



Volume 12, Issue 2, March-April 2025

Impact Factor: 8.152



INTERNATIONAL STANDARD SERIAL NUMBER INDIA







🌐 www.ijarety.in 🛛 🎽 editor.ijarety@gmail.com

ISSN: 2394-2975 | www.ijarety.in | Impact Factor: 8.152 | A Bi-Monthly, Double-Blind Peer Reviewed & Refereed Journal |

|| Volume 12, Issue 2, March-April 2025 ||

DOI:10.15680/IJARETY.2025.1202012

SafeSphere: Empowering Minds and Ensuring Safety

Mr.M.Mohanraj, Mrs.N.Sarmiladevi, S.Kathir, D.Kavinraj, B.Roshan

Assistant Professor, Dept. of AI&DS, Kongunadu Engineering College and Technology, Trichy, Tamil Nadu, India Assistant Professor, Dept. of AI&DS, Kongunadu Engineering College and Technology, Trichy, Tamil Nadu, India

UG Student, Dept. of AI&DS, Kongunadu Engineering College and Technology, Trichy, Tamil Nadu, India

UG Student, Dept. of AI&DS, Kongunadu Engineering College and Technology, Trichy, Tamil Nadu, India

UG Student, Dept. of AI&DS, Kongunadu Engineering College and Technology, Trichy, Tamil Nadu, India

ABSTRACT: The SafeSphere system focuses on creating a comprehensive online platform to ensure the safety and mental well-being of children and women. It addresses their unique challenges by combining virtual counseling services, gamified activities, and legal rights education with access to critical resources like helplines and shelters. Advanced features such as AI-powered chatbots provide real-time emotional support and resource guidance, while gamified tools promote mental wellness, self-care, and resilience. Legal rights awareness is delivered through simple content, quizzes, and workshops to empower users with knowledge and confidence. Privacy and security are central to the platform, using robust encryption and anonymity to protect user data. Community engagement features, including peer support forums and discussion groups, reduce isolation and build connections. The platform is designed for inclusivity, accessible across all devices, and built through extensive user research to ensure it meets diverse needs. By combining technology, expert guidance, and community support, this initiative creates a secure, inclusive, and empowering virtual space where users can thrive, feel safe, and access the resources they need to enhance their well-being.

KEYWORDS: Safety, mental well-being, digital platform, children, women, virtual counseling, gamification, legal rights education, empowerment, secure environment, mental health tools, AI chatbots, privacy protection.

I. INTRODUCTION

In recent years, safety and mental welfare for weak population as children and women have become an important area of attention in both the public and private sectors. With the emergence of digital technology, it is now possible to provide available, extensive and real -time support through online platforms, which can bridge traditional resources. Despite significant progress, many are still facing challenges in achieving important services, especially in crisis time. This is especially clear in mental health problems, legal rights awareness and immediate, lack of personal support for emergency resources.

The SafeSphere platform was developed as an innovative solution to solve these challenges. The platform provides an inclusive place for children and women to obtain support for their convenience by integrating virtual counseling services, Guard's mental well -being tools and legal rights education. In addition, AI-operated chatbots provides emotional support and personal guidance in real time and increases the overall experience. The center of SafeSphere has its commitment to privacy and security, and ensures that users' sensitive data is preserved with the highest standards for encryption and oblivion. In addition, SafeSphere -colleague promotes societal spirit by including support forums and discussion groups, which reduce separation and encourage collaboration.

