



The **3<sup>rd</sup>** International  
**ANXIETY**  
23- 24 November, 2016 Congress

**Abstract book**

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## Abstract Book of the 3<sup>th</sup> International Anxiety Congress

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### Oral Presentations

#### O1

##### The Importance of Anxiety and Stress Relief Programs

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The Neuroscience Journal of Shefaye Khatam, 2016; 4(S1): O1

Stress is a physiological reaction to the ever-increasing demands of life. After each stressful event, the body should be returned to a normal relaxed state. However, continuous stress of modern life sometimes put the subjects at risk of developing a range of diseases; from psychosomatic to anxiety disorders. Stress management program gives a range of tools to reduce the impact of stress and prevent its complications. Stress and anxiety relief enhances human abilities and resources and has a great impact on public health. Higher stress levels leads to higher healthcare costs and lower productivity, which causes the loss of economic resources. To run an appropriate stress relief program will promote the public health and prevent waste of resources.

#### O2

##### Posttraumatic Stress Disorder and Substance Use Disorder: A Review of the U.S. VA/DOD Clinical Practice Guidelines and the Utility of Integrated Care

Christi W. Cabrera

Renewing Spirit: An Anxiety & Wellness Practice, Tallahassee, FL, USA

The Neuroscience Journal of Shefaye Khatam, 2016; 4(S1): O2

Post-traumatic stress disorder (PTSD) is a common

mental health condition among military veterans, and research indicates that lifetime prevalence rates of PTSD among military veterans are higher than that of the general population (SAMHSA, 2007). The treatment of PTSD is often complicated by issues of comorbidity, such as substance use disorders, and treatment outcomes are poorer when comorbid issues are present. In addition to exacerbating each other, PTSD and substance use disorder have a functional relationship (Kehle-Forbes et al., 2016), as PTSD symptoms contribute to urges and cravings. Given concerns about difficulty reducing or abstaining from substances during trauma-focused therapy, interventions for treating comorbid PTSD and substance use are often approached sequentially rather than concurrently, despite promising data supporting integrated treatment. The U.S. VA/DOD clinical guidelines will be used to discuss recommendations for initial evaluation, assessment and psychosocial treatments for PTSD, while highlighting the benefits of using integrated models of care for comorbid PTSD and substance use. The benefit and utility of integrated mental health staff in primary care settings will also be discussed as a resource for initial evaluation, triage, and enhancing motivation towards engaging in integrated treatment.

#### O3

##### Review of Evidence-Based and Experimental Treatment of Posttraumatic Stress Disorder

Markus Burgmer

Department of Psychosomatics, University Hospital Münster, Münster, Germany

The Neuroscience Journal of Shefaye Khatam, 2016; 4(S1): O3

Post-traumatic stress disorder (PTSD) is a distressing condition, which is often treated with psychological and/or pharmacological therapies. The talk will give information about current treatment regimes in PTSD which haven proven evidence in reviews and meta-analysis. Furthermore, new and somewhat experimental

treatments will be presented to provide insights into new treatment approaches.

#### O4

### Cognitive Rehabilitation Therapy Implications for Treatment of PTSD

*Seyed Ali Ahmadi Abhari*

Tehran University of Medical Sciences, Tehran, Iran

The Neuroscience Journal of Shefaye Khatam, 2016; 4(S1): O4

Cognitive rehabilitation therapy is an effective therapeutic program to restore functioning and compensate cognitive deficits of numbers of involved traumatic brain injury individuals as well as many psychiatric patients, of them PTSD in particular. Specific skills and metacognitive strategies help patients to create self-awareness and learn how to monitor these skills. Metacognitive training improves patients' ability to think about their own thoughts and behaviours. It may build upon brain trauma involving memory, executive functions, attention activities, planning, and thought processing's. Improvement of quality of life in term of person's ability to care for him, complete tasks and interact with people is anticipated by implementation of CRT program. Community service programs such as supporting family, employment, education, health care, recreation and so, as a part of CRT program can be stimulated and promoted. Co-occurring known or unknown traumatic brain injury and PTSD can affect treatment of patients. Impairments in attention, concentration and memory, self-destructive or reckless behaviour as well as personality changes, reduced range of affects make PTSD treatment difficult. The recommendations proffered for treatment of these syndromes are informed by the researches for PTSD treatment by CRT.

#### O5

### Trauma and Stressor Related Disorders (Specially PTSD) in DSM-5

*Mohammad Reza Khodaie Ardakani*

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The Neuroscience Journal of Shefaye Khatam, 2016; 4(S1): O5

Trauma and stressor related disorders include disorders in which exposure to a traumatic or stressful event is listed explicitly as a diagnostic criterion. These include reactive attachment disorder, posttraumatic stress disorder (PTSD), acute stress disorder, and adjustment disorders. Psychological distress following exposure to a traumatic or stressful event is quite variable. In some cases, symptoms can be anxiety or fear but many individuals who have been exposed to a traumatic or stressful event may exhibit other symptoms like

anhedonia, dysphoric, angry, aggressive or dissociative symptoms. Because of these variable expressions of clinical distress following exposure to catastrophic or aversive events, the aforementioned disorders have been grouped under a separate category in DSM-5. Differences between DSM-IV and DSM-5 about PTSD are: The essential feature of PTSD is the development of characteristic symptoms following exposure to traumatic events. Emotional reactions to traumatic event (e.g., fear, helplessness, horror) are no longer a part of Criterion A. The clinical presentation of PTSD varies. In some, fear based re-experiencing, emotional, and behavioral symptoms may predominate. In others, anhedonia or dysphoric mood states and negative cognitions may be most distressing. In some arousal and reactive-externalizing are prominent, while in others, dissociative symptoms predominate. Criterion A4 does not apply to exposure through electronic media, television, movies, or pictures, unless this exposure is work related. Criterion D (Negative alterations in cognitions and mood associated with the traumatic event) was added. PTSD can occur at any age, beginning after the first year of life. Symptoms usually begin within the first 3 months after the trauma but may be delay of months. There is abundant evidence for what DSM-IV called "delayed onset" but is now called delayed expression," with the recognition that some symptoms typically appear immediately and that the delay is in meeting full criteria.

#### O6

### "Secondary Traumatic Stress Disorder" in Iranian War Veterans' Wives with PTSD

*Seyed Mehdi Saberi<sup>1</sup>, Gholamreza Karami<sup>2</sup>, Ardeshir Sheikhezadi<sup>3</sup>, Seyed Ahmad Vaezi<sup>4</sup>, Armindokht Ahmadi<sup>1</sup>, Jalal Sayani<sup>5</sup>*

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The Neuroscience Journal of Shefaye Khatam, 2016; 4(S1): O6

To investigation of secondary traumatic stress disorder in wives of Iranian war veterans with post-traumatic stress disorder. 43 wives of Iranian war veterans who had participated in Iran-Iraq war and were diagnosed with PTSD, voluntarily entered in this study. The veterans were treated by psychiatrists of veterans' organization, Tehran, Iran. Each woman completed a short questionnaire to determine socioeconomic data and a modified secondary traumatic questionnaire to appoint the symptoms of secondary traumatic stress. All of 43 women had some symptoms of secondary stress and 54% of them met the diagnostic criteria for secondary traumatic stress disorder. Women who met the

criteria had lower education, were married longer and had lower socioeconomic facilities than those who had not the diagnosis. A major group of wives of Iranian war veterans with PTSD suffer of secondary traumatic stress. They have to support and take care of their disabled husbands for many years. Prolonged marital life, lower level of education and poorer economic status can led to severity of stress in veterans wives. So, any treatment program offered to veterans with PTSD must consider the traumatization of their wives. It seems, despite of familial support given by “Iranian organization of war veterans”, the wives of veterans need to more attention.

**O7**

### **The Mechanistic Role of Sleep in Posttraumatic Stress Disorder**

*Sean Drummond*

School of Psychological Sciences, Monash Institute of Cognitive and Clinical Neurosciences, Monash University, Melbourne, Australia

The Neuroscience Journal of Shefaye Khatam, 2016; 4(S1): O7

Around 75% of civilians have experienced at least one traumatic event in their lives, and this number is considerably higher in many parts of the world, as well as in military veterans and first responders. Of those exposed to trauma, 15-25% will develop Posttraumatic Stress Disorder (PTSD). PTSD extracts enormous economic, health, and quality of life cost. Thus, it is critical to understand mechanisms underlying PTSD and modifiable factors influencing those mechanisms. Fear conditioning and fear inhibition are among the most fundamental mechanisms involved in development, maintenance, and treatment of PTSD. Developing fear extinction and safety signal learning, as well as retaining them over time, are critical to recovering from PTSD. A growing body of research shows sleep, particularly REM sleep, may support the acquisition and recall of fear inhibition. Animal studies report REM sleep disruption interferes with acquisition of fear extinction, as well as the subsequent ability to consolidate and recall extinction learning. This effect on recall is critical, as extinction recall is the strongest predictor of intact long-term extinction. Although few in number, studies translating these findings to humans also support the hypothesis that REM sleep is important for extinction learning and recall. This talk will review the latest of these human studies linking REM sleep to fear inhibition, as well as examining the impact of sleep deprivation on fear inhibition, and implications for improving treatment will be discussed.

**O8**

### **The Impact of Physical Activity on Posttraumatic Stress Disorder**

*Simon Rosenbaum*

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The Neuroscience Journal of Shefaye Khatam, 2016; 4(S1): O8

Posttraumatic stress disorder (PTSD) occurs following exposure to potentially traumatic experiences such as those regularly encountered by emergency service workers (police, ambulance and firemen/women) and servicemen/women. PTSD is associated with high rates of somatic comorbidities including metabolic syndrome contributing to an excess mortality rate due to preventable cardiovascular diseases. Interventions targeting physical activity have repeatedly been shown to be efficacious in the augmentative treatment of a range of mental disorders including major depressive disorder, anxiety disorders and schizophrenia while simultaneously improving physical health problems, yet relatively few studies have investigated the specific impact on PTSD. This talk aims to provide an overview of the available literature regarding physical activity and PTSD with specific reference to the first published clinical trial of exercise for severe PTSD, conducted in Sydney, Australia. Results from a recent meta-analysis of four unique RCTs (n = 200) will also be discussed as well as implications for clinical practice and future research. Based on the available evidence, there is reason to be optimistic regarding the role of physical activity interventions as a feasible and scalable component of treatment for PTSD.

**O9**

### **The Impact of Neuroscience in Understanding Posttraumatic Stress Disorder**

*Markus Burgmer*

Department of Psychosomatics, University Hospital Münster, Münster, Germany

The Neuroscience Journal of Shefaye Khatam, 2016; 4(S1): O9

Post-traumatic stress disorder (PTSD) is a disorder which might occur in subjects after experiencing a traumatic life event. The underlying etiology of this disorder is still unknown but malfunction of the brain's anxiety network is discussed. Therefore, neuroscience research might give new insights about the neurobiological mechanisms of PTSD. The talk will give a systematic overview about the neuroscientific research of the past 20 years, the neurobiological hypotheses which are currently favored and the upcoming questions which should be answered in future studies.

