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## Exploring empathy through sobering persuasive technologies: "No breaks! Where are you going missy?"

Ioanna Iacovides, Anna L Cox, Dominic Furniss, and Chrystie Myketiak

Errors are ubiquitous across daily life. Often frustrating and sometimes funny, they can also be fatal: errors that occur within safety critical contexts such as healthcare may result in patient harm or death. When an incident arises people tend to look for an individual to blame e.g. a nurse who delivers a fatal dose of medication, without considering the wider circumstances. However, there is a need to move from beyond this individualised blame culture towards a more sophisticated appreciation of human error that focuses on wider systemic failures.

Blame cultures are perpetuated by a lack of awareness and empathy regarding the factors influencing error (Myketiak & Curzon 2014). Persuasive games are one way to promote empathy. For instance, Belman and Flanagan (2009) discuss three examples that engage players' capacity to empathise in relation to the Israeli-Palestinian conflict, the Rwandan genocide and unemployment during the recent financial crisis. These are examples of "serious experience" that raise awareness and promote reflection about social issues. Marsh and Costello (2010) distinguish between serious experiences that are "entertaining without exclusively being fun" or that are "uncomfortable" for players (Benford et al. 2012).

We present two examples of persuasive games that address the issue of blame culture within healthcare. In *Nurse's Dilemma* you play a nurse faced with a series of difficult choices. During play-testing, participants reported engaging emotionally with content of the game and gaining new insight into the challenges nurses face. In follow-up email questions, there was also an indication that the game had "lingered" with players. In *St. Error Hospital*, players adopt a bird's eye view as hospital manager who directs staff and manipulates variables. Play-testing indicated that the game-play was engaging but that players were less likely to empathise. For example, one player stopped a nurse leaving the hospital stating, "No breaks! Where are you going missy?". Based on the evaluation, we argue that *Nurse's Dilemma* was more successful than *St. Error Hospital* in engendering empathy and challenging blame culture. We invite the HCl community to experience the games at the demo to see if you agree with us.

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