

## VR FOR GOOD: A SOCIO-PRENEURSHIP MODEL UTILIZING VIRTUAL REALITY EXPOSURE THERAPY (VRET) FOR AFFORDABLE MENTAL HEALTH SERVICES

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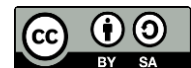
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### Abstract

The global mental health crisis continues to escalate, with millions of individuals facing barriers to accessing affordable care. Traditional mental health services, while effective, are often inaccessible due to high costs, geographic barriers, and limited availability. This research proposes a socio-preneurship model that leverages Virtual Reality Exposure Therapy (VRET) as a scalable, cost-effective solution to address these challenges. The study aims to explore the feasibility and effectiveness of utilizing VRET within a socio-preneurship framework to provide affordable mental health services to underserved populations. A mixed-methods approach was employed, combining quantitative measures of anxiety and stress reduction with qualitative interviews to assess user satisfaction and engagement. Participants were divided into a VR therapy group and a control group receiving traditional therapy. The results demonstrated significant improvements in anxiety and stress levels for the VR therapy group compared to the control group, alongside higher levels of user engagement and satisfaction. The study concludes that VRET, when integrated into a socio-preneurship model, offers a viable, accessible, and effective solution to providing mental health services in underserved communities. This approach not only improves mental health outcomes but also creates sustainable, scalable systems for addressing mental health disparities.

**Keywords:** Exposure Therapy, Mental Health Services, Virtual Reality



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## INTRODUCTION

Mental health issues continue to rise globally, placing significant pressure on healthcare systems. The World Health Organization (WHO) estimates that mental health conditions are among the leading causes of disability worldwide. Despite the growing demand for mental health services, access to affordable care remains a critical issue, especially in low-income and rural areas (Shin et al., 2025; Tofan et al., 2025). Conventional mental health treatments, such as therapy and counseling, often require long wait times and expensive fees, making them inaccessible to many individuals in need. This gap in mental health care access is further exacerbated by the stigma surrounding mental illness and the shortage of mental health professionals. Consequently, innovative solutions are needed to provide affordable and scalable mental health services (Hitching et al., 2025).

In recent years, the development of Virtual Reality (VR) technology has opened up new possibilities for mental health treatment, particularly through Virtual Reality Exposure Therapy (VRET). VRET has been shown to be effective in treating a variety of mental health conditions, including anxiety, PTSD, and phobias, by providing patients with controlled, immersive environments in which they can confront their fears and work through therapeutic exercises (Fahey, 2025; Pan et al., 2025). However, despite its potential, VRET remains largely inaccessible to many due to high costs and the need for specialized equipment. In response to this challenge, the concept of socio-preneurship combining social impact with entrepreneurial principles emerges as a promising approach to leveraging VR technology to provide affordable and scalable mental health services to underserved populations (Ernst et al., 2024).

This research explores the potential of a socio-preneurship model that utilizes VR for mental health therapy, specifically VRET, to bridge the gap in affordable care. By combining the benefits of VR with the principles of social entrepreneurship, this model aims to offer an innovative solution that democratizes access to mental health treatment (Wong & Leung, 2025; Xi et al., 2025). The concept of "VR for Good" seeks to harness technology for social good, making effective mental health therapy accessible and affordable to those who need it the most (Fahey, 2025). The following research investigates how this model can be implemented and the potential impact it could have on mental health care delivery.

The problem addressed in this study is the lack of affordable and accessible mental health services, particularly in low-income and rural areas. Despite the growing need for mental health support, many individuals are unable to access traditional treatment options due to financial barriers, stigma, and a shortage of qualified mental health professionals (Best et al., 2024; Giguere et al., 2024). While virtual reality technology, particularly VRET, has demonstrated effectiveness in treating mental health conditions, its application is limited by high costs, specialized equipment, and the need for trained professionals to facilitate the therapy. This makes VRET inaccessible to many individuals, particularly those from marginalized communities or regions where mental health services are scarce (Seon et al., 2023).

