# APPLIED PSYCHOPHYSIOLOGY, BIOFEEDBACK, AND SCHIZOPHRENIA

New perspectives for assessment, treatment, and monitoring of psychosis

Teacher: Prof Tullio Scrimali

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## Carlo Perris classroom

ALETEIA International, European School of Psychotherapy, - Via Gramsci 6 (95021)
Acicastello (Catania)

Friday, 3 July 2015, 9:00 a.m. to 7:00 p.m.

#### Introduction

Psychophysiology is a scientific discipline that studies a series of biological parameters within Neuroscience that provide reliable information on mental, cognitive, emotional, relational, and neuropsychological processes (Scrimali, 2010 and 2012). Over the last 30 years, due to the development of microelectronics and information technology, an increasingly compact and economical, easy to use tools and methods have been developed that allow for the implementation that began with experimental Psychophysiology as an extension to research laboratories of *applied Psychophysiology* with methods that for Psychiatrists, Psychologists, and Psychotherapists to use with patients in a normal outpatient setting. As part of the integrated treatment of schizophrenia, the Applied Psychophysiology, Biofeedback, and Neurofeedback tecniques are gradually becoming widely used. The workshop, which was already completed with great success in several countries around the world including North and South America, Europe, Africa, and Asia (China, Taiwan, Hong Kong, Japan and Korea), in addition to Italy. This workshop presents a neuroscience-based model of schizophrenia and proposes new methodologies for assessment, monitoring, and treatment of psychosis such as *quantitative electroencephalography*, quantitative *monitoring of electrodermal activity, biofeedback*, and *neurofeedback*.

# **Subjects covered**

### **Entropy of the Mind and Negative Entropy**

A neuroscience-based complex cognitive model for schizophrenia and its treatment.

Contemporary neuroscience and its relationship with cognitive and behavioral therapy (CBT) of schizophrenia

#### **Applied Psychophysiology**

- Parameters of Applied Psychophysiology
- Quantitative electroencephalography (basic introductory notes)
- Exosomatic, tonic and phasic, spontaneous, and evoked electrodermal activity (this topic is dissected in all aspects).

#### **Instrumental Psychodiagnostics**

QEEG Atlantis I, 4x4 and Mini-Q 2 analysis system (presented)

MindSCAN & BFB protocol for monitoring and digital analysis of electrodermal activity (in-depth)

#### **Psychotherapy and Rehabilitation**

Biofeedback, Mindfulness Based Biofeedback, Neurofeedback

Monitoring of integrated treatment through QEEG and QEDA

Monitoring of warning signs and prevention of relapses

## **Timetable**

8:30 a.m. to 9:00 p.m.: Registration

9:00 a.m. to 10:30 p.m.: First morning session

10:30 a.m. to 11:00 p.m.: Coffee break

11:00 a.m. to 12:30 p.m.: Second morning session

12:30 p.m. to 3:00 p.m.: Lunch break

3:00 p.m. to 4:30 p.m.: First afternoon session

4:30 p.m. to 5:00 p.m.: Coffee break

5:00 p.m. to 6:30 p.m.: Second afternoon session

6:30 p.m. to 7:00 p.m.: ECM (Italian Program for Continuing Medical Education certification via questionnaire)

# **Teaching methodology**

Lectures with the help of multimedia, practical activities, and role-playing.

## Materials for the practical part

Participants may use the following instruments and relative software:

## Neurofeedback and QEEG instrumentation Biofeedback and QEDA instrumentation

Participants will work in-depth with Biofeedback instruments. All workshop participants will undergo psychophysiological assessment procedures relative to electrodermal activity. Thus, acquiring important information on their psychophysiological personality and risk level for *stress related discomfort*.

# Registration

The workshop has a limited number (30) of seats and <u>is ECM accredited for Doctors and Psychologists</u>. The participation fee is Euro 150. SITCC (Italian Association for Behavioral and Cognitive Therapy Association) Members: Participation is free. Students of Psychiatry and Psychotherapy Specialization Schools: The Participation fee is Euro 100.

## **Information**

ALETEIA School Administrative Office, every morning, 095-7127747 - E-mail: <u>tscrima@tin.it</u> Coffee breaks and lunch breaks are included in the registration fee and will be offered in the *Mediterranean Garden* of ALETEIA School.