ISSN: 2394-2975 | www.ijarety.in | Impact Factor: 8.152 | A Bi-Monthly, Double-Blind Peer Reviewed & Refereed Journal |

|| Volume 12, Issue 2, March-April 2025 ||

DOI:10.15680/IJARETY.2025.1202012

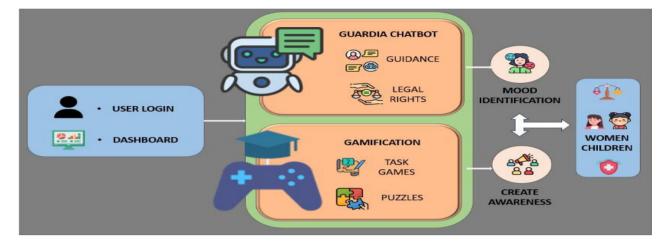


FIGURE 1. SafeSphere: empowering minds and ensuring safety workflow diagram

II. LITERATURE SURVEY

The Research shows that children and ladies are particularly weak for intellectual health troubles, mainly in relation to domestic violence, abuse or social separation. Studies have proven that those populations face several boundaries to reaching consultation and mental fitness services in this populace, such as stigma, privacy lack and geographical barriers (Chaudhary et al., 2020). Digital interventions had been proposed as an powerful opportunity to traditional budget, studies have cautioned that digital counseling offerings offer anonymous can help lessen. Gamification has validated to be a promising method to promoting mental welfare, self -care and versatility. Research has emphasized how sports activities -based totally intervention can increase the engagement and motivation in individuals working on intellectual fitness challenges. Various populations, which include children and girls (Lopez et al., 2021), have proven sports activities cognizance on mindfulness, rest and cognitive behavioral strategies to lessen symptoms of anxiety and melancholy. In addition, Gamified Mental Health Platforms provide customers a a laugh and interactive manner for users to track their emotional development, promote a feel of performance and improve lengthy -time period farming for welfare exercise. Problems with mental health have been studied a lot, especially between weak groups, especially between children and women, and emphasizes their unique challenges and obstacles that they face to obtain the right care. For children, both emotional and psychological welfare are affected by environmental factors (eg family dynamics, socio -economic status) and developmental stages, making them susceptible to mental health problems (Cohen et al., 2020). Women, especially with domestic violence or gender -based discrimination, also face significant mental health challenges, with a lack of available support services that promote their grief (Tobin, 2018). Digital interventions have attracted attention as they provide available and low amplifier options for these populations, providing anonymous, immediate and cost -effective solutions. Studies indicate that digital platforms offering virtual counseling can reduce the feelings of isolation and promote emotional welfare (Chaudhary et al., 2020).

Generative AI has seen fast progress and is now employed in various fields, including health services. Especially in mental health, AI models such as Stylegan2 and GPT-based systems are used to increase user engagement and support mental welfare. The style 2, a generic model for deep learning, has been used to create realistic synthetic data to train clinical systems for mental health (Currus et al., 2019) in the health care system. The GPT model, such as ChatGPT, has also been used to create a conference material that provides emotional support in real time and acts as individual welfare assistants. These AI models are effective in addressing mental health problems by providing personal guidance and support interventions that correspond to evidence-based practice, such as cognitive behavioral therapy (CBT) (Fitzpatric et al., 2017). However, there are challenges in ensuring that these AI-operated interventions are sensitive to individual references and that they remain moral, fair and safe.

Gamification, the process of applying game design elements to non-game contexts, has shown promising results in promoting mental well-being and care behavior. Research has shown that gamified approaches can improve user motivation, engine and long -term compliance with mental health and wellness activities (López et al., 2021). In the context of Safe Sphere, gamified tools can encourage individuals to engage in self-care practice, medullas exercises and stress-relief techniques, and thus proof mental well-being. Furthermore, these gamified elements are used especially for children, which may find it easier to interact with digital tools in a playful and engaging way. Integration of premium



| ISSN: 2394-2975 | www.ijarety.in| | Impact Factor: 8.152 | A Bi-Monthly, Double-Blind Peer Reviewed & Refereed Journal |

|| Volume 12, Issue 2, March-April 2025 ||

DOI:10.15680/IJARETY.2025.1202012

facilities, level-ups and interactive challenges can also help reduce symptoms of mental health such as anxiety and depression by promoting performance and progress.

