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Article Review

The Implications of Utilizing Artificial Intelligence-Based Parenting Technology on Children's Mental Health: A Literature Review

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ABSTRACT

The study aims to look at the development of artificial intelligence to support positive parenting and help improve children's mental health. This research method uses the PRISMA approach through a search process using the keywords "Parenting, Child Mental Health, Artificial Intelligence, Communication, and Discipline Enforcement on the Scopus, Google Scholar, Science Direct, and Pubmed databases in the period 2018 to 2023 with a five-step process to obtain data. After elimination, 1,223 journal articles were obtained that met the inclusion and exclusion criteria of 11 journal articles. Based on the results of the literature review, information was identified regarding the history of the development of artificial intelligence technology, artificial intelligence significantly has a positive impact on children's mental health, through the use of artificial intelligence parents gain meaningful literacy in providing positive care for children. However, the use of artificial intelligence can lead to parents' dependence on artificial intelligence, which is feared to replace human figures. In conclusion, studying the development and adequate use of artificial intelligence technology is urgently needed to improve the ability and quality of parenting to support the optimization of children's mental health.

Keywords: *Parenting, Children's Mental Health, Artificial Intelligence, Communication, Enforcement of Discipline*

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INTRODUCTION

Mental health problems among children and adolescents are increasing (Entenberg et al., 2023), and this trend has increased in recent years due to the impact of COVID-19, such as social isolation and stress [1,2,3]. Problem behavior is one of the most common disorders in children and adolescents[4,5], and childcare programs effectively reduce disruptive behavior[4,6].

The psychological formation of children depends on the care of both parents[7]. Children will grow into a generation with good morals if they receive good parenting, whereas children will grow into an era with bad morals if they receive lousy parenting[8]. Therefore, the family environment is much associated with children's behavior because parenting is fully responsible for forming children's attitudes and behavior[9]. In addition to the school environment and community environment, parents are one of the keys to success in shaping children's behavior in all matters, both in speech and formal education. Parents need to create intense parenting with their children through communication and enforcement of discipline [10].

The massive development of information technology has brought changes and significantly impacted the child-rearing process. Parents must try to find appropriate and appropriate parenting patterns for the millennial generation or digital native generation[11]. The

most effective plan of action in supporting long-term outcomes for children is to focus parents on implementing parenting styles throughout childhood [12,13] fostering parents in childcare, of course there are many interventions that can be carried out, one of which is with the support of technology as a means of implementation that can be applied[13]. Artificial intelligence has demonstrated its ability to change early childhood education, focusing on building a solid foundation for a child's learning journey that will last a lifetime. Educational tools and systems that use Artificial Intelligence (AI) are created to meet young learners' specific needs, improving their learning experience and helping them develop[14,15].

In dealing with behavioral problems in children and adolescents effectively, a solution has been found that by implementing digital parenting applications, promising results have been obtained[16]. Digital care shows a higher potential for consistency and regulatory compliance than face-to-face therapy, although digital use has challenges in user retention[11]. Interactive digital parent training apps had a higher impact size than non-interactive programs, as users were more likely to report that they praised the inclusion of a sales feature provided[11]. Thus, it becomes essential to explore references regarding the critical role of artificial intelligence in supporting the parenting of children.

Currently, there are not many literature reviews that explore the influence of the use of artificial intelligence on children's mental health through the role of mothers in parenting. For this reason, this literature review was conducted to answer the question of how the use of artificial intelligence affects the mother's ability to provide care for children, in addition to the risks that can be caused by excessive use of artificial intelligence. The purpose of this study is to determine the development of artificial intelligence in improving the ability of parents to provide positive parenting, the impact on children's mental health and the risks posed by excessive use of artificial intelligence.

