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The Second International

# Anxiety

Congress

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### Oral Presentations

#### O1

##### Anxiety As a Global Problem

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): O1

Several investigations demonstrated that anxiety is the most common mental health disorder worldwide; affected about one in 13 people. Anxiety disorders are more commonly reported in Western societies but it is also a main health problem in non-Western countries as stress and anxiety levels have drastically increased over the last two decades. Several wars in Middle Eastern countries in the last few years seem to increase the rate of anxiety dramatically in this area. Women, children, and adolescents are the most vulnerable groups. The aim of our congress is to reduce the enormous individual and social burdens imposed by anxiety disorders. Prevention of stress and anxiety as well as effective treatment of different forms of anxiety based on the latest scientific achievements improves the public health. Drawing a clear plan to prevent and combat anxiety will be necessary before we face anxiety epidemics in different societies.

#### O2

##### Reviewing the Opportunities and Threats to Psychology and Counseling in Iran

Abbasali Allahyari

Psychology and Counseling Organization of Iran, Tehran, Iran.

The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): O2

Perhaps before establishing the Psychology and Counseling Organization of Iran by the Parliament in 2003, the biggest threat to this discipline was the practice of unprofessional people. On this basis, the biggest opportunity for this discipline was establishing this

organization by the parliament as the supreme legislative body in the country. On 14/11/2012 counseling centers regulation was introduced by the tenth government in executing the Act 43 of the Law, which was a big shock to the Organization, and the authority of issuing counseling certificates was assigned to State Welfare Organization and Ministry of Youth Affairs and Sports. Fortunately, with a lot of consultations and followings, this regulation was abolished and the duty of issuing counseling certificates and supervising counseling centers was exclusively assigned to the Psychology and Counseling Organization. This, in turn, can lead to a tremendous development and progress in the discipline. The other opportunity to the Organization is the declaration of health system policy by the Supreme Leader which has taken the society's mental health indexes into account and demands the citizens' mental, social, and spiritual health. The other opportunity to the Organization is the Supreme Leader's attitude toward the Organization and psychology in general, and his expectations from the Organization aired in the central council meeting on 9/5/2011. In the current situation, all branches of psychology and counseling have committees and the improvement and growth of all branches have been planned. We are signing memorandum of understanding with all related bodies in the fields of psychology and counseling. Retraining all psychologists and counselors and updating their knowledge and skills is intended. Psychotherapy and counseling with a religious orientation is one of the priorities of the Organization. The biggest threat to psychology and counseling of the country is a decline in the quality of education in some universities, and the Organization intends to invalidate these low quality universities by a quality control evaluation and consolidate the discipline and psychologists' position in the new health system program.

#### O3

##### Anxiety Psychopathology-Epidemiology and Burden of Disease: Problems and Solutions

**Norman Bradley Schmidt**

Anxiety and Behavioral Health Clinic, Department of Psychology, Florida State University, Florida, USA.

The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): O3

The goal of this talk will be to familiarize the audience with the nature and prevalence of anxiety disorders and document their impact on society. Anxiety is the most common form of psychopathology affecting an estimated one in four people at some point during their lifetimes. In comparison to all types of diseases and injuries, a 2013 JAMA report indicated that anxiety disorders were the fifth leading cause of years lived with a disability. Moreover, the impact of anxiety psychopathology on society has remained steady since 1990. These various anxiety manifestations, along with associated conditions such as depression and substance use issues will be described. Finally, an overview of state-of-the-art and first line, empirically supported prevention and treatment efforts focused on ameliorating anxiety will be provided.

**O4**

**Transdiagnostic CBT and Comorbidity in the Anxiety Disorders**

**Peter Joseph Norton**

UH Anxiety Disorder Clinic, University of Houston, Houston, USA.

The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): O4

Recent research from a number of clinical trials has shown that Transdiagnostic Cognitive-Behavioral Therapy is efficacious, having shown comparable effects on primary anxiety disorder diagnoses as traditional diagnosis-specific CBT, and highly economical for treatment providers. However, a majority of anxiety disorder patients present with two or more “comorbid” diagnoses at once. Given that Transdiagnostic CBT focuses on the patient’s entire anxiety presentation, as opposed to just one primary diagnosis, several psychological scientists have suggested that Transdiagnostic CBT may be more efficient than traditional CBT in treating comorbid presentations (those with more than one anxiety disorder or depressive diagnosis). The current presentation will present data from a number of studies testing this hypothesis. An initial pilot study (Study 1) evaluated the effect of transdiagnostic CBT on comorbid diagnoses of depression, suggesting that patients who present with both anxiety and depression show substantial improvements on both diagnoses. Study 2 compared the effect of Transdiagnostic CBT on treating comorbid diagnoses of anxiety (two or more anxiety disorders simultaneously), finding that Transdiagnostic CBT had greater effects on comorbid anxiety than did diagnosis-

specific CBT. Finally, data from a large ongoing study (Study 3) examining the impact of Transdiagnostic CBT on comorbid anxiety-depression will be presented. Future directions for the treatment of complex comorbid anxiety and anxiety-depression patients will be discussed.

**O5**

**Stigma in Psychiatric Disorders**

**Ahmad Jalili**

Representative President of Iranian Psychiatric Association, Tehran, Iran.

The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): O5

Social stigma is a major challenge among the patients with mental illness, their families and the health care providers. Not only the patient with psychological disorders, but also who has an infectious disease suffer social stigma. Stigma refers to an extreme and unusual disapproval of a person from the other members of society. Stigma is a Greek word that in its origins referred to a type of marking or tattoo that was cut or burned into the skin of criminals, slaves, or traitors in order to visibly identify them as blemished or morally polluted persons. Due to the stigma and its negative effect on the patient and his family, the treatment of the patients is also challenging. Although stigma arises from the other’s belief, but the worst part is the patient’s bad feeling about himself. Most of the patients and their families avoid visiting a psychiatrist cause them to lose the golden time of the treatment, make their illness chronic which end to disability. Lack of knowledge about the mental illnesses has been always the most important origin of stigma. Up to the 19<sup>th</sup> century, psychosis has been the only well-known type mental illness and there was no concept about the other psychological disorders such as spasm, depression and obsessive compulsive disorders which are usually concomitant with physical manifestations. Today, although the psychosis is a small portion of the mental illnesses, but it forms the major viewpoint of the people about psychological disorders. Despite of modern treatment methods applied to even cure the mental illnesses, the people hate to be called “mentally ill”. Today we recognized that mental disorders are a brain disorder, and we refuted the ideas that psychosis is a curse from the gods and that people with epilepsy held prophetic powers. Although mental disorders are very similar to the physical disorders in term of pathophysiology, etiology, treatment and prevention, but it is yet hard to accept them. Health system have a long way to overcome the big challenge of recognition, prevention and treatment of mental disorders and to instruct the people about the nature of these disorders which lead to a significant improvement in the health care system.

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**O6**

**Pathophysiology of Anxiety Disorders**

**Gregor Hasler**

University Clinic for Psychiatry and Psychotherapy, University of Bern, Bern, Switzerland.

The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): O6

The most important risk factors for anxiety disorders include genes, early life stress, and current stress. These factors do not act independently but interact with each other throughout human development through examples such as epigenetic modifications and complex forms of learning. The neural substrate of pathological anxiety includes hyperactivity in the amygdala and other limbic brain regions, and decreased activity of the anterior cingulate and prefrontal cortex. This pattern of abnormal brain activity points to an impaired balance between subcortical emotional centers and higher cortical centers that are responsible for cognitive control. The molecular underpinnings of this unbalance are dysfunctions of neurotransmitter and neuropeptide systems responsible for the connectivity and communication between brain regions. GABA is the major inhibiting neurotransmitter in the human brain. The rapid and robust anxiolytic effects of benzodiazepines, which are positive allosteric modulators at the GABA<sub>A</sub> receptor, has encouraged imaging and genetic studies on the GABA neurotransmitter system. The anxiolytic effect of drugs that increase monoamines (e.g., serotonin, norepinephrine and dopamine) in the synaptic cleft, have made the monoaminergic systems a prime target of anxiety disorder research. Neuropeptides with particularly strong links to anxiety include the corticotropin-releasing factor, cholecystokinin, neuropeptide Y and oxytocin. This talk will give an overview on the current knowledge on the neurobiology of anxiety disorders and discusses the findings with respect to preventative approaches, pharmacotherapy, psychotherapy and future clinical research of anxiety disorders.

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**O7**

**Limbic System Associated with Anxiety (Focus on Emotions Including Anxiety)**

**Majid Ghafarpour**

Iranian Center of Neurological Research, Imam Khomeini Hospital, Tehran, Iran.

