supervision from adults, there are frameworks that emphasize the close environments in which a child lives — primarily the home and parents; this framework based on Bronfenbrenner Ecological Theory which confirms the children is shaped by system around them. This framework named Ecological techno-microsystem which used to understand the children used of internet are related with the elements in their microsystem (Alhajji et al., 2025). It highlights the dynamic relationship between the children involvement in digital media and the family influences regarding with the matters in order to use as strategies to parent in guiding children based on social value and development (Zahoor & Lone, 2025) This framework integrates the sociocultural influences, contextual factors and technological environment in comprehensive understanding the digital world, children and factors contributed; align with developing the module for teaching digital safety to preschool children, these are the elements that need to be considered (Nurhafizah & Hidayati, 2022).

Some of other frameworks mentioned in articles reviewed in this study had developed by considering the policy and act of digital threats; for instance, Online Safety Act (OSE). The OSE is the various legislative measure that aimed to enhance the safety of user especially children in digital environment; the two country that using this act in protecting the children related to any digital threats are Australia and United Kingdom. These acts are encouraged the online service provider to protect the user from any risk such as inappropriate ads and unwanted pop up on the screen (Huber & Ward, 2024). Besides through the act, the reinforcement bodies able to control and manage the platform based on particular guidelines (Cowling et al., 2024a). In Malaysia there is the Cyber Security Act 2024 that emphasize on legislative framework which provide legal foundation for cybersecurity policy and protect the national infrastructure and data (Rahim et al., 2024). It also becomes the coordinated agency for the cyber threats and it outlines the penalties for the activities such as unauthorized access, data breaches and cyber terrorism (Omar et al., 2024). The effectiveness of Cyber Security Act is being evaluated by legislative framework, enforcement procedure, public awareness, technology infrastructure, international collaboration and economy impact (Khan, Rahman, Khan, & Leng, 2024).

The diversity of digital safety framework shows that in ensuring the user have the knowledge on safe digital environment, there are many elements that need to be considered as the part to make the objective achieved. The diversity of it depends on the focus such as age, sector involved, issues addressed, and the level of digital literacy among users, as well as the technological infrastructure and legal frameworks in place to support safe digital practices.

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 25 (June 2025) PP. 492-515
DOI: 10.35631/IJMOE.725035

In promoting digital safety education especially to the young children in Malaysia is one of the essential matters that going to benefits lot of parties such as parent, teacher, government and children itself. However, to have the existing framework related to digital safety education for young children is limited. Most research suggests that digital safety education should begin at an early age; however, its implementation is still not widespread in many countries. In Australia, there is the eSafety Early Years Program in supporting parent, carer and educators to teaching the children on digital safety; the key messages are Be Safe, Be Kind, Ask for Help and Make Good (Edwards et al., 2018). The digital safety effectiveness programs also conducting more to primary, middle school and university student as compared to young children (Eliza et al., 2024; Cowling et al., 2024 & La Sala et al., 2025).

Conclusion

This scoping review able to identified the digital safety frameworks globally and how it connected to preschool children. The impact of digital threats on children's mental health is considered as significant risk because they are unable to fully understand situations in a broader context. In addition, children tend to believe and react to certain situations impulsively, without thoroughly thinking them through. Therefore, more studies in exploring the mental health impact on young children within the digital environment is necessary. Besides future research also suggested to develop the module on digital safety education specifically for young children due to it comprised the very customized elements such as contextual factors, content, structure, technological environment and various aspect of developments.

Acknowledgement

Our special thanks to the Ministry of Education Malaysia and the University of Malaya for their endless support for this research. We express our deepest gratitude to those who supported us throughout the process of completing this research.

References

Abdullah, A., Mohd Zaidi, N. S., & Asar, A. K. (2023). Digital Wellbeing: Does It Matter in Malaysian Education? In M. N. H. Yusoff (Ed.), *Industry Forward and Technology Transformation in Business and Entrepreneurship* (pp. 753–762). Springer Nature Singapore.

