Utilizing Virtual Reality for Thaharah from the Perspective of the Mobile-Based Book Safinatun An-Najah to Enhance Learning Motivation

Achmad Munib^{1*}, Mustagfirun Mustagfirun², Fandy Indra Pratama³, Salman Rashid

^{1,2,3,4} Universitas Wahid Hasyim, Indonesia ⁵ University of Turbat, Pakistan

*Email: mustagfirin@unwahas.ac.id

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Abstract

Background - Education continually adapts to societal advancements, aligning with Law Number 20 of 2003, which mandates conscious and planned efforts to cultivate student potential through effective learning environments. Within Islamic religious education, understanding *thaharah* (purification) is crucial, with *Safinatun An-Najah* serving as a foundational text. Cleanliness in Islam is both an act of worship and a moral imperative. At the same time, the United Nations' Sustainable Development Goals (SDGs), particularly the goal of inclusive and quality education, and the emergence of Society 5.0, highlight the growing integration of technology into learning, including Virtual Reality (VR). VR offers immersive and interactive simulations, making it a relevant and engaging educational tool for Generation Z.

Urgency of Research - Despite the significance of *thaharah* in Islamic teachings, traditional instructional methods often rely on rote learning, limiting student engagement and practical understanding. As Generation Z is inherently tech-savvy, educational approaches must evolve to meet their learning preferences. The integration of mobile-based VR into Islamic religious education presents a timely and necessary innovation, bridging traditional religious knowledge with modern technology. This approach not only strengthens comprehension of *thaharah* but also equips students with essential digital literacy skills, aligning Islamic education with global educational trends and technological demands.

Research Objectives - This study aims to investigate the efficacy of mobile-based VR in teaching *thaharah* concepts as outlined in the *Safinatun An-Najah* book. It seeks to assess how mobile VR can enhance student motivation and engagement, while preparing them for technological advancements in Islamic education.

Research Method - A qualitative research approach was applied, using literature review and content analysis of studies on mobile VR in education, pedagogical theories, and Islamic educational principles, particularly those related to *thaharah*.

Research Findings - Mobile VR offers an interactive and engaging learning experience, significantly increasing motivation and making complex *thaharah* concepts more accessible. It transforms conventional teaching into immersive learning, fostering both religious understanding and technological readiness.

Research Conclusion & Novelty - Mobile-based VR is a highly effective and innovative medium for teaching *thaharah* from the *Safinatun An-Najah* perspective. The study's novelty lies in merging traditional Islamic texts with immersive VR technology, offering a unique pedagogical model that promotes deeper comprehension, engagement, and digital competency among students.

Keywords: Virtual Reality, Education, Safinatun An-Najah, Generation Z.

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INTRODUCTION

Education continuously progresses with the times. Law Number 20 of 2003 concerning the National Education System states that education is a conscious and planned effort to create a learning environment and process in which students actively develop their potential. Knowledge has advanced rapidly with the help of technology and the evolution of human thought. Educational institutions can undertake various efforts to improve the quality of education in Indonesia, one of which is conducting research, particularly educational research (Okpatrioka, 2023; Fuad et al, 2020; Afriani et al, 2025). In the context of Islamic education, understanding thaharah (purification) is very important. The Safinatun An-Najah book is a key reference for studying thaharah (Junoh et al, 2024). Cleanliness holds great importance in Islam, as those who purify themselves or strive for cleanliness are loved by Allah (Adawiah et al, 2023). The teachings on cleanliness in Islam stem from faith in Allah, where one strives to be pure/clean to draw closer to Allah. Thus, cleanliness in Islam encompasses both worship and moral aspects. However, thaharah is often taught conventionally, which can be less engaging for the millennial generation, especially for high school students (Lutfiana et al, 2023).

