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PSYCHOLOGICAL CHALLENGES OF SPACE TRAVEL

Abstract

Space travel may bring psychological difficulties to the astronauts, such as being confined in a small area with no exit, isolation and exposure to extreme conditions. Observation of these problems is very important to maintaining health and mitigating the impact, that space travel might have on an astronaut. According to previous studies, psychological distress has been singled out as one of the journey-related challenges with space flights. Works reveal that astronauts while on missions in space can demonstrate symptoms of elevated stress, anxiety and mood interruptions, especially in such important stages as launch and re-entry. An additional effect of heading to outer space, especially on long trips is a brutal lack of sensory stimuli alongside the monotony of daily life can bring you to a state of Welshness and isolation. Hence, the misaligned gravity systems of space create difficulties in sensory-motor coordination as well as spatial orientation, both causing motion sickness and disorientation of astronauts. The common research methods that focus on psychological difficulties while in space comprises providing surveys, interviews and behavioural observations in such cases as before, during and after the missions. Psychometric tests are interestingly useful to measure psychological variables such as stress, anxiety, mood, and cognitive function. Extensive studies do prove that in the course of their journey to space, astronauts are facing mental problems. Research supports the idea that the astronauts' inner world may be affected by extra-terrestrial challenges, like isolation, enclosure, or sensory deprivation. Astronauts must be well-equipped with proper strategies for managing stress and resilience to withstand the pressures of their jobs. In this connection, space encompasses emotional challenges that affect crew selection, training, and support. These hurdles can be overcome through pre-flight psychological screening, psychotherapeutic interventions, and the creation of a social network support system. The research focused mainly on space analogues, including those based in Antarctica and underwater, which helps us understand the psychology of long-term space missions. Lastly, the psychological problems of space travelling are diverse and attention is paid to these during the planning and execution of future space programs. Overcoming these obstacles will be beneficial for astronauts psychologically and also will be the key to human missions that go beyond Earth's orbit. Continued research in this field is inevitable as it deals with human psychology in space and forms the basis for human spaceflight safety.