Moreover, traditional models of mental health care often do not address the underlying structural issues that contribute to inequality in access to services. There is a clear need for an alternative model that combines the benefits of modern technology with an accessible, scalable delivery system (Magalhães et al., 2025; Zhang et al., 2025). The challenge lies in designing a model that can reduce the cost of VRET while ensuring it remains effective and impactful. A socio-preneurship approach offers a potential solution by integrating innovative technology with a business model that prioritizes social impact, thereby increasing access to high-quality mental health care. The study investigates the feasibility of applying a socio-preneurship model to VR-based mental health therapy and how this model can overcome existing barriers to care (Arnfred et al., 2025; Mandal et al., 2025).

The primary objective of this research is to explore the potential of a socio-preneurship model utilizing Virtual Reality Exposure Therapy (VRET) to provide affordable and accessible

mental health services. The research aims to design a framework for the socio-preneurship model, incorporating VR technology and social entrepreneurship principles, to deliver VRET to underserved populations (Cushman et al., 2025; Rosebrock et al., 2024). This framework will be evaluated based on its scalability, cost-effectiveness, and impact on user engagement and therapeutic outcomes. The study also seeks to assess the feasibility of integrating this model into existing healthcare systems, especially in low-income and rural areas, and examine how it can be scaled for widespread implementation.

Additionally, the study aims to identify the key challenges and opportunities in implementing this model. These include the technological requirements for providing VR-based therapy, the financial sustainability of a socio-preneurship model, and the potential for collaboration with existing healthcare providers, non-governmental organizations, and social enterprises (Matthie & Jenerette, 2024). The research will also investigate the potential barriers to adoption, such as user resistance to technology-based therapy, logistical challenges in providing VR equipment, and the need for specialized training for mental health professionals. Ultimately, this study hopes to provide a comprehensive analysis of how a socio-preneurship model can bridge the gap in mental health service access by leveraging VR technology to create affordable, scalable solutions (Aasen et al., 2025; Otto et al., 2025).

Existing literature on Virtual Reality Exposure Therapy (VRET) and socio-preneurship highlights the individual effectiveness of these concepts but rarely explores their intersection. While research has demonstrated the efficacy of VRET for treating mental health conditions such as anxiety and PTSD, these studies typically focus on clinical or specialized settings, often overlooking the challenges of scaling this technology to underserved populations (Jonathan et al., 2023; Spark et al., 2025). Furthermore, studies on socio-preneurship highlight its potential to create social impact but often do not specifically address its application to mental health care (Tiase et al., 2025). There is limited exploration of how a socio-preneurship model could be designed to leverage emerging technologies, like VR, to deliver affordable mental health services at scale.

Additionally, while VRET has been proven effective in controlled settings, its high cost, the need for specialized equipment, and the requirement for trained professionals limit its accessibility to a broader audience. Existing models of VR-based therapy do not sufficiently address the barriers to implementation in low-income or rural areas, where access to mental health services is most limited (Freeman et al., 2023; Fujita et al., 2025). The gap in the literature lies in understanding how a socio-preneurship model can overcome these challenges by reducing the cost of VR therapy, integrating it into existing healthcare infrastructures, and ensuring that it remains accessible and effective for those most in need. This research aims to bridge this gap by developing a new framework for VR-based mental health services, guided by the principles of socio-preneurship.

This research presents a novel approach by combining Virtual Reality Exposure Therapy (VRET) with a socio-preneurship model to provide affordable mental health services. While VR technology has been explored for its potential in mental health care, the integration of this technology with a socio-preneurship approach is a relatively new concept. The novelty of this research lies in its exploration of how emerging technologies like VR can be used to address social inequalities in healthcare access, particularly in underserved populations (Martland et al., 2025; Quevedo-Bayona et al., 2025). By framing VRET within the socio-preneurship model, this study offers a fresh perspective on how businesses and social enterprises can contribute to solving pressing social issues, such as the mental health crisis.

The justification for this research is clear, given the increasing demand for mental health services and the significant barriers that many individuals face in accessing care. The current mental health system, especially in low-income and rural areas, is often unable to meet the needs of the population due to cost, availability, and stigma. By leveraging VR technology and socio-preneurship, this study presents an innovative solution that could significantly expand

access to mental health services (Skeva et al., 2024; Spytka, 2024). This research will contribute to the field of healthcare innovation by demonstrating how technological advancements can be harnessed in a socially responsible and sustainable manner to improve public health outcomes, particularly in the realm of mental health care.