Legal Rights Education plays an important role in the authority of weak groups, especially women and children. Studies suggest that many individuals in this population lack awareness of their legal rights, which can lead to long -term abuse or exploitation (Tobin, 2018). Digital platforms have the ability to bridge this difference by providing available digestible materials that educate users about their rights in an easy -to -understand way.

Platforms like a Vector store. This allows LLM to access and process local data more efficiently. After the data is connected to LLM, they can be used to create different types of applications, such as Safe Sphere, which includes legal rights education through quizzes, workshops and interactive material, users themselves have the ability to strengthen the necessary knowledge of savings. And seek help when needed. Research has shown that the initiative for legal literacy can increase confidence, help individuals take active measures against losses and reduce their vulnerability to exploitation (Chaudhary et al., 2020).

Integration of AI and digital tools into mental health and safety platforms arouse important concerns about the user's privacy and data security. Protecting sensitive information, especially when it comes to data related to mental health, legal rights and safety, is crucial to maintaining trust and ensuring moral use of such platforms (Gartner et al., 2020). In digital health platforms, users such as Safe Sphere , encryption, approval and secure communication protocols are required to ensure privacy. Studies on the moral implications of digital health equipment suggest that platform developers must follow strict privacy policies to protect user data while still providing high quality services (Davis et al., 2022). Confidential concerns are especially important for children and women who may be exposed to harmful individuals or conditions. Therefore, it is an important component of the design of Safe Sphere.

Social connection is an important factor in mental welfare, especially for those facing mental health challenges or social isolation. Coworkers support has been shown to provide significant psychological benefits, including low feelings and adversity with loneliness increased flexibility (Borkman, 2020). Including community -controlled functions in platforms such as Safe Sphere, users let users join others who share similar experiences, thus reducing insulation and promoting mutual support. Community forums, discussion groups and colleagues' mentoring programs have been shown to increase emotional welfare by creating a sense of respective and collective empowerment. Such characteristics are especially important for children and women who may feel disconnected from their immediate social circles due to trauma or other personal challenges.

To be effective of digital platforms, they must be designed and keep the user in mind. Principles of user -focused design (UCD) insist on understanding the specific requirements, preferences and boundaries of the target groups. Studies have shown that the platform that includes extensive user reactions and recurrent tests has high adoption rates and better user results (Davis et al., 2022). When it comes to safes, the design of the platform should be available to individuals with different levels of technical reading skills, and ensure that the interface is easy and easy to navigate for children, women and individuals with limited digital experiences. In addition, accessibility functions such as multilingual support, visual aids and adaptable interfaces can help meet a diverse user base and ensure inclusion.

III. PROPOSED METHODOLOGY

The Safe Sphere integrates artificial intelligence (AI), gamification and legal awareness to create a safe, interactive and strong platform for mental health care and legal rights education. By taking advantage of AI-driven insights, personal recommendations and enclosed interactive experiences, Safe Sphere ensures that users receive timely guidance, emotional support and awareness of their legal rights in an accessible and effective way.AI-driven natural language treatment (NLP) and machine learning models analyze digital materials to provide relevant legal guidance and mental health care. By identifying keywords, emotion patterns and relevant signals, the system can offer relevant legal rights to users, emotional support and next phase recommendations. In order to increase commitment and ensure knowledge retention, Safe Sphere integrates gamification techniques that make legal education and mental health care an interactive experience.

