

# Digital Travel for Senior Citizens: 360° Virtual Tourism

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## FIGURE 1

360° VR cyclotourism experience (while one participant was testing, the others observed).

## FIGURE 2

Researchers of Digital Travel for Senior Citizens: 360° Virtual Tourism (from left to right: Francisco Regalado, Tânia Ribeiro, Ana Veloso and Cláudia Ortet).

Digital travel is currently a reality in the tourism sector exacerbated by the emergence of COVID-19. Not only this sector was deeply affected by the pandemic, but also senior citizens suffered from social distancing and isolation measures, causing health decline. Thus, digital travel can be a solution for tourism and senior citizens as it allows to virtually visit places. It does not replace reality, instead, it can be a resource that democratizes tourism in critical situations.

This research, developed under IC SeniorX project, analyzed the influence of 360° virtual reality (VR) on the sense of Immersion and Presence in tourism. A total of 76 participants, between 50 and 97 years old, were involved in the experiment. Data was collected from a technology acceptance questionnaire, image and sound recordings, and field notes.

Specifically, the VR trip was divided into: (i) – Visit to the Eiffel Tower; (ii) – Bike ride in the suburbs of Paris; and (iii) – Experience evaluation and feedback. The purpose of sharing the experience was to encourage active participation, as while one individual (at a time) performed the activity, the rest watched on TV (Figure 1). Regarding the setting, it contained: (a) a head-mounted display; (b) a computer; (c) a Smart TV; (d) video cameras; (e) chairs for participants; (f) an armchair for the testing subject; (g) an elliptical bicycle; and (h) a fan.

Findings suggest that 360° VR can positively influence Immersion and Presence while promoting active and healthy ageing, sociability behaviors and wellbeing. It can be a safe alternative for the tourism industry and aged populations. Additionally, unexpected results were observed, such as the creating of game strategies to navigate in the 'virtual' world and the absence of motion sickness.

Moreover, this activity was submitted to the Good Practices Award for Active and Healthy Ageing in the Central Region of Portugal (2022), at the Knowledge+ category, winning an honorable mention (Figure 2).

