

Life support Challenges for Human Space Exploration (10)
Supporting Crews for Exploration Missions (2)

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CROSS-CULTURAL ASPECTS, GROUP DYNAMICS IN MOON-MARS SIMULATIONS

Abstract

International interest in psychological functions and issues of group and inter-group functions for space crews has increased as focus has shifted towards longer duration spaceflights. This study was only one subset of data collected during the 100B ILEWG EuroMoonMars Expedition at the Mars Desert Research Station (MDRS), Utah in 2011. The aim of this study was to find out personality, coping, group functioning and interpersonal climate during Moon-Mars analogous missions. The strong positive correlations between task orientation and verbal aggressiveness with three groups functioning scales were observed. High score of Group and Work Environment Scale (GES and WES) variables defined as a positive outcome which was higher than midpoints. So, the extraordinary duration of the mission fronts special challenges in planning for mission support, since very different needs may be motivated by particular phases of the mission. Selection, monitoring and support will similarly be significantly affected by anticipating probable differential characteristics and needs across the travel phases to and from Mars and the period on the planet's surface. So, further study is required to evaluate the cross-cultural aspects and group dynamics in isolated environments in long duration mission. Key words: Work Environment Scale, Group Environment Scale, Group identification