

Increasing fire protection through virtual reality

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Fire is one of the most dreaded anxieties in households worldwide. In 2018 Dutch insurance companies registered no less than 80,000 domestic fires. The most common cause is smoking, followed by

technical malfunctions in appliances and cooking. Preventive measures can avoid many of the consequences and there is a lot to be gained. Ph.D. researcher Patty Jansen (Human-Technology Interaction group) researched if it is possible to increase the willingness to take fire protection measurements.

In her research, she had participants experience the effect of a domestic fire caused by a fire in the pan. In the research lab at TU/e half of the respondents experienced the effect of such fire via virtual reality. A [control group](#) received written information about fire and fire prevention. Both groups were later questioned on their willingness to take protective measurements.

Jansen: "We know that people who have experienced a risky situation, like an earthquake, are more likely to take action. They have experienced how drastic something can be and therefore are worried. They want to do something and act. My research shows the same pattern: almost half of the respondents who took part in the [virtual reality](#) experience, bought a fire blanket. 23% took home a leaflet on fire prevention, People who only received written information were less motivated to act."

More information: Patty C. P. Jansen et al. Playing with fire. Understanding how experiencing a fire in an immersive virtual environment affects prevention behavior, *PLOS ONE* (2020). [DOI: 10.1371/journal.pone.0229197](#)

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