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Behaviour, Performance and Psychosocial Issues in Space (1)

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ONE FOR ALL AND ALL FOR ONE: CREW COPING ON THE INTERNATIONAL SPACE STATION

Abstract

Long-duration space missions, such as those on the International Space Station (ISS), involve international crews of both sexes who are responsible for completing complex assignments in isolated and extreme environments. These conditions allow for many physiological and psychological stressors to emerge. In addition, crews face diverse challenges, which they need to overcome together in order to ensure mission success. The present study examines the coping profile of 17 ISS Expedition crews. We applied the idea of concept mapping in order to examine individual coping strategies within the crew. Compared to our previous work where the focus was on the individual, we focus on the team and the coping patterns among members that contribute to a team coping profile. Qualitatively examining the crew as a whole will hopefully allow us to understand, from the team to the individual, how crews on the ISS function together to overcome problems. In addition, crew commanders were studied, in relation to the crew, to better differentiate their role. Results suggest that an overwhelming number of crews rely on Seeking Social Support and Planful Problem Solving; however, each crew has one or two members who rely heavily on an unique coping strategy. For example, crews have a member that frequently mentions Positive Reappraisal as one of their top coping strategies. Crew commanders mention a variety of emotion-focussed coping strategies, which may be beneficial in an isolated and extreme environment. The presentation will address implications of the research on crew composition and training.