The Sustainable Development Goals (SDGs) were launched by the United Nations in 2015 as a global development agenda consisting of 17 main goals. Indonesia has also adapted this plan into sustainable development goals aimed at ending poverty, reducing inequality, and protecting the environment, all of which are expected to be achieved by 2030 (Ginting et al, 2023; Hendrati et al, 2025). The SDGs are based on the principles of universality, integration, and inclusiveness. One of the key SDG targets is Goal 4, which focuses on education and seeks to ensure inclusive, equitable, and quality education while promoting lifelong learning opportunities for all. Alongside these global priorities, technological advances have now entered the era of Society 5.0, moving beyond the Industrial Revolution 4.0. Society 5.0 envisions the internet as not only a source of information but a core part of daily life, where technology becomes an extension of humanity. Technological leaps in education have also transformed learning spaces, with virtual platforms like Zoom, Webex, and Google Meet becoming commonplace (Jackson, 2021). In addition, educational methods using Virtual Reality (VR)—a technology that combines the digital and physical worlds—are increasingly being developed. This progression has prompted studies and analyses on whether VR-based learning methods can be effectively implemented in Indonesian education and what role Generation Z, known as the digital generation, can play in advancing these educational applications.

Education cannot be separated from challenges, whether in methods, media, learning models, or teaching materials. In this context, educational renewal or innovation is essential (Molomo, 2025). On the other hand, Virtual Reality (VR) technology has shown great potential for enhancing learning experiences through immersive, interactive simulations (Jayawardena et al, 2023). The ease and practicality of Android mobile devices have made them popular among all age groups. Combining Android mobile technology with Virtual Reality enables realistic simulations on a mobile device, making learning more engaging and allowing users to apply what they learn to real-life situations without boredom (Amani et al, 2024; Arifuddin & Mustagfirin, 2022; Widiyanto et al, 2021).

From the explanations above, this research focuses on how mobile-based Virtual Reality can be utilized to teach thaharah from the perspective of the Safinatun An-Najah text to increase learning motivation. A mobile VR application offers an engaging and interactive learning experience that can enhance student involvement in thaharah lessons. Integrating VR technology into Islamic education not only makes the learning process more appealing but also prepares students to navigate future technological advancements.

METHODS

Research design

This study employs a qualitative research design, specifically a literature review approach. This design is chosen to systematically collect, analyze, and synthesize existing published works and scholarly documents to establish a comprehensive theoretical foundation and derive insights relevant to the research objectives. This method is particularly suitable for exploring the potential of mobile-based Virtual Reality (VR) in teaching *thaharah* from the perspective of the *Safinatun An-Najah* text, and its impact on student motivation.

Research participants

This study uses literature review, there are no human research participants involved in this study. The "participants" in this research are the scholarly documents and academic sources themselves, which are analyzed for their content.

Data Collection Techniques

The primary data collection technique for this study is documentation and systematic literature search. This involves identifying relevant keywords such as "mobile VR," "Virtual Reality education," "thaharah learning," "Safinatun An-Najah," "Islamic religious education," "student motivation," and "Society 5.0 education." Subsequently, searches are conducted across reputable academic databases including Google Scholar, ScienceDirect, Scopus, and academic library catalogs to find pertinent articles, journals, research reports, books, and scientific papers. The retrieved sources are then filtered and selected using specific inclusion and exclusion criteria to ensure their direct relevance to the application of mobile VR in *thaharah* education, its potential for increasing student motivation, and its alignment with sustainable education in the Society 5.0 era. Following selection, key information, theories, research findings, methodologies, and expert opinions are extracted from the chosen documents through careful reading.

Data Validity & Data Analysis

The validity of the data in this literature review is ensured through several important measures. Firstly, source credibility is prioritized by selecting sources from peer-reviewed journals, reputable academic publishers, established research institutions, and authoritative religious texts such as *Safinatun An-Najah*. Secondly, relevance is maintained by choosing only documents that directly address the specific intersection of mobile VR, *thaharah* education, student motivation, and the broader context of Society 5.0. Thirdly, comprehensiveness is aimed for by seeking a broad range of sources to provide a holistic view and avoid bias from a limited set of perspectives. Finally, a critical evaluation is conducted on the methodologies, findings, and conclusions of each source to determine its reliability and contribution to the research questions.