The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): O7

The cerebral cortex can be functionally subdivided into primary sensory-motor, unimodal association, heteromodal association, paralimbic and limbic regions. Broca was the first who described limbic lobe in 1874,

as a ring of gray matter, lying between the diencephalon and more lateral neocortex on the medial surface of the hemispheres. It locates outside of the corpus callosum and consists of subcallosal, cingulate and parahippocampal gyri. Septal area is also noted as a part of limbic lobe by some authors (Barr's anatomy). Actually, Thomas Willis had pictured this region and referred it as the limbus in 1664. Limbic system includes limbic lobe, amygdala, hippocampal formation (subiculum, Ammon's horn or hippocampus, indisium griseum or supracallosal gyrus, septal area), hypothalamus, anterior thalamus, parts of corpus callosum, certain nuclei of the midbrain, habenula and bundles interconnecting them (Fornix, mamillothalamic bundle or Vicq d' Azyr, Papez circuit, stria terminalis, stria medullaris, diagonal band of Broca, medial forebrain bundle). Paralimbic regions consist of orbitofrontal cortex, insula, temporal pole, parahippocampal, subiculum and cingulate gyrus. These regions, that demonstrate a transition from six-layered neocortex to a more primitive allocortex (hippocampus and dentate gyri) is called mesocortex or transitional cortex. Mesocortex receive emotional, cognitive and visceral inputs, resulting in further cortical processing. Lesions involving limbic system present with protean clinical features including emotional disturbances. Emotion can be defined as any complex feeling (e.g., fear, anger, excitement, love, hate, panic, anxiety, agitation, tension, ambivalence, apathy, abreaction, guilt, shame, impulse, ineffability, acathesia and decathesia) associated sometimes with psychic, somatic (visceral and autonomic) and behavioral components. There may be also intellectual disturbances in patients with severe emotional upsets (e.g., disorganized rational thought and unmodulated automatic behaviors). Emotion is related to affect and mood. Affect is observed expression of emotion whereas mood is pervasive and sustained emotion subjectively experienced and reported by a patient and observed by others (depression, elation and anger). In general, limbic system contributes to the preservation of the individual and the continuation of species. Its basic functions include feeding behavior, fight-to-flight response, aggression and of the emotion and of the autonomic, behavioral and endocrine aspects of the sexual response. Hippocampus contains "place cells" that encode spacial memory, thus plays crucial roles in special problem solving. Although, Jaspers has categorized feelings according to the object of emotion (fear of snake, patriotism, servile submission), their source (vital feeling, sadness, Joy) and its biological purpose, duration and intensity, but neurologists tend to classify emotion in the six following categories: 1) disturbances due to perception (illusions, hallucinations) or cognitive derangements (delusions), 2) disinhibition of emotional expression such as emotional lability and pathologic laughing/crying status, 3) rage reactions and aggressivity, 4) apathy and placidity, 5) altered sexuality and 6) endogenous fear, anxiety, depression

and euphoria. In this lecture we will focus mainly on the different presentations of disturbed limbic system and their related lesion localization.

## O8

### **A Prevention Program for Postpartum OCD**

*Kiara R. Timpano*

Psychology Department, University of Miami, Miami, USA.

The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): O8

There has been a recent rise in research focused on maternal psychological conditions during the perinatal period. Although the majority of investigations have examined postpartum depression, there is a growing appreciation for the deleterious consequences of maternal anxiety in the perinatal period for both the mother and child. Obsessive compulsive disorder (OCD), in particular, has emerged as a desirable target for intervention. This presentation will discuss the development of an indicated prevention program for postpartum obsessive compulsive symptoms (OCS), along with findings from the initial randomized controlled trial. Participants included women in their 2<sup>nd</sup> or 3<sup>rd</sup> trimester of their first pregnancy, who were pre-screened to determine psychological vulnerability to OCD. The treatment group (n=38) received a CBT prevention program for OCS that was incorporated into six weekly prenatal education (PE) classes. The control group (n=33) received the same PE classes along with general psychoeducation on anxiety disorders. Results revealed that at 1, 3, and 6 months postpartum, the prevention program was associated with significantly lower levels of obsessions and compulsions than was the control condition. Group differences remained significant even after controlling for baseline OCS and depression symptoms. Those in the prevention condition also reported decreasing levels of cognitive distortions, in contrast to the control condition. Significant predictors of 1-month postpartum OCS were baseline levels of OCS, thought-action fusion, and distress tolerance. Significant moderators included baseline OCS, obsessive beliefs, distress tolerance, and relationship adjustment. The interaction between these variables and condition was such that the prevention program was particularly effective for individuals who had poorer functioning at baseline. Results will be discussed with respect to implications for future intervention research on postpartum OCD.

## O9

### **Activating Spiritual (Religiosity) Dimension and Control of Anxiety**

*Masoud Janbozorgi*

Psychology Department, The Research Institute of Hawzah &

University, Qom, Iran.

The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): O9

Human was created from both the natural and spiritual dimensions and has multimodal functions (e.g., cognitive, behavioral, affective, sensation, interpersonal relationship, and etc.). Having One-dimensional impression in life would provide anxiety predisposition for man, but then having an integrated and monotheistic view would result in an assimilated psychological discipline for him/her. The objective of this article was to investigating how activating spiritual dimension by applying monotheism as the most important human healing mechanism could control anxiety. If anxiety is defined as “the apprehensive anticipation of future danger or misfortune accompanied by a feeling of worry, distress, and/or somatic symptoms of tension”, which its core characteristics are feeling threatened, fearfulness, uncertainty, disturbance, distress, and worry. Each theoretical framework of psychotherapy would attempt to provide an evident response to alleviate this anxious heart. Though prominent success in psychotherapy, research findings report symptoms relapse. The spirituality modal as an original humanistic dimension due to eliciting special aspects in clients could alleviate anxiety symptoms. This dimension would, then, sustain the treatment goal by vigilante-man nature as a result of activating two mechanisms (i.e. integration and transcending). These contextual components based on religious texts analysis include sense of unity with God, confidence and relaxation with remembering God, modifying the image of God and reinforcement of God-concept, increasing consciousness to nurturing of God, and understanding of God as unique love object because of having full criteria for being as an entire and irreversible waning love object, having relationship to presence and the world due to regulating the interest, identity acquisition according to connecting between self- conscious, and God- conscious (that would result into being conscious about humanistic features such as kindness, generosity, and etc.), perceiving being-in- world as a transitional stage for encountering with love object and joining him in otherworld (so, how to being survival in hereafter would determine how and why we live here in this world). These concepts by applying spiritual techniques (e.g., worthiness, being goal and proposing oriented, and giving meaning) could improve ascendancy due to applying transcending mechanism (from materialism, egoism, and status), and could eliminate the insecurity, and anxiety, and then the alternative would be alacrity and joyfulness feelings and happiness. Moreover, clinical observations clarified that creating satisfaction in man would provide sincerity, monotheism and integration, and would fading the relapse predisposition. Experiencing integration and transcending is not fundamentally equivalent to equanimity which is critical component of equilibrium.

But satisfaction could help to maintain treatment outcomes and could improve transcending from health into fully function person and to be commitment and acceptance. A variety of clinical experiences in the context of activating psycho-spiritual dimension revealed this practice could significantly reduce anxiety and worry.

## O10

### Deep Brain Stimulation and Psychiatry

*Damiaan Denys*

Department of Psychiatry, University of Amsterdam, Amsterdam, The Netherlands.

The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): O10

The use of deep brain stimulation in psychiatric disorders has received great interest owing to the small risk of the operation, the reversible nature of the technique, and the possibility of optimizing treatment postoperatively. Currently deep brain stimulation in psychiatry is investigated for obsessive-compulsive disorder, Gilles de la Tourette's syndrome and major depression. This presentation reviews the application of deep brain stimulation in psychiatric disorders. Preliminary results suggest that deep brain stimulation can effectuate a decrease of 40 to 60% in at least half the patients. Although various side effects occur, most of these are transitory and linked to specific stimulation parameters, which can be changed. Because only a few studies have been performed with a limited number of patients in accordance with varying research protocols, appliance of deep brain stimulation to psychiatric disorders is still at an experimental stage. The speed of the effect of deep brain stimulation causes fundamental assumptions on the pathophysiology of psychiatry to come into question.

## O11

### Internet and Smartphone Based Treatments Including a New PTSD-Study

*Per Carlbring*

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): O11

Our research group has - during the past 15 years - developed and tested internet interventions for more than 20 separate conditions totaling in close to 50 published randomized controlled trials. The studies cover a wide range of diagnoses including depression, social anxiety, panic disorder, generalized anxiety disorder, and pathological gambling. The treatments have mostly been based on cognitive behavior therapy. However, acceptance and commitment therapy, interpersonal psychotherapy and motivational interviewing have also been tested. In addition to the more traditional online

therapies psychodynamic internet-based psychotherapy has also been evaluated. In general the effect sizes are large when active treatment is compared to a control group. In fact, in our recent systematic review and meta-analysis that has been accepted for publication, Internet-delivered cognitive behavior therapy was directly compared against face-to-face CBT within the same trial. The results showed a pooled effect size at post-treatment across of Hedges  $g = -0.01$  (95% CI, -0.13 to 0.12), indicating that Internet-delivered cognitive behavior therapy and face-to-face treatment produce equivalent overall effects. In addition to giving an overview of internet-based treatments a new randomized controlled trial will be presented. The aim of this trial was to investigate the effects of guided internet-based cognitive behavior therapy (ICBT) for posttraumatic stress disorder (PTSD). Sixty-two participants with chronic PTSD, as assessed by the Clinician-administered PTSD Scale, were recruited via nationwide advertising and randomized to either treatment ( $n = 31$ ) or delayed treatment attention control ( $n = 31$ ). The ICBT treatment consisted of 8 weekly text-based modules containing psychoeducation, breathing retraining, imaginal and in vivo exposure, cognitive restructuring, and relapse prevention. Therapist support and feedback on homework assignment were given weekly via an online contact handling system. Assessments were made at baseline, post-treatment, and at 1-year follow-up. Main outcome measures were the Impact of Events Scale-Revised (IES-R) and the Posttraumatic Stress Diagnostic Scale (PDS). Results showed significant reductions of PTSD symptoms (between group effect on the IES-R Cohen's  $d = 1.25$ , and  $d = 1.24$  for the PDS) compared to the control group. There were also effects on depression symptoms, anxiety symptoms, and quality of life. The results at one-year follow-up showed that treatment gains were maintained. In sum, these results suggest that ICBT with therapist support can reduce PTSD symptoms significantly.