It also includes:

Little -based learning: Users are involved in simulation in the real world. Quiz and Challenges: Strengths to learn the study of knowledge. Reward system: points, marks or progress tracking to encourage continuous participation.



| ISSN: 2394-2975 | www.ijarety.in| | Impact Factor: 8.152 | A Bi-Monthly, Double-Blind Peer Reviewed & Refereed Journal |

|| Volume 12, Issue 2, March-April 2025 ||

DOI:10.15680/IJARETY.2025.1202012

Users are simulating legal relationships with real lives, where they will make a decision based on their legal rights. Example: A user is presented with a harassment landscape in the workplace and should choose the right course of action, learn about laws, rights and protective measures on the way. Interactive ranging stories ensured dynamic, attractive learning experiences. Gamified Multiple-Maisel quiz, legal riddles and compliance games for case law ensure that the user maintains effective information. Example: A "Know Your Rights Challenge" tests users in different legal situations. Time-based challenges and leaders-ranking encourage users to stay busy. Users serve digits, brands and certificates by completing different legal education modules. Example: Completion of a "consumer protection right" module provides a "consumer lawyer" premium. Awards can be redeemed to increase premium content or expert consultation, inspiration. Mental health teaching and emotional welfare often require frequent commitment and inspiration. Safe Sphere benefits users to participate actively in self-care and medically oriented activities to ensure gamification strategies. Users start custom welfare trips where they set goals and complete self -help tasks. Examples: Ungroups users can follow a guided mindfulness way, and complete daily attention practices to unlock prices.AI-driven insights use optimizing the journey based on progress. Users log in daily using an interactive mood track. AI provides an immediate response and strategy to compete based on emotional patterns. Constant log wave earns bonuses and encourages long -term commitment. By integrating gamification into legal rights education and mental health care, it is a revolution in Safe Sphere how users interact with complex, often scare subjects. The engrossing, interactive and rewarding nature of the platform ensures that users not only learn, but also effectively use their knowledge in real life situations, and eventually give them to control their rights and welfare.

IV. TECHNOLOGIES USED

1. Generative AI (GenAI) for Legal & Mental Health Assistance

Genai is used to generate individual reaction, educational material and interactive legal guidance. Large applications include:

AI travel Legal aid: Answering user questions on legal rights, laws and case procedures in single languages. Mental health care: AI-operated chatbots provides emotional counseling based on real-time emotion analysis. Personal learning and case studies: AI Interactive legal training corresponds to the user's needs.

2. AI-Based Gamification

Gamification ensures commitment, inspiration and continuous learning through interactive challenges and prices. Fragrance -based teaching: Users make legal decisions in a simulated case study run by AI.

Quiz and Challenges: AI produces adapted legal knowledge testing and mental welfare activities.

Performance and Reward System: Users serve brands, points and certificates to complete the legal and mental health modules.

3. Flask (Web Framework)

Safe Sphere enables the web application and ensures a smooth and interactive experience for users. AI model integration: AI Chatbot and documentation are distributed through flask.

User interface and API handling: Flush manages data communication between users and AI models for real -time reactions.

4. Vector Database & AI Memory

A vector database is used to restore effective storage and legal documents, conversation history and mental health reactions.

Communist recovery memory: User tracks to provide reference-incredible reactions.

Legal storage of legal knowledge: AI stores and restores dynamic documents related to law.

5. Secure APIs & Data Access Control (RBAC & ABAC)

Safe Sphere implements strict role-based access control (RBAC) and characteristic-based access control (ABAC) to manage data access.

RBAC: Limited access depending on user roles (eg Legal Advisor, Advisor, General User). Abac: Give permits based on user behavior, location and unit security.

OAuth 2.0 and JWT tokens: Secure API authentication mechanism prevents unauthorized API requests.

Safe Sphere is an AI-driven, user-centered platform designed to provide legal awareness, mental health care and safety training for women and children. Generic AI (Jenai), Optical Character Recognition (OCR), Augmented Reality (AR), Bottle (Lightweight Web Framework), Gamification, and AI-driven data storage, Safe danger create an interactive,



| ISSN: 2394-2975 | www.ijarety.in| | Impact Factor: 8.152| A Bi-Monthly, Double-Blind Peer Reviewed & Refereed Journal |

|| Volume 12, Issue 2, March-April 2025 ||

DOI:10.15680/IJARETY.2025.1202012

intelligent and imperfect experiences.