The data collected from the literature review will be analyzed using content analysis and syntactic analysis. This process involves thematic analysis, where recurring themes, concepts, arguments, and findings are identified across various sources related to the benefits of VR in education, challenges, best practices, and the specific application of technology in Islamic studies. Subsequently, categorization will be performed by grouping similar findings and arguments to identify patterns and relationships between mobile VR, student engagement, and *thaharah* comprehension. Comparative analysis will be utilized to compare and contrast different perspectives and research outcomes from various sources to build a robust argument. Finally, information from multiple sources will be synthesized to construct a coherent narrative that addresses the research objectives, highlighting how mobile-based VR can enhance student motivation and understanding of *thaharah* in the current educational landscape. This analysis will culminate in identifying gaps in existing literature and proposing future research directions.

RESULTS AND DISCUSSION

The world of education must leverage technological advancements as tools for engaging in positive activities. The use of Virtual Reality (VR) has been examined in several scientific journals. Rahmawati et al (2021), Alifteria et al (2023) & Wu et al (2021) studied the use of VR technology in science lessons with eighth-grade students at SMP Negeri 22 in Bandung. The results showed that students who used VR media in science lessons had a better understanding of the material compared to students who used conventional methods. Sukmawati et al (2023) conducted research with kindergarten group B students in Singaraja, focusing on introducing wild animals through VR media. The study found that student responses were very positive. A journal by Park & Kim (2022) examined a VR-based solar system lesson for sixth-grade students with 30 respondents, showing that students were satisfied with the application.

A study by Park & Kim (2022) explored the application of VIRSAG (Virtual Reality Science Glasses) in education for students with physical disabilities in science lessons, helping these students understand concepts related to ecosystems, the respiratory system, the digestive system, and the properties of matter. The use of Virtual Reality (VR) in the learning process can significantly enhance students' enthusiasm for learning (Wong et al, 2021; Devadze & Gechbaia, 2024; Rafiq et al, 2022). VR is designed to be engaging, sparking curiosity, reducing boredom, and, most importantly, providing a realistic experience that helps students grasp

the learning material more quickly (AlGerafi et al, 2023). This immersive and interactive approach makes the learning process more enjoyable and effective (Petersen et al, 2022). With VR, learning can take place anytime and anywhere, free from the limitations of physical space and time (Shaw, 2023). This flexibility is particularly beneficial for students with special needs or disabilities, as VR enables them to engage in learning activities that are otherwise challenging in traditional classroom settings.

The advantages of using VR in education align closely with the fourth goal of the Sustainable Development Goals (SDGs), which aims to ensure inclusive, equitable, and quality education for all (Abera et al, 2023; Adipat & Chotikapanich, 2022; Kushnir & Nunes, 2022). This goal emphasizes providing equal learning opportunities and improving lifelong learning prospects. By integrating VR into education, it is possible to create more accessible learning environments that cater to diverse needs, helping all students, regardless of their abilities, to participate in and benefit from quality education. Thus, VR technology plays a key role in advancing inclusive and sustainable education in the modern era (Siddiqi, 2024). Although the use of Virtual Reality (VR) technology in education offers various benefits, there are also drawbacks that need to be considered. One of the most immediate disadvantages is its impact on health (Meijers et al, 2022; Koujizer et al, 2023; Torous et al, 2025).

Prolonged use of VR can cause side effects such as dizziness and eye strain, commonly referred to as "virtual reality sickness" or "cyber sickness" (Biswas et al, 2024). A trial conducted by Joanna Stren, who used VR for 24 hours, showed that she experienced dizziness and eye discomfort. This indicates that prolonged use of this technology can negatively affect users' health (Yousof et al, 2021). Additionally, Jack Wilmot, who spent a week in the virtual world, stated that the virtual environment made people lose the natural energy they would otherwise gain from the physical world. Dependency on VR for learning could pose similar health risks for students, such as eye strain, mental fatigue, and balance disorders (Souchet et al, 2023). Aside from health effects, the use of VR also has the potential to reduce social interaction among people (Hennig-Thurau et al, 2023). With VR, individuals tend to become isolated in their virtual world, enjoying a personalized experience without the presence of others. This can reduce opportunities for students to interact with teachers and classmates in a healthy social context. As mentioned, VR can create social distance between educators and students, as well as diminish the connections among students themselves (Childs et al, 2023). This limited social interaction could affect students' social skills, which are essential for their personal development outside of academics (Haneef, 2024).