## O12

### Off the Couch and out the Door: Improving Treatment Through a Refined Understanding of Psychotherapeutic Change

*Andrew Gloster*

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): O12

State-of-the-art psychotherapy for anxiety disorders represents some of the most efficacious treatments in the mental health literature. Nevertheless, these treatments are not panacea. Too many patients drop out of treatment, response rates leave room for improvement, and residual symptomatology is common.

The quest to improve therapy for patients suffering from mental disorders necessitates ongoing refinement of theories, research questions, and methodologies. This presentation will illustrate this iterative process with data from two randomized controlled trials (i.e., Cognitive Behavioral Treatment and Acceptance and Commitment Therapy) on Panic Disorder. Utilizing data from clinical outcomes and experimental paradigms imbedded within these trials, I will present results on efficacy, drop-out, mechanism of action, and long-term outcomes that provide important clues for understanding who gets better, who doesn't, and importantly -why. The question will be examined whether "getting off the couch and out of the therapy room" is step ideally suited to help achieve further refinements in our treatment. Together with theorization about how patients relate to symptoms and well-being, I will review how these data can contribute to the refinement of psychotherapeutic change in general.

### O13

#### **Comparing the Effect of Prazosin and Hydroxyzine on Sleep Quality in Patients Suffering from PTSD**

*Serge Brand<sup>1, 2</sup>, Mohammad Ahmadpanah<sup>3</sup>, Parasto Sabzei<sup>3</sup>, Seyed Mohammad Hosseini<sup>3</sup>, Saadat Torabian<sup>4</sup>, Mohammad Haghighi<sup>3</sup>, Leila Jahangard<sup>5</sup>, Hafez Bajoghli<sup>5</sup>, Edith Holsboer-Trachsler<sup>1</sup>*

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<sup>3</sup> Research Center for Behavioral Disorders and Substances Abuse, Hamadan University of Medical Sciences, Hamadan, Iran.

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<sup>5</sup> Psychiatry & Psychology Research Center (PPRC), Roozbeh Hospital, Tehran University of Medical Sciences, Tehran, Iran.

The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): O13

In light of the high prevalence of sleep disorders in patients suffering from post-traumatic stress disorders (PTSD), this study sought to comparing the effect of prazosin and hydroxyzine on sleep quality in this patient group. A total 100 patients suffering from PTSD were assessed (mean age:  $M=35.51$ ,  $SD=6.41$ ; 28% females). Next, they were randomly assigned to one of three treatment groups: prazosin (33 patients), hydroxyzine (34 patients), or placebo (33 patients). The trial lasted for 8 weeks. Patients' sleep quality was assessed using the Pittsburgh Sleep Quality Index (PSQI). Items taken from the Mini International Neuropsychiatric Interview (M.I.N.I.) were used to operationalize PTSD. Compared to controls, patients treated with prazosin and hydroxyzine reported improved sleep and less

nightmares. Improvement was greatest in patients treated with prazosin, as compared to hydroxyzine and placebo. Improvement in sleep was associated with amelioration of PTSD symptoms. Both prazosin and hydroxyzine can be used to treat psychopharmacologically sleep disorders and nightmares in patients suffering from PTSD, leading also to reductions in PTSD symptoms.

### O14

#### **Trauma Focused Cognitive Behavior Therapy on Anxiety of Children Survivors of Earthquake in Eastern Azerbaijan**

*Amir Askari*

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): O14

Most of the disasters such as earthquakes can impact on mental health and personal development of children. This study is to evaluate the effectiveness of Trauma Focused Cognitive Behavior Therapy (TF-CBT) in reduce the anxiety among children survivors of earthquake in Eastern Azerbaijan, Iran. The sample was composed of 30 children exposed to the earthquakes. One year after the earthquakes, all subjects were approached with questions from a survey consisting of the Measures were administrated in a standard order as follows: Demographic Data Sheet, Trauma Symptom Checklist for Children (TSCC), and State - Trait Anxiety Inventory for Children (STAIC). Our findings show that TF-CBT has influence on anxiety of children survivors of earthquake. So, we can definitely say that TF-CBT had significantly reduced anxiety scores of adolescent survivors in experimental group. After a catastrophic natural disaster, children are at risk for co-morbid PTSD, dissociation and depression. Early clinical intervention on anxiety is recommended to prevent chronic post-traumatic stress reactions and other mental problems. The results of this study may be helpful for further mental health interventions for children after earthquakes.

## Workshop Presentations

### W1

#### The Role of Art Therapy (Music and Painting) on Reduction of Anxiety in Children and Adults

*Kaveh Moghaddam<sup>1</sup>, Ali Zadeh Mohammadi<sup>2</sup>*

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<sup>2</sup> Family and Art Research Center, Shahid Beheshti University, Tehran, Iran.

The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): W1

Anxiety disorders are a group of psychiatric disorders which can have negative effects on the human life. Children and adults can have anxiety disorders and these disorders can lead to secondary problems such as cognitive, perceptual, emotional and behavioral problems. For treatment of anxiety, the practitioners and psychologists can apply psychotherapy approaches such as: cognitive therapy, Gestalt therapy and logo therapy. Art therapy is one of the psychotherapy approaches in which the relation between “Id”, “Ego” and “Super Ego” will be facilitated. Art as a projective activity that consists of beautiful elements can cause the release of fears, feelings, emotions, and it can show all of the subjects which are in the unconscious level of clients. Therefore, in art therapy methods, art therapists can apply free association, transference and interpretation. Studies in art therapy suggests that art elements can be applied for both of evaluation and treatment of patients with anxiety disorders because it can help them to have better perception of themselves and also they can change their mental image and help to integrate their ego. Studies of practitioners such as Hill (1942), Numberg (1960), Uhlin (1972), Andreas (2005), Case and Dalley (2009) show that art therapy can reduce anxiety, depression and negative effects in patients. To achieve the best results it is better to apply art therapy methods in the peer groups. In art therapy sessions we can apply music, painting, poem, drama and clay. Materials and instruments such as clay, painting colors, crayons, pastels, music instruments (piano, keyboard, violin and etc.) can be applied.

### W2

#### Clinical Training Workshop: Trans-Diagnostic Group CBT for Anxiety Disorders

*Peter Joseph Norton*

University of Houston Anxiety Disorder Clinic, Houston, USA

The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): W2

This workshop is an evidence-based Cognitive Behavioral Therapy (CBT) training for mental health

professionals and counselling graduate students in group therapy for anxiety disorders. The “transdiagnostic” approach is gaining widespread acceptance because it enables therapists to treat a variety of anxiety disorders using a common group protocol. Training will focus specifically on delivering Transdiagnostic CBT, with an emphasis on Cognitive Restructuring (Thought Challenging) and Exposure Therapy. At the conclusion of the workshop, participants will:

- understand the basic strategies involved in providing group-based CBT for Anxiety Disorders.
- understand the issues and approaches to treating anxiety disorders from a transdiagnostic framework.
- be able to begin implementing transdiagnostic group CBT for Anxiety Disorders.

Handouts, materials, and resources will be provided.

### W3

#### PTSD and War

*Norman Bradley Schmidt*

Anxiety and Behavioral Health Clinic, Department of Psychology, Florida State University, Florida, USA.

The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): W3

Post-traumatic stress disorder (PTSD) may develop after a terrifying event involving physical injury or the threat of physical harm in war. Eight years of war after Iraq attacked Iran (between 1980-1988) caused thousands of PTSD among Iranian soldiers as well as civilians. Many of those people are suffering several decades from this form of anxiety; most now a complicated form of complex PTSD. Years of war in Iraq and Afghanistan have brought PTSD among soldiers to the attention of the Western scientific societies. PTSD is currently the subject of many research studies. In this session, several of these complicated patients will be introduced in this session and discussion will be aimed to find the best way of the management for them.

### W4

#### The Neuro- Feedback and Treatment of Attention Problems and Anxiety

*Ashkan Irani*

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): W4

There are the different treatments, such as: drugs, psychotherapy, cognitive therapy and behavior therapy, for management of anxiety. But nowadays, an intervention called “Neuro-feedback” which is combination of electronic, behavior, neurology and pharmacology sciences has been innovated in which the neurons can be growth and reinforced and the brain’s

function will be increased. In this intervention, the electrodes will be attached to the scalp and the ears of the patients and they just receive the information from environment and the therapist can look the brain's waves on the monitor. According to the studies, neuro-feedback can help to treatment of attention-deficiency, anxiety, sleep and learning disorders and etc. It is important to notice that this intervention can be useful beside occupational therapy and can improve the patients' quality of life.

## W5

### Children and Anxiety

*Peter Joseph Norton*

University of Houston Anxiety Disorder Clinic Houston, USA.

The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): W5

It is estimated that 8-22% of children and adolescents experience anxiety during their childhood. Different forms of anxiety, such as social anxiety, separation anxiety, etc. may affect the normal life of children and influence their mental health through their life. Some anxious children will grow out of their problems, but others will keep having trouble with anxiety unless they get professional help. Recognizing anxiety in these children and accurate treatment has an important impact on their life in the future. In addition, prevention of anxiety in children is a crucial factor for maintenance of public health. In this session, the latest scientific findings on prevention, diagnosis, and treatment of anxiety in children and adolescents will be discussed.