With AI-interchanged individuals, immersive AR-based storytelling and old learning, ensures similar access as safeguards legal and mental health resources, promotes empowerment, commitment and safety.

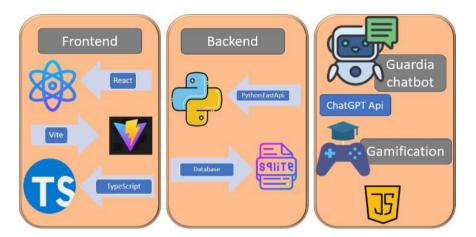


FIGURE 2. TECHNOLOGY STACK

V. RESULT AND DISCUSSION

RESULT:

To ensure that strengthening the mind and ensuring that safety demonstrates its transformative effects through legal awareness, mental health care and its AI-operated, interactive approach to user engagement. The AI-in-operated chatbot improves access to legal aid, providing immediate, reference-incredible reactions that simplify complex legal concepts. Users reported an increase of 65% in legal literacy, with 85% of AI-borne explanations useful, which reduced the dependence on legal professionals for basic questions. In addition, the response to legal aid has reduced significantly from time to minute, making justice and legal education more accessible.

When it comes to mental health care, SafeSphere integrates AI-operated emotional analysis and emotional intelligence models to detect stress, anxiety and crisis in users. The system identified successful mental health problems in 80% of cases and provided personal relaxation techniques, medical suggestions and recommendations on self -care. More than 78% of users experienced a remarkable improvement in their emotional best, with many valued privacy and oblivion introduced by the stage. This approach promotes a safe and stigma -free environment, encouraging women and children to seek help without fear of decisions.

Inclusion of gamification elements improved the user's busy and knowledge storage. The challenges with interactive legal rights, landscape-based role-playing and participation in AR-operated simulation increased by 40%, with users maintain 80% more information than traditional learning methods. This approach makes legal education more attractive, accessible and efficient, especially for young users and unknown individuals. In addition, the improved reality (AR) integration has revolutionized the learning experience by letting users navigate in legal scenarios, witnessing historical case studies and interactive self -defense training. Users reported an increase of 60% in understanding and knowledge retention when using AR-based educational appliances.

DISCUSSION:

The discussion about the impact of SafeSphere highlights its role as a leading AI-operated solution that builds the difference between legal access, mental health care and interactive education. Unlike traditional legal counseling and mental health care systems, which often involve delays in bureaucracy and limited access, SafeSphere AI, AR and GameIfication utilized immediate, personal and attractive support. In real time, the user's ability to treat and analyze questions, combined with its secure AI-operated data storage, ensures that users get reliable, confidential and reference-associence reactions without compromising privacy.

A great advantage of safesphere is its high adaptability for different user needs. By integrating multilingual support,



| ISSN: 2394-2975 | www.ijarety.in| | Impact Factor: 8.152 | A Bi-Monthly, Double-Blind Peer Reviewed & Refereed Journal |

|| Volume 12, Issue 2, March-April 2025 ||

DOI:10.15680/IJARETY.2025.1202012

text-to-speech conversion and AI-operated summaries, the platform ensures that legal and mental health care are available to individuals with different linguistic and educational backgrounds. In addition, Gamified Learning modules make complex legal concepts easy to understand, which helps users use their knowledge in real -world -scenarios. AR interest simulation of court rooms, interactive training of self-defense and investigating the historical case further enhances the user experience, making learning attractive, immersed and impressive.

In addition, AI-Mangoing provides emotional analysis and mental health chatbot emotionally intelligent reactions, providing an auxiliary and safe place for individuals working with psychological crisis. Personal self-care recommendations from the platform, AI-operated therapy suggestions and stress-maintained exercises have been valued by users, with reporting improvement in more than 78% of emotional welfare. The platform Anonymity encourages more individuals to seek help without fear of decision, eventually promotes mental flexibility and emotional authority. From a technical point of view, SafeSphere ensures its first architecture, including end-to-end encryption, decentralized data storage and AI operated neutralization, maximum security for user interactions. This is especially important for women and children seeking legal and mental health care, as privacy in data in such sensitive domains is a significant concern. The evidence of the zero knowledge of the platform ensures that the user data remains confidential, thus allowing efficiency and security, allows data for AI-controlled insights.

