# 60852 - Psychological variables in evaluation and prescription of physical exercise

## **Syllabus Information**

Academic Year: 2020/21 Subject: 60852 - Psychological variables in evaluation and prescription of physical exercise Faculty / School: 229 - Facultad de Ciencias de la Salud y del Deporte Degree: 549 - Master's in Evaluation and Physical Training for Health ECTS: 3.0 Year: 1 Semester: Second semester Subject Type: Optional Module: ---

# **1.General information**

## **1.1.Aims of the course**

## 1.2.Context and importance of this course in the degree

## 1.3.Recommendations to take this course

# 2.Learning goals

## 2.1.Competences

## 2.2.Learning goals

At the end of this course, students will be able to

- to identify the different periods that make up a research about promoting physical activity and to link with theories, models and variables of influence.
- identify different factors that influence the practice of physical activity and sedentary behaviors in adolescents.
- to critically evaluate different intervention possibilities for improving levels of physical activity in adolescents within school and extracurricular intervention contexts.

## 2.3.Importance of learning goals

# 3.Assessment (1st and 2nd call)

## 3.1.Assessment tasks (description of tasks, marking system and assessment criteria)

## 4.Methodology, learning tasks, syllabus and resources

## 4.1.Methodological overview

The methodology followed in this course is oriented towards achievement of the learning objectives. A wide range of teaching and learning tasks are implemented, such as

- MD1 Lectures. Teacher's presentation of the course contents, illustrated with examples.
- MD2 Lectures or conferences by experts. Presentation of contents by an external expert to the University.
- MD5 Problem-based learning. Method of promoting learning with selected real-life problems. Each student identifies
  and analyzes the problem, formulates questions to turn them into learning objectives, looks for information to

answer and interact, thus socializing this knowledge. This type of methodology allows to acquire conceptual knowledge and develop skills and attitudes in a way that becomes an especially interesting strategy to achieve competences.

- MD6 Case study. Method used to study an individual, an institution, a problem, etc. in a contextual and detailed way (analysis processes must be developed). It is also a simulation technique in which a decision has to be made regarding a problem (a case is presented with a conflict that must be solved: strategies to solve conflicts must be developed).
- MD10 Assignments. Preparation of seminars, readings, research, works, memories, etc. to present or submit in class.
- MD12 Autonomous work and study. The study of lectures' contents, which includes any study activity that has not been mentioned in the previous section (studying exams, work in the library, complementary readings, doing problems and exercises, etc.)
- MD15 Tutorials. Teacher's office hours for students to review and discuss the materials and topics presented in the classes.
- MD16 Complementary activities. Voluntary training activities related to the course, but not to the preparation of exams or to the assessment: readings, seminars, attendance to lectures, conferences, videos, etc.
- MD17 Assessment. A set of written, oral, practical tasks, projects, etc. used in the evaluation of student progress.

## 4.2.Learning tasks

The course includes the following learning tasks:

- Lectures (15 hours). Attendance is compulsory.
- Practice sessions (15 hours). Attendance is compulsory. Problem-solving tasks and case studies.
- Autonomous work and study (38 hours).
- **Tutorials** (5 hours). Attendance is compulsory.
- Assessment tests (2 hours). Attendance is compulsory.

## 4.3.Syllabus

The course will address the following topics:

Topic I. Social cognitive theories used to explain PA practice in adolescents.

- 1.1. Eccles model (model expectation / value)
- 1.2. Theory of planned behavior
- 1.3. Transtheoretical model
- 1.4. Social cognitive theory and self-efficacy theory
- 1.5. Self-determination theory (TAD)

Topic II: TAD: Motivational elements in PA practice. Conceptual and practical insights into the theory of self-determination.

- 2.1 Conceptual Approach:
  - Continuum of motivation regarding PA
  - Basic psychological needs
  - Social factors (teacher, parents, friends) that influence the practice of PA
  - Hierarchical Model of Vallerand
- 2.2. Practical approach:
  - Intercultural analysis of SDT
    - \* Methodological problems in the measurement of psychological variables: intercultural perspective
    - \* Example of an intercultural project: EPAPA project
  - Motivational interviewing: advice and guidance

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Topic 1. Health and disease processes from the perspective of the biopsychosocial model.

Topic 2. Methodology for the assessment of psychological variables and behavior disorders: ? Techniques and instruments: Direct methods (self-observation, observation and psychophysiological records) and indirect

(questionnaires and tests, scales, surveys, self-records and interview).

? Behavioral Functional Analysis.

? Clinical diagnosis.

Topic 3. Assesment of psychological variables implied in sedentary behavior:

- ? Reasons to start a physical exercise program.
   ? Beliefs and attitudes about the practice of physical exercise and competition.
- ? Specific social anxiety.
- ? Family and social support.
- ? Psychological variables related to adherence and exercise risks.

Topic 4. Psychological variables related to physical exercise for the improvement of health:

- ٠ Stress
- Attribution style.
- Motivation. ٠
- Self-confidence.
- Social support.
- Attention.
- Activation level. •
- Mood
- Sleep ٠
- Fatigue / fatigue.
- Pain

Topic 5. Negative emotions and their impact on physical and mental health.

? Psychoimmunology: psychophysiological processes and interaction between psychic processes, the Nervous System (SN), the Immune System (SI) and the Endocrine System (SE).

? Co-morbidity of behavioral disorders (anxiety, depression, sleep disorders, chronic pain, fatigue) and physical pathologies (oncological processes, cardiovascular, dermatological, endocrine, gastrointestinal, neurological, respiratory and rheumatological disorders).

Topic 6. "Self-administered" multidisciplinary programs for the improvement of health.

#### 4.4.Course planning and calendar

Further information concerning the timetable, classroom, office hours, assessment dates and other details regarding this course, will be provided on the first day of class.

#### 4.5. Bibliography and recommended resources

http://psfunizar10.unizar.es/br13/egAsignaturas.php?codigo=60852