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FOCUSING ON VIRTUAL GROUPS: A METHOD FOR FOCUS GROUP INTERVIEWS IN XR/VR GROUP SETTINGS

Oskar Milik
Michigan State University

Dayeoun Jang
Michigan State University

Maxwell Foxman
University of Oregon

Brian Klebig
Bethany Lutheran College

David Beyea
University of Wisconsin – Whitewater

Alex Leith
Southern Illinois University Edwardsville

Rabindra Ratan
Michigan State University

Intro

The methods we use to study human behavior must change to match the advancements of social reality. The increasing use of technology to mediate interaction and the digitalization of many aspects of our world have increased the urgency for constructing and evaluating both established and novel methods for analyzing modern-day social situations. One type of social science research that has not been as thoroughly developed is the use of focus group interviews within digital settings. The goal of this paper is to present a theoretical foundation and practical structure for an upcoming focus group study on interaction using virtual avatars in VRChat (2014).

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Background

Digital Research

As new digital communication tools have engendered new contexts for social experiences, researchers have published discussions about expanding their methodologies, including quantitative methods such as “big data” and large surveys of online users (Williams et al., 2011; Yee, 2006) in addition to traditional ethnographic and interview methods translated into digital spaces (Boellstorff et al., 2012; Taylor, 2006). Further, the accessibility of the variety of digital-world data makes mixed-method research even more powerful (Ducheneaut, Yee, & Bellotti, 2010).

More recently, the use of digital systems for work settings, such as Zoom or virtual-world meeting spaces (e.g. Engage, Meta’s Horizon Workrooms), has increased significantly. Considering social group interactions are affected by technology (Milik, 2015), we need a new methodological approach to understand group dynamics in virtual meeting spaces. We also aim to expand methodological approaches beyond methods for focus group interviews in video-conferencing platforms (Willemsen et al., 2023). We accomplish this by specifically focusing on the use of avatars and virtual spaces for interaction, specifically in a platform based on VRChat (2014).

Avatars and Actors

When observing social action in a digital setting, especially in virtual worlds, researchers should pay careful attention to the role of avatars, defined as digital representations of users that facilitate interactions (Nowak & Fox 2018). Similar to how people adjust their identity to fit various circumstances offline, avatars allow users to adapt their online identity accordingly (Phillips & Milner, 2018). The ease of modifying digital representations allows individuals the ability to effortlessly alter the aspects of themselves and to showcase or even establish an entirely new identity (Phillips, & Milner, 2018). This creates a multi-layer representation of an individual that can create difficulty in analysis (Carter, Gibbs, & Arnold, 2012). In response to this layered meaning, we present the individual in physical space as the “participant” and the individual’s virtual representation in digital space as the “avatar.” In discussing these two entities simultaneously for analysis, we use the concept of the “persona” (Milik, 2017) as a methodological construct.

Also related to persona, we consider the concept of a third space (Oldenburg, & Brissett, 1982). Even in a purely digital setting, these spaces can allow for interaction with greater freedom of expression (Steinkuehler, & Williams, 2006). VR-mediated meta-spaces can imitate a third space thanks to a sense of spatial presence (Ahn et al., 2022). It is important to note that a VR meeting platform can be understood as an extension of the workspace but also a third place in terms of supporting formal and informal communication and offering features to support freedom of interaction (i.e., flying, teleporting, drawing in a void, etc). As work productivity and creativity are influenced by the physical environment (Kristensen, 2004; Sailer, 2011), it is important to examine how a VR meeting platform can influence social interaction.

Power, Language, and Identity

When studying behavior in a digital space, questions of agency and power become additionally complicated. The participant retains social agency in physical space, but the behaviors of the avatar are intrinsically limited by the programming of the virtual world. In studying interpersonal relationships and social power, this can significantly change the nature of the research (Taylor, 2018). Representations of gender (Bergstrom, 2012) and race (Nakamura, 2020), for instance, can be heavily affected by the design of the virtual space and create restrictions on mobility for certain individuals. Also important is the fact that some individuals are simply less comfortable with technology (Bolin, Kalmus, & Figueiras, 2023), and this can lead to a normalization of inequality between members in digital interaction (Paul, 2018) and create additional limits for people with certain disabilities.

Focus group interviews are built specifically to generate valuable data on interactions, discussions of narrative, and analysis of interpersonal relationships. The use of a digital platform for this purpose remains viable due to the researchers' access to data for ethnographic (Boellstorff et al., 2012), ethnomethodological (Milik, 2015), and interview analysis (Taylor, 2018). In designing this study, the concerns of agency, power, and identity were key factors that determined how the VR meeting platform was constructed.

The Method We Used

Building on a larger project that examines how facets of virtual meeting technologies influence user well-being, we combine traditional focus group interviews with observational methods to investigate participants' behavior and interactions in a VR meeting platform. We developed a VRChat world to study the capacity of a VR meeting platform to promote equitable interaction, creativity, and collaboration between participants.

First, participants in this IRB-approved study experience a tutorial in the VR meeting platform to acclimate them to the environment and to collect data based on communication in more natural situations. Participants choose one of 16 avatars (casual/formal outfit, four skin colors, feminine/masculine), which allows us to understand their use of avatars to establish identity. Then, they work as a team for 15 minutes and complete a collaborative task (i.e., designing a modification to the game rock-paper-scissors or tic-tac-toe). Participants are encouraged to use a variety of tools to help with the task, including 3D pens, boards, and dice to assess how technological competence affects the interaction. When done, the participants are asked to have a representative present their outcome to the researcher to assess power dynamics and leadership. Participants can freely move around different locations in the platform by walking or using the teleportation feature to help understand how movement and closeness affects the group dynamics.

As is standard for focus group interviews, one moderator and one observer are assigned to each participant group. The role of the observer is to monitor behavior while being invisible. Even if being invisible is not common in VRChat, we decided on using invisibility to minimize the unintentional effect of an observer's presence. During the

task, both the observer and moderator monitor inter-participant discussions and how much each individual is contributing. This data is also collected through audio and video recordings of the session.

Following the observational portion of the study, we also conduct group interviews based on participants' experiences in the VR meeting platform, either in-person or virtually, depending on the participants' preference and availability. The main goal of this follow-up is to understand individual reasoning behind the actions and decisions that the participants made on the platform, which are difficult to ascertain through observation only.

Conclusion

As virtual meeting environments become more common, a reliable method of collecting focus group data is a rising concern. This study will incorporate the theoretical roots of digital research, address important social questions, and present the core of a methodological system for future studies using virtual reality or other multi-user meeting software for focus group interviews. Beyond the academic setting, this will additionally be valuable for studies in management and organization, as well for rapidly digitalizing corporate actors.

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