AN INVESTIGATION INTO THE IMPACT OF INDIVIDUAL DIFFERENCES ON IMMERSIVE LEARNING ENVIRONMENT PREPAREDNESS TRAINING.

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Simulator training, such as Hydra, has been shown to increases:

- Problem solving and decision-making (Elfrink et al., 2010).
- Improving teamwork (Foronda et al., 2013).
- Self-confidence (Blum, et al., 2010; Sinclair & Ferguson, 2009).
Simulation-based learning has also been found to trigger anxiety (Foronda et al., 2013).

Work with the Helicopter Underwater Evacuation Training simulator suggests increases in both self-reported and physiological stress measures.
Individual differences, such as a person’s personality traits can mediate how anxiety inducing simulator training is.

Robinson (2015)
HYDRA MINERVA SUITE
SCENARIO
CURRENT STUDY

- **Aim** – to identify and understand the individual differences that may impact on training effectiveness.

- **Rationale** - High anxiety during training can reduce the effectiveness of training. Therefore we explored the impact of individual differences (person based factors, such as personality traits) on anxiety levels during simulator training.
METHOD

Participants – Thirty-seven undergraduate policing students.

Time 1 – Questionnaires

Time 2 - Stress/Arousal measured

Time 3 – Stress/Arousal measured
RESULTS

Neuroticism + Low mood → Higher anticipatory anxiety
RESULTS
RESULTS

Higher Self-efficiency + Higher arousal → More engagement
The experience proved to be challenging and very interesting.

It is a useful exercise to confront difficult scenarios and decide on an appropriate course of action.

The uncertainty surrounding Hydra could be minimised by allowing students to watch a video about Hydra and what it entails.
The results show that individual differences can have an impact on people’s experiences of immersive learning environment training.
INTERVENTIONS TO SUPPORT LEARNING

Allow students to work in friendship groups.

Stress no/right or wrong answers. Create a non-threatening/non-judgement learning environment.

Stress the importance of the learning for future life (e.g. court experiences).

Show them around the suite and familiarise students with equipment (Nielsen, & Harder, 2013). May using a video.
THANKS

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FURTHER READING