METHOD

This research is a literature review based on the PRISMA guidelines. The process carried out is to search for several research journal articles published throughonline databased, an integrated analysis process is implemented. Several electronic databases used in this research are Scopus, Google Scholar, Science Direct and Pubmed with a time span of 2018 to 2023 with the keywords “Parenting, Children's Mental Health, Artificial Intelligence, Communication, Enforcement of Discipline. The criteria used in this literature review were that the literature reviewed was original research, utilization of artificial intelligence, and mental health. The study selection process consists of 5 steps shown in the diagram. The process can be seen in the diagram below:

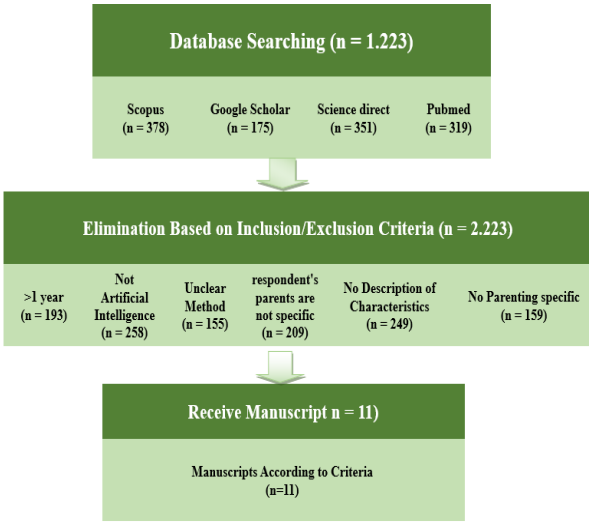

Chart 1. Processing of Elimination of Article Journals

Data from selected articles is extracted in a table, including: length of research in years, title of artificial intelligence article, clarity of research methods, specific parent respondents, clarity of respondent characteristics, results of research on child care. This literature review used guidelines to analyze reporting quality among the selected studies. The guidelines used areCritical Appraisal Skill Program Tools (CASP) and Quality Assessment to assess the risk of bias from selected studies.

RESULTS

The results of the study found that from 11 articles it was found that there was a relationship between artificial intelligence (AI) and parenting styles for their children. The 11 articles used have relevance and pay attention to the research objectives. The following table reviews the results of the analysis in this article:

Article Reviews "Artificial Intelligence-Based Parenting Training for Children's Mental Health"

Research (Year)	Article Title	Source	Method	Characteristics	Results	Conclusion
(Entenberg et al., 2023)[11]	AI-based chatbot micro-intervention for parents: Meaningful engagement, learning, and efficacy	Google Scholar	This research use A randomized control trial and the participants in the experimental group accessed a 15-min intervention that taught how to utilize positive attention and praise to promote positive behaviors in their children, while the control group remained on a waiting list	170 parents with at least one child between 2–11 years old.	- The result is participants engaged with a brief AI-based chatbot intervention and were able to learn effective praising skills. Although scores moved in the expected direction, there were no significant differences by condition in the praising knowledge reported by parents, perceived changes in disruptive behaviors, or parenting self-efficacy, from pre-intervention to 24-hour follow-up.	The results provided insight to understand how parents engaged with the chatbot and suggests that, in general, brief, self-guided, digital interventions can promote learning in parents. It is possible that a higher dose of intervention may be needed to obtain a therapeutic change in parents. Further research implications on chatbots for parenting skills are discussed.
(Cecula et al., 2021)[17]	Applications of artificial intelligence to improve patient flow on mental health inpatient units - Narrative literature review	Science Direct	- This research was conducted by identifying patterns in literary works, analyzing them and reflecting on them in the form of themes. - The OVID database is still used to access the Embase and Medline databases. - Major journals (JAMA, Nature, The Lancet) are checked against the most important studies.	- 323 papers were selected and 83 papers were analyzed - Then divided into three main themes: diagnosis (33%), prognosis (39%) and treatment (28%). The main themes that emerged from AI in patient flow studies were: readability (41%), resource	- A review of the AI mental health literature shows that AI can be used to improve diagnostic accuracy, personalize treatment, and predict clinical outcomes to ensure timely intervention. - A review of the literature on the use of artificial intelligence in patient flow with regard to predicting avoidable readmission, increasing treatment efficiency, optimizing resource allocation, reducing length of stay, and validating existing algorithms for more general purposes.	There is extensive research on the potential use of AI in mental health, and some studies focus on its application in inpatient psychiatric care, but research rarely addresses improving patient flow. Further research should explore patient perspectives regarding the integration of AI into healthcare, as patient experience is a key factor in healthcare, especially in patient access. Addressing patient concerns is critical in

