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Virtual Reality Simulations in Dementia Care

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Abstract
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Abstract

BACKGROUND: Given that the presence of dementia more than doubles every five years in those over age 65, approximately one in four seniors age 85 and older in Canada is diagnosed with the condition [1]. Further, since approximately 261,000 seniors in Canada who are living with dementia receive informal care from family members [2] rather than from long-term care facilities [1], interventions that offer caregivers problem-solving techniques are needed to foster quality of life for both parties.

OBJECTIVE: This research aims to explore the development and efficacy of interventions that support caregivers of persons living with dementia, with a specific focus on virtual reality simulations.

DESCRIPTION OF INNOVATION: A serious game segment, which will evolve into a virtual reality product that assists those who care for persons living with dementia in learning effective communication strategies and approaches to common challenges such as apathy, repetitive questions and resistance, was created. The game, which features first person and the third person perspectives, challenges users to assist a person living with dementia, in this case their mother, who is delaying getting ready to go out. The user must complete tasks such as retrieving clothes and effectively communicate with the person living with dementia in order to stay on schedule.

IMPACT: By offering a scaffolded approach to learning that imparts optimal strategies for interacting with persons living with dementia, the eventual virtual reality product will enhance the lives of caregivers and those for whom they care.

Index terms: Serious games, virtual prototyping, virtual reality, dementia

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