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## **An Application of Virtual Reality in Fire Emergency Preparedness – Impacts of Information and System Attributes**

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# An Application of Virtual Reality in Fire Emergency Preparedness – Impacts of Information and System Attributes

*Research-in-Progress*

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## **Abstract**

*Virtual reality (VR) is gaining significant attention as a tool for supporting learning and education. However, most studies of virtual reality focus on system aspects such as presence and immersion and their impacts. Few have examined the information aspect of VR applications. Focusing on public fire safety and preparedness education, this study examines the impacts of system and information characteristics on learning and intention to create an escape plan in the event of a fire incident following participant exposure to the 'Escape My House', a virtual reality tool that enables people to experience a house fire. The results show that information aspects have significant impacts on learning and intention, and fully mediates the impact of system aspects (i.e. presence) on learning. Implications for future research and practice are discussed.*

**Keywords:** Virtual Reality, Virtual Learning Environment, Information characteristics, System characteristics, Emergency Preparedness.