

Physical Activity and Psychological Functioning (60 hours)

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Aims:

1. To examine the effect of physical activity on psychological functioning – mainly cognitive and affective functioning
2. To examine this effect in relation to aging
3. To investigate the dynamics between psychological processes and exercise behavior
4. To examine the mediating mechanisms between physical activity and psychological functioning
5. To review the research methods assessing the relationship between physical activity and psychological functioning elaborating on the typical problems in this area
6. To improve reading skills and critique of scientific articles dealing with the relationship between physical activity and psychological functioning
7. To learn how to write a research proposal in the area of physical activity and psychological functioning

Specific topics:

1. A review of the psychological factors related to physical activity and methods for measuring them: a) Cognitive factors such as attention, perception, memory; b) Emotional factors such as depression, anxiety and self-perception.
2. Age-related changes in the Central Nervous System affecting cognitive and emotional functioning
3. Measuring physical activity and physical fitness in relation to psychological functioning
4. Research designs
5. Physical activity and cognition – history and mediating mechanisms
6. Physical activity and emotions – mediating mechanisms
7. Methodological, conceptual and design weaknesses within the research literature on physical activity and psychological factors; Issues in questionnaire translation
8. An overview of research on cognition – attention, executive functions, brain functioning – and physical activity – cross-sectional and epidemiological studies.
9. Experimental studies assessing the effect of physical activity on cognitive functions – automatic vs effortful functions, fluid vs crystallized intelligence
10. Physical fitness and cognition – meta-analysis

11. The effect of a single session of physical activity on cognition
12. An overview on research on physical activity and emotional functioning – physical activity depression and anxiety in normal and clinical populations
13. An overview on research on physical activity and emotional functioning – physical activity and well-being
14. An overview of research on emotions – self-perception
15. Physical activity and affect – meta-analysis
16. The effect of a single session of physical activity on mood
17. Quality of life and physical activity – dose response relationship?
18. Motivation - age differences in motivational orientation toward physical activity: An application of Social-Cognitive Theory

Requirements:

1. Class participation
2. Reading assignments
3. Presenting in class an article on psychological functioning and physical activity - in a specific topic chosen by the student
4. Presenting in class a short paper, based on 3 research articles focusing on the specific topic chosen by the student (in the area of psychological functioning and physical activity)
5. An examination

Grade components:

1. Class participation – 5%.
2. An article presentation in class - 10%.
3. A short paper presentation - 20%.
4. Final Exam – 65%.

Bibliography

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