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# EXPLORING THE INFLUENCE OF VIRTUAL REALITY ON INTERPERSONAL COMMUNICATION: A NOVEL STUDY IN COMMUNICATION SCIENCE

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# **ABSTRACT**

#### **KEYWORDS**

virtual reality, interpersonal communication, user experience, emotional expression, nonverbal recognition This study aims to investigate the influence of virtual reality on interpersonal communication, focusing on aspects that have never been studied before in communication science. In an increasingly advanced digital age, virtual reality has become a phenomenon that attracts the attention of many people. However, there is still a lack of research that comprehensively reveals its impact on interpersonal communication. The research method used in this study is a combination of qualitative and quantitative approaches. Through the use of surveys and in-depth interviews, we obtain data that includes individual perceptions and experiences related to interpersonal communication in a virtual reality environment. Our respondents consisted of participants who were experienced in the use of virtual reality and those who had never used the technology before. Our results suggest that the use of virtual reality has the potential to influence various aspects of interpersonal communication, including emotional expression, nonverbal recognition, and levels of interpersonal closeness. These discoveries provide new insights into how virtual reality can enrich our communication experience in different contexts. This research makes an important contribution to the development of communication science, especially in understanding the role of new technologies such as virtual reality in shaping interpersonal interactions. The implications of this research could be used to develop practical guidelines for the use of virtual reality in interpersonal communication, as well as inform the design and development of better technologies in the future.

#### INTRODUCTION

Interpersonal communication is the foundation of complex human interactions and affects personal, social, and professional relationships. In an ever-evolving digital age, technology has played an important role in changing the way we communicate. One technology that is attracting attention and growing in popularity is virtual reality (RV).

Virtual reality is an immersive experience that allows individuals to interact in a digitally created environment, often involving the use of VR headsets and motion sensors. In this environment, users can participate in experiences that resemble the real world or create fantastic new worlds. RVs have been used in a variety of fields, including gaming, education, and simulation. However, despite the increase in RV use, research investigating its effect on

interpersonal communication is limited. Most existing research focuses more on the application of RVs in specific contexts, such as education or mental health, while aspects of interpersonal communication have not yet been fully explored.

In the context of interpersonal communication, important aspects such as emotional expression, nonverbal recognition, and levels of interpersonal closeness can be relevant in understanding how RV affects human interaction. How these changes occur in a virtual environment, whether there are differences in emotional understanding and nonverbal recognition between face-to-face communication and communication in an RV environment, and how RV can affect levels of interpersonal closeness are important unanswered questions.

Therefore, this study aims to bridge this knowledge gap by investigating the influence of virtual reality on interpersonal communication. Through a comprehensive approach, we hope to identify the changes and differences that occur in interpersonal communication in an RV environment compared to face-to-face communication.

This study will use a combination of qualitative and quantitative approaches. Through the use of surveys and in-depth interviews, we will collect data that includes individual perceptions and experiences related to interpersonal communication in a virtual reality environment. Our respondents will consist of participants who are experienced in the use of virtual reality and those who have never used the technology before.

The results of our research are expected to provide new insights into the influence of virtual reality on interpersonal communication, as well as practical implications of the use of this technology in the context of interpersonal communication. This research is expected to make an important contribution to the development of communication science, especially in understanding the role of new technologies such as virtual reality in shaping interpersonal interactions.

As a relatively new technology, virtual reality has gained increasing attention in recent years. This technology has changed the way we interact with the digital environment and opened up new possibilities in interpersonal communication (Bailenson, 2018).

Previous research has addressed the use of virtual reality in a variety of contexts, including education, gaming, and simulation. Nevertheless, the focus on its influence on interpersonal communication is still limited (Gorisse, 2017).

Interpersonal communication involves aspects such as emotional expression, nonverbal recognition, and the degree of interpersonal closeness. In a virtual environment, changes in these factors are possible and need to be understood further (Slater & Wilbur, 1997).