				allocation (44%) and limitations (91%).	- The potential for this application of AI to have both positive and negative impacts on the patient experience.	the broader implementation of AI so that patients can maintain autonomy over their sensitive information, particularly in the field of psychiatry..
(Siddiqua et al., 2023)[18]	AIDA: Artificial intelligence based depression assessment applied to Bangladeshi students	Science Direct	- Study of the assessment and observation of depression, including the development of an integrated questionnaire - Then measure the hybrid depression rating scale by analyzing and assessing the collected data.	- The questionnaire was distributed among Bangladeshi students and a total of 684 responses (aged between 19 and 35) were obtained.	- The results of this study show a new depression measurement scale with three different levels, namely. normal, moderate and extreme, using voting techniques on the results of eight known scales. - Nine characteristic selection methods are used to find important and important characteristics that influence depression. Additionally, 12 machine learning, ensemble, and deep learning algorithms are used to automatically predict depression. Random Forest, Gradient Boosting Algorithm, and CNN were found to be better models for depression assessment. Finally, hyperparameter optimization and feature selection are used to improve the performance of prediction results	- This research examines various personal and social factors that negatively impact the mental health of young people. - Metaheuristic optimization methods can be widely applied to find the best patient biometric markers and features. A possible extension of this work is to harness the power of advanced AI frameworks such as adversarial and sequential learning, domain conditions, etc. -
(Alrusaini & Beyari, 2022)[19]	The Sustainable Effect of Artificial Intelligence and Parental Control	Science Direct	The technique of research that was applied in the study was a quantitative approach. The primary questionnaire focused on	sample in this study are 415 parents who had given their children at least one smart device	The findings presented in this paper show that the moderating effect of artificial intelligence control was more statistically significant than parental controls in influencing the sustainability of child behavior.	the study concluded that using artificial intelligence control is more effective than relying on parental controls to enhance the behavioral sustainability of

	on Children's Behavior While Using Smart Devices' Apps: The Case of Saudi Arabia		game apps, social media apps, video-streaming apps, artificial intelligence control, parental control, and the sustainability of child behavior. On the other hand, a separate questionnaire designed specifically to capture demographic information was also drafted. The structural equation model (SEM) was preferred, as it depicted the moderating roles of artificial intelligence control and parental control by using SPSS AMOS software. Findings established that games, social media, and video-streaming applications negatively affected the sustainability of child behavior		Moreover, the results show that the greatest effect on children's behavior were social media, video-streaming, and games apps. respectively. Nevertheless, both approaches resulted in positive child behavior	children with smart device applications in Saudi Arabia.
(Entenberg et al., 2023)[11]	AI-based chatbot micro-intervention for parents: Meaningful engagement, learning, and	Scopus	The exploration system with a randomized control trial was carried out. Actors in the experimental group penetrated a 15-nanosecond intervention that tutored how to use	The parties sign through Facebook postings and shipping list ads. An total of 170 parents who had at least one child progressed between 2 – 11	-	The results of this study were that participants engaged with a brief AI-based chatbot intervention and were able to learn effective praise skills. Although the scores moved in the expected direction, there were no significant differences by condition in terms of parent-	Parents can admit psychoeducation and learn from chatbot micro interventions. parents can engage meaningfully with chatbots when communicating about their gests with their children.

	efficacy		positive attention and praise to promote positive get in their children, while the control group remained on a waiting lis.	times living in Argentina	reported praise knowledge, perceived change in disruptive behavior, or parental self-efficacy, from pre-intervention to 24-hour follow-up. - The results give sapience into u nderstanding how parents engage with chatbots and suggest that, in general, brief, tone- directed digital interventions can enhance literacy in parents. It's possible that advanced inter vention boluses may be demand ed to evoke remedial changes in the senior.	Chatbots area unique and innovative wa y to increase availability, train ing parents and druggies to engage meani ngfully with them. With advances in AI, chatbots for internal health are a promising intervention form at for parents of busy children and adolescents.
(Lin et al., 2021)[20]	Parental Acceptance Of Children's Storytelling Robots : A Prejection Of The Uncanny Valley Of AI	Scopus	- This exploration uses a qualitative study using design fiction, which is a form of academic design that opens up conversations about the use of new technology and its ethical and social counterclaims.	- People receive invitations through posts, forums, the original Reddit community, or word of mouth. - Additional criteria are adult parents who have at least one child, aged 2 to 5 years (preschool age).	- Exploration has shown that robots in the home are further than just a new technology for children. They give a sophisticated exper imental platform for shaping co gnitive perception, family dyna mics, and mortal-robot relations. - Exploration shows that parents have an equivocal but g enerally positive station toward s chatbots and are ready to drink them at home. Parents appreciate puck tales fo r perfecting children's reading c hops, forming habits and family connections	Parents find it delicate to produce a internal model of how socially able robots operate, which creates cognitive conflict and passions of ignorance. This feeling can be reduced by making the AI more transparent and easy to understand. Experimenters explore the counteraccusations of using robots for children's story time, including their implicit effect on maternal well- being, and suggest directions for unborn exploration.

