Typology: Mini-Talk

**Usability study of a planning-based tool to improve problem-solving skills in older adults**

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The development of web-based cognitive enhancement programs is becoming a priority to promote active aging. To be more effective, these programs should have a high ecological validity (i.e., train participants to perform typical daily life activities) and be easily accessible, adaptable and customizable. In this way, they can have a positive impact on quality of life. Tasks that require planning, organization, memory, time management and flexible thinking skills are particularly challenging for older adults.

The present study tested the usability of a first version of SWIFT (Shared, Web-based, Intelligent Flexible Thinking Training), a web-based, automated planning-based cognitive training system that uses artificial intelligence (AI). SWIFT simulates a real-life scenario and is designed to stimulate planning and problem-solving skills of older adults, as well as to increase their confidence with technological tools and internet-based activities.

A group of healthy older adults (age: 68-81) used SWIFT twice a week (8 sessions of 40 min each). The task is about planning a two-days’ vacation in Rome; participants were asked to book train tickets and a hotel, and to accomplish specific objectives (typical objectives of real-life trips – e.g., visiting a place, attending an event, taking the bus, respecting opening times of places). In order to perform the activities, participants had to navigate using a map. All sessions were video recorded to allow for a subsequent analysis of the strategies implemented by the participants to carry out the task. Usability and satisfaction questionnaires were administered to all participants.

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