

# Collaboration in virtual worlds

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## Abstract

Virtual worlds refer to three-dimensional, computer-generated environment where collaboration is facilitated through the use of shared virtual space. In this research, we investigate the effect of task complexity on team collaboration. We use a puzzle as the collaboration task and manipulate task complexity using the number of puzzle pieces. We hypothesize that task complexity will influence team variables such as team cohesion, satisfaction with team process, and satisfaction with team outcome as well as time taken to complete the task. An experimental study will be conducted where subjects will be assigned to teams of two (i.e., dyads) and then to one of three levels of task complexity (i.e., low, medium, high). The low complexity task consists of 6 (i.e., 2 x 3) pieces of a puzzle, the medium task consists of 12 (i.e., 3 x 4) pieces, and the high complexity task consists of 24 (i.e., 4 x 6) pieces of the puzzle. The time taken to complete the puzzle will be tracked and the subjects' perceptions will be captured using a post-study questionnaire. We will report the findings of this study at the conference.