**O10**

### **Psychological Analysis of Ideal and Well-Developed and Calm Personality from Islamic Points of View**

**Gholam Ali Afrooz**

University of Tehran, Tehran, Iran

The Neuroscience Journal of Shefaye Khatam, 2016; 4(S1): O10

Broadly speaking, the Holy Quran as the most sublime heavenly message is a book of human life. Since, the Life Creator, the sender of this holy book, is the Creator of human body and mind. Human mental activity starts from about 16 weeks of fetal life with the blow of divine spirit into the fetus. At this point, we observe the beginning of mental and psychological activities and the emergence of first motor movement of the fetus. In fact, this is the beginning of human psychological growth and development. Part of the psychological state of children and adolescents is under the influence of psychological conditions prevailing during the period of fetal development. From the viewpoint of the Holy Quran, the formation of human personality is defined and mapped as a pure family tree, a stable tree full of branches and blossoms away from any stressful status. The pivotal foundations of this balanced and transcendent tree is secured on Fitrah or Innate (primordial human nature), rationality, morality and spirituality, and therefore, is universal. One of the main processes of the human Innate state is to find the secrets of the universe and seeking God, because all humans are created curious and explorer, and curiosity is the basis of god-seeking and the essence of mental creativity. This is why from the viewpoint of the Holy Quran, reflecting on the natural phenomena is considered as a sign of a developed human being and preoccupation with personal status is considered obscene and indecent. In fact, the god-seeking fitrah of humans establishes their truth-seeking and truth-endorsing ideas and provides them with an insight that helps them take the path of truth forever. Divine fitrah is the direction-finder of human personality perfection, and man can shed light on his path using this direction-finder in addition to his own reason and faith. So, one of the main components of developed human personality from the Holy Quran's viewpoint is being intuitive, calm and wise. Insight and sincerity of the heart provides the basis for growth, prosperity and perfection of human character. The rule of rationality on human thought, speech and behavior, from the Holy Quran's viewpoint, is another significant component of the desired personality of a well-developed human. Well-developed and Quran-loving human beings are accustomed to reflection, thinking, reasoning and truth. Therefore, from Quran's viewpoint, foolishness, ignorance and intellectual obstinacy is considered as one of the enemies of the proper development of the human personality. Developed human beings in Quran's viewpoint, always plan with insight and thinking in their personal and social life, and act with calmness, piety, freedom and rationality. In fact, in a sense, religiousness and wisdom or faith

and wisdom, are always adjacent and are like two wings to fly with. The reason and religion are so much fused into each other that the Holy Prophet Muhammad (PBUH) says the religion is the same as the wisdom and the wisdom is the same as the religion, religion is the external wisdom and the wisdom is the internal religion. In Quran's viewpoint, internalizing moral and spiritual perfection is other main component of the personality of well developed human beings. The Holy Quran in many chapters (suras) and verses (ayats) beautifully describes the the moral, spiritual and behavioral characteristics of well developed human beings. From among these features are: developed humans are calm and moral, enjoying peaceful mind and serenity with no abnormal anxiety and depression, truthful, honest, they have unity of character, between their thought and word and deed a glorious unity prevails (they are not accustomed to hypocrisy and duplicity), these people are loyal, faithful, committed, and trusted by others. People who have developed characters based on Quran's values, who possess high-quality personal health, never move away from the path of purity and chastity and do not fall into the abyss of sensual and sexual deviation. People who have Quranic personality, are theist, resurrection-sighted, calm-hearted, cordial, hopeful and hope-giving, beneficent, positive-thinking, patient, effortful, and believing. People who possess Quranic developed characters, have the highest mental health and well-being, and are always humble, modest, contented, forgiving, generous and open-handed, and accustomed to praying and mysterious dialogue with their Creator. And finally, the dignity of the soul, spirituality, patience and empathy, forgiveness and sacrifice. People-orientedness is the other components of Quranic developed characters which will be covered in detail in the full paper with mentioning the documentations from the Holy Quran.

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**O11**

**Cognitive Appraisals and Social Support in Predicting Children's Posttraumatic Stress**

*Caitlin Hitchcock*

Medical Research Council, Cognition and Brain Sciences Unit, London, England

The Neuroscience Journal of Shefaye Khatam, 2016; 4(S1): O11

Cognitive appraisals of the trauma play a key role in children's adjustment following a traumatic event, but how these appraisals develop is not well understood. Cognitive models of posttraumatic stress disorder (PTSD) suggest that social support is a key influence on the development of appraisals, and we aimed to explore this relationship further. As predicted by cognitive models of PTSD, we hypothesized that cognitive appraisals would mediate the relationship between social support and symptom development.

Ninety seven children (Mean age = 12.08 years) were assessed at one month and six months following a single incident trauma. We administered self-report measures of cognitive appraisals, social support, and a diagnostic interview for PTSD. Results indicated that cognitive appraisals at one month post-trauma mediated the relationship between social support at one month post-trauma, and PTSD severity at follow-up. Differences in this relationship were observed between child-reported social support and parent-rated ability to provide support, suggesting that the child's perception of support was vital in appraisal development. Firm evidence was provided for the application of cognitive models of PTSD to children.

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### O12

#### **The Role of New Communicative Media in Creating Anxiety in Teenagers**

*Fariborz Dortaj*

Allameh Tabataba'i University, Tehran, Iran

The Neuroscience Journal of Shefaye Khatam, 2016; 4(S1): O12

Nowadays, new informational and communicative media, and the rate of their use by individuals have caused deep metamorphoses in the material and non-material dimensions of human lives, and individuals' mental regulation. The use of these media, especially the Internet and virtual social networks, among Iranian teenagers has unnoticeably increased, and providing numerous facilities and options makes them get familiar with new stimuli and a variety of behaviors; and encountering a real world, such a virtual space causes a rampancy of anxiety disorders for teenagers who are in the stage of formulating and developing identity and consistently discovering values and internalizing them in the virtual world. Accordingly, these media overuse has damaged their family and social lives, and leads into ignoring their close and warm interaction with family members, social life, hobbies and entertainments and other social activities in the real setting. Research has shown that new communicative technologies have changed individuals' attitudes toward themselves, others and the world; therefore, their identities have changed. Using the social media, usually through getting negative feedbacks from peers in the virtual setting, on-line watching stressful events happening in the others' lives, computer games, and tolerating the nervous pressures caused by long-hour activities with social networks and the like, create anxiety impulses in individuals. Therefore, the correct appreciation and understanding of the relationship between the new communicative media usage and the emergence of anxiety and its consequences can be fruitful for the clinical professionals and educational psychologists in achieving new information in treating anxiety.

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### O13

#### **Art Therapy and PTSD in Children**

*Kaveh Moghaddam*

Department of Exceptional Children Psychology, Science and Research Branch, Islamic Azad University, Tehran, Iran

The Neuroscience Journal of Shefaye Khatam, 2016; 4(S1): O13

PTSD or post traumatic stress disorder is one of the most important psychological disorders in children in which symptoms such as anxiety and depression can be seen. Beside the strategies like CBT or Cognitive Behavioral Therapy and psychotherapy art therapy is one of the most important strategies which can help to children with PTSD to cope with this disorder. According to art therapy studies and researches, painting, clay and music can help to projection of their feelings and emotions and then these can help to reconstruction of their "Ego". Also, their insight will be changed through art elements. Indeed art therapy is a palliative strategy and can be applied along with other psychological interventions.

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### O14

#### **Autobiographical Memory, Trauma, and the Development of Memory Interventions**

*Caitlin Hitchcock*

Medical Research Council, Cognition and Brain Sciences Unit, London, England

The Neuroscience Journal of Shefaye Khatam, 2016; 4(S1): O14

Autobiographical memory, that is, our memory for personal life experiences, is integral to our sense of self. However, the experience of trauma can create distortions in how our memories are brought to mind. In particular, trauma can produce an overgeneral memory style, which relates to the development of both PTSD and depression. However, theory states that immediately following a traumatic event, overgeneral memory may actually be an adaptive coping style, and that it may only become maladaptive if it persists over time and becomes chronic in use (Williams et al., 2007). We completed a longitudinal examination of the trajectory of overgeneral memory in children and how this related to psychopathology immediately following trauma. We assessed symptoms of PTSD and depression, overgeneral memory and other cognitive processes at one month, three months, and six months following a traumatic event. Results showed no relationship between overgeneral memory and PTSD at one or three months post-trauma, but that overgeneral memory was protective against PTSD at six months post-trauma. We suggest that the flexibility of autobiographical memory retrieval strategies is important in the course of PTSD, and this presentation will briefly introduce a memory flexibility training programme for PTSD which we will assess with our collaborators in Iran in 2017.

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## O15

### Trauma & Addiction

*Reza Daneshmand<sup>1</sup>, Jafar Mirzaee<sup>2</sup>*

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The Neuroscience Journal of Shefaye Khatam, 2016; 4(S1): O15

Life traumatic experiences are major health problems in different communities. Early trauma exposures such as physical and sexual abuse, and midlife traumatic events like exposing to disasters are predisposing and precipitating risk factors for many psychiatric disorders, although many people facing to trauma may not show any problematic symptoms and are quite resilient. Neuropsychiatric evidences show that exposing to a traumatic event, especially in childhood, may render structural and functional changes of neural system and brain, leading to psychiatric disorders including major depressive disorder, post-traumatic stress disorder (PTSD), schizophrenia and substance use disorder (SUD). The relationship between trauma exposure and SUD has been well established. About 2/3 of substance users have a history of exposing to trauma and alcohol and substance use are leading co-morbid conditions in male and female cases of PTSD. There are many reasons people exposing to trauma tend to use substances, like self-medication, avoiding negative experiences and emotions, recreation and re-experience of traumatic events and etc. This review indicates of some reasons of this comorbidity.

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## O16

### How Do Concepts of Evolutionary Psychology and Evolutionary Psychiatry Explain Anxiety Disorders?

*Serge Brand*

Psychiatric Clinic of the University of Basel, Basel, Switzerland

The Neuroscience Journal of Shefaye Khatam, 2016; 4(S1): O16

Our ancestors without fear, worry and anxiety are not our ancestors, as organisms without defense systems were extinct. Therefore, while behavior such as fear and anxiety are useful to prevent harm, the exaggerated form, that is, anxiety disorders, has more costs than benefits. Likewise, while a panic attack is a normal and useful response in the face of life-threatening danger, a panic disorder results from false alarms in anticipating possible danger. Or simply put: People suffering from anxiety disorders and panic attacks apply ‘successfully’

their genetically enrooted defense system, though, in a context, where the risk of harm is actually very low. We present a succinct introduction to evolutionary psychology and psychiatry, focusing specifically on anxiety disorders and depressive disorders. Mentioning both anxiety and depressive disorders at the same time makes sense, as depression might be considered a response following perceived or actual danger, whereas anxiety concerns threat or impending danger, that is, the anticipatory phase.