(Glassman et al., 2021)[13]	Parents' Perspectives on Using Artificial Intelligence to Reduce Technology Interference During Early Childhood: Cross- sectional Online Survey	Scopus	- This exploratory study was conducted using a cross-sectional experimental study using a population-based examination of websites where US parents had a 5-year-old child. - This examination was developed for the Amazon TurkPrime platform (now called CloudResearch) for recruitment and administration via the Prime Panels service.	- Adults aged > 18 years, with primary care responsibility for at least one child aged < 5 years in the household. - Exclusion criteria included inability to read English or Spanish or completion of checks outside the United States.	- From this study parents inform digital devices can affect the concentration of parent-child relationships with an average of 3.03 devices (SD 2.07). - Youth, Hispanic race, and Spanish spoken at home are associated with increased awareness of technological significance. Compared to parents' perceptions of techno- and sociodemographic factors, parents' perceptions of their problematic technology use were most strongly associated with acceptance of AI tools.	AI grounded tools may be used as training aids to help parents of colorful sociodemographics increase their attention when minding for their youthful children, particularly in managing with technology from using their own mobile bias. Unborn examinations should validate whether there's sufficient focus on AI grounded parenthood support to combat parents' inordinate use of digital technology-convinced technoference versus their particular problems with technoference and to identify other factors impacting the adequacy and utility of this support.
(Ghaznavi et al., 2020)[21]	Photorealistic avatars to enhance the efficacy of Self-latachment psychotherapy	Scopus	This exploration system was carried out with a validity study in which the actors were asked to flash back their nonage moments by first using their filmland and also by using customized photorealistic incorporations using Mobilevr and Oculus	- Low end interpretation A aggregate of 15 actors were signed via social media platforms; the maturity of actors were in their twenties(11 males and 1 lady). For each party, a special Android	- Experimenters created a new psychotherapy that uses customizable photorealistic incorporations to increase the effectiveness of tone-protestation psychotherapy. - The platform also offers facial and body robustness for some introductory moods similar as happy, sad, spooked and agitated, and allows you to	Sophisticated virtual reality systems are transforming sectors such as the military, education and healthcare. Advances in virtual reality technology, particularly the availability of photorealistic human-like avatars, have made virtual reality experiences more personalized and

			Quest.	VR operation, containing their custom icon , is created and participated. - High end interpretation Six actors from the low end trial, who have access to the Oculus Quest	change the body(height/ range) and apparel color of the icon . - icon(VR) grounded approaches when combined with traditional print grounded approaches show promising results. Nearly 85 of actors reported that their child's photorealistic icon in VR was more seductive than a print of their child. - Both low- position and high-position VR- grounded approaches were unanimously reported to be more effective than traditional high-imagination approaches. Actors reported that the high- end VR interpretation of the platform was more realistic and immersive than the low- end mobile VR interpretation.	realistic. Researchers who implement both high-end and low-end versions can help other researchers create better, more interactive, and highly realistic virtual reality experiences in the future.
(Roslan et al., 2023)[22]	Parent Assistance Training on Children's Intelligence in the Modernization Era in Wawatu Village, North Moramo District, South Konawe Regency	Google Scholar	- The method of this research is lectures and discussions explaining the role of parents, especially mothers in today's children's education, the positive and negative impacts of media technology.	20 people consisting of mothers who have teenage children in Wawatu Village, North Moramo District, South Konawe Regency	- participants have been able to understand the role of parents, especially mothers in educating children in this modern era, especially in using communication technology. - They are also able to understand how to provide assistance to children so that they grow up as intelligent generations who can maximize the use of communication technology by avoiding the negative effects of communication technology.	With the knowledge that they've attained from this comforting, it's clearly hoped that it'll be useful in the sweats of parents, especially maters , in furnishing backing and knowledge to children at home related to the use of communication technology. The donation of this training is to raise mindfulness for parents about the significance of educating and educating