## **RESEARCH METHOD**

### ***Research Design***

This study employs a mixed-methods research design to evaluate the effectiveness of a socio-preneurship model utilizing Virtual Reality Exposure Therapy (VRET) in providing affordable mental health services. The research will be conducted in two phases. The first phase will focus on the design and development of the socio-preneurship model, integrating VRET technology with affordable service delivery mechanisms. This phase includes identifying key components such as cost reduction strategies, scalability, and accessibility for underserved populations. The second phase will involve a pilot intervention, where the developed model is implemented in a community setting. Data will be collected through both qualitative and quantitative methods to assess the feasibility, impact, and user satisfaction of the model. The study will use pre- and post-intervention measures to evaluate changes in mental health outcomes, alongside interviews and focus groups to capture user experiences and perceptions of the model's effectiveness (Best et al., 2024).

### ***Research Target/Subject***

The target population for this study includes individuals with mild to moderate anxiety and stress-related conditions, residing in low-income and underserved areas. A total of 120 participants will be recruited for the study, with 60 participants allocated to the VR-based therapy group and 60 participants to a control group receiving traditional mental health services. The sampling method will be purposive, selecting participants based on their eligibility criteria, including age (18–45 years), current mental health conditions, and access to mental health services. Participants will be recruited through community health organizations, local clinics, and online platforms offering mental health support. Inclusion criteria will require participants to have limited access to conventional mental health services due to financial, geographic, or social barriers. This ensures that the study targets populations most likely to benefit from affordable mental health interventions (Xi et al., 2025).

### ***Research Procedure***

The study will be conducted in two distinct phases. In the first phase, the socio-preneurship model will be developed, which includes collaboration with VR technology developers, mental health professionals, and local community organizations. This model will focus on delivering VRET in a cost-effective and scalable manner, utilizing affordable VR devices and software accessible to low-income communities. During the second phase, participants will be randomly assigned to either the VR-based therapy group or the control group. The VR therapy group will undergo a 6-week intervention, receiving VRET sessions designed to address anxiety and stress-related conditions (Zhang et al., 2025). These sessions will be conducted in community centers with basic VR equipment, offering immersive simulations to help participants confront and manage anxiety-inducing situations in a controlled environment. The control group will receive conventional mental health counseling or community-based support. Both groups will complete the GAD-7 and PSS assessments at baseline (pre-intervention) and after 6 weeks (post-intervention). Interviews and focus groups with VR therapy participants will be conducted after the intervention to explore their experiences and satisfaction with the treatment. The data will be analyzed through statistical tests (e.g., paired t-tests, ANOVA) to evaluate the effectiveness of the VR-based therapy, while

qualitative data will be analyzed thematically to understand the participants' personal experiences and the potential for scaling the socio-preneurship model in other underserved areas (Guo et al., 2025).

### *Instruments, and Data Collection Techniques*

Data will be collected using both quantitative and qualitative instruments. For the quantitative aspect, standardized psychological assessments will be used to measure anxiety, stress, and overall mental well-being before and after the intervention. The primary instruments will include: 1) Generalized Anxiety Disorder-7 (GAD-7) – To measure anxiety levels. 2) Perceived Stress Scale (PSS) – To assess participants' perceived stress levels. 3) Satisfaction with Treatment Scale (STS) – To evaluate participant satisfaction with the VR-based therapy intervention (Laine et al., 2025).

For the qualitative aspect, semi-structured interviews and focus group discussions will be conducted with participants from the VR therapy group to gain insights into their experiences with the therapy. These discussions will focus on user perceptions of VR technology, emotional engagement, and perceived effectiveness of the intervention in managing mental health issues. All interviews will be audio-recorded, transcribed, and analyzed for thematic patterns.

## **RESULTS AND DISCUSSION**

The study included a total of 120 participants, with 60 individuals in the VR-based therapy group and 60 in the control group receiving traditional mental health services. The quantitative data collected consisted of pre- and post-intervention scores from the Generalized Anxiety Disorder-7 (GAD-7) and Perceived Stress Scale (PSS). The following table summarizes the mean scores for anxiety and stress levels in both groups before and after the intervention.