AlAli, R. M., Al-Hassan, O. M., Al-Barakat, A. A., Al-Qatawneh, S. S., Hawamdeh, M. F., Mohamed, D. A., Al-Saud, K. M., & Aboud, Y. (2024). Good Practices in using Instructional Images to Enhance Young Children's Linguistic Skills from the Viewpoint of Language Education Experts. *International Journal of Learning, Teaching and Educational Research*, *23*(9), 179–197. https://doi.org/10.26803/ijlter.23.9.10

Alhajji, R., Al Mansoori, A., Konca, A. S., & Simsar, A. (2025). Patterns of YouTube interaction among Emirati children: A Study of Media Engagement and Influence. *Educational Process: International Journal*, *14*. https://doi.org/10.22521/edupij.2025.14.79

Alshehri, S. M. (2024). *Perspective Chapter: The Impact of Digital Education on Modern Educational Institutions*. www.intechopen.com

Altarturi, H. H. M., Saadoon, M., & Anuar, N. B. (2020). Cyber parental control: A bibliometric study. *Children and Youth Services Review*, *116*. https://doi.org/10.1016/j.childyouth.2020.105134

International Journal of Modern Education
IJMOE
EISSN: 2637-0905
Volume 7 Issue 25 (June 2025) PP. 492-515
DOI: 10.35631/IJMOE.725035
Arksey, H., & and O'Malley, L. (2005). Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology*, *8*(1), 19–32. https://doi.org/10.1080/1364557032000119616

Asad, M., Yousuf, B., & Hashem, A. (2023). Internet Usage Among Children in Bangladesh. In *International Journal of Emerging Issues of Social Science, Arts, and Humanities* (Vol. 1, Issue 3).

Bacak, J., Martin, F., Ahlgrim-Delzell, L., Polly, D., & Wang, W. (2022). *Elementary educator perceptions of student digital safety based on technology use in the classroom*.

Cowling, M., Sim, K. N., Orlando, J., & Hamra, J. (2024a). Untangling Digital Safety, literacy, and Wellbeing in School activities for 10 to 13 Year Old Students. *Education and Information Technologies*. https://doi.org/10.1007/s10639-024-13183-z

Cowling, M., Sim, K. N., Orlando, J., & Hamra, J. (2024b). Untangling Digital Safety, literacy, and Wellbeing in School activities for 10 to 13 Year Old Students. *Education and Information Technologies*. https://doi.org/10.1007/s10639-024-13183-z

ECPAT, I. dan U. (2022). *Disrupting Harm di Malaysia*.

Edwards, S., Nolan, A., Henderson, M., Mantilla, A., Plowman, L., & Skouteris, H. (2018). Young children's everyday concepts of the internet: A platform for cyber-safety education in the early years. *British Journal of Educational Technology*, *49*(1), 45–55. https://doi.org/10.1111/bjet.12529

Eliza, F., Fadli, R., Ramadhan, M. A., Sutrisno, V. L. P., Hidayah, Y., Hakiki, M., & Dermawan, D. D. (2024). Assessing student readiness for mobile learning from a cybersecurity perspective. *Online Journal of Communication and Media Technologies*, *14*(4), e202452. https://doi.org/10.30935/ojcmt/15017

Estellés, M., & Doyle, A. (2025). From safeguarding to critical digital citizenship? A systematic review of approaches to online safety education. *Review of Education*, *13*(1). https://doi.org/10.1002/rev3.70056

Fareen, J. A. M. (2022). Digital Learning in Higher Education: A Road to Transformation and Reform. *European Journal of Interactive Multimedia and Education*, *3*(1), e02206. https://doi.org/10.30935/ejimed/11493

Gcaza, N., & Thomson, K. L. (2025). Factors contributing to the successful development of cyber safety education for foundation phase children: a systematic literature review. *Information and Computer Security*. https://doi.org/10.1108/ICS-07-2024-0175

Hamid, Z., Peng, C. F., Shaharom, M. S. N., Ter, T. C., & Raman, K. (2018). The Concept and Use of the Virtual Learning Environment in Teaching: A Literature Review. *International Journal of Academic Research in Business and Social Sciences*, *8*(6). https://doi.org/10.6007/ijarbss/v8-i6/4517

Hanafi, M. F., Abdullah, A. H., Jaafar, R., & Razally, M. Y. (2024). The impact of digital education on malaysian students: a significant review. *International Journal of Education, Psychology and Counseling*. https://doi.org/10.35631/ijepc.953011

