

## Investigating the Link between Perinatal Factors and Psychopathic Traits on a Greek Sample of Adolescents with and without Conduct Disorder

Zacharias Kalogerakis<sup>2</sup>

Psychiatric Department, Psychological Counseling and Information Helpline, Central Athens

Police Medical Centre, Greece

E-mail: zaxarias\_k@hotmail.com

### ABSTRACT

**Title:** Investigating the link between perinatal factors and psychopathic traits on a Greek sample of adolescents with and without conduct disorder

**Background:** Conduct disorder (CD) is a common psychiatric disorder of childhood and adolescence, characterized by a persistent and repetitive pattern of destructive behavior that violates social rules and involves significant impairment in social and/or academic functioning. Children and adolescents with CD have a higher risk of developing a number of dysfunction characteristics, i.e. emotional and behavioral problems, aggression, and psychopathic traits. This study aimed to investigate the relationship between these characteristics, perinatal factors and CD.

**Methods:** The sample consisted of 121 Greek children and adolescents, who participated in the “FemNAT-CD” European study. Fifty-five (45.5%) of the participants had the diagnosis of CD, and 61 (54.5%) were healthy (control group). Basic demographic and perinatal information were collected by using parents’-reported Medical History questionnaire. Participants’ mental health issues, aggression and psychopathic traits were assessed using the Massachusetts Youth Screening Instrument II (MAYSI-II), the Reactive-Proactive Aggression Questionnaire (RPQ), and the Youth Psychopathic Traits Inventory (YPI), respectively. Conduct Disorder (CD) is characterized persistent and repetitive pattern of aggressive and destructive behavior that violates the basic rights of others, social norms, and rules. The disorder is considered as childhood- or adolescence-onset

depending on whether the diagnosis was met before or after the age of 10 years old. Childhood-onset CD constitutes a prognostic marker for its maintenance [2]. The clinical picture of CD varies among children and adolescents, depending upon factors such as age, individual characteristics and social environment, and it involve significant impairments in social and/or academic functioning.. Immersive technology provides a unique solution to treating and caring for patients with complex Neurodegenerative Diseases. Immersive technologies coupled with machine learning services may be used to procedurally generate 3D simulations for use in Virtual/Augmented Reality Health Care. Mothers of participants with CD reported significantly more frequently the occurrence of partner violent behavior during pregnancy vs. the mothers of controls. Mother’s substance-alcohol use during pregnancy, gestational duration, perinatal health problems and birth weight were not significantly related to participants’ behavioral needs, aggression and psychopathic traits based on the whole study population. Within participants with CD, maternal smoking during pregnancy was significantly associated with participant higher scores in anger-irritability (proactive, reactive, and whole), aggression and psychopathic traits; for this group partner violence during pregnancy was associated with higher participants’ psychopathic traits.

**Keywords:** Conduct disorder; Perinatal factors; Behavioral problems; Aggression and Psychopathic traits