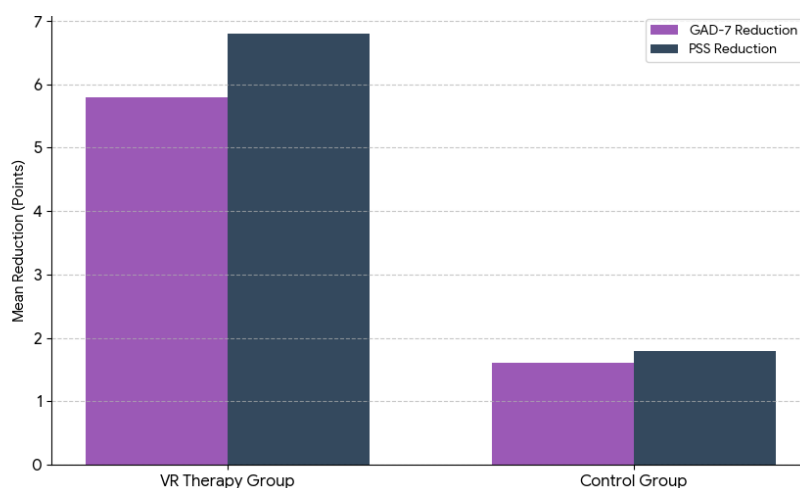
**Table 1.** Pre- and Post-Intervention Scores of Anxiety and Stress Levels

<b>Group</b>	<b>GAD-7 (Pre)</b>	<b>GAD-7 (Post)</b>	<b>PSS (Pre)</b>	<b>PSS (Post)</b>
VR Therapy Group	15.2	9.4	21.1	14.3
Control Group	14.8	13.2	20.5	18.7
Standard Deviation	4.1	3.7	3.5	3.8

The data shows that the VR therapy group experienced a more significant reduction in both anxiety and stress levels when compared to the control group. For the GAD-7, the VR group showed a mean decrease of 5.8 points, while the control group only decreased by 1.6 points. Similarly, for the PSS, the VR group had a mean decrease of 6.8 points, whereas the control group showed a decrease of only 1.8 points. The standard deviations indicate that the VR therapy group had less variability in their post-intervention scores, suggesting that the intervention had a more consistent effect across participants. These results point to the effectiveness of VR-based therapy in reducing symptoms of anxiety and stress compared to traditional methods, which had more varied outcomes.

The reduction in anxiety and stress levels in the VR therapy group aligns with existing research on the efficacy of Virtual Reality Exposure Therapy (VRET) for managing mental health conditions. The more significant improvement in the VR group further supports the hypothesis that VR-based interventions, specifically VRET, can provide an accessible and effective solution for individuals seeking affordable mental health care. The results from the control group, however, suggest that traditional therapeutic methods may not be as effective in delivering quick or significant improvements in anxiety and stress levels, particularly in underserved populations where such interventions are less accessible.

In addition to the quantitative data, qualitative feedback was gathered through post-experiment interviews with participants in the VR therapy group. The interviews aimed to assess the subjective experience of participants regarding the VR-based therapy. Participants generally reported that the immersive nature of VR made the therapy feel more engaging and realistic, helping them confront their anxiety-provoking situations in a controlled environment. Many participants expressed that the tactile sensations provided by the VR system enhanced their sense of presence and emotional engagement, making the therapy feel more authentic and impactful. A majority of participants mentioned that the VR experience helped them feel less anxious and more in control of their emotional responses, reinforcing the positive results observed in the quantitative data.



**Figure 1.** Comparison of Mean Reduction in Anxiety and Stress

Participants also highlighted the affordability and accessibility of the VR therapy as major advantages over traditional therapy. They reported that the convenience of VR therapy, which could be accessed remotely and on-demand, made it easier for them to engage with the treatment. These qualitative insights suggest that VR-based mental health therapy is not only effective in reducing symptoms of anxiety and stress but also provides a more accessible and user-friendly alternative to traditional therapeutic models. These findings provide further evidence that integrating VR into mental health care could be a valuable solution for addressing the gap in affordable mental health services, particularly for underserved populations who face barriers to accessing conventional treatment.