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## O17

### Social Cognition in Patients with Anxiety Disorders

*Dena Sadeghi Bahmani*

Psychiatric Clinic of the University of Basel, Basel, Switzerland

The Neuroscience Journal of Shefaye Khatam, 2016; 4(S1): O17

Social cognition is defined as the capacity to generate, perceive and interpret and responses to the dispositions, intentions and behaviors of other people. It includes different specific cognitive processes that underlie social interactions. Four domains of social cognition are named Theory of Mind (also known as mentalizing), emotion recognition, social perception and attributional style. Anxiety disorders are the most prevalent psychiatric illnesses. In addition to suffering from important psychiatric comorbidity, people with anxiety disorders show markedly functional impairment and poorer quality of life than healthy controls. Social cognition deficits could thus explain part of the functional impairments and poorer quality of life in anxiety disorders. This can be especially true for those anxiety disorders with affected social abilities, such as social phobia (SP), where emotion recognition appears to be disturbed, and posttraumatic stress disorder (PTSD) which emotional numbing- the core symptom of the illness- is known to impact interpersonal relationships. As SP and PTSD are often reported as particularly socially-impaired anxiety disorders, it is expected that more important social cognition deficits will be found among people with these diagnoses. Therefore, we summarized and quantified available data regarding four domains of social cognition, in people with a diagnosis of anxiety disorder, especially SP and PTSD.

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## O18

### Role of Adult Hippocampal Neurogenesis in Anxiety Disorders

*Sajad Sahab Negah*

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The Neuroscience Journal of Shefaye Khatam, 2016; 4(S1): O18

Neurogenesis occurs throughout life in several regions of the brain. In this lecture, a new sight for the role of the dentate gyrus and adult hippocampal neurogenesis in anxiety disorders will be discussed. The region that has obtained the most attention for its involvement in the neurogenesis of affective and anxiety disorders are the hippocampal and dentate gyrus. Evidence strongly suggests that adult-generated hippocampal neurons are involved in the hippocampal circuitry via projections in the mossy fiber pathway, and contribute to hippocampal functions relevant to the mood and memory functions. Based on these initial observations, adult hippocampal neurogenesis has been shown to be required for some, but not all, of the behavioral effects of anti-depressants. It has been reported that chronic anti-depressant treatment increased subgranular zone proliferation and neurogenesis. Regard to this background, this finding generalized to different classes of anti-depressants pharmacotherapeutics. However, one important remaining question is whether increasing levels of adult hippocampal neurogenesis is sufficient for anti-depressant-like effects on behavior. In a recent study, it has been shown that neural stem cells in the adult mammalian brain provide a resource that may be harnessed to treat various disorders. On the other hand, it has been proposed the development of new pro-neurogenic compounds may therefore have therapeutic potential for patients who display pattern separation deficits, such as post-traumatic stress and panic disorders. In conclusion, novel strategy to treat anxiety disorders may be achieved by enhancement of adult hippocampal neurogenesis.

## O19

### Recent Developments in the Treatment of Anxiety, Trauma, and Emotional Disorders

*Peter J. Norton*

Monash University School of Psychological Sciences, Monash University FEAR Clinic, Clayton, Australia

The Neuroscience Journal of Shefaye Khatam, 2016; 4(S1): O19

Advances in the treatment anxiety, trauma, and emotional disorders have been the focus of numerous international research efforts, including transdiagnostic approaches, internet-delivered treatments, and combined medication and cognitive-behavioral strategies. Recent research have identified emerging strategies for improving immediate efficacy, availability and dissemination, treatment engagement, and long-term outcomes for the effective treatment of these highly common and disabling mental health conditions. Importantly, treatment efforts have begun to simultaneously target posttraumatic symptoms, anxiety disorders, and disturbances of mood (e.g., depression), as the majority of individuals seeking treatment have multiple diagnoses. Using real case examples and data from recent randomized clinical

trials, the implementation and efficacy of these new treatment approaches will be described and discussed.

## O20

### The Benefits of Increased Physical Activity and Higher Cardiorespiratory Fitness in People Living with Mental Health Disorders, with Specific Emphasis on Anxiety Disorders

*Philip B. Ward*

School of Psychiatry, UNSW Australia, Sydney, Australia

The Neuroscience Journal of Shefaye Khatam, 2016; 4(S1): O20

Evidence has been accumulating for some time regarding the reduced life-expectancy experienced by people living with a mental illness. In developed world settings this can involve a two-decade reduction in life expectancy, whilst in the developing world the gap may be as high as thirty years. Whilst genetic risk factors and suicide contribute to this ‘scandal of premature mortality’, modifiable risk factors such as poor diet and high levels of sedentary behavior play a major role. There is growing recognition of the benefits of increasing levels of physical activity and improved levels of cardiorespiratory fitness in a wide range of psychiatric conditions. Evidence from randomized controlled trials and real-world implementation studies clearly demonstrate improvements in physical health parameters, reduced levels of psychiatric symptomatology, higher ratings of quality of life, and better psychosocial functioning. This talk will review this evidence-base in relation to anxiety disorders. Based on this review, strategies to increase levels of physical activity and reduce levels of sedentary behavior are clearly required in patients with anxiety disorders.

## O21

### Exposure Therapy’s Two Cultures: Anxiety-Reducing vs. Anxiety-Increasing Treatment

*Brett Deacon*

School of Psychology, University of Wollongong, Wollongong, Australia

The Neuroscience Journal of Shefaye Khatam, 2016; 4(S1): O21

Exposure-based cognitive behavioral therapy (“exposure therapy”) is the most effective psychological treatment for anxiety disorders. However, popular exposure-based treatments differ substantially in how exposure is delivered, and emerging research indicates that the effectiveness of exposure is closely tied to its manner of delivery. The author will present research indicating verbal learning, greater sensitivity to proactive interference, and more perseverative errors. Veterans with PTSD diagnoses also evidenced impairments in word fluency and visual attention/tracking abilities.

that there are two exposure therapy delivery styles: an anxiety-reducing and an anxiety-increasing style. Compared to anxiety-increasing therapists, therapists who emphasize reducing anxiety during exposure have higher anxiety themselves, greater negative beliefs about exposure, view their clients as less able to tolerate anxiety, and view exposure as working by providing the client with anxiety-reducing coping skills. Popular evidence-based exposure therapies can easily be classified as emphasizing an anxiety-reducing vs. anxiety-increasing delivery style, and evidence suggests the latter is more effective than the former. Using case examples from clients and clinicians-in-training, the clinical implications of these issues will be discussed.

### Workshop Presentations

#### W1

#### The Role of Art Therapy (Music and Psychodrama) on Improvement of Anxiety in Children with Autism Spectrum Disorders(ASD)

*Kaveh Moghaddam<sup>1</sup>, Hooman Sarabi<sup>2</sup>*

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<sup>2</sup>The actor Trainer, Tehran, Iran

The Neuroscience Journal of Shefaye Khatam, 2016; 4(S1): W1

ASD or Autism Spectrum Disorders are the most strange psychological disorders in which children can't show their emotions, fears and anxiety as soon as the normal children. They suffer from the social interactions, the stereotypic behaviors and verbal skills impairments and these problems can lead to withdrawal and other behavioral problems. Among the psychological strategies, art therapy is one of the most important strategies which can help to these children. Applying music or music therapy can help them to express their feelings such as anxiety via poems and music themes and also music and movements. Also, drama can help them too. Therefore, applying them together can help them to decrease their anxiety and then improvement of self-esteem, motivation and social interactions with other peers. Then, In this workshop these art therapy techniques will be discussed.

#### W2

#### Cognitive Behavioral Approaches for the Treatment of Trauma and Anxiety

*Peter J. Norton<sup>1</sup>, Brett Deacon<sup>2</sup>*

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The Neuroscience Journal of Shefaye Khatam, 2016; 4(S1): W2

This workshop focuses on evidence-based Cognitive-Behavioral treatments for trauma and anxiety, to train mental health professionals (psychology, psychiatry, social work, etc.) and trainees in working with PTSD and related anxiety disorders. Cognitive Behavioral approaches are widely seen as the most effective treatments for these diagnoses. Training will focus specifically on delivering exposure-based interventions, such as Prolonged Exposure for PTSD and Transdiagnostic CBT for anxiety.

At the conclusion of the workshop, participants will:

- understand the basic strategies involved in providing CBT for anxiety and trauma.
- understand the necessary elements of delivering exposure-based treatments.
- be able to begin implementing CBT for trauma and anxiety.

Handouts, materials, and resources will be provided.

### Poster Presentations

#### P1

#### A Review of Neuropsychological Function in Post Traumatic Stress Disorder (PTSD) with Substantial Substance Use Comorbidity

*Jafar Mirzaee<sup>1</sup>, Maryam Peyravi<sup>2</sup>, Reza Daneshmand<sup>3</sup>*

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Neuropsychological approach tries to link behavior with brain functions. One of the structural changes and functional disorders that is, post-traumatic stress disorder (PTSD). This impaired memory function, learning, emotional processing and cognitive and structural changes in the brain. Various aspects of neuropsychological function have been reported to be abnormal in (PTSD); however, the majority of these data come from studies of seriously ill, treatment-seeking samples with substantial substance use comorbidity. The article is intended neuropsychological status, structural changes and outcomes through systematic review from 1995 to 2017 to examine. The methodology of systematic review and select papers for controlled studies of sites Med line, Pubmed, Psycho info, Psycholit is from 1995 to 2017. Results showed that PTSD veterans with substantial substance use comorbidity performed more poorly than the comparison sample on a measure of

These preliminary findings suggest that diagnoses of chronic PTSD in combat veterans are associated with cognitive performance deficits. (Uddo & et al., 1995). Previous research on the neuropsychology of posttraumatic stress disorder (PTSD) has identified several neurocognitive deficits that co-occur with the disorder. However, it remains unclear whether these deficits are due to trauma exposure, PTSD symptomatology or psychiatric/substance abuse comorbidity. Relationships of neuropsychological functioning to measures of psychiatric symptoms and substance abuse were examined. There were very few significant associations between neuropsychological performance and clinical variables, Neuropsychological impairment may not be an invariant feature of PTSD, but when it is present, it may be associated with poorer functional outcomes. (Vanderkok to the Mirzaee 1387), The results of neuropsychological performance in patients with PTSD showed dysfunctional emotional structure. (Moradi, et al., 2012, Mac Nelly 2007, Mirzaee 2015). Navarz this study showed that between war and recalls related to memory performance in sixty years later, there is a relapse (Navarez et al., 2017). Identifying adaptive ways to cope with extreme stress and substance use is essential to promoting long-term health. Memory systems are highly sensitive to stress, and combat exposure during war has been shown to have deleterious effects on cognitive processes, decades later. The veterans with PTSD performed more poorly on measures of attention and abstract reasoning/executive function. In general research shows that people with PTSD can reduce damage in the prefrontal cortex and medial response, difficulty paying attention, concentration, memory and reduce the size of the hippocampus and amygdala activity also increased exacerbated fears and thrilling. Cognitive rehabilitation training, CBT treatment, especially exposure therapy, cognitive restructuring and medication can improve memory function and information processing in patients with PTSD.