						children using information technology in the modernization period.
(Pervanidou et al., 2023)[23]	The Impact of the ENDORSE Digital Weight Management Program on the Metabolic Profile of Children and Adolescents with Overweight and Obesity and on Food Parenting Practices	Scopus	- This study explores the impact of the ENDORSE platform on metabolic parameters associated with childhood obesity and the dietary care practices of participating mothers. - The Comprehensive Feeding Practice Questionnaire was used for the assessment of feeding practices. Next, regression analysis was used to investigate possible associations between changes in BMI z-scores and changes in metabolic parameters and dietary care practices.	- Children aged 6-14 years with a BMI > 85th percentile, which is the cutoff value for the definition of overweight according to the International Obesity Task Force (IOTF). - Exclusion criteria for participating in this study were secondary causes of obesity, such as endocrine diseases , genetic syndromes known to be associated with obesity.	- Glycated hemoglobin (mean change = -0.10, p = 0.013), SGOT (mean change = -1.84, p = 0.011) and SGPT (mean change = -1.84, p = 0.011) decreased statistically and SGPT (mean change = - 2 0.95, p = 0.022). Emotional feeding/food as a reward decreased (mean change −0.21, p = 0.007) and healthy eating guidelines increased (mean change = 0.11, p = 0.051). Linear regression analysis showed that changes in BMI z-score had a strong and significant correlation with important metabolic parameters: changes in HOMA-IR (beta coefficient = 3.60, p value = 0.046), changes in SGPT (beta coefficient = 11.90). , P). -value = 0.037) and changes in cortisol (beta coefficient = 9.96, p-value = 0.008). Additionally, changes in healthy eating guidelines had a strong negative association with changes in BMI z-score (beta coefficient = -0.29, p value = 0.007. - Implementation of the ENDORSE digital weight monitoring program improves	The use of this new digital-based ENDORSE platform in weight management and the promotion of parental healthy eating practices adds new data about the importance of digital-based interventions to combat childhood obesity. Certainly, future large-scale cohorts combined with a control group representing standard care of overweight and obese children and adolescents are needed to better support the findings of this study.

					several important metabolic parameters and eating habits.	
(Ali et al., 2022)[24]	Artificial Intelligence-Based Mobile Application for Sensing Children Emotion Through Drawings	Scopus	This study included Primary (local) and Secondary (online) data sources for child art drawings. Our primary source was data collected from a local school based in Doha. We collected 102 drawings to test the effectiveness of art therapy-based emotion-sensing. Our secondary data source was searching online where we collected a total of 521 drawings through Google and Instagram.	Thus, the 521 drawings were labeled by the art therapist into two different groups: positive emotions (n=365) and negative emotions (n=258). Drawings collected from the school were also labeled into positive emotions (n=52) and negative emotions (n=50).	The model accuracy ranged from 55% to 79% in the four experiments. This study showed that ESRA has the potential in identifying the emotions of children. However, the underlying algorithm needs to be trained and evaluated using more drawings to improve its current accuracy and to be able to identify more specific emotions.	ESRA can help parents and teachers understand the emotions of children through analyzing their drawings using AI. However, the underlying algorithm proposed in this work needs to be trained and evaluated using more drawings to improve its current accuracy. Further research is needed to improve ESRA in identifying more emotions and considering cultural nuances in the representation of the drawings.

DISCUSSION

Technological developments that entered the era of the Industrial Revolution 4.0 are considered to have influenced various fields of science, one of the focuses being the ways and patterns of child development[25]. The era of the Industrial Revolution 4.0 can also be said to be the era of Artificial Intelligence (AI) and machine learning, also often referred to as artificial intelligence[26]. Technological developments challenge mentors and the next generation of children[27].

