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Behaviour, Performance and Psychosocial Issues in Space (1)

Author: Prof. Nick Kanas
University of California, San Francisco (UCSF), United States, nick.kanas@ucsf.edu

LUNAR COLONIES: PSYCHOLOGICAL AND SOCIOLOGICAL ISSUES

Abstract

INTRODUCTION. The Artemis Program focuses on returning humans to the Moon and establishing a permanent base, which likely will evolve into a lunar colony. Central to planning for such a colony is an understanding of the psychological and sociological issues that will allow people to live comfortably with one another.

METHODS. To elucidate these issues, a review was made of diverse sources related to lunar colonization. These sources included: 1) migratory colonies on Earth, 2) empirical human research conducted on-orbit, and 3) insights deduced from science fiction.

RESULTS. The experiences of Earth migrations suggest that a lunar colony may undergo its own development over time, similar to the three phases discussed by Schwartz: pioneering, consolidation, and stabilization [1]. The governance structure may mirror models imported from Earth, or lunar colonists may choose different forms influenced by the novel conditions found on the Moon. Relations with the colonizing country can vary as well, as has been found in Polynesia and ancient Greece. Economic issues may influence the type of colony that forms, such as happened with the British East India Company. On-orbit empirical research has found that tension can be high initially as people adjust to a new space environment. Studies have shown that people in space may displace interpersonal tension to people on Earth, and a leader with good support skills can positively affect cohesion within the group [2]. Science fiction reminds us that male-female demographic imbalances may exist in a lunar colony, resulting in unusual social units such as the multi-generational line-family portrayed by Heinlein [3]. Due to the closeness of the Earth, political and economic issues may influence the social climate of the colony. Over time, the colonists may tire of Earth control and develop their own identity, leading to a desire for independence or revolution.

CONCLUSIONS. An awareness and understanding of the psychological and sociological issues of lunar colonization can be used for future planning and for study in various analog and simulation environments.

REFERENCES. [1] Schwartz, D.W. (1985). The colonizing experience: A cross-cultural perspective. In: B.R. Finney E.M. Jones (eds.) *Interstellar Migration and the Human Experience*. Berkeley, University of California Press. [2] Kanas N. (2023) *Behavioral Health and Human Interactions in Space*. Cham, Switzerland, Springer Nature Switzerland AG. [3] Heinlein, R.A. (1966, 2018). *The Moon is a Harsh Mistress*. New York: Ace Reprint Edition, Kindle Version.