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PERSONAL GROWTH FOLLOWING LONG-DURATION SPACE FLIGHT

Abstract

Posttraumatic growth (PTG) is defined as positive psychological change as a result of experiencing major stressful events (Tedeschi Calhoun, 1996). The individual who experiences personal growth does not simply return to a baseline level of well-being, but experiences positive change in such characteristics as self-understanding, values, and life goals. PTG is a multi-dimensional construct with five factors representing potential growth: Personal Strength, New Possibilities, Relating to Others, Appreciation of Life, and Spiritual Change. Because many experiences – including spaceflight – that may be stressful and demanding are nevertheless not traumatic, the PTG has been modified to measure positive change after any challenging event. In the present study, the scores of 17 retired long-duration male cosmonauts on the modified PTG were compared to the means of the 926 participants who had experienced various forms of trauma and formed the norm group for the PTG (Taku, Cann, Calhoun Tedeshi, 2008). The cosmonauts reported higher scores on the dimensions of Personal Strength and New Possibilities compared to the population norms. In addition, we made comparisons based on the age of the cosmonaut, the total time he spent in space, and the station he flew on (MIR only, ISS only, or both MIR and ISS). Those in the oldest age bracket, those who spent more than a year in space, and those who flew on both MIR and ISS were most likely to experience changes in the domain Appreciation of Life. In conclusion, it appears that cosmonauts have experienced positive personal growth following their space flights. Differences across demographic variables, as well as additional psychosocial changes as the result of the flights, were observed and will be discussed in detail.