ABSTRACT

## Extended researchers: Towards a meta social human beings

## Keywords

Augmented Reality, Immersive Event, Ph.D Career, Wellbeing, Metaverse.

Extended reality (XR) technologies, particularly those derived from virtual reality (VR), offer promising alternatives in so far as they foster new social contexts that must be analyzed and systematized. The virtual world-centered Metaverse began to spotlight educational and social interaction, with possibilities to break the boundaries between real-world and virtual spaces that help escape from isolation constraints. The necessity for alternative solutions became evident in times of isolation, where physical interactions were limited. In July 2021, during the restrictions imposed by the Covid 19 pandemic, researchers from the University of Porto in Portugal created a virtual event called "Surviving a Ph.D: Tec & Arts Experiences," aimed at helping doctoral students face the challenges of conducting lengthy and sometimes solitary investigations. The emotional problem related to the isolation of investigators was already evident in previous research, and the pandemic scenario served as an even greater warning to professionals such as scientists, in which alternative contact solutions are very welcome. To achieve the purpose, a threedimensional virtual environment was developed, among other things, that allowed providing, in addition to presentations and discussion panels, an immersive experience to promote an instance of dialogue and discussion around the problems that occurred in doctoral programs. Attendees

were invited to participate in scheduled activities in an environment developed in Mozilla Hubs, a web open-source platform that allows creating multi-user virtual spaces under a first-person game mechanic. The scenarios produced (also called rooms) sought to reflect the idea of isolation by incorporating the imaginary of four interconnected islands, which were developed in the Spoke editor provided by Mozilla. These islands housed a particular activity in a specific virtual space (Lobby, Conference Area, Culture & Leisure, and Food for thought area). Likewise, the participants had to choose an avatar with which they could visit the facilities provided for the event. The results showed that, unlike those platforms that we could consider linear, such as Zoom, Google Meet, or even YouTube, where interactions occur sequentially, virtual environments promote group relationships that can occur simultaneously and asynchronously. Likewise, positive effects were observed in the registered impressions of concurrent visitors from twenty-three countries worldwide from five continents, who evaluated the rooms as modern, innovative, fun, and friendly. In this article, we expose the antecedents, the methodology, and the results of this experience to contribute to the systematized knowledge around these new information technologies that, from the Metaverse, invite us to rethink ourselves as social beings.