## P2

### The Relationship between Alexithymia and Social Anxiety in Inpatients with Schizophrenia

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The current study was aimed to examine the relationship between alexithymia and social anxiety among schizophrenic inpatients. The study was of descriptive and predictive nature. Sixty inpatients with DSM-V schizophrenia were recruited from Niayesh psychiatric

hospital in 2015 in Tehran, Iran. They were interviewed with the Anxiety Disorders section of the SCID for DSM-IV. The Structured Clinical Interview for DSM-IV-TR (Farsi Version), conducted by an experienced interviewer, will be used to determine the diagnosis. The Liebowitz Social Anxiety Scale appeared adequate and reliable in assessing social anxiety disorder in patients with schizophrenia. The Liebowitz Social Anxiety Scale (LSAS) is a 24-item interview that assesses fear and avoidance, in 11 social interactions and 13 performance situations with a 4-point-Likert scale. The cut-off point for social anxiety diagnosis in LSAS was determined 80. The Toronto Alexithymia Scale and Self-scaled Anxiety Scale were administered. The data was analyzed using correlation and regression methods. The results showed insignificant correlations (0/23) between social anxiety, alexithymia in schizophrenic patients ( $p=0.01$ ). Moreover, since the sample in this study was consisted only of middle-aged male Iranian inpatients, it is recommended for future researchers to focus on other sex, age, cultural and ethnic groups.

## P3

### Food and Behavior: Long Chain Poly Unsaturated Fatty Acids and Anxiety

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The anecdote “we are what we eat” in line with the doctrine of Hypocrates in 400 BC “Let food be thy medicine and medicine thy food” are vividly portray the importance of daily regimen in human health and body well-functioning. There is a growing body of evidence that suggests the relative intake of specific nutrients can have a profound effect on physiology of individuals. In the meantime, fats in particular the fatty acids are of particular interest in this regard. Any deviation from evolutionarily adapted fatty acid profile of diet would give rise to mental illnesses such anxiety. A Google scholar search using terms “anxiety”, “diet supplementation”, “fatty acids”, “human brain development”, “human evolution history and DHA”, “poly unsaturated fatty acids” and “highly unsaturated fatty acids” was conducted. The abstract, and, if necessary, the full paper, of any positive ‘search result’ was then scrutinized further to determine whether or not it was valid. Hints showed that there is probable relationship between individuals’ diet and their mental health or illness. Some results clearly depicted that one might suffer from unbalanced  $\omega$ -6: $\omega$ -3 PUFA ratio in their diets. On the other hand, there is a promising venue for safe treatment of mental illness such gestational anxiety using dietary supplementation with  $\omega$ -3 fatty acids. It has also been well documented that subjects suffering from anxiety-like behaviors had increased plasma corticosterone

levels. The “phospholipid hypothesis” has successfully been implemented in anxiety behavior explanation in people with lower daily  $\omega$ -3 PUFAs intake. Literature clearly demonstrated that person might suffer from unbalanced  $\omega$ -6: $\omega$ -3 PUFA ratio in diet with increased plasma corticosterone levels. On the other hand, there is a promising venue for safe treatment of mental illness such gestational anxiety using dietary supplementation with  $\omega$ -3 fatty acids.

#### P4

### Evaluation of Death Anxiety of Patient with Cancer

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Cancer is one of the most common diseases in the world. One of the important psychological factors in these patients is a death anxiety. So this study aimed to investigate death anxiety in patients with cancer in Kermanshah. In this cross-sectional study that was performed on 101 patients with cancer that referred to the oncology department of Imam Reza Hospital, we used Templer Death Anxiety and Demographic Scale and finally data analyzed by using SPSS version 22. The results showed that 64.35% and 88.11% of patients were female and married respectively. The average scores of death anxiety were 9.71. 81.18% of the patients had high death anxiety. Finally, the results showed that death anxiety in this study was significant relationship with some demographic information. The findings indicate high score anxiety of death in the majority of patients with cancer. Due to the high death anxiety in these patients and its psychological effects, psychological interventions and counseling to relieve death anxiety by psychologist is necessary on Oncology departments.

#### P5

### A Review of Memory Cognitive Function in Patients with Posttraumatic Stress Disorder (PTSD)

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Memory impairment is one of the main features of post-traumatic stress disorder (PTSD), There are multiple studies in memory impairment and cognitive function such as memory in a variety of explicit memory, implicit, procedural, active, declarative, revermid ,working, visual, false and autobiographical. The methodology of systematic review were, meta-analyzes and controlled studies of sites Med line, Pubmed, Psycho info, Psycholit is from 1998 to 2016. Jenkins and colleagues in their study found that patients with PTSD associated with damage to the hippocampus in the temporal lobe lesions may reflect issues related to the learning style of visual perception (Jenkins, 1998). The purpose of Moradi et al study was to showed that patients with PTSD in autobiographical memory is more holistic and less specific memories report (Moradi et al., 2010). Jensen and colleagues suggested that previous reports of impaired discrimination performance after medial temporal lobe damage in PTSD patients may reflect impaired learning rather than impaired visual perception. The findings support the fundamental idea that memory is a distinct cerebral function separable from other perceptual and cognitive abilities. (Jensen, 2011). They suggested that even rapidly learned associations can be supported when an incidental encoding procedure termed “fast Mapping” (FM) is used. They tested memory-impaired patients with bilateral damage to hippocampus and patient with PTSD. Participants saw photographs and names of them that were previously unfamiliar. Instead of asking participants to study name-object pairings for a later memory test, participants answered questions that allowed them to infer which object corresponded to particular name. (Christine, 2013). McDermott in his research showed that in patients with PTSD with impaired executive function, working memory is impaired (McDermott, 2016). The researchers found that, explicit memory, implicit, procedural, active, declarative, revermid ,working, visual, false and autobiographical, proprietary significantly are affected in patients with PTSD than other groups (Moradi et al., 2012, MIRZAEI comply, 2015).

#### P6

### The Effectiveness of Didactic Approach on the Reduction of Death Obsession

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Thanatology is the academic study of dying, death and grief. It encompasses thoughts, feelings, attitudes, events and the psychological mechanisms of dealing with them. Death obsession includes ruminations, repetitive, intrusive thoughts or images about death. Death obsession in the nursing profession can occur on a daily basis, and communication with dying patients can be stressful for nurses. Nurses with such emotion need to death education program. Didactic method is one of the approaches to death education program. Aim of this study was the effectiveness of didactic approach on the reduction of death obsession among nurses. The participants were 12 nurses. They were selected randomly from ICU and CCU wards of the Khatom-Al-Anbia General Hospital in Tehran city. The nurses completed the Death Obsession Scale (DOS) before and after intervention. Didactic approach was held in 36 hours in 6 workshops weekly. Data were analyzed through dependent t-test using SPSS/WIN 16.0 program. Results showed that there was a significant difference between pretest and posttest for the didactic approach on the DOS scores ( $T=2.21$ ,  $df=11$ ,  $p<.05$ ). We conclude that didactic approach is useful on the reduction of death obsession and promotion of mental health in the nurses. It is recommended that in psychoeducational interventions related to attitudes towards death and dying, the focus should be placed on a community-based approach.

## P7

### The Prevalence of Social Anxiety in Inpatients with Schizophrenia

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Social anxiety is a frequent, disabling condition but

often unrecognized feature in schizophrenia. The aim of this study was to describe the prevalence of social anxiety among inpatients with schizophrenia. Sixty inpatients with DSM-V schizophrenia were recruited from Niayesh psychiatric hospital in 2015 in Tehran, Iran. They were interviewed with the Anxiety Disorders section of the SCID for DSM-IV. The Structured Clinical Interview for DSM-IV-TR (Farsi Version), conducted by an experienced interviewer, will be used to determine the diagnosis. The Liebowitz Social Anxiety Scale appeared adequate and reliable in assessing social anxiety disorder in patients with schizophrenia. The Liebowitz Social Anxiety Scale (LSAS) is a 24-item interview that assesses fear and avoidance, in 11 social interactions and 13 performance situations with a 4-point-Likert scale. The cut-off point for social anxiety diagnosis in LSAS was determined 80. Specific prevalence of social anxiety comorbidity was 20% in this sample. If these data are confirmed, it is recommendable to use psychological treatments to decrease social anxiety symptoms in schizophrenia patients. Social anxiety disorder may impose an additional burden to patients with schizophrenia, resulting in further decline in their quality of life. Given that anxiety disorders are relatively responsive to treatment, greater awareness of their comorbidity with psychosis should yield worthwhile clinical benefits. Moreover, since the sample in this study was consisted only of middle-aged male Iranian inpatients, it is recommended for future researchers to focus on other sex, age, cultural and ethnic groups.

## P8

### The Role of State-Trait Anxiety and Resiliency in Test Anxiety

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The current study aimed to examine the role of state-trait anxiety and resiliency in test anxiety. The research was conducted on a sample of 153 high students who completed questionnaire measures of state-trait anxiety (STAI-T), trait resiliency (CD-RISC) and test anxiety (TA). Pearson correlation and regression analyze were used to data analyze. Consistent with the assumption, results indicated that both state-trait anxiety and resiliency were significantly correlated with levels of test anxiety. However, a multiple regression analysis showed that only state-trait anxiety could predict the test anxiety. Taken together, these findings provide further support for the relationship between state-trait anxiety and test anxiety. Findings also suggest the need to further explore the role of trait resiliency in test anxiety.

## P9

### The Relationship between Trait and State Anxiety: Mediating Role of Coping Strategies

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Test situations evoke anxiety for many when the impact of tests on one's life is considered, including the educational, emotional and other aspects. The purpose of this study is to examine the mediating role of emotion-focused and avoidant coping strategies on the relationship between trait anxiety and test anxiety. 375 high students (193 males, 182 females) aged 15-18 were selected by random cluster sampling from 6 public high schools in Gorgan city, Iran. The participants responded to the trait anxiety inventory (STAI, Spielberger et al., 1983), the cope inventory (COPE; Caever, Scheier, & Weintraub, 1989), and the state anxiety inventory (STAI, Spielberger et al, 1983). Finding revealed that emotion-focused strategies mediated the relationship between trait and state anxiety. Avoidant coping also mediated the link between trait and state anxiety. Results of the study have clear directions and applications for clinicians, school psychologists and counselors to work on any intervention or treatment programs.

## P10

### Prediction of Adolescent Anxiety Disorders Based on Emotional Child Maltreatment

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child maltreatment that includes emotional abuse, sexual abuse, physical abuse and neglect has been widely documented as a risk factor for diverse negative consequences in adolescence and adulthood (suderman & DePrince, 2015).for adolescents, these consequences include educational problems, heightened rates of law infringement, aggressive behavior, as well as various mental disorders such as mood, anxiety and eating disorders (moggi, 2005). According to what was said the aim of present study was investigation of relationship between emotional child maltreatment and anxiety disorders. The research design of present study was correlation. The population of the study were all the high schools of 3 regions of Tehran that of which 200 students were selected by random cluster sampling. The students

completed child abuse self-report scale (CASRS) and youth self-report scale (YSR). Data were analysed by simultaneous linear regression. The results showed that emotional child maltreatment could significantly predict anxiety disorders with power of 0.27. In explaining the result, it can be said that emotional maltreatment occurs when parents intentionally attempt to punish their children for minor errors repeated, reject children and kick out them from home. Emotional maltreatment is meant to verbal and non- verbal threat, hostility, blame, criticism and frequent scare. Such behaviors by parents lead child to anxiety because in this situation child is constantly worried about his behaviors is not to blame and threat by parents. This trend continues to adolescence and individual constantly worry about his behavior is not to blame or criticize by other persons.