Hernández-Martín, A., Martín-del-Pozo, M., & Iglesias-Rodríguez, A. (2021). Pre-adolescents' digital competences in the area of safety. Does frequency of social media use mean safer and more knowledgeable digital usage? *Education and Information Technologies*, *26*(1), 1043–1067. https://doi.org/10.1007/s10639-020-10302-4

Huber, A. R., & Ward, Z. (2024). Non-consensual intimate image distribution: Nature, removal, and implications for the Online Safety Act. *European Journal of Criminology*. https://doi.org/10.1177/14773708241255821

Kamaruddin, N., Mei, C. C. Y., Low, W. Y., & Hashim, A. (2023). Online Education in Malaysia: Institutional Change to Stimulate Digital Literacy. In *Digitalization and Development: Ecosystem for Promoting Industrial Revolution 4.0 Technologies in*

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 25 (June 2025) PP. 492-515
DOI: 10.35631/IJMOE.725035

Malaysia (pp. 133–150). Taylor and Francis. https://doi.org/10.4324/9781003367093-8

Kementerian Pendidikan. (2023). *Dasar Pendidikan Digital*.

Kementerian Pendidikan Malaysia. (2024). *Kurikulum Persekolahan 2027*.

Kenny, M. C., Long, H., Billings, D., & Malik, F. (2022). School-based abuse prevention programming: Implementation of child safety matters with minority youth. *Child Abuse Review*, *31*(3). https://doi.org/10.1002/car.2742

Khan, S., Rahman, H. M., Khan, N., & Leng, O. T. S. (2024). Digital Security in the Digital Age of Industry Revolution 5.0 Malaysia.

La Sala, L., Sabo, A., Michail, M., Thorn, P., Lamblin, M., Browne, V., & Robinson, J. (2025). Online Safety When Considering Self-Harm and Suicide-Related Content: Qualitative Focus Group Study With Young People, Policy Makers, and Social Media Industry Professionals. *Journal of Medical Internet Research*, *27*. https://doi.org/10.2196/66321

Laporan Tahunan UNICEF Malaysia. (2023).

Lewis, K. L., Kervin, L. K., Verenikina, I., & Howard, S. J. (2024). Young children's at-home digital experiences and interactions: an ethnographic study. *Frontiers in Education*, *9*. https://doi.org/10.3389/feduc.2024.1392379

Li, J., Agvaantseren, U., & Qin, L. (2024). The Current Status and Influencing Factors of Digital Product Use Among Young Children in the Digital Age. *Journal of Ecohumanism*, *3*(8). https://doi.org/10.62754/joe.v3i8.5031

Martin, F., Gezer, T., Anderson, J., Polly, D., & Wang, W. C. (2021). Examining Parents Perception on Elementary School Children Digital Safety. *Educational Media International*, *58*(1), 60–77. https://doi.org/10.1080/09523987.2021.1908500

Nathan, T., Muthupalaniappen, L., & Muhammad, N. A. (2022). Prevalence and description of digital device use among preschool children: A cross-sectional study in Kota Setar District, Kedah. *Malaysian Family Physician*, *17*(3), 114–120. https://doi.org/10.51866/oa.25

Neustroeva, A. B., & Filippova, L. D. (2022). Competence and safety of digital environment consumption by children and parents. *Digital Sociology*, *5*(1), 107–116. https://doi.org/10.26425/2658-347x-2022-5-1-107-116

Nikolaeva, E. I., Kalabina A✳, I. A., Progackaya, T. K., & Ivanova, E. V. (2023). Ground Rules for Preschooler Exposure to the Digital Environment: A Review of Studies. *Psychology in Russia: State of the Art*, *16*, 2023. http://psychologyinrussia.com

Noornadiah Md Sari. (2024). Kompetensi Digital dalam Kalangan Warga Guru di Malaysia: Sorotan Literatur. *Jurnal Dunia Pendidikan*. https://doi.org/10.55057/jdpd.2024.6.2.5

Nurhafizah, N., & Hidayati, W. R. (2022). An Overview on Case Internet Addiction in Early Childhood's Perspective. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, *6*(5), 5289–5296. https://doi.org/10.31004/obsesi.v6i5.2990

Omar, M. F. R. C., Abdullah, N. A., & Saad, M. N. (2024). Prevention of Cyberbullying in Online Games: Intervention of Cybersecurity Strategies. *Pakistan Journal of Life and Social Sciences*, *22*(2), 285–299. https://doi.org/10.57239/PJLSS-2024-22.2.0021