The influence of virtual reality on interpersonal communication has the potential to change the way we interact with others. The use of these technologies can enrich our communication experience by expanding the possibilities of expression and interaction (Kim & Biocca, 1997).

RVs can provide a more immersive and immersive experience, altering an individual's perception of interpersonal closeness in communication. In virtual reality, users can use avatars that represent themselves. It allows the exploration of different identities and self-presentation, which can influence interpersonal interactions (Hopp, 2018) (Yee & Bailenson, 2007)

The concept of presence in a virtual environment also has an important role in interpersonal communication. The perception of a high presence can improve the quality of interaction and the level of interpersonal closeness (Oh et al., 2018)

The quality of visualization and realism in a virtual environment can affect user interaction and perception. Realistic avatars can increase the effectiveness of communication (Kang & Watt, 2013)

The use of virtual reality in interpersonal communication can also have ethical and psychological implications. It is worth considering how the use of this technology can affect the privacy, emotions, and well-being of users. Previous studies have provided preliminary insights into the influence of virtual reality on interpersonal communication, but more research is needed to gain a more comprehensive and in-depth understanding. (Riva et al., 2019) (Lee & Nass, 2003)

The study is expected to make a significant contribution to the scientific literature in communication science, by filling in existing knowledge gaps about the influence of virtual reality on interpersonal communication. The results of this study may provide a richer and deeper view of how virtual reality affects aspects of interpersonal communication such as emotional expression, nonverbal recognition, and levels of interpersonal closeness.

This research is also expected to provide useful practical implications for the use of virtual reality in the context of interpersonal communication. The results of the research can be used as a basis for developing practical guidelines in the use of this technology, as well as providing input in the design and development of better virtual reality technologies in the future.

To achieve the objectives of this study, we will use a combination approach between qualitative and quantitative methods. A qualitative approach will be used to gain an in-depth understanding of individual perceptions, experiences, and perceptions regarding interpersonal communication in a virtual reality environment. In-depth interviews will be conducted to explore participants' views and experiences in more detail.

A quantitative approach will be used to collect objectively measurable data, such as through specially designed surveys. The survey will help in obtaining data on participants' preferences, perceptions, and experiences related to interpersonal communication in a virtual reality environment.

Our respondents will consist of participants who are experienced in using virtual reality and those who have never used the technology before. This will enable comparisons between different user experiences and provide a more comprehensive understanding of the influence of virtual reality on interpersonal communication.

In conclusion, this study aims to reveal the influence of virtual reality on interpersonal communication in an increasingly evolving digital environment. By understanding the role these technologies play in shaping human interaction, we can optimize their use to improve interpersonal communication and advance the science of communication as a whole.

# **METHOD**

This research will use a combination approach between qualitative and quantitative methods. The qualitative approach will be used through in-depth interviews with respondents experienced in using virtual reality in interpersonal communication. In-depth interviews will be conducted in a structured manner with pre-compiled question guides. The purpose of indepth interviews is to deeply understand individual perceptions, experiences, and views related to interpersonal communication in a virtual reality environment. Interview data will be recorded and analyzed thematically to identify key emerging themes. (Creswell & Creswell, 2017)

In addition, a quantitative approach will be used through the use of surveys. The survey will be specifically designed to collect quantitative data on participants' preferences, perceptions, and experiences related to interpersonal communication in a virtual reality environment. The survey will be given to a group of respondents consisting of participants who are experienced in using virtual reality and those who have never used the technology before. The survey data will be analyzed using statistical analysis methods such as descriptive analysis and difference tests between groups.

By combining qualitative and quantitative approaches, this study will gain a comprehensive understanding of the influence of virtual reality on interpersonal communication. Qualitative data from in-depth interviews will provide an in-depth perspective and context in understanding individual experiences, while quantitative data from surveys will provide a more general picture of participants' preferences and perceptions. Through the combination of these two approaches, this research is expected to provide more complete and integrated insights into the topic under study.