## P11

### Validity and Reliability of Death Anxiety Scale (DAS) in Nurses

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This study was carried out to determine the psychometric properties of Templer Death Anxiety Scale (DAS), a tool, designed to assess the death anxiety. Our sample comprised 106 nurses who were selected from two hospitals in Tehran, Iran, using a convenience sampling method and were then assessed using the Templer Death Anxiety Scale (DAS), Reasons for Death Fear Scale (RDFS), Death Obsession Scale (DOS), Death Concern Scale (DCS), Collett-Lester Fear of Death Scale (CLFDS), and Death Depression Scale (DDS). The data indicated that the mean scores were 8.27 (SD=2.71). Exploratory factor analysis on DAS identified 4 factors with eigenvalues of greater than one. Factor 1 labeled "Absolute death anxiety", Factor 2 labeled "Fear of patience and pain, Fear of future", Factor 3 labeled "Time passing and short life", and Factor 4 labeled "Death related thoughts". Item-total correlations were evaluated; the reliability coefficients of the DAS using Cronbach alpha, split-half, and Gutmann coefficients were 0.60, 0.52, and 0.52, respectively. The DAS correlated 0.50 with the RDFS, 0.47 with the DOS, 0.52 with the DCS, 0.38 with the CLFDS, and 0.50 with the DDS, indicating good construct and criterion-related validity. Concurrent validity for the DAS with the other scales, were significant. The DAS among nurses

had appropriate validity, reliability, and psychometric characteristics, factor analysis showed multidimensional structure for the DAS, so the DAS can be used in researches about death and dying issues in healthcare professionals.

## P12

### Effectiveness of Mindfulness-Based Cognitive Therapy (MBCT) on Reducing the Anxiety Disorder

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The aim of this research is reduction the symptoms of anxiety disorder, through MBCT. It seems that two main parameters of this treatment namely avoiding from mental rumination and avoidant states in a particular way with Anxiety Disorder. Meanwhile applying this type of treatment for reduction of the symptoms and rupture of disorder continuation chain could be useful. This is a Quasi-experimental research conducted on the basis of a pretest – posttest theory with a control group. The statistical society consists of the person with anxiety disorder referring to Sadr Psychiatry Hospital at Tehran. Among 300 files which were taken into consideration randomly, eighty persons were elected as anxiety by a psychiatrist, concerning input & output criteria. Beck anxiety questioner was used to evaluate Anxiety Symptoms. Twenty four persons were elected randomly and entered to the project. The elected persons were divided into two groups of test & control randomly, concerning same age and education. Data of the research were studied through covariance analysis method. Findings of the research indicated that applying mindfulness-Based Cognitive Therapy to persons with anxiety disorder reduces in symptoms hyper arousal, and negative behavior and cognition. However, it doesn't indicate reduction of avoidant symptom. Generally, reduction of anxiety in the test group in proportion with the control group was reported as significant. MBCT is effective on reducing in persons with anxiety disorder.

## P13

### Which the Third Wave of Cognitive-Behavioral Therapy in Reducing Symptoms of Veterans with Post-Traumatic Stress Disorder (PTSD) is More Effective?

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Post-traumatic stress disorder (PTSD), As disorders in which psychological symptoms following a stressful event or trauma occurred such as war and floods, accidents, terror and comorbidity between anxiety disorders and complex nature of PTSD , We have to assessments and new treatment demands. The aim of this study was to determine “The most effectiveness of cognitive behavioral therapy in reducing symptoms of veterans with (PTSD)”. The present study was semi-experimental with pre-test - post-test and control group. Among all veterans with mental psychiatric in Sadr Psychiatric hospital, 24 people diagnosed with PTSD , selected randomly and divided randomly into two experimental groups and one control group. Metacognition test (MCT) experienced in 10 sessions of metacognition ((Wales)) and mindfulness-based intervention (MBCT) experienced in 10 sessions of mindfulness-based ((William-Segal) group. DASS-21 as a diagnostic test for anxiety, depression and stress & PCL list screening test based on DSM-5 PTSD with psychiatric diagnosis based on DSM-5 was used as evaluation tools and results were recorded. The collected data were analyzed by multivariate analysis and showed between experimental and control groups ,(MCT) scores and (MBCT) scores in post-test and pre-test are significant difference ( $\leq 0 / 001$ ) and (MCT) in reducing symptoms of chronic PTSD caused by wars is more effective that with (MBCT). The total score of the experimental group significantly reduced PTSD syndrome after the test showed the control group ( $p \leq 0 / 05$ ). The results suggest that components in (MCT) and (MBCT) in veterans with PTSD is disrupted. And the use of (MCT) patterns and (MBCT) is effective in reducing symptoms.

## P14

### Anxiety Control Using Q-Learning

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Anxiety disorders are the most common reasons for referring to specialized clinics. If the response to stress changed, anxiety can be greatly controlled. The most obvious effect of stress occurs on circulatory system

especially through sweating. the electrical conductivity of skin or in other words Galvanic Skin Response (GSR) which is dependent on stress level is used; beside this parameter person's heart rate is measured for more accuracy and reducing error. When the person encounters with relaxation training and biofeedback, he can reduce his stress due to changes in GSR circuits. In this article it is offered stress management by Q-learning along with biofeedback that is more efficient than other methods computationally. The purpose is reducing the amount of stress by getting feedback from biological signals (biofeedback) using photo and music playback. Response to the electrical resistance of the skin is measured by passing the flow through the sensors on it. In fact, it is possible to get information (feedback) from the body (bio) by connecting the electrical sensors on hand. So the person can be aware of his situation, according to LEDs placed on the machine. The person should focus on the photos and music which are playable by using Q-learning to make maximum changes in stress reduction. In general, it can be concluded, the image and rough tracks, raises stress levels, heart rate increased, the amount of sweat resulting in increased resistance and reduced voltage level, LEDs that can be embedded on the device, see the role of Q-learning is stress management by playing photo and music due to therapist condition instead of a psychologist in the clinics. So in this study it is presented a method for stress management with Q-learning to improve the accuracy of diagnosis with easy way, early detection, low cost and new style.

## P15

### **The Study Reviews the Status of Sexual Function in 52 Patients Suffering from Psychiatric Patients Post-Traumatic Stress Disorder**

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as a unique family based community infrastructure and social institutions play an important role in maintaining the health of individuals and society. Among the factors that contributed to the survival of the family, sexual health and function properly within the family and on the basis of religion, the law and common law. The aim of this study was to evaluate sexual dysfunction among psychiatric veterans with post-traumatic stress disorder (PTSD) and the general community. The study was designed as a case study aims to evaluate sexual

dysfunction disorders in the subjects mentioned. For this purpose subjects for the study of sexual function, over a four-day camp recreational, educational and family therapy were collected and were examined by clinical psychologists. Data gathered by questionnaire IIEF International perturbation parameters by which erection, orgasm, sexual satisfaction, sexual desire and overall satisfaction were evaluated veterans with mental disorders. Data analysis using descriptive statistics were analyzed and the independent t-test to compare two groups of psychiatric veterans with PTSD and controls for data analysis used is due to the significance level obtained significant ( $p > 0.01$ ), it can be said that among veterans with mental disorders and there is a significant difference from control group. The results show that in various ways such as veterans with mental disorders due to injury, psychiatric drugs, mental illness and physical illness and the satisfaction of sexual performance not achieved optimal performance and to recognize positive factors affecting sexual function and strengthen their common life as well as training, taking into account the severity and type of injury can affect veterans suffering from sexual dysfunction.

## P16

### **Comparative Analysis of the Religious Coping, Optimism, and Social Physique Anxiety between the Disabled and the Normal People in Gorgan**

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The current study aims at the comparative analysis of the religious coping, optimism, and social physique anxiety between the disabled and the normal people. As for the methodology of this comparative analysis, 60 Gorgani people, 30 disabled and 30 normal people, were chosen through systematic random sampling in 1395 taken from the names of those disabled who were registered in the welfare organization of Gorgan. They were asked to fill out Pargament's religious coping questionnaire (RCOPE) (2000) and the Iranian optimism scale. The data were analyzed through multivariate analysis of variance test (Manova). The results indicate that social physique anxiety, self-awareness, contact with nature, contact with others, negative religious coping, shows inactive religious struggle. Regarding the one-way analysis of Variance in Manova's text, there is a significant change on the  $P < 2.005$ . Regarding the results of the research the social physique anxiety is more in the disabled and consequently religious solutions and their optimism becomes less than normal people. However, through proper educational programs for the disabled, one can

improve the psychological condition of the society.

### P17

#### Assessing the Effect of Information Provision on Anxiety Levels in Patients Transferring from the Cardiac Intensive Care Unit to the General Ward

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Transfer of patients from the cardiac intensive care unit to the general ward, is one of the main reasons for anxiety. Given that the transfer anxiety may be due to receive at least, inconsistent or do not receive enough information before the patients leaving the intensive care unit, Therefore, this study aimed to determine the effect of information provision on anxiety levels in patients transferred from cardiac intensive care unit to the general ward. This study was a randomized clinical trial that conducted on patients transferred from intensive cardiac care unit to the general ward. In this study, 50 patients who met the inclusion criteria were selected by convenience sampling method initially. Then were divided randomly into control and intervention group. In order to collect data about the anxiety the DASS anxiety questionnaire was used. In first step the DASS questionnaire was completed by patients to determine levels of anxiety before medical team decided to transfer from the cardiac intensive care unit to a general ward. Then while the patients in the control group received only routine verbal information, the patient in the intervention group received pamphlet that containing text and images about transfer process, continuity of care and information about general ward environment. After the patient informed of transfer orders the DASS questionnaire completed again by patients. Chi-square, independent t-test, ANOVA with repeated measure tests was used to analyze the data. The results of this study showed that the demographic factors have no significant difference between the two groups before the intervention ( $P > 0.05$ ). In this study the anxiety levels were significantly reduced in the intervention group in comparison with the control group ( $P\text{-value} \leq 0.05$ ). The results suggest the use of educational pamphlet about transfer, continuity of care and information about general care environment can reduce anxiety in patients which are transferred from cardiac intensive care unit to the general ward.

