

Using Immersive Storytelling to Improve Fall Prevention Training

Using Immersive Storytelling to Improve Engagement and Motivation During Fall Prevention Training

Ricardo Eiris, Ahmed Al-Bayati. CPWR Small Study, 2023.

Overview

Construction continues to have one of the highest rates of workplace deaths and injuries of any U.S. industry. Falls—particularly in the residential sector—are the leading cause of fatalities. Many construction employers use training programs to try to reduce these incidents, but current programs often produce low engagement and motivation among trainees. To address this problem, the researchers developed fall hazard training methodology for residential construction workers featuring immersive storytelling, which puts participants into a digital environment and delivers job site safety story narratives. They focused on how the inclusion of storytelling-driven narratives affects safety training engagement and motivation. They employed a between-subject experimental design with two approaches—1) virtual human storytelling-driven narratives and 2) non-storytelling narratives—to evaluate trainee engagement and motivation. Data was collected using eye-tracking metrics, a hazard identification survey, and self-efficacy and motivation questionnaires from 42 residential construction workers in Michigan.

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Read the report:

<https://bit.ly/48vk4BV>

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Key Findings

- The use of immersive storytelling in fall prevention training did not produce statistically significant differences in participants' levels of cognitive and emotional motivation and engagement.
- However, using immersive storytelling during the training produces greater behavior and engagement motivation during fall prevention scenarios involving improperly used stepladders (i.e., top step and top cap) and buckets (i.e., used as step stools)
- The research team recommends using immersive storytelling in future training interventions to improve trainees' behavioral engagement and motivation.



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