From a cost and equipment perspective, VR is still considered expensive (Prabhakaran et al, 2023). VR devices range from a few hundred to several thousand dollars, depending on the brand and quality of the equipment. Furthermore, the use of VR requires specialized devices consisting of various interconnected components, such as VR headsets, motion sensors, and other equipment (Mourtziz et al, 2022). If one of these components breaks, the entire system may not function properly. This presents a challenge, especially for schools in rural areas that may not have the budget to provide VR devices for all their students. As a result, only schools in urban areas with better facilities and larger budgets can fully take advantage of VR technology. This creates a gap in the quality of education between urban and rural areas, potentially exacerbating inequality in access to quality education. Overall, although VR offers great potential to enhance the learning experience, there are various challenges that need to be addressed, both in terms of health, social interaction, and economics, in order for this technology to be effectively implemented in education (AlGerafi et al, 2023; Yousof et al, 2021; Prabhakan et al, 2023).

Virtual Reality (VR) requires a stable internet connection for its operation. Indonesia, with its vast geographical area consisting of numerous islands, requires a reliable internet infrastructure to ensure adequate signal and internet speed to support VR-based learning (Ruan & Xie, 2021). This presents a significant challenge, especially when considering the implementation of VR-based education in remote, underdeveloped, and frontier areas of Indonesia. In regions where internet connectivity is poor or inconsistent, the effectiveness of VR technology could be limited, preventing students from fully benefiting from this innovative learning tool (Mondal & Mondal, 2025). Therefore, the challenge of providing widespread access to VR in remote areas is one that needs to be addressed by improving internet infrastructure across the country (Harahap & Mahardhani, 2025).

Although VR is not a new technology, its adoption remains limited to certain groups or regions, which creates an additional challenge in popularizing its use for educational purposes. The role of Generation Z, often referred to as the "digital generation," is crucial in introducing VR as a learning medium to the wider population (Bagdi et al, 2023). Generation Z is deeply immersed in digital technology and has a unique opportunity to lead the way in integrating VR into education (Hernandez-de-Menendez et al, 2020). As outlined in the

principles of sustainable development and the SDGs, which emphasize leaving no one behind and promoting universal access, Generation Z must actively contribute to the development and implementation of VR in education.

Generation Z, characterized by their creativity, vision, and exploration, can play a key role in making VR technology more user-friendly, affordable, and accessible to people of all ages and backgrounds across Indonesia (Rahayu et al, 2025). Given their familiarity with social media content creation, they are well-positioned to develop engaging VR learning materials that will attract students' attention and enhance their educational experience. Additionally, Generation Z can become skilled VR users and share their knowledge with teachers who may differ in age and technological expertise (Hernandez-de-Menendez, 2020). They can also serve as volunteers and mentors, helping to introduce VR-based learning tools to schools throughout the country, particularly in underserved areas. In conclusion, while the challenges of implementing VR in education are significant, the active involvement of Generation Z in the development, dissemination, and teaching of VR technology can help overcome these obstacles. By harnessing their digital expertise and creativity, they can play a transformative role in expanding the reach of VR as an educational tool and ensuring that all students, regardless of location or background, can access high-quality, technology-driven learning experiences.

CONCLUSION

Virtual reality as an educational tool can be applied across all subjects, at all levels of education, and can benefit all students, including those with special needs. Through virtual reality, students may find it easier to understand material, experience less boredom, and engage more actively, which enhances their motivation. This innovative approach has the potential to improve the quality of education in the future. However, the use of virtual reality in education also has challenges, including health issues, the high cost of equipment, and limited internet access in Indonesia. Generation Z should play an active role in advocating for and implementing virtual reality technology in education to help overcome these obstacles and maximize its benefits.

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