

IAF/IAA SPACE LIFE SCIENCES SYMPOSIUM (A1)
Interactive Presentations - IAF/IAA SPACE LIFE SCIENCES SYMPOSIUM (IPB)Author: Mr. Karoly Schlosser
Humansys Ltd, HungaryEVALUATION OF A VIRTUAL REALITY BASED OVERVIEW EFFECT EXPERIENCE ENHANCED
WITH A MINDFULNESS MEDITATION EXERCISE – FINDING OUR BETTER SELVES BY
CULTIVATING INTERCONNECTIVITY WITH ONE ANOTHER.**Abstract**

The overview effect is a marked cognitive shift reported by some astronauts when seeing Earth shielded by the thin ozone layer from the hostility of space (White, 2014). During this encounter, the observer experiences an overwhelming state of awe with self-transcendent qualities (Yaden et al, 2016), leading the person to experience interconnectedness and interdependence, realising that our planet is one complete, but fragile ecosystem. Virtual reality (VR) was found to trigger awe experiences and induce a sense of cognitive shifts in participants' world views similar to those found during an overview effect (Stephanova, Quesnel Riecke, 2019). Originally, White stated that the effect requires some experience to “understand” and compared the relatively sudden impact of the Overview Effect to the cumulative realisations one may experience during meditation in Zen Buddhism (White, 2019). The utility of mindfulness and meditation is relatively new in the space industry, with few papers suggesting its importance in astronaut training and behavioural health (Decadi, 2018; Schlosser, 2018; Pagnini, Philips, Bercovitz, Langerm, 2019; Pagnini et al, 2023). Trainings of astronaut candidates, flight controllers, biomedical engineers, support teams and management were trained using forms of mindfulness-based interventions, for example with Acceptance and Commitment Therapy, Mindfulness-based Stress Reduction or Mindfulness-based Cognitive Therapy (Decadi, 2018; Schlosser, 2019; Schlosser, 2021; Schlosser and Whiteley 2022; Schlosser, 2023). This paper explores learning outcomes of a Virtual Reality based Overview Effect Experience Enhanced with a Mindfulness Meditation Exercise. Further this paper evaluates the preliminary benefits of the experience including decreased levels of anxiety, stress and depression, reducing loneliness, and helping to find possibilities to understand interdependence, cultivate self-transcendence and a sense of interconnectivity between ourselves and each other, and with all other living and non-living beings on Our Planet.

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