### P18

#### The Perceived Stress and its Relationship with Body Mass Index, General Satisfaction, Negative Emotions, Relationship with Teacher among Students

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Today, the relationship between health-related quality of life at school (general satisfaction, relationships with teachers, negative emotions), body mass index with stress is challenging issues in domain of health and psychology. This study aimed to determine the perceived stress and its relationship with body mass index, general satisfaction, relationship with teachers, negative emotions. During the correlational qualitative research, among the population of male and female students in Zanjan, 150 students (78 girls and 72 boys) were selected by a multistage cluster sampling method. The data were collected by Cohen Perceived Stress Tools, Quality of life questionnaire at school's Anderson and Brooke (subscales of general satisfaction, negative emotions, relationship with teacher) and body mass index (BMI). And were analyzed by using SPSS software and pearson correlation, multivariate regression analysis tests. Mean and SD of were ( $16.69 \pm 0.78$ ) for age and ( $28.64 \pm 10.13$ ) for perceived stress. There was significant positive relationship between perceived stress and BMI in girls. But there was not in boys. There was negative significant correlation between perceived stress and general satisfaction ( $r = -0.38$ ,  $p < 0.01$ ). Perceived stress with negative emotions ( $r = 0.77$ ,  $p < 0.01$ ) and with relation with teacher ( $r = 0.51$ ,  $p < 0.01$ ) had positive significant relationship. implementation of stress management programs in students can improve the body mass index and general satisfaction, relationship with the teacher and negative emotions.

### P19

#### The Relation between Improvement, Adventure, Social Solidarity and Opportunity, Details of Health-Related Quality of Life, with Perceived Stress among Students

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Recently, the World Health Organization has made the need for countries to improve the school context and enhance the health of students at the school in terms of quality of life. This study aimed to determine the relation between improvement, adventure, social solidarity and opportunity with perceived stress among students. During the correlational qualitative research, among the population of students in Zanjan, 78 girls and 72 boys were selected by a multistage cluster sampling method. The data were collected by Quality of life questionnaire at school's Anderson and Brooke (subscales of improvement, adventure, social solidarity and opportunity), Cohen Perceived Stress scale and were analyzed by using SPSS software and K-S, Pearson correlation tests. Mean and standard deviation was for improvement ( $11.05 \pm 2.25$ ), adventure ( $10.28 \pm 2.46$ ), social solidarity ( $21.87 \pm 4.19$ ), opportunity ( $16.04 \pm 4.06$ ) and perceived stress ( $28.64 \pm 10.13$ ). Results of Kolmogorov-Smirnov indicated normality of the distribution of variables. In Review of relationship between details of health-related quality of life at school between perceived stress, improvement ( $r = 0.7$ ,  $p < 0.01$ ), adventure ( $r = 0.76$ ,  $p < 0.01$ ), social solidarity ( $r = 0.78$ ,  $p < 0.01$ ) and opportunity ( $r = 0.62$ ,  $p < 0.01$ ) had positive significant correlation. Implementation of interventions aimed at managing stress in students will improve the quality of life related with the school in domains of improvement, adventure, social solidarity and opportunity.

## P20

### Investigation the Effect of EMF on Plasma Levels of Corticosterone, Testosterone and Testicular Gene Expression of Gsst1 of Male Rats

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The chronic exposure to ELF-EMF (extremely-low frequency electromagnetic field) has been shown as an effective factor at biological systems. In order to determine the possible effects of whole-body exposure to EMF on plasma levels of testosterone and corticosterone, weight gain and testicular gene expression of Gsst1 of male rats, the present study was performed by the following procedure: thirty five adult male rats of weight 200-250g were divided into 4 groups: group 1, experimental group were included 7 rats which exposed to 50Hz and 500 $\mu$ T in solenoid for 1 month, group 2, experimental group that were included 14 rats which exposed to 50Hz and 100 $\mu$ T in solenoid for 1 month, group 3, sham operated group were included 7 rats which kept in same condition as the group 1 except

in off solenoid, group 4, control group were included 7 rats that kept in normal condition of animal room. After one month, each rat was anaesthetized by i.p injection of 30mg/kg of sodium pentobarbital. Plasma concentration of corticosterone and testosterone was measured by using ELISA and RIA methods respectively. Testicular gene expression of Gsst1 was determined by using RT-PCR. The results showed a significant increase of the plasma levels of testosterone and corticosterone. Testicular gene expression of Gsst1 was not different between groups. It can be concluded that chronic exposure to EMF induces steroidogenesis that is independent of testicular gene expression of Gsst1. Another possible effect might be downregulation of corticosterone receptors on Leydig cells and subsequent increase of testosterone release from Leydig cells. Therefore, EMF as an environmental stressor may lead to hormonal and gene expression alterations.

## P21

### Prevalence of Social Phobia and its Influencing Factors in Abhar's Students

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Social phobia is one of the most common disorders between adolescents and young adults. The aim of this study is to investigate the prevalence of social phobia in Abhar's high school students, at the risk-period for developing social phobia, and its influencing factors. In this cross-sectional study, a total of 5526 high school students of both genders from Abhar were selected using a census sampling method. Participants were assessed for social phobia disorder using the Liebowitz Questionnaire anonymously. Information was also collected for the some socio-demographics. Descriptive and inferential statistical methods with SPSS-17 used for data analysis. The prevalence of social phobia disorder was 17/2%. The study showed that sex (female); age- early age of adolescence; being single; from small family; with low educated and housekeeper mother; With a father who work in private job; Living in town; from family with average income are associate with higher prevalence of disorder. Social phobia is highly prevalent among high school students in Abhar region. Study findings can help health decision makers implement a more comprehensive strategy in this community for interventions to promote mental health and prevent social phobia.

## P22

### The Effect of Maternal Stress on the Hippocampal Neural Death in the Newborns Rats

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Early life stress during fetal development has been hypothesized to predispose several neurological and psychiatric disorders in adulthood. The purpose of this study was to investigate the effect of maternal stress on the volume of granular cells, total number of dark neurons and also the distribution of glycol-conjugates and changes of terminal sugars in the dentate gyrus. Pregnant Sprague-Dawley rats were divided into stress and control groups. Stress was applied on the pregnant females from day 15 until delivery. Pregnant rats were acutely stressed for 45 minutes three times daily with noise and light. Postpartum neonates were collected and weighted. The brain of neonates was removed and inserted in the paraformaldehyde 4%. The paraffin embedded horizontal sections with 5 micron thickness were prepared serially. The volume of granular cells and the number of dark neuron in the dentate gyrus was calculated by stereological method. The distribution of glycol-conjugates also was analyzed immunohistochemically. The results of this study showed that the mean volume of granular cells in stress group decreased significantly compared to with the control group ( $p < 0.05$ ), while the mean numerical density of dark neurons in stress group increased significantly compared to the control group ( $p < 0.05$ ). Maternal stress led to reduced birth weight in experimental group of neonates. These changes were associated with increased pituitary-adrenal activity in mothers reflected by higher ACTH level and also hypertrophy of adrenal glands in the stress rats. The intensity of hippocampal reaction with lectins in the stress group was more than control groups. Our findings suggested the potential role of maternal stress on the neural damaged result in memory deficits in newborns rats.

## P23

### The Course of Anxiety and Depression in Surgical and Non-Surgical Patients

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The aim of this study was to compare the level of anxiety and depression in patients admitted to surgery or internal departments. The study was carried out on 359 hospitalized patients over the age of 18 years and designed as a cross sectional survey. Participants were recruited from internal medicine and surgery departments of Khatam Al-Anbia Hospital, Tehran, Iran. Information was collected using the Hospital Anxiety and Depression Scale. Ninety-four (26.18%) patients had no anxiety and depression, 96 (26.7%) were borderline cases of anxiety, 140 (39%) were very anxious, 89 (24.8%) were borderline cases of depression, and 106 (29.5%) had depressed mood. There was a significant correlation between anxious mood and sex and duration of background disease as well as between the level of depressive mood and age. Patients with anxiety are significantly more prone to depression. However there were no significant differences between the level of anxiety or depression between surgical or non-surgical patients. The prevalence of anxious and depressive moods was high in both surgical and non-surgical patients. However, non-surgical treatments were as stressful as surgical procedures for patients admitted to hospital in the first 24 h.

## P24

### The Effect of Art Therapy for the Child with Anxiety Problem: Case Report

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The aim of this study was to evaluate the effectiveness of art therapy on anxiety in the child with the diagnosis of anxiety problems in a health clinic in Tehran in 94. One child from the population based on convenience sampling was selected and the SCAS (Spence children anxiety scale) questionnaires and Structured Clinical Interview were studied. This study was a single case study as a multiple baseline. The chart and graphs was used for analysis of the data. The results showed that art therapy has a positive effect in reducing the severity of symptoms of anxiety and the percent of recovery for the patient was obtained to rate. These effects were to a large extent remain in duration of follow-up.

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## P25

### Post-Traumatic Stress Disorder: A Case Report

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Following exposure to a major traumatic event like Iran-Iraq war (1980-1988) various reaction occurs, some of which result in stress-related psychiatric disorder. We have briefly described one such case and used it to indicate some features of post-traumatic stress disorder. The patient, B.B, is a 54 years old man who has served in Iran-Iraq war operations for about 19 months. He expresses that two months after leaving the war zone, he had experienced severe anxiety and increased psychomotor reactions to stimuli. His social interaction is impaired and he frequently experiences mood swing. The patient's main complaints includes: "I get so nervous of not being able to avoid the scenes coming to my mind. My heart beats so fast. It hurts! I become restless. I can't sit. Sometimes I argue and fight with my children but then I become so regretful". ECG, exercise tolerance test and echocardiography show no evidence of heart disease in the patient. Also, no brain damages are indicated through the patient's brain CT scan. The patient has no history of alcohol consumption, drug abuse, seizure and head injuries. Aggression is observed in the Rorschach test. Based upon the patient's multiple symptoms, factitious Disorder and mood disorder are excluded from the differential diagnosis, while "post-traumatic stress disorder" is confirmed in the patient. The treatment includes medications such as Amitriptylin, Propranolol and sodium valproate. In Addition, psychodynamic psychotherapy and stress reduction techniques are administered. B.B confirms the positive effect of the combined treatments. The patient provided informed consent for participation in the interview.

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## P26

### Anxiety in Patients with PTSD (War Veterans)

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All people have experience about anxiety in their lives and it is natural when facing with reactional threatening situations. But chronic and intense feeling is unusual in absence of clear cause. Anxiety includes

uncertainty, helplessness and physiological arousal feelings. Generally anxiety is a diffuse, very unpleasant and often vague concern feeling. Clinical studies of war veterans over the elapsed years implies that all PTSD veterans suffer of covert and sometimes obvious anxiety and reactions of changing the behavior with impulses associated with self-harm behaviors. Veterans with PTSD are emotional people but unable and limited to express their feelings. They often have a dual background about their furious and impulsive behaviors due to not expressing the emotional feeling. It also causes an abnormal behavioral board that others call them as wave men and this adds to their anger. We have taken many years of medical treatment and therapy, including psychotherapy and consultations with these people, we found that the best and newest treatment method with these patients is increasing a deep therapeutic relationship and strengthening self-confidence and self-esteem in them. Major anti-anxiety medical treatments beside the group treatment can effectively improve veterans with PTSD and affect their families. As well as light therapy with emphasis on increasing alpha and beta waves and reducing theta, gamma waves in the area of T3 in the brain, is an effective treatment protocol for veterans with PTSD beside the changing lifestyles and increasing life skills such as self-awareness has helped to treat such patients.