Child psychiatry is a branch that is oriented and explores the stages of growth and development of children's emotions and behavior[28]. This is intended to provide promotive, preventive, curative, and rehabilitative efforts with an eclectic-holistic approach to achieve optimal mental health for children and their families. The biggest challenge facing the Industrial Revolution 4.0 was meeting the stimulation needs to support children's emotional growth and development to have healthy minds to deal with rapid and drastic changes. The World Health Organization (WHO) concept is that a mentally healthy child is a child who can feel that he is healthy and happy [29]. Child psychiatry tries to address the challenges of development in the current 4.0 industrial revolution era and achieve Indonesia's Sustainable Development Goals (SDGs) goals[30] .

The influence of AI on child development In the rapid and drastic development of technology, AI technology, also known as machine learning or super-computer, can change human interactions [31,32]. Such as communication interaction patterns between friends, neighbors, teachers, and students, to communication patterns between parents and their children. No artificial intelligence in this AI era can replace someone's job in doing something, especially medical elements [33].

These efforts are also expected to face challenges in children's lives. Able to accept other people and their environment as they are and have positive perceptions and attitudes towards themselves and others. This period is significant because it is the main foundation for brain growth and developing individual character and personality in the future.

The benefits of AI in the context of child mental health

Artificial intelligence (AI) can now be applied in almost all fields, including parenting. The use of AI by parents to help raise their toddlers for a full day has already been done[34,35]. Waugh uses the cutting-edge AI program ChatGPT and Google Bard to help raise his 18-month-old son, William. They were serving food created by AI and participating in suggested activities before relaxing with some AI-produced television scripts and reading books to children written by technology.

Based on research by Guido A. Entenberg, Sophie Mizrahi, Hilary Walke, et al. (2023), chatbots are computer-based programs that utilize artificial intelligence (AI) to communicate with people via text or voice and have the potential to provide mental health interventions to a large number of populations (i.e., adolescents and adults)[11]. The chatbot is designed to guide parents of newborns and premature babies about stress, sleep, and nutrition[36]. The chatbot reproduces human-like conversations and captures open dialogue about parenting experiences. Overall, participants found it helpful and reported having a positive experience. The parenting chatbot also offers tools for depression screening and relaxation exercises[37]. One-session interventions for parents have shown promising results in treating children's and adolescents' mental health problems, including anxiety, depression, and behavior problems[11].

In the future, artificial intelligence (AI) could mimic human behavior, including the complex task of raising children[13]. Microsoft researchers report that GPT-4 is starting to exhibit near-human intelligence. However, this can lead to potential pitfalls. AI can offer children what humans, TV, or smartphones cannot providesmartphone[38,39] . AI will be able to determine a child's needs and tailor interactions to offer the best parent-child and educational experience. If a child has difficulty learning a specific concept, AI can adjust its instructions, trying to change to meet the child's learning needs excitingly[40]. AI can act as a nanny, tutor, or playmate; its primary selling point is unprecedented personalization to suit every child's needs[41]. This condition sounds too exaggerated to be accurate, even though it happened. Children must deepen and inculcate moral values into their souls, as parents must educate and have a pure spirit and noble

character, and be far from despicable and vile[41]. They must also instill these noble values into children's souls and purify their hearts from dirt. The communication patterns used by families, in this case, parents, in shaping children's character are more dominant using open models or democratic communication models compared to closed or authoritarian communication models[42].

AI can recognize the most straightforward child's learning method, like what is based on the child's algorithm. AI can help analyze and detect dangerous behavior and inappropriate content for children so that we can protect children from bad risks online. Irresponsible people can use the innocence of children to use personal identity data without the owner's knowledge. Therefore, digital literacy is essential so that people are more aware and careful about potential crimes involving AI.

The advantages of AI in improving children's mental health

AI can behave similarly to a human with one exception: it never gets tired. This technology will continue providing undivided attention to parents in raising children in a way humans cannot. One of the significant advantages of AI is its ability to automate repetitive tasks, freeing human resources to focus on more complex and creative endeavors[41]. By simplifying processes, AI can significantly increase efficiency and productivity in various areas, especially for repetitive work, including parenting[34,35].

Unlike humans, machines do not require rest to recover from fatigue and increase productivity. The AI-based engine helps perform repetitive tasks for a long time without slowdowns. AI enables operating machines unlimitedly without reducing productivity[43,44]. This is one of the main advantages of AI that has led to its acceptance in every sector. Manufacturers use Artificial Intelligence to continue to produce according to consumer demand and get high profits[45]. In parenting, artificial intelligence can assist in diagnosing parenting patterns, predicting parenting outcomes, and identifying ways in parenting data, which ultimately improves child care and parenting effectiveness[40].