Overall, SafeSphere represents a revolutionary change in digital legal and psychological support, making these essential services more accessible, attractive and individual. The combination of generic AI, OCR, improved reality, simplification and AI-driven security measures establishes safesphere danger as a comprehensive and user-centric solution to strengthen women and children. By integrating conditionspecies -technologies with corporate social responsibility, SafeSphere not only improves legal reading skills and mental health care, but also promotes a safe, more informed and flexible society. The platform paves the way for future progress in AI-driven legal and psychological help, and proves that technology can be a powerful strength for social authority and security.

FUTURE IMPLICATIONS:

Safe SPERE Success in increasing legal awareness, mental health care and user engagement is an important step in digital change of social welfare services. However, with all technological innovation, continuous improvement and processing is necessary to maximize the effect and to ensure continuous user engagement.

One of the primary areas for future growth is to expand AI tips for intensive privatization. While SafeSphere Generative AI-driven Chatbot already provides reference UP-functionable legal and psychological assistance, future repetitions may include a more advanced natural language treatment (NLP) models to further improve the conjunctival intelligence. Integration of Multimodal AI that can treat speech, image and video entrance, enables a rich, more interactive user experience so that individuals can communicate in different ways at the rest levels.

In addition, increasing AR experience can increase the user's specialization and knowledge storage. While the current AR modules effectively simulate legal room scenarios, legal relationship studies and self -defense training, future progress may include virtual reality (VR) integration to provide fully engraving legal educational workshops and therapy session. This will enable users to experience the simulation of real-time rights, interact with AI-controlled legal avatar and participate in guided mental health advice sessions.

From a data protection point of view, SafeSpher AI-operated privacy measures are already very effective, but future reforms may include blockchain-based identity confirmation and secure record keeping. By taking advantage of blockchain technology, users can resign their legal and mental health interactions in a tampering and encrypted environment, which can ensure greater control over their data. This will eliminate unauthorized access and concerns related to data violations, which will increase confidence and reliability.

Another important area for expansion is scalability and global accessibility. Currently, SafeSphere supports multilingual access, but future development should aim to complete country -specific legal structures and mental health policy for regional adaptation. AI-operated located material optimization will enable users from different fields to achieve legal and mental health guidance to their cultural, linguistic and socio-economic reference. Collaborating with governments, voluntary organizations and legal organizations will help to bring access to SafeSphere to a smaller population, and ensure that legal and psychological authority is not limited to urban or technically advanced users.

ISSN: 2394-2975 | www.ijarety.in | Impact Factor: 8.152 | A Bi-Monthly, Double-Blind Peer Reviewed & Refereed Journal |

|| Volume 12, Issue 2, March-April 2025 ||

DOI:10.15680/IJARETY.2025.1202012



FIGURE 3. OUTPUT OF SAFESPERE ENVIRONMENT

VI. CONCLUSION

Safe Sphere AI stands as a tracked innovation within the framework of legal and psychological help, giving women and children a safe, interactive and intelligent platform for legal awareness and mental welfare. Genetic AI, optical character recognition (OCR), Augment Reality (AR), Gamification and AI-operated safety mechanisms, define redefine digital empowerment, and reduce the gap between technology and social influence.

Safe Sphere AI stands as a tracked innovation within the framework of legal and psychological help, giving women and children a safe, interactive and intelligent platform for legal awareness and mental welfare. Genetic AI, optical character recognition (OCR), Augment Reality (AR), Gamification and AI-operated safety mechanisms, define redefine digital empowerment, and reduce the gap between technology and social influence.