## W6

### Transcranial Direct Current Stimulation Workshop

*Hossein Sepasi Moghaddam*<sup>1,2</sup>

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): W6

It is an Intensive 1-day course for introducing utilizing transcranial direct current stimulation (tDCS) in an applied format. This technique is a noninvasive brain stimulation that uses direct electrical currents over the head to stimulate specific parts of the brain which modulates neuronal activity. It has strong potentiality in the field of medical and neuroscientific research. Anodal stimulation acts to excite neuronal activity while cathodal stimulation inhibits or reduces neuronal activity. Although tDCS is still an experimental form of brain stimulation, researchers have demonstrated cognitive improvement in some people undergoing

tDCS. Several studies also suggest it may be a valuable tool for the intervention in neuropsychiatric conditions such as depression, craving, stroke and pain. It was first recognized in neuroscience research in the 1950's and 60's, but has been a rapid growth from 2008. Lecture and hands-on practice in this course will introduce participants to the theoretical aspects of tDCS, (and related simulation technologies e.g. tACS, HD-tDCS, tRNS) and help develop proper skills for practical application. Some issues related to mechanisms of action, hardware, accessories, device set-up and parameters, safety, previous application in research settings, and best clinical practices will be introduced.

## W7

### Acceptance and Commitment Therapy (ACT)

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): W7

Acceptance and Commitment Therapy (ACT) is a new development within behavioral therapy. Its goal is to promote psychological flexibility. Numerous studies show that suffering results when people attempt to avoid their inner experiences (experiential avoidance). This experiential avoidance often leads to rigid and inflexible behavior that also leads them to compromise their goals and what is important to them. ACT clients learn that experiential avoidance is not a solution, but part of the problem and learn to differentiate between that which can be controlled and that which cannot. Clients learn to more flexibly deal with aversive physical sensations, thoughts and feelings through exercises of present moment awareness and acceptance. Simultaneously, clients choose and formulate personally important life goals. These goals are often neglected in their struggle with inner experiences. Clients learn to commit and act towards their values despite the presence of emotional and cognitive barriers, there by leading to a renewed valued and vital life.

#### Goal of the workshop:

Participants will learn how disorders arise from emotions, thoughts, and feelings and get to know a therapeutic approach that integrates experiential exercises, metaphors, role-playing, defusion, and behavioral activation. The workshop will concentrate on experiential avoidance, valued goals and behaviors, and the gentle handling of barriers. The workshop will utilize practical and experiential exercises (e.g., metaphors, role playing, and video demonstrations) in the workshop.

## W8

### PTSD and Disasters

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): W8

Post-traumatic stress disorder (PTSD) can arise from different traumatic incidents, such as war, torture, being kidnapped or held captive, mugging, child abuse, road accidents, train wrecks, plane crashes as well as natural disasters like earthquakes and floods. During each disaster, both victims and rescue workers are vulnerable to physical and psychological trauma that may lead to different forms of anxiety disorders, including PTSD. In this session, different manners and methods for prevention and treatment of anxiety disorders after various disasters will be discussed.

## W9

### Forum on Therapeutic Theater with Emphasis on Helping Children Cope with Stress and Mental Pressures

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): W9

Using theater in the treatment as well as education traced back to several thousand years ago. In fact, drama therapy has been used for a long time in clinics and rehabilitation/treatment centers. Children theater experts intend to adopt this approach outside of the confined framework of clinics and make it as a general method in the society. In other words, let it face the theater's large audience, cause change and undergo change in itself. As far as working with all children is concerned, it is perhaps better to use the general term "theater-life", meaning the use of theater in real world scenarios for achieving a profound outlook to a vibrant life. Why theater? The deep influence of groups over individuals is known to all, which explains the effectiveness of group therapy. When speaking of the role of theater in improvement or treatment of children's behavioral abnormalities, it is important to emphasize the active and constructive role of interactions. Our attitudes consist of three distinctive dimensions: emotional, cognitive and physical. Our attitudes and perceptions are shaped and recognized in practice. No attitude is established before being demonstrated in our behavior. In fact, it is our behavior that reveals our attitudes and perception of realities. Similarly in theater, body is united the soul and "individual" is in fact demonstrated in its wholeness. Therefore, all aspects of human existence are addressed in theater and this is the key benefit of "theater-life". Drama therapy in Iran is uncommon practice for certain reasons. Some sub-categorize it under dramatic arts,

and to some others, it is considered a method used by psychologists in treating certain mental disorders (because of the suffix "-therapy") and therefore not usable for the general public. Hardly, though, most psychologists show any inclination in making use of drama therapy as an effective treatment method, which is due to their lack of awareness of the potential benefits of dramatic arts. In this workshop, experts will try to share their knowledge and experience about therapeutic theater with emphasis on the issue of stress and mental pressures in children.

## W10

### Art and Anxiety

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): W10

The objective of this session is to identify that how films, movies and TV series can affect on anxiety level of the audiences. In this session, actors, directors, and psychologists are going to discuss about the role of TV series, films and their contents on decreasing or increasing of anxiety and the importance of "identification" between audiences and actors or actresses.

P1

**The Relationship between Alexithymia and Anxiety in Male Schizophrenic Patients**

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P1

The current study was aimed to examine the relationship between alexithymia and anxiety among male schizophrenic inpatients. The study was of descriptive and predictive nature. The sample consisted of 50 male patients in Niayesh psychiatric hospital of tehran, all of whom diagnosed with chronic schizophrenia (at least 2 years). The toronto alexithymia scale and self-scaled anxiety scale were administered. The data was analyzed using correlation and regression methods. The results showed significant correlations between anxiety, alexithymia and the subscales of alexithymia. It was also observed that alexithymia could predict about 69 percent of variances in anxiety scores ( $P=0.001$ ). The analyses revealed that among the tree subscales of alexithymia, only difficulty in identifying feelings had significant role in predicting variances of anxiety ( $P=0.001$ ). The role of the other two subscales was insignificant. The regression analyses in this study showed that alexithymia could predict about 69 percent of variances in anxiety scores. The results also showed that among the three subscales of alexithymia, difficulty identifying feelings correlated positively with anxiety, and this could be due to problems in cognitive processing of these patients. Alexithymia may cause difficulty in identifying and expressing feelings, and hence increase anxiety.

P2

**Epidemiology Study on Anxiety in Patient with Diabetes in Iran**

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P2

The purpose of this survey was the study of the occurrence of anxiety and depression symptoms in patients with Type 2 diabetes mellitus with regard to sex and body

mass index (BMI). 333 individuals with type 2 diabetes mellitus participated in the study. Their demographic and clinical features were examined. The self-completed questionnaire HADS was used for anxiety and depression level evaluation. Student t test and chi square were used for evaluating statistical significance. Findings showed that 56% of the participants were women ( $n=174$ ), while men percentage was 44% ( $n=136$ ). Percentages of anxiety symptoms in women were three times higher in comparison to men, 62% ( $n=136$ ) of women were presented with HADS-A>8 in contrast to 21% ( $n=29$ ) of men ( $P<0.001$ ). Women had a twofold percentage of depression symptom than men, as 41.4% ( $n=72$ ) of women were presented with a HADS-A>8 in comparison to men's 17.8% ( $n=24$ ). When the relation between sex, age and BMI and depression-anxiety symptoms was examined, it was shown that high BMI favors the occurrence of modest or severe symptom, as risk increases for any additional BMI unit. The occurrence of anxiety and depression symptoms is strongly related to the sex of individuals with Type 2 diabetes mellitus, as well as with the BMI in Iran diabetic patients.

P3

**Effect of Group Cognitive-Behavior Therapy on Anxiety and Dysfunctional Attitudes of Patients with Generalized Anxiety Disorder**

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P3

In this investigation, the effect of group cognitive-behavior therapy in reduction of anxiety and dysfunctional attitude were studied on patients with generalized anxiety disorder (GAD). 20 female participants were recognized to have GAD by the researcher through a clinical interview on the basis of DSM-IV-TR standards and invited to take part in the study. They first filled in the dysfunctional attitude scale (forty-question form) as the pre-test of dysfunctional attitudes variable. Then, they completed Beck anxiety inventory as the pre-test of anxiety variable and randomly were categorized in either treatment or control group. Group cognitive- behavior intervention was performed during twelve sessions, two hours each week. The control group was on the waiting list during therapeutic intervention. Midtest was administered at the end of the sixth session and the post-test was given at the end of the twelfth session. The findings suggested that dysfunctional attitudes factor was significantly reduced in the experimental group and supported the hypothesis of the existence of relationship between dysfunctional attitudes and GAD disorder. Moreover, the significant decrease of anxiety in the patients indicates the correct direction of the treatment.

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**P4**

**Family, Chronic Anxiety and Health**

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P4

Based on Bowen family systems theory, one of the sources of chronic anxiety is the level of differentiation of self or emotional maturity in the family of origin: the lower level of differentiation results in less adaptiveness to stress, higher chronic anxiety in a relationship system, greater strain on adaptive capabilities and higher health problems and anxiety disorders. So, the goal of this study has been to examine the relationship between differentiation of self and two symptoms of chronic anxiety in family, namely quality of relationship with parents and health dimensions in an Iranian college student sample. A convenient sample of 210 students (102 women and 108 men) participated in the study. They were selected from the college student population who were studying in Tehran. This is a correlational study that used standard and hierarchical regression analyses for data analyzing. Participants responded to the differentiation of self inventory (DSI), the quality of relationships inventory (QRI) and the world health organization quality of life-100 (WHOQOL-BREF). The results indicate that the level of differentiation of self in the family of origin as the source of chronic anxiety has an influence on conflict with parents and physical, psychological and social health. Also, support has been found for moderating and mediating mechanisms and the results indicate that persons who are more differentiated experience less conflict with parents and report better social health than those who are less differentiated. These results support the initially cross-cultural validity of Bowen family systems theory and extend it by supporting some mechanisms that explain how the level of emotional immaturity in the context of family of origin as the source of chronic anxiety leads to personal and interpersonal health difficulties. Furthermore, these results can help therapists for providing some therapy programs.

