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Public Summary of Developing a Virtual Stealth Assessment of Orderliness and Exploring the Effect of Environmental Orderliness in Virtual Reality

Master thesis

Educational Science and Technology

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Summary

Self-reported measures are the predominant method to assess job applicants' orderliness in the employee selection process. However, the validity of the measures has been questioned due to response bias and self-knowledge constraints. A potential alternative is stealth assessment, which is a type of embedded assessment in a game that evaluates the players' latent competencies with their behaviours. Combined with VR, a virtual stealth assessment can increase the test ecological validity, offer a natural setting that allows experimental control, and provide substantial behavioural data. Apart from personality, environmental factors can also have an impact on behaviours. The person-organisation fit theory suggests the compatibility between individuals and environments can affect human behaviours. Therefore, for individuals with different orderliness levels, their orderly behaviours can vary depending on the orderliness level of the environment they are in. As such, this study aimed to explore the relation between orderly performance in a virtual stealth assessment and self-reported orderliness and examine how environmental orderliness affects this relationship. To achieve this, 50 participants completed a survey on their perceived level of orderliness and underwent an assessment in a tidy and a messy virtual environment. The results showed a significant but weak relationship between self-reported orderliness and orderly performance in both environments and a moderately strong correlation in the tidy environment for high orderly people. The findings indicated that the current assessment is correlated to an existing measure, and highly orderly people are more likely to behave according to their personality in a tidy virtual environment than a messy one. This study proposed advantages of the current assessment over self-reported measures, such as the enhancement of ecological validity and higher resistance to social desirability bias. This research established the foundation for future virtual stealth assessments and provided insights on the influence of environmental orderliness in virtual reality.