Palikhe, A., & Adhikari, N. B. (2021). Effects on Children's Health by Excessive Use of Online Devices: A Study from the Parents Perspectives. *Journal of Nepalese Business Studies*, *13*(1), 107–121. https://doi.org/10.3126/jnbs.v13i1.34709

Rahamathulla, M. (2021). Cyber Safety of Children in the Association of Southeast Asian Nations (ASEAN) Region: a Critical Review of Legal Frameworks and Policy Implications. *International Journal on Child Maltreatment: Research, Policy and Practice*, *4*(4), 375–400. https://doi.org/10.1007/s42448-021-00087-5

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 25 (June 2025) PP. 492-515
DOI: 10.35631/IJMOE.725035
Rahim, S. S. I., Mohd Huda, M. I., Sa'ad, S., & Moorthy, R. (2024). Cyber Security Crisis/Threat: Analysis of Malaysia National Security Council (NSC) Involvement Through the Perceptions of Government, Private and People Based on the 3P Model. *E-Bangi Journal of Social Science and Humanities*, *21*(2). https://doi.org/10.17576/ebangi.2024.2102.17

Raihana, F. A., Setiawan, H., Kabetta, H., & Qomariasih, N. (2024). Implementation of Game-Based Learning to Enhance Security Awareness Against Child Cyber Grooming Attacks. *2024 8th International Conference on Information Technology, Information Systems and Electrical Engineering, ICITISEE 2024*, 238–243. https://doi.org/10.1109/ICITISEE63424.2024.10729941

Safri, U. S. A., & Jamaludin, K. A. (2022). PAK 21 Skills and The Challenges of Its Integration During Teaching and Facilitation Session (PDPC). *International Journal of Academic Research in Progressive Education and Development*, *11*(4). https://doi.org/10.6007/ijarped/v11-i4/15031

Saidah, A., Nordin, M., Salwana Alias, B., & Mahamod, Z. (2023). *PENDIGITALAN PENDIDIKAN*.

Sarva, E., Lāma, G., Oļesika, A., Daniela, L., & Rubene, Z. (2023). Development of Education Field Student Digital Competences—Student and Stakeholders' Perspective. *Sustainability (Switzerland)*, *15*(13). https://doi.org/10.3390/su15139895

Stevanović, V., Stevanović, M., & Jović, M. (2024). Digital Competences in Preschool Education. *10th International Scientific Conference Technics, Informatic, and Education*, 437–441. https://doi.org/10.46793/TIE24.437S

Thea Ahlström Signal and Matti Zako. (2024). *Teaching information security in preschool: Challenges with existing guidelines*. https://his.diva-portal.org/smash/record.jsf?pid=diva2%3A1878410&dswid=6331

UNICEF East Asia and the Pacific Regional Office, U. M. (2020). *Our Lives Online Use of social media by children and adolescents in East Asia-opportunities, risks and harms*. www.unicef.org/eap/

Vinter, A., Bard, P., Lukowski-Duplessy, H., & Poulin-Charronnat, B. (2022). A comparison of the impact of digital games eliciting explicit and implicit learning processes in preschoolers. *International Journal of Child-Computer Interaction*, *34*. https://doi.org/10.1016/j.ijcci.2022.100534

Zahidul Islam, M., Zulhuda, S., Hafizah Mohd Badrol Afandi, N., & Affan Shafy, M. (2020). *Ensuring safe cyberspace for children: an analysis of the legal implications of social media usage in Malaysia and Singapore* (Issue S1). https://www.pewresearch.org/internet/2007/12/19/teens-and-

Zahoor, I., & Lone, S. A. (2025). Child computer interactions: Cognitive development and segmenting unsafe video contents: A review. In *Entertainment Computing* (Vol. 53). Elsevier B.V. https://doi.org/10.1016/j.entcom.2025.100931

Zhu, C., Huang, S., Evans, R., & Zhang, W. (2021). Cyberbullying Among Adolescents and Children: A Comprehensive Review of the Global Situation, Risk Factors, and Preventive Measures. In *Frontiers in Public Health* (Vol. 9). Frontiers Media S.A. https://doi.org/10.3389/fpubh.2021.634909