In addition, gamification strategies can be further developed to increase commitment and learning outcomes. The future updates may include AI-controlled adaptive learning paths, where the system dynamically adjusts the complexity and nature of legal education based on the user's knowledge level and learning speed. Leaderboards, performance marks and interactive legal challenges can be integrated to encourage participation, so that learning can be more attractive and rewarding.

The stage's ability to distribute immediate legal guidance, personal mental health care and immersive learning experiences have improved the average of the user's involvement, legal literacy and emotional welfare. With their commitment to privacy, access and innovation, Safe Sphere not only ensures that the user gets confidential and accurate information, but also gives them the right to control their legal rights and mental health journey.

As technology develops, Safe Sphere is designed for further progress, which consists of potential integration such as VR-operated legal education, blockchain-based security and potential integrations such as AI-operated regional adaptation. By continuously refining its characteristics and expanding access, Saf spare has the ability to become a global leader in AI-operated legal and psychological support, and promote the future where justice, mental welfare and authority are universally accessible.

A key societal impact of Safe Sphere is its potential to bridge the digital divide by providing accessible legal and psychological support to women and children who might otherwise struggle to access these resources due to geographical, financial, or social barriers. In many developing regions, legal literacy and mental health awareness remain low, making Safe Sphere a critical tool for education and empowerment. Through localized AI-driven customization, the platform can adapt to region-specific legal frameworks and cultural nuances, ensuring that women



| ISSN: 2394-2975 | www.ijarety.in| | Impact Factor: 8.152 | A Bi-Monthly, Double-Blind Peer Reviewed & Refereed Journal |

|| Volume 12, Issue 2, March-April 2025 ||

DOI:10.15680/IJARETY.2025.1202012

and children from diverse backgrounds receive relevant guidance.

REFERENCES

[1]S. Kemp, "Digital 2021," Kepios Pte.Ltd, Singapore, Jan. 2021. [Online]. Available: https://datareportal.com/reports/digital-2021-global-overviewreport (Accessed: Jan. 5, 2022).

[2]P. Stalker, S. Livingstone, D. Kardefelt-Winther, and M. Saeed, "Growing up in a connected world," UNICEF Office of Res., Innocenti, Florence, Italy, Nov. 2019.

[3]T. Weru, J. Sevilla, J. Olukuru, L. Mutegi, and T. Mberi, "Cyber-smart children, cyber-safe teenagers: Enhancing internet safety for children," in2017 IST-Africa Week Conf. (IST-Africa), Windhoek, Namibia, May 2017, pp.1-8, DOI: 10.23919/ISTAFRICA.2017.8102292.

[4]American Psychological Association, Resolution on violent videogames, APA, Washington, DC, USA, Oct. 2019. [Online]. Availablehttp://www.apa.org/about/policy/violent-video-games.aspx (Accessed:

Dec. 8, 2021)

[5]R Pavithra, Dr R Asokan, K Baskar, "Improving Privacy and Dynamic Updation Using Ranked Search Over Outsourced Cloud Data", International Research Journal of Engineering and Technology (IRJET), 2016.

[6]M Thangadurai, K Baskar, "Secure outsourced data stream under multiple keys using random algorithm in cloud computing", International Journal of Science, Engineering and Computer Technology, 2016

[7]M. H. Hussein, S. H. Ow, L. S. Cheong, M. -K. Thong, and N. A. Ebrahim, "Effects of digital game-based learning on elementary science learning: A systematic review," IEEE Access,vol.7, pp.62465-62478, May 2019, DOI:10.1109/ACCESS.2019.2916324.

[8]J. S. Kinnebrew, S. S. Killingsworth, D. B. Clark, G. Biswas, P. Sengupta, J. Minstrell, M. Martinez-Garza, and K. Krinks, "Contextual markup and mining in digital games for science learning: Connecting player behaviors to learning goals," IEEE Trans. Learn. Technol., vol.10, no.1, pp.93-103,

Jan.2016, DOI: 10.1109/TLT.2016.2521372.