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**P5**

**Evaluation of Mice Sperm Fertility Quality in Voice-Induced Stress**

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Reports indicate that one of the causes of harmful to the genital system, especially the testes is stress. Result of damage to testicular quality certainly will affect the quality of sperm fertility. Stress could be created secondarily after some pathological conditions such as neurological diseases or environmental factors. One of the causes of stress could be scary voices, such as cat voice for mice. In this study we aimed to investigate the fertility quality in the animals that were exposed against cat voice to induce stress by using in vitro fertilization (IVF). Twenty male and clinically healthy mice (20-25 g and 6-8 weeks old) were divided to 2 groups including control and test groups. The stress was induced by using cat voice. The control animals were placed in a quiet environment and the test group was kept in a stressful environment. Cat voice was administered each 2 h for 35 days. At the end of experiment the semen samples were collected from epididymis for IVF study with healthy oocytes. Finally we counts fertilized oocytes, two-cell stage oocytes, blastocyst and stopped oocytes. The results of this study showed that despite the decrease in the fertility quality in the test group compared with the control group, however, the differences were not significant ( $P>0.05$ ). These results indicate that the stress has little effect on the in-vitro fertilization quality of mouse sperm.

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**P6**

**Religious Attitudes, Coping Skills and Subjective Well-Being among University Students**

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P6

The current study aims at studying the relationship between the religious attitudes and the coping skills and the subjective well-being of the students of the Azad University, Gorgan branch. To do this, 357 female and male students of the Azad University of Gorgan were randomly selected using cluster sampling. Data were collected by using a questionnaire on assessing the religious attitudes (RAQ) (to assess their Islamic attitude), a questionnaire on Lazarus coping ways (WOCQ), a questionnaire on positive and negative affects scale by Mroczek and Kolarz and a questionnaire on the life satisfaction scale by Diener. Pearson correlation, multiple regression were used to analyze the data. The results show that there are meaningful relationships between the religious attitude

and the subjective well-being, and the coping skills and the subjective well-being. The dimensions of the coping skills, problem-focused coping and subjective well-being showed a significant positive relationship and there is no relationship between emotion-focused coping and subjective well-being.

## P7

### **Compared the Personality Trait in Adolescents with Symptoms of Social Phobia Disorder and Normal Subjects**

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P7

Social anxiety disorder is a debilitating and chronic illness characterized by persistent fear of one or more social or performance situations, with a relatively high lifetime prevalence of 7% to 13% in the general population and various factors are involved in its creation. One of the factors that affect this disorder is personality trait. The present study compared the personality trait in adolescents with symptoms of social phobia and normal subjects. In this study, population included all high school students in the academic year 2013-2014 in Tabriz were selected using the clustering method, 80 students were selected among them. The sample included 40 students with symptoms of social anxiety disorder, and 40 students without regard to age, gender and education matched normal control group. Research tools include personality questionnaire short form and the social phobia inventory. The data were analyzed using univariate ANOVA. The results showed that there are significant differences in the four factors of personality (neuroticism, extraversion, openness and conscientiousness) when the study group compared with the normal group, but there was no significant difference in the agreeableness. So students have symptoms of social phobia compared with the normal group in terms of personality.

## P8

### **Compared the Anger Control and Expression Style in Adolescents with Symptoms of Social Phobia Disorder and Normal Subjects**

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P8

Social anxiety disorder is an anxiety disorder in which a person has an excessive and unreasonable fear of social situations. Social anxiety and self-consciousness arise from a fear of being closely watched and criticized by others. Clinical observation also suggests that some persons with social anxiety disorder may experience intense anger at others upon perceived negative evaluation or when others expect them to engage in activities that are anxiety provoking. The present study compared the anger control and expression style in adolescents with symptoms of social phobia and normal subjects. The study population included all high school students in the academic year 2013-2014 in Tabriz were selected using the clustering method, 80 students were selected among them. The sample included 40 students with symptoms of social anxiety disorder, and 40 students without regard to age, gender and education matched normal control group. Research tools include trait anger expression inventory (STAXI) and the social phobia inventory. The data were analyzed using univariate ANOVA. The results showed that there are significant differences in the anger control and expression style, anger expression outer, expression internal and internal control anger, between normal and adolescents with social phobia subscale, but no significant difference was observed between outer control anger. So students have symptoms of social phobia compared with the normal group in terms of different anger control and expression style.

## P9

### **Social Anxiety Symptoms and Anger: The Mediating Role of Emotion Regulation Difficulties**

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P9

Emotion regulation strategies are considered as determinant variables on both normal and psychopathological processes. The aim of the present study was to investigate the mediating role of emotion regulation difficulties on the relationship between social anxiety symptoms and anger. A total of 171 participants (71 men, 100 women) from the city of Tehran participated in this study as volunteers. All participants were asked to complete the social phobia inventory (SPIN), the difficulties in emotion regulation scale (DERS), and the multidimensional anger inventory (MAI). Social anxiety symptoms showed significant positive correlations with emotion regulation

difficulties as well as anger. The results of path analysis revealed that the association of social anxiety symptoms with anger arousal, hostile outlook, and anger-in was mediated by difficulties in emotion regulation. Based on the results of the present study, it is concluded that the relationship between social anxiety symptoms and anger is not a simple linear one, but the other variables such as emotion regulation strategies play a mediating role in this relationship. These findings also imply the importance of emotion regulation strategies and anger in the process of psychotherapy for patients with social anxiety disorder.

## P10

### Comparing the Early Maladaptive Schemas in Normal and Social Anxiety Adolescents

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Social anxiety disorder is a common anxiety disorders in childhood and adolescence. Adolescence is a period during which the individual believes will lead to different outcomes. The aim of this study was to compare early maladaptive schemas in two groups of adolescents with social anxiety disorder and normal adolescents. The present study was causal-comparative. Population was consisted of all high school students in Shiraz in 2013-2014 school year. 214 students (107 males and 107 females) were selected by cluster random sampling. The 18-item social anxiety scale for adolescents (SASA) was completed. This sample was classified in two groups of normal and social anxiety. Among them, 47 patients (15 females and 32 males) were diagnosed with social phobia and 32 patients (15 females and 17 males) as normal. Short form early maladaptive schema questionnaire subsequently (Yang and Brown, 1994) was distributed. Data were analyzed by independent t-test and multivariate analysis of variance. Results showed that early maladaptive schemas scores were significantly different between two groups of adolescents with social phobia and normal adolescents ( $P < 0.01$ ). Multivariate analysis of variance also showed that adolescents with social anxiety, in terms of separation/rejection, autonomy/dysfunctional performance, heterodirection, vigilance and hampering restrictions, were scored higher than the normal adolescents. Based on the findings, it can be concluded that the scheme is one of the important factors in the development of social anxiety. Patients with social anxiety disorder can be treated by schema therapy as a cognitive-behavioral-

dynamical method for changing dysfunctional schemas.

## P11

### Prediction of Trait Anxiety Based on Emotional Schemas

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P11

Anxiety is a painful feeling that depends on a current traumatic situation or an expected threat that its origin is unknown. State anxiety is a transitory emotional state and trait anxiety refers to individual readiness for anxiety that is relatively stable. Besides, cognitive therapists believe that schemas are central for developing and maintaining the chronic forms of trauma, such as personality disorders, depression and anxiety. Emotional schemas are related to programs, concepts, and strategies that used to respond to emotions. The aim of this study was to predict trait anxiety on emotional schemas. The present study was correlation. Study population included all students at Shiraz University, 270 students (140 females and 130 males) participated in the study through the convenient sampling. They complicated revised scale of emotional schemas and spielberger trait anxiety scale (1983) respectively. For data analysis, descriptive statistics method and Stepwise multiple regression were used. Data analysis showed that emotional schemas of "understanding & control" and "rumination" significantly explained anxiety variance. In this regression model, the "understanding and control" scheme was entered into the equation as the strongest predictor of anxiety. We can conclude that emotional schemas have a high explanatory power in anxiety disorders. So individual understanding of emotions, feelings of mastery and control over them, as well as the amount of rumination in emotional and stressful events, is effective in creating and exacerbating anxiety.

## P12

### Relationship between Anxiety and Personality Types of Female Students

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Anxiety is an unpleasant state of inner turmoil. Anxiety is a feeling of fear, worry, and uneasiness, usually generalized and unfocused as an overreaction to a situation that is only subjectively seen as menacing. The trait of extroversion–introversion is a central dimension of human personality theories. Extraversion and introversion are typically viewed as a single continuum. Thus, to be high on one it is necessary to be low on the other. The aim of this study was to investigate the relationship between anxiety and personality types (introverted and extroverted) in female students. The study population comprised all undergraduate girl students in Payame Noor University. The sample group includes 100 students who were randomly selected and completed anxiety questionnaire and extraversion-introversion questionnaire. To analyze the data, correlation and analysis of variance were used. The results of the study showed that there is a significant relationship between anxiety and personality types. The anxiety level among introverted characters is more than extroverted personalities. People who are introverted personality experience more anxiety than extroverted personalities. According to the obtained results it can be stated that having a mild and extroverted personality reduces internal anxiety and leading to mental health.