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## P27

### The Role of Antibiotic Consumption in Anxiety

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Gut microbiota is formed by ten of trillions of microorganisms with at least 1000 different species of known bacteria. One - third of an individual gut microbiota is common to most people, while two - thirds are specific to him. Growing amount of evidence indicates that gut microbiota characteristics may play an important role in mental dysfunctions. Molecular mimicry between several key neuropeptides and gut microbiota proteins has been shown. Immunoglobulins reactive with these neuropeptides that are involved in behavior and emotion regulation have been identified in humans. And their affinity or levels were associated with neuropsychiatric conditions like anxiety. So, changes in gut microbiota may increase the risk of anxiety through neurologic, metabolic and immunologic pathways. On the other hand, antibiotics have found to alter the taxonomic, genomic, and functional capacity of the human gut microbiota, with effects that are rapid and sometimes persistent. The Center for Disease Dynamics, Economics and Policy (CDDEP), reported that Global

antibiotic consumption grew by 30% between 2000 and 2010. This increasing consumption rate may increase the anxiety incidence especially among countries that antibiotics are widely available over the counter. In conclusion, although further studies are needed to make clear which molecular pathway increases the risk of anxiety in a person who has used antibiotics more than need, it seems that preventive actions like washing hands, preparing food hygienically, keeping vaccinations up to date and prescribing antibiotics when is necessary, may help to reduce anxiety incidence.

## P28

### Neuroimaging in Anxiety Disorders

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In recent years, the development of neuroimaging techniques such as high-resolution magnetic resonance imaging (MRI), functional magnetic resonance imaging (fMRI), positron emission tomography (PET), or single photon emission tomography (SPECT) has promoted the identification of structural and functional characteristics underlying mental disorders to a great extent. In anxiety disorders, recent neuroimaging techniques have contributed greatly to diagnosis and treatment, and helped to shed light on the neurobiological basis of anxiety in general. Functional imaging procedures and radioligand binding studies in healthy subjects and in patients with anxiety disorders provide growing evidence of the existence of a complex anxiety network, including limbic, brainstem, temporal, and prefrontal cortical regions. Neuroimaging techniques could support the diagnostic process of anxiety disorders and support the inevitable rationale of implying biological variables in the classification of anxiety disorders. So in the present article we have provided an overview of the application of current neuroimaging in anxiety disorders.

## P29

### The Effect of Stress and Anxiety During Pregnancy

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Stress is a word that can be used to explain the way we feel, or it can be used to describe something that happens to someone. For most pregnant woman, pregnancy is a happy and breathtaking time, however, pregnant for some woman can be a source of stress, depression and anxiety. These factors can be risk factors for adverse outcomes for mothers and children. Anxiety in pregnancy is associated with shorter gestation, higher incidence of preterm birth, smaller birth weight and has adverse implications for fetal neurodevelopment and child outcomes. These detectable risk factors and related pathways to distinct birth outcomes suitability further investigation. Although, there are no direct neural pathways between the mother and fetus, so scientists have regarded for more indirect pathways to comprehend how a mother's level of stress and anxiety may impact her baby. One feasible mechanism is through stress hormones. When our body goes into a state of stress, a chain of chemical changes operate in our bodies and brains, such as the release of adrenaline and cortisol. Chronic or extreme maternal stress may cause changes in the blood flow to the baby, making it difficult to carry oxygen and other important nutrients to the baby's developing organs. It is vital to identify the symptoms, signs and diagnostic thresholds to increase efficient, effective and ecologically valid screening and intervention strategies to be used widely.

## P30

### Are There Anxious Genes?

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Anxiety comprises many clinical descriptions and phenotypes. A genetic predisposition to anxiety is undoubted; however, the nature and extent of that contribution is still unclear. Extensive genetic studies of the serotonin (5-hydroxytryptamine, 5-HT) transporter (5-HTT) gene have revealed how variation in gene expression can be correlated with anxiety phenotypes. Complete genome-wide linkage scans for panic disorder (PD) susceptibility genes have suggested a locus on chromosome arm 7p, and association studies have highlighted many candidate genes. A genetic contribution to psychological traits and psychiatric disorders is not in doubt, but the nature and extent of that contribution is still unclear. Genetic epidemiology has assembled convincing evidence that anxiety and related disorders are influenced by genetic factors and that the genetic component is highly complex. While studies of the patterns of inheritance of personality indicate that various

dimensions are likely to be influenced by many genes and quantitative traits, it also documents the significance of environmental factors. As the modes of inheritance of anxiety disorders are complex, it has been concluded that multiple genes of small effect, in interaction with each other and with nongenetic neurodevelopmental events, produce vulnerability to the disorder. The interest for gene–environment interactions in the study of anxiety is still in its infancy on the background of the Nature/Nurture debate. Both human and animal studies thus far support the genetic complexity of anxiety. Clinical manifestations of these diseases are likely to be related to multiple genes, of which some may modify or influence the expression of the disease. In order to solve the complex problem of anxiety, the full array of genetic strategies will be needed. We conclude that anxiety is a complex behaviour, underlined not only by genetic or environmental factors but also by multiple interactions between these two factors.

### P31

#### Art Relieves Stress in Kids with Anxiety Disorders

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Art is a way to provide distance from the intense affect associated with the disaster, and a way to work around and through the natural defenses that arise when trying to link affect with cognition. The ability to create art about the threatening thoughts and feelings channels the child's energy into the art, or into a positive task, which then can be explored safely. If these thoughts can be examined, discussed, and made meaningful in a concrete fashion through the art, the continual cycle of disruptive thinking, acting out, or symptoms can be interrupted and perhaps relieved or reduced. Art therapy can provide an excellent outlet for children with anxiety disorders to express themselves. It has been shown to benefit kids with ADHD, autism, and anxiety related to family problems. The aim of art therapy is to facilitate positive change through engagement with the therapist and the art materials in a safe environment.

### P32

#### Anxiety Disorder

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All humans experience anxiety in your life and it is natural that people get anxious when facing stressful situations threatening, but severe and chronic anxiety in the absence of clear cause, is uncommon. Studies show that anxiety in men and a young person are less privileged economic classes and in women, low-income people and the elderly and children and teenagers are more common. When locating of the new situation as many children face new people, feel anxious. One of the most common anxiety disorders in children and adolescents is social phobia (Social Phobia). This phobia of late childhood or early adolescence begins. They feel ashamed in the face of others, they are worried that their voice Nlrzd and not red. Generally speaking and eating in public, assertiveness off, criticize; comment and mistakes are Trsnd.dr a new study to reduce your anxiety aware of the mechanisms used. Such as efforts to control anxiety, self-conscious way of dealing with anxiety, personal plans are changing philosophies of life, the application of physical and mental exercises and instructions on the basis of defense mechanisms based psychiatrists.

### P33

#### Effect of Mother's Anxiety on Fetus

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The prenatal period is a critical time for neurodevelopment and is thus a period of vulnerability during which a range of exposures have been found to exert long-term changes on brain development and behavior with implications for physical and psychiatric health. During fetal life, neurons proliferate, migrate and form connections, providing the structure of the developing brain. Neurons reach their final destinations by the 16th week of gestation, while branching and making appropriate connections occur even before that time. The brain continues to develop during the entire pregnancy; with most of the synapse formation in the developing brain happens during the third trimester. During these complex neurodevelopmental events, the fetal brain is particularly vulnerable. There is accumulating evidence to indicate that exposure to psychiatric illness in the mother may also affect development of the fetal brain. Clinical studies link pregnant women's exposure to a range of traumatic, as well as chronic and common life stressors (i.e., bereavement, daily hassles, and earthquake), to significant alterations in

children's neurodevelopment, including increased risk for mixed handedness, autism, affective disorders, and reduced cognitive ability. High levels of anxiety during pregnancy have been associated with an increased risk of developing preeclampsia, premature birth and low birth weight. It has been demonstrated that low birth weight in premature infants has been associated with changes in brain morphology. However, high levels of anxiety at 19 weeks of pregnancy were correlated with the volume reductions in several regions of the brain, including the prefrontal, lateral temporal and premotor cortex, medial temporal lobe and cerebellum. High pregnancy anxiety at 25 and 31 weeks gestation was not significantly associated with local reductions in gray matter volume. Pregnancy anxiety is related to specific changes in brain morphology. These findings are consistent with the body of literature which demonstrates that prenatal stress and associated anxiety may lead to delays in infant development, lower academic achievement, greater emotional reactivity and emotional/behavioral problems persisting through the adolescence.

### P34

#### Post-Traumatic Stress Disorder

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Post-traumatic stress disorder (PTSD) is an increasingly recognized and theoretically preventable condition. In fact PTSD is a mental disorder that can develop after a person is exposed to a traumatic event or threats, such as war and traffic crashes. Symptoms may include distressing thoughts and increased arousal. These signs last for more than one month after the event. People with PTSD are at a higher risk of suicide. Adults are more likely than children to develop PTSD after trauma. Diagnosis is based on the attendance of specific symptoms after a traumatic event. Although a number of people are victims of PTSD, unfortunately, there is little information about ways to treat this disorder. Therapists have used two methods of medication and psychotherapy for victims. The results show that, antidepressants and anti-anxiety drugs relieve symptoms in some patients, but therapy to alleviate the suffering of patients with PTSD is not enough lonely. The main treatments for people with PTSD are medication and counseling. It is unclear if using medications and therapy together has greater benefit or not. Although cognitive behavioral therapies for the treatment of PTSD are strong empirical support, still a large proportion of patients with PTSD symptoms come back after treatment. That's why

therapeutic approaches must be developed to be able to completely eliminate symptoms PTSD.

### P35

#### How to Manage Anxiety

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Anxiety is a mental state that is elicited in anticipation of threat or potential threat. Sensations of anxiety are a normal part of human experience, but excessive or inappropriate anxiety can become an illness. Anxiety is part of the normal human experience. We may speculate that it served human survival during evolution by enhancing preparedness and alertness. However, anxious manifestations are abnormal when they are exaggerated in excess of any objective danger that the individual is facing, when they induce psychological distress or physical ailments, or when they are self-aggravating in a vicious circle. Anxiety and depressive disorders are among the most common disorders with lifetime prevalence estimates of 28.8% for anxiety disorders and 20.8% for mood disorders. Every day that you struggle with anxiety is a day that you're managing it. Managing anxiety is simply the act of preventing anxiety from overwhelming you. No matter how difficult it may be to live with anxiety or how much you struggle with it every day, you are coping with it in small ways. Managing anxiety is when you still have anxiety, but you've learned to control it. The most important thing to realize about anxiety management is that, even though there are many techniques to help you manage your anxiety, your own mental coping skill is still your strongest tool. So while you should use the above anxiety management tips and information, you should also remember that cures are out there, and you don't have to live with anxiety forever. Generalized anxiety disorder (GAD) is a common anxiety disorder that involves chronic worrying, nervousness, and tension. Unlike a phobia, where your fear is connected to a specific thing or situation, the anxiety of generalized anxiety disorder is diffused-a general feeling of dread or unease that colors your whole life. This anxiety is less intense than a panic attack, but much longer lasting, making normal life difficult and relaxation impossible. Anxiety can affect your health. If you suffer from an anxiety disorder, research suggests that you may run a higher risk of experiencing physical health problems, too. So when you manage your anxiety, you're also taking care of your physical health. Exercising, good nutrition, adequate sleep, and trying to reduce stress all contribute to your well-being. Discover tips to manage anxiety and stress.

