

3<sup>rd</sup> World Congress on Mental Health



8th International Conference on Brain Disorders and Therapeutics February 03, 2022 | Webinar







## MENTAL HEALTH

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# 8<sup>th</sup> International Conference on BRAIN DISORDERS AND THERAPEUTICS

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# Vagally mediated Heart Rate Variability: Physiological reactivity to stressors and Hypertension

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Statement of the Problem: Despite the well documented link between the physiological substratum of stress and blood pressure regulation, stress management is not considered in relevant prevention and management approaches. The aforementioned omission is driven by studies examining psychosocial stressors and hypertension that are hindered by variability in the

operational definitions and reactivity measures employed that prohibit the summarization of the evidence for the association between exposure to stressors, subsequent physiological reactivity and hypertension. This is of particular importance as physiological reactivity constitutes a prominent mechanism through which stressors impact blood pressure regulation. The neural substrates of vagally mediated Heart Rate Variability (VM-HRV) indicate that it is able to assimilate such an interfacing mechanism. Indeed, relevant research showed that VM-HRV integrates stressors with individuals' reactivity capturing a prominent biological mechanism through which stressors impact blood pressure regulation. The purpose of this meta-analytic study is to assess the strength of evidence presented regarding the association between VM-HRV and hypertension, examine heterogeneity in individual study results and obtain a single summary estimate of the effect.

**Methodology & Theoretical Orientation:** We systematically searched and identified relevant cohort and case-controlled studies from six databases, including PubMed, Cochrane Library, Embase, LILACS, and Opengray until Dec 2021 that included participants above 40 years of age with SBP above 130mmHg or DBP above 85 mmHg and healthy controls.

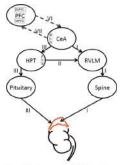


Figure 1: Schematic recresentation of PFC inhibitory influence on the CAA. The sympathetic output of the CAA is endeatonic whiteirs; control from the PFC (M), including the rePFC and the OFC. The reduction of PFC's inhibitory right to the CAA as result of the activation of the EAA (M) leads to the EAAA (M

**Findings:** Preliminary results show that low VM-HRV is associated with significant increases in blood pressure. Similarly, hypertensive patients had a lower VM-HRV compared to healthy normotensives.

Conclusion & Significance: Individuals' physiological reactivity to stressors, measured via VM-HRV, increases the risk for the development of hypertension. As such, its utilization can reinforce current screening initiatives. In addition, current primary prevention and management approaches targeting high blood pressure should consider the utilization of evidence-base interventions for stress management.

#### **Biography**

Spyros Christou-Champi has a strong background in the advancement of multidisciplinary research and more than eight years of hands-on experience in the development of research and innovation initiatives. Through the wide range of research programs he has been involved in, he has worked with both healthy and clinical populations among others Generalized Anxiety Disorder, Depression, and Hypertension on a variety of topics encompassing both basic and applied research aiming to examine and regulate the effects of stress on physical and mental health. His early work leveraged functional magnetic resonant imaging techniques while integrating behavioral research methods enabling the examination of the effectiveness of active avoidance behavior in regulating the stress response. Subsequent work utilized non-invasive brain stimulation paradigms to enhance the regulation of the stress response. This work investigated the effectiveness of non-invasive ambulatory brain stimulation in enhancing individuals' resilience to stressors. Current research focuses on individuals' ability to reduce the influence of stress implemented in populations at high risk for the development of stress deregulation and thus increase likelihood for adverse health outcomes, including elevated arterial hypertension.

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## Associations between Disordered Eating, internal dialogue, and loneliness

#### Surabhi Roy

SWPS University of Social Sciences and Humanities, Poland

This pilot research studies disordered eating symptom severity, internal dialogical activity, and loneliness levels among a convenience sample of 60 Indian females within the age bracket of 18-28. Disordered eating can be described as a sub-clinical level of manifestation of eating disorder symptoms. As the criteria to be eligible for an eating disorder diagnosis are narrowing, this research aims to study a larger representative sample. Internal dialogue, also known as self-talk, has been recognized as a mechanism underlying disordered eating. Extensive research suggests that the self-talk of those suffering from the same is initially benign but gradually gets harsher and more controlling. While the interpretation of one's self-talk, with regards to disordered eating; is widely studied, the associations between disordered eating symptom severity and different functions of self-talk haven't drawn adequate attention yet. Other than the association between internal dialogue and disordered eating, how loneliness is associated with them both is explored in this research. To the best knowledge of the author; this study is the first of its kind to explore self-talk as a function of disordered eating. The lack of research on disordered eating in India is disturbing since there has been an increase in medical consultations wherein patients displayed abnormal eating symptoms. Hence, to increase the validity of the findings of the study, a questionnaire adapted to Indians was used to measure disordered eating.