### P13

#### **The Relationship Between Locus of Control With Anxiety and Social Phobia in Adolescent's Girl**

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Locus of control refers to the extent to which individuals believe they can control events affecting them. Social anxiety disorder, also known as social phobia, is the most common anxiety disorder. It is characterized by intense fear in one or more social situations. The aim of this study was to investigate the relationship between locus of control with anxiety and social phobia in adolescent's girl. The study population comprised all high school girl students in Pardis city. The sample group consisted of 147 students who were selected through multistage cluster. Research instruments were locus of control questionnaire, anxiety questionnaire, social phobia questionnaire that completed with participants. Pearson and Spearman correlation were used for data analysis. The results showed that there is a significant positive

relationship between external locus of control (the person believes they cannot control their life) and chance with anxiety and social phobia. But there is not a significant relationship between anxiety and social phobia with internal locus of control (the person believes they can control their life). According to this research we can say that believe in external factors and chance (person believes their decisions and life are controlled by environmental factors which they cannot influence) cause to internal anxiety and social phobia.

### P14

#### **Effectiveness of Cognitive-Behavioral Therapy (CBT) Focuses on Cognitive Functions of Patients with Panic Disorder**

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P14

Anxiety disorders, especially panic disorder, are the prevalent psychiatric disorders. Given the high prevalence of this disorder (1.5 to 5 percent of the population), significant impact on quality of life and dysfunctional cognitions during panic attacks and cognitive functions, the present study examined the efficacy of cognitive behavioral therapy on improvement of cognitive functions patient payments. In this study, 6 patients with diagnostic criteria for panic disorders by the structured clinical interview axis I (SCIA) for anxiety disorders were enrolled in the research, before and after the intervention pre-test and post-test were performed. Patients underwent cognitive behavioral therapy for 3 months. Clinical outcomes were compared before and after treatment and obtained data were analyzed based on the size effect and the improvement precedent. The results shown cognitive-behavioral therapy (CBT) improved executive functions (ability abstract, strategic planning and mental flexibility) in patients of panic disorder. According to the results, the effectiveness of cognitive behavioral therapy on the improvement of cognitive functions (improved the top-down processing) of the patients with panic disorder was approved. The results of this study suggest that researchers and practitioners in the field of mental disorders and impaired cognitive functions of the brain should pay more attention in therapeutic approaches (approach based on cognitive rehabilitation) in the treatment of panic disorder.

### P15

#### **The Effect of Dialogues Based on Philosophical Stories on Reducing Anxiety Symptoms in 11-12 Old Age Children in Tehran**

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The present study examines the effect of conversation based on philosophical stories in the community of inquiry on the reduction of the signs of anxiety disorders in the children between 11 and 12 of Tehran. This semi-empirical study was conducted in terms of test and control groups. The participants of the study consisted of all fifth and sixth grade students of public schools of Tehran (n=50) chosen among the 19 education areas using cluster sampling. To do so, first, five areas were randomly chosen out of which two primary schools -Nur-e Narges and Shohaday-e Mantagheh 5 - were selected among the public girl schools and all the fifth and sixth grade students were assessed using Achenbach self-evaluation questionnaire (YSR) and the students suffered from anxiety disorders syndrome were accepted as the sample of the study. Then, the students were randomly divided into two test and control groups. The test group read the philosophical stories and discuss on it for an hour during 12 weekly sessions by the help of a trained teacher. After the sessions ended, again Achenbach self-evaluation questionnaire (YSR) was administered to determine the effect of participation in philosophical community of inquiry on anxiety disorders in both test and control groups. Results indicated that the administration of the plan had significant effect on reducing the signs of anxiety disorders in the test group.

**P16**

**Comparing Anxiety and Stress in Diabetic Patients with and without Complications**

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People with diabetes mellitus have a high risk of anxiety and stress, and anxiety is higher in patients with diabetes who have long-term complication. The aim of this study was to assess and compare the prevalence of anxiety and stress in diabetic patients with and without complication attending to diabetes clinic of Ebn Sina hospital of Delfan, Iran. In this descriptive-comparative study, 239 type II diabetic patients (152 patients with complications and 87 patients without complications) from diabetes clinics of Ebn Sina hospital were assessed.

Patients selected with census method and completed the Dass scale and demographic questionnaire. Data was analyzed using SPSS 18 software. Significant levels in this study were  $P < 0.05$ . The results showed that the prevalence of anxiety and stress in both groups (diabetic patients with complications and without complications groups) was 15.17% and 11.74% respectively (17.43% anxiety and 13.05% stress in diabetic patients with complications and 11.21% anxiety and 9.44% stress in diabetic patients without complications) that the difference of anxiety and stress between two groups was significant ( $P = 0.0001$ ). The findings of this study demonstrate a significant association of complications, anxiety and stress symptoms. But additional studies are needed to establish the directional nature of these relationships.

**P17**

**The Effectiveness of Acceptance and Commitment Therapy on Reducing Internalizing Symptoms in Children and Reducing Parental Stress in Mothers**

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The aim of this study was to examine the effectiveness of acceptance and commitment therapy (ACT) on reducing internalizing symptoms in children and reducing parental stress (PS) in mothers. Research design of this study was Quasi-experimental research with a pre/post test design with a control group. Using cluster sampling from among all the school children of the 2013-2014 school year at Isfahan city, 20 children (n=10 experimental and n= 10 control group) 5 and 6 age with internalizing problems (anxiety/depression and depression/isolation) were selected as sample. The mothers of these children based on PS scale require psychological treatments. Mothers and children in the experimental group, attended separately for ten week in ten sessions with 60 minutes duration in group therapy sessions (ACT). Mothers completed in the pre-test and post-test (PS) (Abidin, 1990) and Achenbach (2001) Questioner. Analysis of covariance was used. The results obtained showed that the symptoms of anxiety/depression in children and parental stress at intervention group compared with the control group was significantly decreased ( $P < 0.05$ ) However, reducing anxiety/depression and depression/isolation was not observed in any groups. ACT can be

an effective way to reduce the symptoms of anxiety/depression in children and parental stress in mothers. However, according to the results, using this method to reduce the symptoms of isolation/depression in children requires further research.

## P18

### **Comparing the Effectiveness of Child-Parent Relationship Therapy and Positive Parenting on Children Symptoms of Anxiety and Depression and, Maternal Efficacy**

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Purpose of this study was comparison of efficacy of child parent relationship therapy and positive parenting on decreasing of symptoms of anxiety and depression of children and maternal efficacy. Research design of this study was semi-experimental research with a pre/post-test design and control group. Among all of the school children who have 7 and 8 aged in Isfahan city in the 2011-2012 school year, 20 children with anxiety/depression were selected as simple with cluster sampling method. Sample group divided into two groups. Ten of the mothers of the children attended in the parent-child relationship therapy based on group meetings and ten of them attended in the positive parenting based on group meetings for eight week in eight sessions with 120 minutes duration. Parent completed maternal efficacy (Dumka,1996) and Achenbach questionnaire (Achenbach,2001) in the pre-test, post-test. Analysis of covariance was used to analyze the data. According to results, both methods lead to significant reduction in children Symptoms of anxiety and depression at ( $P<0.05$ ), although significant increase of parenting self-efficacy observable only at child-parent relationship therapy ( $P<0.05$ ). The use of both methods in order to reduce symptoms of anxiety/depression in children, recommended to child psychologists and educators. Although between these two methods only child-parent relationship therapy intervention led to increased self-efficacy parents.

## P19

### **Effectiveness of Child-Parent Relationship Therapy on Reducing the Children's Physical Complaints and Improving Family Functioning**

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One of the children problems is persistent physical complaints without clear medical cause, that often have a negative effect on children performance. Purpose of this study was investigation of effectiveness of child parent relationship therapy on reducing somatic complaints in children 7 and 8 aged and improving family functioning. Methodology of this study was Quasi-experimental research with two groups. After the initial screening of 300 girls aged 7 and 8 at Isfahan city in 2011-2012 school year, 20 children who based on Achenbach questionnaires on in somatization subscale were needed to clinical attention were selected with using cluster sampling and randomly assigned in two experimental and control groups. Afterward Mothers in the experimental group attended in (CPRT) for eight week in eight sessions with 120 minutes duration. Mothers of both groups completed Achenbach (1991) and family functioning (Bernard bloom ,1985) questionnaire in the pre-test, post-test. Analysis of covariance was used to analyze the data. The results of the study showed that there was significant different means of somatic problems at two experimental and control groups. In the other words the parent-child relationship therapy leads to decreasing children somatic complaints ( $P<0.05$ ). In addition this method lead to family performance at intervention group ( $P<0.01$ ). Child-parent relationship therapy is an effective method in reducing somatic complaints in children and improves family functioning.

## P20

### **The Effectiveness of Child-Centered Play Therapy on Reducing Internalizing Symptoms in Children and Reducing Parental Stress in Mothers**

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The aim of this study was assessing the effectiveness of child-centered play therapy (CCPT) on reducing internalizing symptoms in children and reduced parental stress in mothers. The method of this study was Quasi-experimental research study using a pretest – post-test along with the control group. A group of 20 children with 7 and 8 age in 2012-2013 school year (n=10 experimental and n=10 control group) with internalizing disorder (anxiety/depression and depression/isolation) selected through cluster sampling method. They were divided into two experimental and control groups. Children in the experimental group participated in CCPT in 15 session of one hour. Control group does not receive any intervention. Both groups were assessed at the pre-test and post-test questionnaires, using the Achenbach Child Behavior Checklist (2001) and parental stress (Abidin, 1990). Analysis of covariance was used. CCPT in the treatment group a significant reduction in symptoms of anxiety/depression in children at ( $P<0.05$ ) in compared with the control group. But this method has not significant impact on reducing symptoms of isolation/depression in children. In addition, reducing parental stress was not significant in any groups. CCPT can be an effective way to reduce the symptoms of anxiety/depression in children. However, an intervention to alleviate symptoms of isolation/depression in children and reduce parental stress requires further investigation.

