Qualitative Insights Into Artificial Intelligence (AI) and Virtual Reality (VR) Training for Value Communication: Comparing Innovative Technologies With Traditional Methods in Pharma

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INTRODUCTION

To enhance communication between key account managers (KAMs) and healthcare professionals (HCPs), pharmaceutical companies are forced to optimize their value communication training approach. The goal is equipping KAMs with new interactive learning technologies based on AI and VR, enabling them to improve real-life dialogues. For this, the AI-based tool Q-BO for tablet and the the AI- and VR-based tool WAFLE have been tested from the participants.

SCIENTIFIC BACKGROUND

The concept is based on the use of Virtual Reality Exposure Therapy. This has emerged as a robust adjunctive modality in the treatment of a broad range of psychological disorders, particularly those characterised by heightened avoidance and hyper-arousal such as anxiety disorders, specific phobias and post-traumatic stress disorder [1]. The key mechanism is the provision of a controlled, immersive, and frequently graded simulation of feared stimuli, enabling safe and repeated exposure that is central to extinction of avoidance and corrective emotional learning. Moreover, VRET offers logistical advantages—such as enhanced standardization, therapist control over exposure parameters, and improved accessibility—that may improve adherence and scalability of exposure-based interventions.

METHODOLOGY

As part of an ongoing customer survey, KAM groups from major pharmaceutical companies participated in training on a novel product using three methods: face-to-face(F2F) role-playing, AI-based, and AI and VR-combined-based applications. A stepwise evaluation has been introduced (qualitative and quantitative). The initial qualitative approach gathered impressions to answer: What are the perceived advantages and disadvantages of each method? The participants rotated through all methods, engaged in immersive simulations, text or audio dialogues, received scores on their answers, and reviewed their performances records, and also participated in F2F role play. Afterwards, they completed a qualitative evaluation of their experiences.

RESULTS

Generally, the average overall conference rating was 5.36 out of 6 by the participants, indicating a very positive general impression. The use of AI and VR is seen principally more motivating (40%) then demotivating (13%).

Positive Aspects of AI-based learning approach:
AI-driven training personalizes learning, adapting to each participant's strengths and weaknesses for faster skill development. AI-powered simulations and chatbots provide on-demand practice, helping trainees handle challenging questions and retain knowledge. Immediate AI feedback highlights areas for improvement, enabling real-time refinement of communication and interpersonal skills.

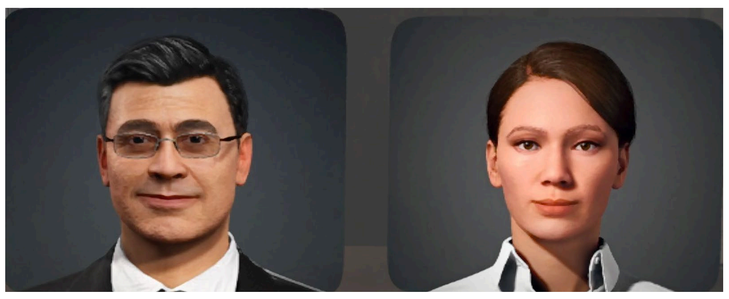
"AI helps me train smarter, not harder — it adapts to my learning style and gives me the feedback I need to improve my conversations with clients."

"I love how AI gives me honest, unbiased feedback — it's like having a personal coach who's available 24/7 to help me get better."

Generally, the gamification process of value and data proposition is seen as an advantage versus traditional methods.

Challenging Aspects of AI-based learning approach:
With almost endless possibilities, the use of AI might potentially mislead to wrong expectations. Anyhow, the use of AI and VR is seen principally more motivating (40%) then demotivating (13%).

Positive Aspects of VR-based learning training:



"Talking to an avatar: Xavier and Xenia"

Participants see Virtual Reality (VR) to offer significant advantages in professional training by providing immersive, experimental learning environments that closely replicate real-world interactions without associated risks. Through controlled simulations and the repeated training, practice complex communication and decision-making scenarios, enhancing situational awareness, emotional regulation, and skill retention. The interactive nature of VR fosters active engagement and motivation, leading to deeper cognitive processing and improved transfer of learning outcomes to actual practice.

Moreover, VR enables standardized yet flexible training delivery, ensuring consistent quality across diverse learner groups and geographical contexts.

"Practicing in VR feels real, so when I'm face-to-face with a customer or healthcare professional, I already know how to handle the pressure with confidence."

"In virtual simulations, I can experiment safely — I can try new approaches, make mistakes, and learn from them without any real-world consequences."

"VR training keeps me engaged — it's interactive, immersive, and honestly, way more enjoyable than traditional role-playing sessions."

"AI and VR make learning consistent and fair, no matter where I'm based — everyone gets the same high-quality, hands-on training experience."

"The platforms are as perfect as an add-on to F2F role play."

Challenging Aspects VR AI-based learning approach:
Conversely, participants noted that they "needed more time to fully understand and get used to the technologies". Also, some participants needed more time to adjust to the technology and get used to the personal setting of a VR Headset, to avoid personal comfortless like headache.

CONCLUSIONS

KAMs responded positively to AI and AI-VR-combined training with apps, particularly valuing autonomy, adaptability, and consistent delivery of product knowledge. Addressing users' technical or physical limitations through clearer instructions or alternative training formats can improve further training experience. Compared to traditional methods, these technologies offer scalable, personalized, and engaging alternatives, helping value-communication teams build stronger foundational knowledge for effective and nuanced communication with Health Care Professionals.

REFERENCES

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