#### **Biography**

Surabhi Roy has completed her BSc (Hons) Psychology with Management from Heriot-Watt University and is now pursuing her Master's degree in Clinical Psychology from SWPS University of Social Sciences and Humanities, Poland. She has additionally undergone training in Adolescent Mental Health First Aid and has been published in mental health magazines and blogs.

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## The Psychology of football: Psychological factors and football player's performance

#### Kadhim Alabady

Dubai Health Authority, UAE

**Background:** Football psychology can help footballers to train with more focus, play with more confidence. This helps them improving their mind, concentration and leadership skills. Many teams appoint a psychologist to improve team and individual performance. Football psychologists can support footballers to cope with the stress and frustration during the games and to prevent injuries and prepare players who are back from injuries into playing.

**Purpose:** This study aims to identify:

- 1. Role of psychologist within a football team.
- 2. Does a football team require a psychologist or a psychiatrist?
- 3. What are the most common mental issues among football players?
- 4. To assess the role of psychologist in football teams.

**Methodology:** Qualitative study approach was applied specifically in-depth interview with 11pschologists working with European clubs including Dr. Matser a clinical Neuro- psychologist and has 25 years of experience in clinical Neuro- psychology. He worked as the first team psychologist of Chelsea FC with Coach

clinical Neuro- psychology. He worked as the first team psychologist of Chelsea FC with Coach Jose Mourinho for four years. Thirteen sessions were conducted.

#### **Key findings:**

- 1. The role of the psychologist is relevant in football as a player's mental state can decide a game.
- 2. Football psychologists can help in creating a winning team.
- 3. Psychological Skills can help Footballers in Commitment, communication, concentration, control, and confidence.
- 4. Psychosocial development through targeted intervention can promote youth soccer players behavioral responses associated with skills and decision-making.
- 5. Mental issues in football have a big role.
- 6. Football psychologists can improve your emotional control and prevent injuries.
- 7. A Psychologist support footballers to be at the top of their game recognize and improve on their weaknesses and develops their strengths more.

#### **Biography**

Kadhim Alabady is a Fellow of the Faculty of Public Health UK (FFPH) and Fellow of the Royal College of Physicians and Surgeons of Glasgow (FRCP – Glasgow). He holds a Doctorate degree in Public Health and Epidemiology, Master degree in Clinical Epidemiology (MSc), Master degree in Public Health (MPH), all from The Netherlands Universities with broad experience in driving Research and Development (R&D) strategies and operations. He is registered as Epidemiologist Grade A with The Netherlands Epidemiological Society. He has numerous publications in the UK in Mental Illnesses, Cancer, Cardiovascular Diseases, Diabetes, Dementia, Autism, COPD, Population Health, Road Casualties' Infectious Diseases, Vaccination, and others.

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## Questions Effect of Psychology on:





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## How to apply Artificial Intelligence in estimating Mental Illnesses, 2021

#### Kadhim Alabady

Dubai Health Authority, UAE

**Background:** Mental health is without doubt one of the most vital aspects of any child's development. It is an essential part of children's overall health and has an impact on the child's physical health and their ability to be successful. Mental health increases children's opportunity to live up to their full potential and do what is best for themselves and the people around them.

Purpose: The purpose was to estimate the expected number of children or adults with mental disorder through.

**Method:** In order to carry out this assessment we applied qualitative modeling (Artificial Intelligence approach) and quantitative methodology.

#### **Key findings:**

- 1. Artificial intelligence can be used as tools to measure the differences level of actual registered cases with ASD and compared with the expected cases with foe a general population.
- 2. Annual birth figures can be applied to estimate the risk of developing autism spectrum disorder (ASD) in future.
- Studies of eating disorders are so effective to determine the needs of required services for girls aged 13–19 years affected with anorexia nervosa and bulimia nervosa.
- 4. An estimated 5% of children and 2.5% of adults have ADHD. ADHD is often first identified in school-aged children when it leads to disruption in the classroom or problems with schoolwork. These figures can be applied to assess the expected number of people with ADH in the community.
- 5. Applying the postnatal depression prevalence rates (10–15%) to the number of annual total live births or pregnancies in estimating postnatal depression among women.

### **Biography**

Kadhim Alabady is a Fellow of the Faculty of Public Health UK (FFPH) and Fellow of the Royal College of Physicians and Surgeons of Glasgow (FRCP – Glasgow). He holds a Doctorate degree in Public Health and Epidemiology, Master degree in Clinical Epidemiology (MSc), Master degree in Public Health (MPH), all from The Netherlands Universities with broad experience in driving Research and Development (R&D) strategies and operations. He is registered as Epidemiologist Grade A with The Netherlands Epidemiological Society. He has numerous publications in the UK in Mental Illnesses, Cancer, Cardiovascular Diseases, Diabetes, Dementia, Autism, COPD, Population Health, Road Casualties' Infectious Diseases, Vaccination, and others.

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