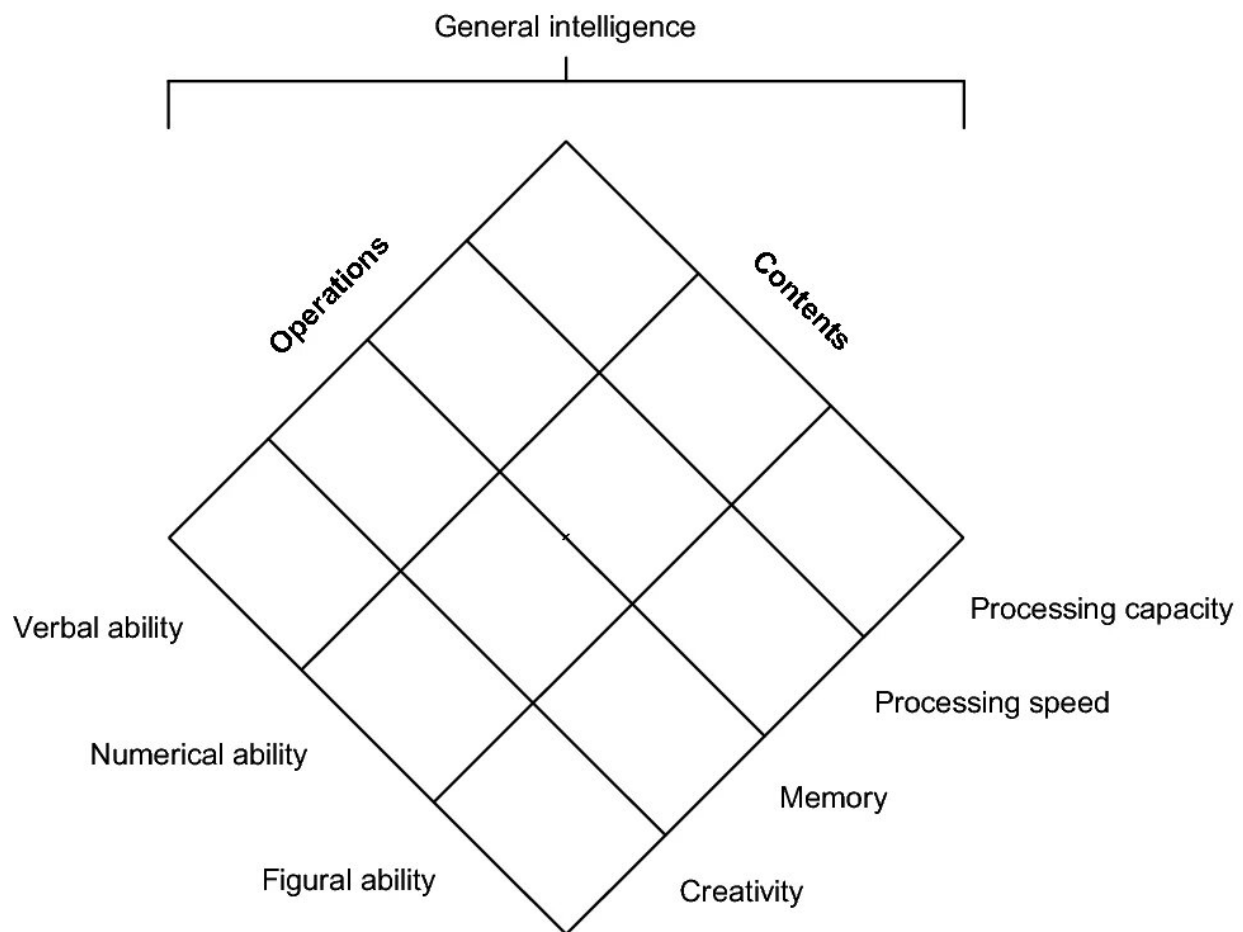


Virtual reality games can be used as a tool in personnel assessment

March 9 2023, by Anna Euteneuer



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BIS model (Jäger et al. 1997, p. 5). Credit: *Virtual Reality* (2023). DOI: 10.1007/s10055-023-00752-9

Virtual reality gamers who finished a given game faster than their fellow gamers also have higher levels of general intelligence and processing capacity. This was the finding of a study conducted by the University of Cologne, the University of Liechtenstein and Vorarlberg University of Applied Sciences.

The results also indicate that virtual reality games can be useful supplementary [human resource management](#) tools in companies for predicting the job performance of an applicant. The study "Intelligence at play: game-based assessment using a [virtual-reality](#) application" by Markus Weinmann of the University of Cologne and his fellow scientists was published in the journal *Virtual Reality*.

Several studies have already shown that video games may indicate or even help to develop intellectual and cognitive abilities. As intelligence is one of the most commonly used predictors for job performance, video games could be interesting for the human resource management.

Although many companies are increasingly using VR technology to recruit candidates, only a few studies have specifically investigated whether and how VR games can be used to draw conclusions about intelligence in this area. The study by Markus Weinmann and his colleagues contributes to bridging the gap between research and practice.

Weinmann and his fellow scientists invited 103 participants to their lab. Under controlled laboratory conditions, they played the commercial VR game "Job Simulator" and completed the short version of the intelligence test BIS-4.

The researchers' analyses show that participants who finished the game faster than others also had higher levels of general intelligence and processing capacity. An increase of 17% in processing capacity correlated with less time spent playing the game (by an average of 3.7

minutes). The results suggest that VR games can be useful supplementary tools in companies for predicting the job performance.

The results are a scientific novelty, as it has hardly been possible to conduct VR studies with state-of-the-art VR hardware. There are thus few studies that have investigated the correlation between behavior in VR and [intelligence](#). "There are already some companies that use games, so-called 'serious games', for recruiting. The new results are in line with this specific application of VR games and show that they can be used for recruiting," said Weinmann.

The scientists intend to continue their research on the potential of video games for practical applications. Among other things, they are investigating how people behave towards virtual avatars in the metaverse.

More information: Alexander Simons et al, Intelligence at play: game-based assessment using a virtual-reality application, *Virtual Reality* (2023). [DOI: 10.1007/s10055-023-00752-9](https://doi.org/10.1007/s10055-023-00752-9)

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