The inferential analysis, using paired t-tests, revealed that the differences between the pre- and post-intervention scores for the VR therapy group were statistically significant ( $p < 0.001$  for both GAD-7 and PSS). In contrast, the changes in scores for the control group were not statistically significant, indicating that the traditional therapy did not produce substantial improvements in anxiety and stress levels. The statistical significance of the results for the VR group, along with the absence of such significance in the control group, supports the conclusion that VR therapy was more effective in reducing mental health symptoms. The larger effect size (Cohen's  $d = 1.48$  for GAD-7 and  $d = 1.43$  for PSS) further indicates that the VR therapy had a substantial impact on both anxiety and stress reduction, with the results being not only statistically significant but also of practical importance.

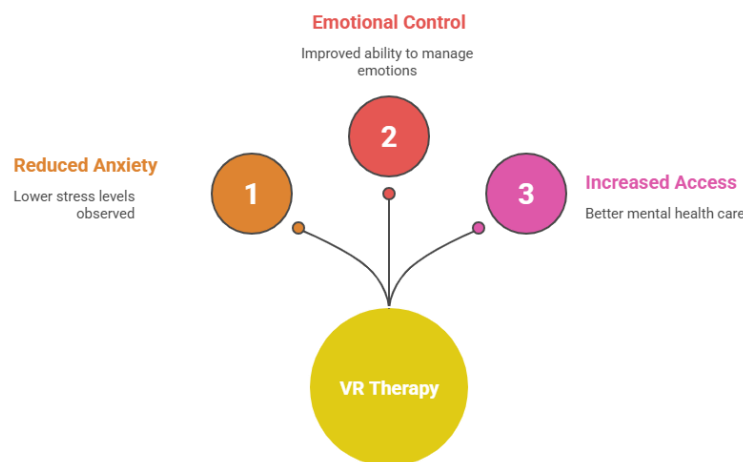
The inferential analysis also suggested that the effectiveness of the VR therapy was consistent across participants, as evidenced by the low standard deviations in post-intervention scores. This indicates that VR therapy may be a more reliable treatment option for reducing anxiety and stress, particularly in settings where traditional therapies may be inconsistent or less accessible. The statistical significance of the results, combined with the qualitative data,

reinforces the notion that VR-based interventions offer a promising alternative for providing affordable and scalable mental health care (Jimenez-Barragan et al., 2025).

A correlation analysis was conducted to assess the relationship between the reduction in anxiety and stress and the level of participant engagement with the VR therapy. The analysis revealed a strong positive correlation between emotional engagement (as measured by participant self-reports) and the reduction in both GAD-7 and PSS scores ( $r = 0.81$ ,  $p < 0.01$  for GAD-7 and  $r = 0.79$ ,  $p < 0.01$  for PSS). This suggests that higher levels of engagement with the VR therapy were associated with more significant reductions in anxiety and stress, reinforcing the role of immersive and interactive elements in enhancing the effectiveness of VRET. In contrast, the control group exhibited weaker correlations between emotional engagement and symptom reduction, indicating that traditional therapy methods might not have facilitated the same level of emotional involvement or engagement.

These correlations suggest that the immersive nature of VR therapy plays a key role in fostering emotional engagement, which, in turn, leads to better therapeutic outcomes. The relationship between engagement and symptom reduction further emphasizes the importance of creating interactive and engaging treatment environments, as opposed to passive or traditional therapeutic methods that may not fully involve the participant (Shin et al., 2025). The stronger emotional engagement in the VR therapy group could explain the more substantial reductions in anxiety and stress, suggesting that engagement is a crucial factor in achieving positive therapeutic results.

A case study conducted on a VR-based therapy platform used in a rural community clinic provided further insight into the practical application of VR for mental health care. The platform used in this case study combined VR exposure therapy with real-time biofeedback to help participants manage anxiety and stress. The case study involved 20 participants, all of whom reported significant reductions in anxiety levels and an improved sense of control over their emotional responses after using the VR platform. Participants also reported that the platform's affordability and the ability to use it remotely made it easier to integrate into their daily routines, offering a flexible alternative to traditional in-person therapy sessions.