## P21

### **The Simple and Multiple Relationships of Cognitive Avoidance, Intolerance of Uncertainty, Metacognitive Beliefs, Perfectionism, and Cognitive Avoidance with Worry in Patients with Generalized Anxiety Disorder and Obsessive Compulsive Disorder**

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Worry is considered as one of the shared cognitive components in generalized anxiety disorder (GAD) and obsessive compulsive disorder (OCD). The study of cognitive factors influencing worry simultaneously has important implications for psychopathology. These factors have been discussed separately in different theoretical models. The aim of the present study was to investigate the simple and multiple relationships of metacognitive belief, intolerance of uncertainty, perfectionistic cognitions, and cognitive avoidance with worry in patients with GAD and OCD. A total

of 66 patients (52 women, 14 men) with GAD and 74 patients (51 women, 23 men) with OCD were selected by purposive sampling in Yazd and Tehran. All participants completed Penn State worry questionnaire (PSWQ), metacognitive beliefs questionnaire (MCBQ), intolerance of uncertainty scale (IUS), perfectionism cognitions inventory (PCI), and cognitive avoidance questionnaire (CAQ). Results showed a positive correlation between predictor variables and worry in both groups. Metacognitive beliefs and intolerance of uncertainty were the most powerful predictors of worry in patients with GAD and OCD, respectively. It can be concluded that although worry is a shared cognitive component in both GAD and OCD, the determinants of worry are different in the two disorders.

## P22

### **Meditating Role of Rumination and Worry on the Relationship between Locus of Control with Depression and Anxiety in a Sample of Depressed and Anxious Patients**

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The aim of the present study was to investigate the relations of locus of control, rumination, and worry with depression and anxiety in a sample of depressed and anxious patients. A second purpose of the study was to examine the mediating role of rumination and worry on the relationship between locus of control with depression and anxiety. One hundred and twelve patients with major depression and anxiety disorders (58 depressed, 54 anxious) participated in this study. All participants were asked to complete Rotter's Locus of control scale (RLCS), response styles scale (RSS), Penn State worry questionnaire (PSWQ), Beck depression inventory (BDI), and Beck anxiety inventory (BAI). The results revealed significant correlations between locus of control, rumination, and worry with depression and anxiety. Rumination and worry mediated the relationship between locus of control with depression and anxiety. On the basis of the results of the present study it can be concluded that the relation of locus of control with depression and anxiety is not a simple one but is mediated by other variables such as rumination and worry.

## P23

### **The Investigation of the Obsessive-Compulsive Disorder Severity Based on Self-Focused Attention Styles and Sense of Guilt in Students**

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Several studies suggest that obsessive-compulsive disorder (OCD) is common among college students. Therefore, identification of factors contributing to the symptoms of this disorder is considered one of the most important issues in the field of education. The purpose of this study is to predict the severity of OCD based on self-focused attention styles and sense of guilt in students. Sample group was included 150 students of universities in Kazeroun city that they were selected between all students by multi-stage cluster sampling and were tested via Maudsley obsessional compulsive inventory (MOCI), rumination-reflection questionnaire and test of self-conscious affect (TOSCA-2). In this correlation study, the correlations between variables were analyzed using Pearson's correlation coefficient and hierarchical regression analysis in SPSS. The results showed that reflection style of attention ( $\beta$ : -0.22,  $P \leq 0.01$ ) could predict the intensity of OCD in students. This study provided opportunity for psychotherapists and psychologists to consider style of self-attention particularly reflection style in reducing and preventing recurrence of OCD symptoms.

## P24

### Religious/Spiritual Coping in Childhood Cystic Fibrosis: a Qualitative Study

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To understand the role of religiousness/spirituality in coping in children with cystic fibrosis (CF). Participants were a convenience sample of 23 patients with CF, ages 5 to 12 years, and their parent(s) in an ambulatory CF clinic. The design was a focused ethnography including in-depth interviews with children and parent(s), children's drawings, and self-administered written parental questionnaires. Analysis used grounded theory. Main outcome measures were participants' views on religion/spirituality in coping with illness. Data included 632 quotes organized into 257 codes categorized into 11 themes. One overarching domain emerged from analysis of the 11 themes: religious/spiritual coping composed of 11 religious/spiritual coping strategies. Children with CF reported a variety of religious/spiritual coping strategies they nearly always

associated with adaptive health outcomes. A preliminary conceptual framework for religious/spiritual coping in children with CF is presented. More study is needed to assess how variability in age, disease type, disease severity, religious/spiritual preference, and religious/spiritual intensity affect religious/spiritual coping in children with chronic illness. Future studies should also investigate whether physician attention to religious/spiritual coping could assist patients in coping with CF and strengthen the doctor-patient relationship.

## P25

### The Effectiveness of Positive Thinking Skills on Locus of Control and Controlling the Test Anxiety for Female Student of 3<sup>rd</sup> Grade of High School

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Test anxiety is one of key factors which weaken the student's morale and confidence and reduce their creativity and gradually become the permanent personal characteristic, and mostly results in feeling of inadequacy. Human's locus of control is usually roots in personal belief system about the causes of the different personal experience and the causes of the success or failure, so it has great effect on human behavior. This research is to investigate the effectiveness of positive thinking skills on locus of control and controlling the examination anxiety for female student of 3rd grade of high school. The research method is quasi-experimental study methods with pretest-posttest control group. 36 third grade female student of high school from Qazvin city were selected as samples by random sampling and they answered Spielberger's test anxiety questionnaire. Students were placed into an experimental group and a control group. Spielberger's test anxiety questionnaire and Rotter's locus of control questionnaire were used in this research. After the pretest, the experimental group was trained by the positive thinking skills through eight 90-minute training sessions. After training sessions, the same questionnaire was answered by both experimental and control group in two phase of pretest and follow up (1 month). The results were analyzed with repeated measures analysis of variance. Results show that the positive thinking skills training caused the significant differences between experimental and control group. ( $\alpha=0.05$ ). Based on the research results it can be stated that "Training the positive thinking skills can be used as medical and educational practices for students".

P26

**The Effectiveness of Cognitive Behavior Therapy on Coping Strategies: Compare of Children with Internalized Disorder**

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We aimed to investigate the efficacy of coping cat protocol on coping strategies of girls and boys with internalized disorders. A true experimental method in the form of pre-test and post-test. The study population consisted of all children with internalized disorders in Tehran. The sample consisted of 80 children aged 9 to 11 years (40 boys and 40girls) with internalized disorders were based on teacher evaluation in Achenbach system of empirically based assessment, who selected and divided randomly in to experimental and control groups. Then, experimental groups participated in 16 individual sessions. Before and after treatment sessions, all children of experimental and control groups fulfilled the coping strategies questionnaire of Frydenberg and Luise (1992). ANCOVA and MANCOVA for two independent groups were used. Findings revealed that coping cat protocol significantly changed coping strategies of experimental group and there are significant different between girls and boys and in the post test, this differences (except in affiliation coping) are removed. The findings in this study revealed that the importance of coping strategies on internalizing disorders in girls and boys, and the effect of therapy on children is greater use of problem-solving (help seeking, try & anticipation and focus on the positive) and emotion strategies(affiliation) and has identified the reduction of unadjusted coping styles like as denial and passive aggression.

P27

**Explanation of Vulnerability to Somatization and Anxiety Based on Attachment Styles**

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Several factors may make children vulnerable to psychological problems. Attachment style can be considered as a risk factor for later psychological pathology. The main purpose of this study was to explain vulnerability to somatization and anxiety based

on attachment styles in university students in Tehran. The research method was descriptive- correlation. The statistical population comprised of all students at mixed-state universities in Tehran, that by using random multiple cluster sampling method, 384 male and female students were selected and completed the adult attachment inventory (AAI) and the symptom checklist-90-revised (SCL-90-R). Findings were analyzed by using SPSS statistical software, Pearson correlation coefficients and simultaneous regression analysis. Analysis of the data revealed that secure attachment style with vulnerability to anxiety and somatization has negative significant correlation and avoidant and ambivalent attachment styles have positive significant correlation. The results revealed that secure and insecure internal working models that constructed in frame of mother-infant relationship can play a determining role in genesis and perpetuation of psychological vulnerabilities.

P28

**Anxiety and Spirituality Well-Being**

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Anxiety disorder is one of prevalent mental health problems that affect all aspects of human life. Considering Spirituality aspect of human is essential for mental health promotion. This study aimed to identify the relation between Spirituality well-being and depression, anxiety, and stress. A descriptive-analytical cross-sectional study was carried out on 100 nursing students in Islamic Azad University of Rasht in 2013. For data collection we used three parts questionnaire including demographic variables such as age, sex, occupation and marital status, depression, anxiety and stress scale (DASS-21) and spirituality well-being scale (SWBS). There were significant negative correlation between SWBS and depression ( $r=-0.673$ ,  $P=0.0001$ ), anxiety ( $r=-0.305$ ,  $P=0.002$ ), and stress ( $r=-0.385$ ,  $P=0.0001$ ). Also there were significant negative correlation between Existential Well-Being subscale and depression ( $r=-0.651$ ,  $P=0.0001$ ), anxiety ( $r=-0.285$ ,  $P=0.004$ ), and stress ( $r=-0.411$ ,  $P=0.0001$ ), and Religious Well-Being subscale and depression ( $r=-0.550$ ,  $P=0.0001$ ), anxiety ( $r=-0.262$ ,  $P=0.008$ ), and stress ( $r=-0.273$ ,  $P=0.006$ ). Based on findings of this study with increased scores of SWB and its two subscales, scores in depression, anxiety, and stress scales will be decreased. It can be considered that improving spiritual well-being can be a suitable method for decreasing stress and its negative effects.