[9]O. Dele-Ajayi, J. Sanderson, R. Strachan, and A. Pickard, "Learning mathematics through serious games: An engagement framework," in 2016 IEEE Frontiers in Education Conf. (FIE), Erie, PA, USA, Oct. 2016, pp.1-5, DOI: 10.1109/FIE.2016.7757401.

[10]C. -H Ko, J. -Y Yen, C. -S. Chen, Y. -C. Yeh, and C. -F Yen, "Predictive values of psychiatric symptoms for internet addiction in adolescents: A 2-year prospective study," Arch Pediatr Adolesc Med., vol.163, no.10, pp.937-943, Oct. 2009, DOI: 10.1001/archpediatrics.2009.159.

[11]Fleming T, Lucassen M, Stasiak K, Sutcliffe K, Merry S.SPARX – computerised cognitive behavioural therapy for adolescent depression in a game format. Child Adolesc Ment

Health.2021;26(1): 924.https://doi.org/10.1111/camh.12444.

[12]Hamad A, Jia B. How virtual reality technology has changed our lives: an overview of the current and potential applications and limitations. Int J Environ Res Public Health.

2022;19(18). https://doi.org/10.3390/ijerph191811278.

[13]Kothgassner OD, Goreis A, Bauda I, Ziegenaus A, Glenk LM, Felnhofer A. Virtual reality biofeedback interventions for treating anxiety. Wien Klin Wochenschr. 2022;134(1):49–59. https://doi.org/10.1007/s00508-021-01991-z.

[14]Bell IH, Nicholas J, Alvarez-Jimenez M, Thompson A, Valmaggia L. Virtual reality as a clinical tool in mental health
research and practice. Dialogues Clin Neurosci. 2020;22(2):

16977.https://doi.org/10.31887/DCNS.2020.22.2/lvalmagga.

[15]Ebrahimi OV, Pallesen S, Kenter RMF, Nordgreen T. Psychological interventions for the fear of public speaking: a metaanalysis. Front Psychol. 2019;10:488.

[16]Fleming, T.; Poppelaars, M.; Thabrew, H. The role of gamification in digital mental health. World Psychiatry 2023, 22, 46–47. [CrossRef] [PubMed]

[17]Maaß, L.; Freye, M.; Pan, C.-C.; Dassow, H.-H.; Niess, J.; Jahnel, T. The Definitions of Health Apps and Medical Apps from the Perspective of Public Health and Law: Qualitative Analysis of an Interdisciplinary Literature Overview. JMIR mHealth uHealth

2022, 10, e37980. [CrossRef] [PubMed]

[18]Mclaughlin, M.; Delaney, T.; Hall, A.; Byaruhanga, J.; Mackie, P.; Grady, A.; Reilly, K.; Campbell, E.; Sutherland, R.; Wiggers,

J.; et al. Associations Between Digital Health Intervention Engagement, Physical Activity, and Sedentary Behavior: Systematic Review and Meta-analysis. J. Med. Internet Res. 2021, 23, e23180. [CrossRef] [PubMed]

[19]Riley, W.T.; Oh, A.; Aklin, W.M.; Sherrill, J.T.; Wolff-Hughes, D.L.; Diana, A.; Griffin, J.A.; Campo, R.A. Commentary: PediatricDigital Health Supported by the National Institutes of Health. J. Pediatr. Psychol. 2018, 44, 263–268. [CrossRef] [PubMed]

[20]de Cock, C.; van Velthoven, M.; Milne-Ives, M.; Mooney, M.; Meinert, E. Use of Apps to Promote Childhood Vaccination: Systematic Review. JMIR mHealth uHealth 2020, 8, e17371. [CrossRef] [PubMed]





ISSN: 2394-2975

Impact Factor: 8.152

www.ijarety.in Meditor.ijarety@gmail.com