

Simposio IX – Comunicación I

Exploring personality traits, social inhibition, and psychophysiological responses in an immersive virtual environment

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This exploratory study investigated the feasibility of using virtual reality (VR) to assess the Social Inhibition (SI) dimension of Type D personality, which combines high Negative Affectivity (NA) and high SI, both linked to increased risk for physical and mental health problems. Traditional assessments like the DS14 rely on self-report, limiting ecological validity. To address this, a VR scenario was developed in which participants selected a seat in a virtual coffee shop, with each option reflecting a different level of SI. Forty-five higher education students ($M = 21.47$, $SD = 4.29$), of both sexes and mostly single, completed the task along with the DS14 and the Mini-IPIP, a measure of the Big Five personality traits. Throughout the experience, psychophysiological responses, heart rate (HR), electrodermal activity (EDA), and respiratory rate (RR), were continuously recorded to monitor autonomic nervous system activation. Results revealed a moderate positive correlation between seat choice and SI scores, and a negative correlation with Extraversion, indicating that more socially inhibited and introverted participants tended to choose more isolated seating. Additionally, a positive association emerged between respiratory rate in the final stage of the VR task and Conscientiousness, during interaction with a key scenario element, suggesting a possible link between self-regulatory effort and this trait. These findings highlight VR's potential as an ecologically valid tool for assessing personality traits, especially when integrated with physiological and attentional data. Further research should continue exploring social avoidance and emotion regulation mechanisms in individuals with distressed personality profiles.