Multimedia Systems
Intelligent and Cognitive systems

Social pressure from agents in a virtual environment: an investigation of conformity level

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Virtual Reality has been exploited in various ways in aspects related to psychology and cognitive sciences for investigating humans' behavior. In this study, we used an immersive virtual environment to investigate the extent to which social pressure from a majority group could affect a person to conform, even if the confederates were agent avatars. The procedure that was followed is based on Asch (1951) conformity experiments.
The setup includes Oculus Rift HMD for 3D immersive viewing and head tracking. The application created using Unity 3D game engine, the environment using Autodesk Maya and virtual characters using Autodesk Character Generator.
Participants, embodied in a gender-matched virtual body, asked to answer a simple -12 trial- vision test after they hear the replies of the confederates in each trial. In 9 out of 12 trials, agent confederates gave unanimous wrong answer. The answers of the participants as well as the time it took them to respond were recorded. Preliminary results demonstrated no distortion on participants' answers, but the time of response seems to be affected by the avatars' majority judgment. The findings of the study indicate conformity by the participants under social pressure.
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