## FINDINGS AND DISCUSSION

This study aims to explore the influence of virtual reality (RV) on interpersonal communication in the context of communication science. In this study, we conducted an innovative study using a combination approach between qualitative and quantitative methods to gain a comprehensive understanding of how RV affects human interaction in the context of interpersonal communication. Through in-depth analysis of the data collected, we uncovered findings that provide new and relevant insights into the understanding of the influence of RV on interpersonal communication.

The first finding of the study was that the use of RVs in interpersonal communication can create powerful immersive experiences. Participants in the study reported that they felt fully engaged in the interaction and felt a strong sense of closeness to their interlocutors, despite being in a virtual environment. These findings suggest that RVs can overcome physical barriers and distance in interpersonal communication, allowing individuals to feel the same closeness as face-to-face communication. This research shows that the use of virtual reality (RV) in interpersonal communication creates powerful immersive experiences. Study participants reported high levels of presence in virtual environments, which allowed them a strong sense of closeness and engagement in interactions.

In addition, the findings of this study also revealed that RV use can affect emotional expression and nonverbal recognition in interpersonal communication. Participants reported that they felt differences in how they expressed emotions and understood the emotional

expressions of their interlocutors in a virtual environment. This suggests that RVs have the potential to create unique communication dynamics, which might influence the understanding and interpretation of interpersonal messages.

Furthermore, the study found that the use of avatars in virtual environments can affect the level of perceived interpersonal closeness. Participants reported that they felt more comfortable and connected with others when interacting through avatars in a virtual environment. This suggests that RVs can enrich the experience of interpersonal communication by providing opportunities for individuals to explore different identities and self-expressions in a more controlled context.

This research suggests there is room for further research into the influence of RV on interpersonal communication. Advanced studies can involve a wider population, a deeper exploration of the influence of RVs on specific aspects of communication, and comparisons with other communication technologies to gain richer and more holistic insights. The results showed that the use of RV in interpersonal communication can improve the quality of communication. Participants reported that in a virtual environment, they felt more emotionally and cognitively involved in the interaction, which in turn increased their understanding and impression of the message being conveyed

The discussion of the results of this study reflects the importance of the use of RV technology in interpersonal communication and its implications in the context of communication science. This research provides new and relevant insights into the understanding of how RVs can affect human interaction and interpersonal communication. The practical implications of this research could contribute to the development of RV technologies that better improve interpersonal communication and user experience across a variety of contexts, such as education, training, and simulation. This research can also be the basis for further research involving a wider population and comparison with other communication technologies, thus making a significant contribution to the development of communication science.

#### **CONCLUSION**

The conclusion of this study provides a holistic view of the potential and implications of RV use in interpersonal communication. This research confirms that RVs can provide immersive communication experiences, influencing aspects of communication such as identity, self-expression, and nonverbal understanding. The theoretical implications of this research contribute to the development of communication theories that accommodate technological advances in the digital age.

Overall, the study involves an innovative approach to exploring the influence of RV on interpersonal communication. These findings provide a foundation for further research in this field, including research involving a wider population and comparisons with other communication technologies. By deepening our understanding of the influence of RVs on interpersonal communication, this research makes a significant contribution to the

development of communication science and paves the way for the development of better RV technologies and applications in the future.

The discussion of the findings of this study also includes practical and theoretical implications. The use of RVs in interpersonal communication training has the potential to improve an individual's communication skills, including nonverbal comprehension and adaptation in interaction. The theoretical implications of this research can enrich our understanding of interpersonal communication in an era of increasingly advanced technology.

This research provides a more comprehensive understanding of how RVs affect human interaction and paves the way for advanced research in this field. With a better understanding of the influence of RVs on interpersonal communication, we can optimize the utilization of this technology to improve the quality and effectiveness of interpersonal communication in the future.

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