Context-Dependent Memory in Real and Virtual Reality

There is a growing interest in virtual reality, which role has become more useful in our daily use and society. The use of VR to assess learning has already been tested. However, no study has empirically investigated the effect known as context-dependent memory. Wherein the context influences the ability to remember elements from your memory when changing from the context of a real environment and the context of a virtual reality one. In 1975 Godden and Baddeley found that participants had difficulty memorizing items in another context than those in the same context. To test if the change of context from VR and the other way around will affect our memory an empirical study (n=51) based on prior studies was constructed. Randomly assigned groups were made familiar with the given context and did rote-learning, association and recognition tasks. These focused tasks were all given in an as similar experience as possible between the real and virtual environment in order to prevent unnecessary effects caused in the dissimilarity of both environments. Participants reported that when the environmental context was changed, they scored significantly lower than when the context did not change. The results of the experiment were analysed and discussed alongside the hypothesis to show possible indications. The findings provide insights into the adverse short-term context-dependency effects on memory.