

IAF/IAA SPACE LIFE SCIENCES SYMPOSIUM (A1)  
Behaviour, Performance and Psychosocial Issues in Space (1)

Author: Dr. Peter Suedfeld  
University of British Columbia, Canada

Dr. Phyllis J. Johnson  
University of British Columbia, Canada

Dr. Jelena Brcic  
University of British Columbia, Canada

## PERSONAL VALUES BEFORE AND AFTER LONG-DURATION SPACEFLIGHT

**Abstract**

Personal values can be defined as trans-situational motivational guides to behaviour. Although enduring, they may change with age and with major life events. Through almost a century of research, several psychological schemas for categorizing values have been developed. S.H. Schwartz's scale of universal values (e.g., 2012) identifies about ten basic values that have comparable importance across cultures. They vary along two orthogonal axes: Self-enhancement to Self-transcendence, and Conservation to Openness to change. The personal values of 14 ISS astronauts were assessed before their launch and again shortly and six months after their return to Earth. The values most frequently noted were Achievement, Self-Direction (both self-enhancing) and Benevolence, concern for the welfare of one's in-group. Benevolence and Self-Direction are (with Self-Direction) the highest values found in cross-cultural comparisons. Female astronauts had higher scores for Power throughout, and for Achievement at second post-test, a combination denoting personally-focused motivation for esteem and social superiority. Astronauts who had one or more children scored higher than non-parents on Tradition and Conformity, together indicating self-subordination to social expectations. Psychological self-protection against threat is high in the values endorsed by the astronauts. The emphasis on self-protection as opposed to self-expansion and growth in an astronaut sample is surprising, as is the higher evidence for Power motivation among women and the social esteem need shown by women's Power-Achievement combination on the final measurement. Parental status was associated with more emphasis on social conformity. In general, the data reflect a socially-oriented set of values. This, in turn, may follow from the relatively recent emphasis on interpersonal relations in the selection and training of space crews, different from the self-focused pattern implied in some depictions of the early U.S. astronauts such as *The Right Stuff* (Wolfe, 1979). References Schwartz, S.H. (2012). An overview of the Schwartz theory of basic values. Accessed 3 March 2016 from <https://www.researchgate.net/publication/271231569> Wolfe, T.(1979). *The Right Stuff*. Macmillan.