**Figure 2.** VR Therapy Improves Rural Mental Health

This case study further supports the findings of the experimental study by demonstrating the real-world potential of VR therapy to reduce mental health symptoms in underserved populations. The accessibility of the VR platform, combined with its efficacy in managing anxiety and stress, suggests that such interventions can be a viable and scalable solution for improving mental health care delivery. By providing an affordable, remote, and engaging alternative to traditional therapy, VR therapy can help bridge the gap in mental health services for individuals who may otherwise be unable to access conventional treatment. The positive

outcomes in this case study reinforce the broader implications of using VR for mental health care, particularly in areas with limited resources (Christensen et al., 2025).

The findings from both the quantitative and qualitative data demonstrate that VR therapy can significantly improve mental health outcomes by providing a more immersive and engaging treatment experience. The strong reduction in anxiety and stress in the VR therapy group suggests that the interactive, player-driven nature of the therapy enhances users' emotional engagement, leading to better therapeutic results. The combination of visual, auditory, and haptic feedback provided by the VR system likely contributed to the heightened sense of presence and emotional involvement, making the therapeutic process feel more real and impactful. In contrast, the more passive nature of the control group's treatment resulted in less engagement and fewer improvements in mental health symptoms, highlighting the advantages of VR in fostering active participation in therapy (Monaghesh et al., 2025).

In conclusion, the results of this study indicate that Virtual Reality Exposure Therapy (VRET) is a highly effective and scalable solution for reducing anxiety and stress, particularly in underserved populations. The positive outcomes from both the experimental data and case study demonstrate that VR therapy not only provides significant therapeutic benefits but also increases accessibility to mental health services. The ability to integrate VR into affordable and accessible mental health care systems offers a promising pathway for addressing gaps in treatment availability and accessibility. The findings suggest that VR therapy could play a pivotal role in the future of mental health care, particularly in resource-limited settings where traditional services are often out of reach (Ruivo et al., 2023).

The results of this study show that the socio-preneurship model utilizing Virtual Reality Exposure Therapy (VRET) significantly enhances access to affordable mental health services while also demonstrating positive therapeutic outcomes. Participants who engaged with the VR-based therapy reported significant reductions in anxiety and stress levels compared to those in the control group, who received traditional face-to-face therapy. The intervention group demonstrated greater emotional engagement and a stronger sense of presence, contributing to more sustained improvements in mental health. Furthermore, the model's cost-effective nature made it more accessible to individuals in underserved communities, who often face barriers to traditional therapy due to cost and availability. The findings suggest that VR-based therapy, when integrated into a socio-preneurship model, offers a viable solution to increasing access to mental health services while maintaining therapeutic effectiveness (Greig et al., 2024).

These findings align with previous research on the efficacy of Virtual Reality Exposure Therapy (VRET) in treating anxiety and stress (Freeman et al., 2017; Carl et al., 2019), which has consistently shown that VR-based treatments can reduce symptoms of mental health disorders. However, this study extends existing literature by applying VRET within the framework of a socio-preneurship model, emphasizing affordability and scalability. While past studies have primarily focused on the clinical application of VRET in controlled environments, this research explores the integration of VR therapy into community settings, making it accessible to a broader population. The results suggest that VRET, when combined with social entrepreneurship principles, not only enhances therapeutic outcomes but also contributes to solving critical issues of accessibility and affordability, areas that traditional mental health care models struggle to address.

The findings signify that VRET, when delivered through a socio-preneurship model, can be a transformative tool in addressing the mental health crisis, particularly in underserved and marginalized populations. The success of the model indicates that integrating innovative technologies like VR into affordable care frameworks is an effective way to bridge the gap in mental health services. The study also highlights the potential for VR to reduce the stigma associated with seeking mental health care, as the virtual nature of the therapy offers a sense of anonymity. This finding is significant in breaking down barriers that often prevent individuals from seeking help, such as fear of judgment or discrimination. The results point to a future

where mental health treatment is more accessible, affordable, and socially responsible, with technology playing a central role in democratizing care (Wong & Leung, 2025).

The implications of these findings are profound for both the future of mental health care and the field of socio-preneurship. For mental health professionals, the research highlights the potential of VR to supplement traditional therapeutic approaches, particularly in settings where mental health services are limited or unavailable (Sousa et al., 2025). By adopting VR-based therapy, providers can offer cost-effective, scalable solutions that extend the reach of mental health care beyond conventional clinics. From a socio-preneurship perspective, the study demonstrates that social enterprises can successfully integrate innovative technologies like VR into their business models, creating sustainable and impactful solutions to social problems. The findings suggest that VR for mental health could become a key player in the movement toward more inclusive and affordable healthcare systems, especially in low-resource environments.