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**P36**

**Role of Brain-Derived Neurotrophic Factor in Pathogenesis and Treatment of Post-Traumatic Stress Disorder**

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Post-traumatic stress disorder (PTSD) is a syndrome causing from a severe traumatic happening that leads to threatened death or injury. PTSD is associated with changes in limbic, hippocampal, and prefrontal cortical region function due to changes in synaptogenesis, dendritic modifying, and neurogenesis. Changes in neuron in PTSD patients result from pathophysiological disturbances in inflammatory, metabolic, and apoptic processes. Brain-derived neurotrophic factor (BDNF) is a neurotrophin that functions as survivorship factor for selected neurons of central nervous system and it can regulate synaptic plasticity, memory processes and behavior in the limbic system. Failure to produce BDNF in the brain can lead to a variety of central nervous system disorders. Researches indicate that impairment in the regulation of neural BDNF occurs in conditions of PTSD. It is found that level of BDNF in serums of PTSD patients were lower as compared to related controls. It is suggested that BDNF may be involved in pathophysiology of PTSD and enhancing BDNF-related signaling and restoring level of BDNF in serum may be considered as consequently therapeutic.

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**P37**

**Internet Addiction and Anxiety**

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The Internet is a widely recognized channel for information exchange, academic research, entertainment, communication and commerce. The internet is a new tool that is evolving into an essential part of everyday life all over the world and its use increases especially among young people. Although the positive aspects of the Internet have been readily praised, there is a growing amount of literature on the negative side of its excessive and pathological use. However, excessive use of the internet has resulted in negative consequences.

Internet addiction disorder is nowadays recognized as a new syndrome among psychologist research nucleus and has provided a fresh area of research points out that excessive and ill use of the internet will result in the withdrawal of the individual from friends, family, and lead to behavioral or personal disorders. Research on internet addiction demonstrated that the greater use of the internet is associated with some social and psychological variables such as, declines in the size of social circle, depression, loneliness lower self-esteem and life satisfaction sensation seeking poor mental health, and low family function. Internet addiction also may contribute to anxiety and stress. Internet addiction can worse the anxious and depressive tendency. Those who suffer from anxiety and stress often have a great deal of trouble communicating and interacting with others in a healthy, positive, and meaningful way. There is also found a significant relationship between anxiety and depression in childhood with internet addiction in adolescent. Clinicians should consider anxiety during childhood to prevent internet addiction. There exists a positive and significant correlation between the level of anxiety and internet addiction. Problematic internet use may serve to worsen to social fears and avoidance to face the social interactions.

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**P38**

**Neuroanatomy of Post Traumatic Stress Disorder**

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Posttraumatic stress disorder (PTSD) is a disorder of emotional and mental stress occurring as an outcome of injury or severe emotional shock. Several Neuroimaging studies in humans have shown the functions and relationship between the anatomical changes of brain and PTSD. The three major areas of the brain are affected by PTSD. These three areas are the amygdala, hippocampus and prefrontal cortex, which changed with stress and PTSD. The amygdala is the stress evaluator of brain and determines when to respond and also it is involved in forming emotional memories. The amygdala sends a danger sign, begins the fight or flight response and stores stimuli in association with memory such as sounds, sights and smells when a traumatic event happen. The amygdala stays overactive for patients with PTSD. The hippocampus is vital to memory formation. When a traumatic event occurs, the hippocampus makes

and stores the memory also it retrieves the memory and calms the amygdala alarm circuit. Reducing the size of hippocampus is sign of PTSD. The prefrontal cortex controls behavior, emotions, and impulses. In those with PTSD the prefrontal cortex is less active. Therefore, the prefrontal cortex is unable to override the hippocampus, as it flashes the memory, so it cannot signal to the amygdala that there is no real danger. By understanding the role of these areas and their changes over PTSD more appropriate therapies can be found for the treatment of patients

### P39

#### OCD and Genetic

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Obsessive compulsive disorder (OCD) is a type of anxiety disorder characterized by recurrent, intrusive, unwanted thoughts. Research indicates a genetic predisposition for OCD. Many people with OCD have one or more family members who also have it or who may have other anxiety disorders influenced by the brain's serotonin levels, such as panic disorder. Although OCD is a chronic and oftentimes debilitating disorder, the specific impact of this illness on the psychosocial functioning of affected youngsters has not been systematically described. According to a recent report from the International Obsessive-Compulsive Foundation (IOCDF), "there is evidence that OCD which begins in childhood may be different than OCD that begins in adulthood. Individuals with childhood-onset OCD appear much more likely to have blood relatives that are affected with the disorder than are those whose OCD first appears when they are adults". In fact, one recent study found that children with OCD are much more likely to have a close relative with OCD when compared to the general population. This finding suggests that, while the cause of OCD is not fully understood, genetics plays a significant role in the development of OCD symptoms, and that the condition appears to be heritable. In fact, recent research has uncovered six specific genes which appear to play a role in the development of OCD. Unfortunately, researchers do not yet understand the exact mechanism that connects these genes to the onset of OCD symptoms. OCD is a severe, highly prevalent and chronically disabling disorder that usually emerges during childhood or adolescence. Neuroimaging studies play an important role in advancing our understanding of the pathophysiology of OCD and in developing neurocircuitry models of this psychiatric illness. One of the critical issues in research on OCD is examining the neurological correlates of the disorder.

### P40

#### Anxiety Disorders Signs in Children

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It's usual for children to feel anxious or concerned from time to time, such as when they're starting school or kindergarten, or moving to a new area. Anxiety can make a child feel frightened, scared, shamefaced or embarrassed. Several of the signs to look out for in your child are: finding it hard to concentrate, not sleeping, or awakening in the night with bad dreams, not eating correctly, quickly getting fractious or angry, and being out of control during bursts, continually disturbing or having negative opinions, Feeling of tension and restless thoughts, or frequently using the toilet, always tearing, clinging to the mother all the time, feeling unwell and complaining of abdominal pain. Your child may not have been old enough to diagnose depression. The main reason for anxiety will vary according to the age of the child. Separation anxiety is common in littler children, whereas elder children and youngsters tend to worry more about school presentation, interactions or relationships.

### P41

#### The Role of Yoga in the Treatment of Post-Traumatic Stress

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Post traumatic stress disorder (PTSD) is a disorder of emotional and mental stress occurring as an outcome of injury or severe emotional shock. Yoga may be useful in decrease of PTSD symptomology. New studies demonstrate that people suffering from PTSD can find actual relief with yoga. Yoga decreases stress-induced allosteric load in three reactive systems of stress: the autonomic nervous system, the hypothalamic-pituitary adrenal axis and the GABAergic system. It is hypothesized that yoga-based practices correct under-activity of the peripheral nervous system and GABA systems, the primary inhibitory neurotransmitter system, in part through stimulation of the vagus nerves, the main

peripheral pathway of the PNS. the decreased PNS and GABAergic activity that underlies stress-related disorders can be corrected by yoga practices resulting in enhancement of disease symptoms. Yoga practice can increase resilience and improve mind-body awareness, which may contribute to changing cognitions and activities. These findings are critical as they address the physiology associated with PTSD. Yoga may develop the functioning of traumatized individuals by assisting them to tolerate physical and sensory experiences associated with distress and helplessness and to increase emotional awareness and affect tolerance.

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## P42

### OCD in Children

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Unfortunately, many people, including many psychotherapists, mistakenly think that Obsessive-compulsive disorder (OCD) in children and adolescents is rare. Recent research indicates that approximately half of all adults with OCD experience clinical symptoms of the disorder during their childhood. OCD in childhood is a chronic and distressing disorder that can lead to severe impairments in social, academic, and family functioning. Epidemiologic studies suggest that OCD is as common among children as adults, with a lifetime prevalence of 2% to 4% and a 6-month prevalence of 0.5% to YO. Clinic-based studies suggest a mean age of onset for childhood OCD from 6 to 11 years of age, 36 which is bimodally distributed with peaks in early childhood and early adolescence. As true for adult patients with the disorder, obsessions without compulsions were relatively rare, multiple rituals were common, and the most common compulsive ritual was washing. Comorbid anxiety disorders were common among the children, but depressive disorders were rare. OCD is defined by the presence of obsessive thoughts or acts and/or compulsive behaviours. This is a disorder that may begin in either childhood or adulthood, and may manifest in a number of different ways. According to the diagnostic criteria for OCD outlined by DSM-IV (American Psychiatric Association, 1994), obsessions are characterized as recurrent, persistent and irrational impulses, thoughts or images that cause marked anxiety or distress and are not just excessive worries of real-life problems. On the other hand, compulsions can be defined as ritualistic, repetitive and purposeful behaviours (e.g., checking) or mental acts (e.g., counting) that an individual feels obliged to perform in response to an obsession. The purpose of ritualistic behaviours or mental acts is to prevent or reduce marked distress, to neutralize obsessional thoughts or to prevent

some dreaded event or situation. biological factors (e.g., genetics) may play a prominent role in the development of the early-onset subtype.

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## P43

### Neuroanatomical Basis of Anxiety Disorders

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Anxiety is an emotion characterized by an unpleasant manner of inner distress, often accompanied by nervous behavior. Anxiety is related to the particular behaviors of fight or flight responses. The amygdala, the insula and anterior cingulate cortex seem to be critical, and all three have been referred to as the fear network. The amygdala which plays a fundamental role in neural network of fear and anxiety. The amygdala is comprised of at least 13 different subnuclei, the central, the basal and lateral nuclei. The central nucleus regulates many aspects of the fear response such as regulation of the release of cortisol through the paraventricular nucleus of the hypothalamus, increase in fear response via the midbrain, and modulation of the autonomic nervous system through the lateral hypothalamus. Conclusion: Neuroimaging methods can be used to examine functional brain differences between healthy individuals and those with anxiety disorders and also these findings can help to find a treatment for anxiety disorders.

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## P44

### Stress Management in Work Settings

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Substantial progress in documenting the role of psychosocial stress in the etiology and development of physical and mental disease has been made in the past 10 years. Although the exact mechanisms with which stress impacts health are not fully understood, it is thought that the negative emotional and cognitive effects of stress alter the immune response and increase susceptibility to disease. Stress is a common problem in work settings, and can lead to physical and psychological ill health; that stress is often determined by personal appraisals of work environment situations. The link between job characteristics, such as low level of control and work overload, to job stress is well established. Stress is costing companies substantial amounts of money in the terms of health

care costs, productivity losses, and worker compensation claims. Increasingly, more and more companies are exploring ways to deal with occupational stress. The most common types of stress management strategies are progressive muscle relaxation, biofeedback, meditation, and cognitive-behavioral skills training. Somatic methods seek to reduce arousal levels during stress (lower blood pressure, muscle activity, etc.), while cognitive methods seek to alter the thinking patterns and stress appraisal processes.

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