The risks of using AI on children's mental health

AI cannot replace some things and must be anticipated to be a harmful effect from AI, which is that it has not been able to replace the role of emotional relations (bonding) and mother-child attachment, which are essential and are said only to be found in humans [30]. Therefore, integrating the perinatal psychiatric health service system and child psychiatry in primary care is an essential thing to do at this time in mental health services. This is done from the time the mother is pregnant until the child is born to support the formation of a safe mother-child bonding and attachment.

Technology leaders, including the heads of OpenAI and Google's DeepMind, have issued dire warnings about the potential risks AI poses to society and urged caution. The ban on using technology in biometric monitoring and specific clauses to protect children is being carried out more intensively. The first AI law by a significant regulator could be a model for planning similar parenting patterns [46]. Personalization not only widens the gap that separates those who don't share someone's beliefs, values, or interests but can also make people in the same group increasingly polarized in their views and beliefs.

AI relies heavily on data, and the collection and utilization of personal information raises concerns about security and privacy[47]. AI systems must be designed with robust security measures to protect sensitive data from unauthorized access and breaches. In addition, AI also increases the potential for abuse[48]. For example, deepfake videos. Deepfakes can spread false information and manipulate public opinion[49]. Someone could take a video of a person and edit it to make him say things he never actually said.

In utilizing AI, it is necessary to focus on the effects of technology-based personalization on today's culture and society [50]. Algorithms that operate behind the scenes study people's interests to compose and show more about what they might want to see, hear, and experience on this platform. They are designed to make someone hooked so that they continue to use them again [51].

The same can be said about beliefs, political views, values, etc. If someone consumes content with a certain tendency,

online platforms will continue to provide more content with a similar trend[52]. Personalization wraps in a bubble of ignorance, reinforcing the inaccurate perception that everyone has the same beliefs or values as himself[52].

Personalized online platform experiences create many parallel worlds that divide human communicative cultures. This problem gradually goes unnoticed, and these conditions separate, making it increasingly difficult to respect speaking and working with others[52].

Its own culture and communicative practices will influence each circumstance. The more time spent online, the more immersing oneself with like-minded people in the group to learn and internalize language and communicative norms. It's hard to tell if something needs to be fixed if most of one's social circle communicates similarly. If we encounter someone who gives abusive parenting, the last thought that comes to our mind is the possibility that the person comes from a different communicative culture [52].

The exact words and gestures that seem polite to the communicative culture of one area can appear rude to people from other regions, making it very easy for misunderstandings and misjudgments to one another. The concern is that this problem will worsen with children raised in AI-based parenting. Children in parental care for their children must understand how to struggle to understand and cooperate with others. If we are not careful, we risk raising a generation of children with a skewed perception of the world due to the formation of personal groups created by AI [52].

In addition, the depersonalized level of interaction with parenting AI will create tiny groups, making it more difficult for children to try to relate to and understand others, leading to more conflict, misunderstanding, and mistrust [52]. loneliness will be experienced by children when parents do not fully assist when implementing parenting[53]. In the future, the next generation of children may experience increased loneliness and alienation and be less able to communicate or collaborate [52].

CONCLUSION

The rapid development of artificial intelligence sometimes makes it difficult for people to distinguish between reality and digital products. Often someone is not aware that digital activities that seem ordinary, can have a bad impact if the use of technology is not equipped with digital skills. Parents can use artificial intelligence in providing care to improve children's mental health. Digital health technologies that ask about moods and thoughts seem to "listen" to people's feelings, learn about their owners, and offer cognitive behavioral therapy tools. Interactions with AI can mimic real-life face-to-face encounters adapted to individual situations. Caution must be exercised in anticipation that AI cannot replace human connection. If more digitally savvy, AI could benefit much better children's mental health. This is because of the existence of AI for parents to make it easier for them to learn something. AI can recognize the easiest parenting methods, based on the child's algorithm. Researchers are further advised to explore the use of artificial intelligence related to coordination between parents and school teachers to improve the quality of children's mental health development.

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CONFLICTS OF INTEREST:
The authors declare no conflict of interest.

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