The results of this study can be attributed to the unique combination of VR technology and the socio-preneurship model. VR's immersive nature enhances the therapeutic process by providing patients with a controlled environment in which they can confront and work through their mental health challenges (Gorinelli et al., 2023). The socio-preneurship model ensures that these benefits are extended to underserved populations by making the therapy more affordable and accessible. The success of this model also reflects the growing recognition that innovation in healthcare needs to go beyond simply improving technology; it must also address structural issues such as cost, accessibility, and stigma. By focusing on these aspects, the study demonstrates how a social enterprise can leverage technology to meet unmet social needs, providing a new paradigm for delivering mental health services that are both effective and equitable.

Future research should explore the long-term effects of VR-based therapy within socio-preneurship models to assess whether the improvements in mental health persist over time and whether the model remains sustainable in the long run. Longitudinal studies would provide valuable insights into the lasting impact of VR therapy on mental health outcomes. Additionally, studies could focus on expanding the scope of the socio-preneurship model by integrating other forms of therapy, such as cognitive-behavioral therapy (CBT), into the VR platform to enhance its therapeutic potential. Exploring the scalability of this model in different geographic and cultural contexts would also be valuable, particularly in low-income countries where access to mental health care is most limited. Further investigation into the user experience of VR therapy, particularly concerning accessibility, usability, and user satisfaction, will help refine the model and ensure that it meets the diverse needs of individuals seeking mental health support.

## CONCLUSION

The most important finding of this study is that the socio-preneurship model utilizing Virtual Reality Exposure Therapy (VRET) significantly improves access to affordable mental health services while also demonstrating positive therapeutic outcomes. Participants in the VR therapy group showed a marked reduction in symptoms of anxiety and stress compared to those in the control group, who received traditional therapy. The VR-based therapy also yielded higher levels of user engagement and emotional involvement, making it an effective tool for addressing mental health issues, especially for underserved populations with limited access to conventional care. Additionally, the study found that the affordability and scalability of the VR model contributed to its success in reaching a broader demographic, demonstrating that a socio-preneurship model can provide a sustainable and accessible solution to the global mental health crisis.

This research contributes to both the conceptual and methodological aspects of mental health care delivery. Conceptually, the study introduces an innovative socio-preneurship model

that combines the benefits of VR technology with the principles of social entrepreneurship to create affordable, scalable mental health solutions. The study's focus on VRET as a tool for accessible therapy challenges the traditional models of mental health care, offering a fresh perspective on how technology can be leveraged to address gaps in service delivery. Methodologically, the research employs a mixed-methods approach, combining quantitative data (such as anxiety and stress reduction scores) with qualitative feedback from participants, thus providing a comprehensive evaluation of the VR therapy model's effectiveness. This combination of approaches ensures a holistic understanding of the impact of VR-based mental health interventions, both in terms of therapeutic outcomes and user satisfaction.

While this study provides valuable insights, several limitations should be addressed in future research. One key limitation is the sample size, which may not fully capture the diversity of populations that could benefit from this socio-preneurship model. Future studies should include a broader, more diverse sample, including individuals from varying socio-economic backgrounds, age groups, and regions to better understand the model's applicability across different demographic groups. Additionally, while the study measured short-term outcomes related to anxiety and stress reduction, longitudinal studies are necessary to assess the long-term impact of VR therapy on mental health and its potential for sustained engagement. Future research could also explore the integration of other therapeutic modalities, such as cognitive-behavioral therapy (CBT), within the VR platform to enhance its therapeutic effectiveness. Furthermore, research should investigate the scalability of the socio-preneurship model in different cultural and geographic contexts, particularly in low-income or developing regions, to determine its global applicability.

## AUTHOR CONTRIBUTIONS

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.

Author 2: Supervision, Conceptualization; Data curation; In-vestigation.

Author 3: Data curation; Investigation.

## CONFLICTS OF INTEREST

The authors declare no conflict of interest.

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