

Review of: "A Case for Nature in Long-Haul Space Exploration"

Jean-Marc Salotti

Potential competing interests: No potential competing interests to declare.

The paper is interesting. However, important studies are not mentioned. The most important, to my view, is a reference to the Mars 500 experiment, which has been held in Russia in order to simulate the isolated confined environment of a crew of 6 during a human mission to Mars. In that experiment, the crew was very happy with the presence of a small garden, where plants were illuminated by artificial light. However, there was also a 3D virtual garden that could be visited in order to provide the feeling of nature. According to Urbina and Charles, who participated to the Mars 500 experiment, it was not much appreciated. It is not possible to generalize to any virtual environment. Perhaps, if it is more realistic, or if specific odors or sounds are added, it could be better appreciated. Nevertheless, the claim that real plants could be replaced by an artificial device is not supported by the Mars500 experiment.