Exercise, Life Satisfaction and Depressive Symptoms among Individuals with Pediatric-onset Spinal Cord Injury
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Introduction
- Engaging in regular physical activity (PA) and exercise has been linked with mental health benefits (i.e., satisfaction with life, fewer depressive symptoms) (Rangul, Bauman, Holmen, & Midthjell, 2012).
- Individuals living with a spinal cord injury (SCI) often times report none to little participation in PA (Martin Ginis, et al., 2010).

Objectives
1. To explore the relation between exercise, satisfaction, with life and depressive symptoms among a sample of adults with pediatric-onset SCI
2. To examine whether these relations differ depending on level of injury (i.e., paraplegia, tetraplegia)

Method
Participants
- Participants were (N = 457) current & former patients of a pediatric specialty health care system participating in a longitudinal study on outcomes of pediatric-onset SCI.
- Participants had a mean age of 31.3 years (SD = 5.9, range 18 to 48 years); majority were Caucasian (84%) and male (63%).
- Injuries were sustained prior to age 19 (M = 13.8, SD = 4.4, range birth to 18 years); average injury duration was 17 years (SD = 4.4).
- A majority of participants had an AIS A (69%) SCI, and 54% had tetraplegia.

Procedure
Cross-sectional structured interview survey data included participant demographic, injury, and medical information. Exclusionary criteria were significant brain injury and non-English speaking.

Measures
- Physical Activity/Exercise Participation
  - Participants were asked how often they exercised with a 6-point response scale ranging from 'Never' to ‘Daily’.
- Satisfaction with Life (SWL) Scale
  - Assesses satisfaction with life as a whole (e.g., "In most ways my life is close to ideal")
  - 5-item measure with a 7-point response scale ranging from ‘Strongly Disagree to ‘Strongly Agree’
- Patient Health Questionnaire (PHQ-9)
  - Multipurpose instrument for screening, diagnosing, monitoring and measuring the severity of depression (e.g., "little interest or pleasure in doing things")
  - 9-item measure with a 4-point response scale ranging from ‘Never’ to ‘Nearly Every Day’

Results
- Frequency of exercise did not differ between those with paraplegia and tetraplegia.

Significance & Conclusions
- Findings suggest a positive psychological effect of exercise.
- Still, the benefits may be complex among SCI populations, highlighting the importance of understanding factors that may facilitate exercise participation.

References

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