## P29

### The Effectiveness of Psychodrama in the Reduction of Social Anxiety Disorder among Male Adolescents

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This study has been performed with the goal of investigating the effectiveness of psychodrama on the reduction of social anxiety among the male adolescents in Kermanshah. This is a quasi-experimental research study (pre-post and follow-up testing plan with control group). 210 adolescents (13-14 year-olds) from four junior high schools in Kermanshah filled Liebowitz social anxiety scale for children and adolescents (LSAS-CA) (Masia-Warner, Klien & Liebowitz, 2003). 30 of adolescents who obtained the highest scores in LSAS-CA scale were chosen as the sample and were randomly assigned as experimental group (15 persons) and control group (15 persons). The experimental group participated in two-hour sessions of psychodrama twice a week for 6 weeks. The control group received no intervention. Data analysis is performed by analysis of covariance. The findings of this study showed a significant reduction in the symptoms of social anxiety among the adolescents in experimental group in comparison to that of the control group. Also a two-month follow-up confirmed the stability of the results. Adolescents' interactions in the psychodrama group, talking about their problems to the group, and achieving appropriate solutions by the person himself are the useful factors of this intervention.

## P30

### Self-Focus Attention in Social Phobia Patients and Compared with Normal Subjects

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This study compared focus attention (self-focused

attention and other focused attention) in social phobia patients and normal subjects. In this study with causal-comparative method, 100 subjects with social phobia and 100 normal individuals have been compared. Subjects were selected through cluster sampling among Tabriz university students. Data scale of social phobia and focus attention of the data was performed using multivariate analysis of variance and were analyzed with SPSS 16 software. This study showed that there are significant differences in self-focused attention, between the two groups of patients with social phobia and normal subjects, however there was no significant difference between the groups studied in focused attention on others. The results showed that people with social phobia in social situations, their attention mostly is focused on themselves.

## P31

### The Relationship of Self-Esteem and Social Anxiety with Mental Health in Adolescents: The Role of Mediator Variables

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According to studies, self-esteem plays an important role in mental health. Self-esteem is also one of the most important correlates of anxiety, especially social anxiety. Being anxiety in adolescents make negative impacts on their academic performance, mental health and social function. This study aims to investigate the relationship between self-esteem and mental health, according to the mediator role of social anxiety in adolescents. The present study is cross-sectional and correlational. The statistical population is from the guidance and high school students in Shiraz in 2013-2014 that 180 students include 101 girls and 79 boys were selected by cluster sampling. The age range of subjects was 12-18 years and the mean age was 15.4. The instruments used in this study were the general health questionnaire (GHQ), Rosenberg's self-esteem questionnaire and social anxiety scale for adolescents (SASA). Data were analyzed using correlation and regression. There is a significant relationship between mental health and self-esteem ( $r = -0.368, P < 0.01$ ). The relationship between mental health and social anxiety is also significant ( $r = 0.213, P < 0.01$ ). There is a significant relationship between self-esteem and social anxiety ( $r = -0.453, P < 0.01$ ). Hierarchical regression shows that the variable of social anxiety in the relationship between self-esteem and mental health

plays a mediator role. This study shows the role of self-esteem and social anxiety in adolescents' mental health. The relationships between the variables of the study indicate that social anxiety in the relationship between self-esteem and mental health plays a mediator role. So, low self-esteem causes social anxiety to rise; and increasing social anxiety makes mental health to reduce. On the other hand, high self-esteem reduces social anxiety, in turn; reducing social anxiety is associated with increasing the level of mental health.

### P32

#### Effect of Rational Emotive Behavior Therapy (REBT) on Anxiety and Irrational Beliefs among Infertile Women

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Present study is aimed at evaluating the effect of rational emotive behavior therapy (REBT) on anxiety and irrational beliefs among infertile women. To assess the level of anxiety and irrational beliefs, 50 infertile women were selected randomly from Mediwave IVF and fertility research hospital in Mysore city and were administered Cattle questionnaires for surveying anxiety and The shortened general attitude and belief scale (SGABS) for measuring irrational beliefs due to the duration of infertility. Out of 50 infertile women, 40 infertile women were randomly assigned to experimental (n=20) and control group (n=20). Experimental group received 24 sessions of manual based intervention. Results of repeated measure ANOVA indicate that the REBT was effective in reducing anxiety and irrational beliefs in experimental group from pre to post assessment and follow up. Results provide evidence that REBT strategies can be effective in reducing anxiety and irrational beliefs in women undergoing infertility medical treatment. REBT helped in positive coping statements, pleasurable activities and helped them to reduce negative affect associated with infertility and feeling of hopelessness. Further REBT led to a gain in confidence over coping with problems related to infertility. Findings indicate that REBT intervention is a useful technique to alleviate of anxiety and irrational beliefs among infertile women.

### P33

#### The Effect of Maternal Stress on the Neural

#### Apoptosis in the Neonate Rats

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Young children with history of maternal stress during pregnancy suffer from several neurological and psychological disorders in the childhood. The purpose of this study was to investigate the effect of maternal stress during pregnancy on the neural apoptosis in the newborns. Pregnant Wistar rats were divided into control and stress groups. Stress was applied on the pregnant females from day 15 until delivery. Pregnant rats were acutely stressed for 45 minutes three times a day with noise and light. Five micrometer paraffin embedded sections were prepared from the brain of neonates. To visualize DNA fragmentation, terminal deoxynucleotidyl transferase-mediated dUTP nick end labelling (TUNEL) for staining DNA fragmentation after apoptotic cell death was performed. Apoptotic cells were counted in the dentate gyrus of neonates. The mean number of apoptotic cells increased in the neonates of stress group compared to control group in the dentate gyrus ( $P < 0.001$ ). Our findings showed that the maternal stress during pregnancy could lead to some brain structural related diseases.

### P34

#### Attachment Patterns and Separation Anxiety Symptoms in Children

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Separation anxiety disorder (SAD) is characterized by developmentally inappropriate and excessive anxiety concerning separation from home or those to whom the individual is attached. Literature suggests that child attachment and anxiety symptoms are related. The aim of this study is to discover which symptoms of separation anxiety were associated with avoidant and/or ambivalent attachment. A total 150 children in first grade school participated in the study. To collect data personal information form, the separation anxiety symptoms scale (SAAS-C), and attachment questionnaire-child versions (AQC) were used. According to results, there is a significant positive correlation between separation anxiety disorder and attachment. Moreover, different associations were found between three patterns of attachment and separation anxiety symptoms.

### P35

#### **The Effectiveness of Stress Management Training on the Quality of Life of Divorced Women**

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The purpose of current survey is to determine the effectiveness of stress management training on the quality of life of divorced women who are under support of Baharestan township welfare organization. The used method for this survey was quasi-experimental by designing pre test-post test with evidence group. Statistical population of the study includes 587 divorced. The top thirty women in quality of life scale were selected and randomly replaced by two experimental and evidence groups (15 women, in each group). WHO's questionnaire of quality of life (1989) was the basis (tools) for survey. The experimental group was trained stress management based on cognitive-behavioral approach (Antoni MH, Ironson G, Schneiderman N. (2007)) during ten 2-hour weekly sessions. By the contrast, the evidence group received no interference. For the purpose of analysing data, covariance analysis and variance analysis of repetitive measurements were used. Results of the study demonstrate that the interference was led to promotion of quality of life ( $P=0.001$ ). In addition, the occurred changes had impact on the pursuance of permanence. Based on the findings of this survey, stress management training program led to promotion of quality of life. Therefore, it can be considered as an effective method for promotion of quality of life of divorced women.

### P36

#### **The Study of Relationship of Self-Esteem, Social Anxiety and Fear of Body Image in Adolescents: The Role of Mediator Variables**

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During the last two decades, extensive researches have been done on body image in adolescents. Several psychological factors can affect fear or satisfaction

of body image. The present study aims to investigate the role of predicting self-esteem about fear of body image in adolescents emphasizing social anxiety as a mediator variable. The present study is cross-sectional and correlational. The statistical population is the guidance and high school students in Shiraz in 2013-2014 that 180 students including 101 girls and 79 boys who were selected by cluster sampling. The age range of subjects was 12-18 years and the mean age was 15.4. The instruments used in this study were the fear of body image of Littleton et al, Rosenberg's self-esteem questionnaire and social anxiety scale for adolescents (SASA). Data were analyzed using correlation and regression. There is a significant relationship between body image and self-esteem ( $r=-0.405$ ,  $P<0.01$ ). The relationship between social anxiety and body image is significant ( $r=0.280$ ,  $P<0.01$ ). There is a significant relationship between self-esteem and social anxiety ( $r=-0.453$ ,  $P<0.01$ ). Hierarchical regression shows that the variable of social anxiety has a mediator role in the relationship between self-esteem and body image. This study shows the relationship between self-esteem and social anxiety with body image in adolescents. The relationships between the variables of the study indicate that social anxiety in the relationship between self-esteem and fear of body image has a mediating role. So, low self-esteem reduces self-worth and self-esteem, and also, increases social anxiety which increases the level of fear of body image. On the other hand, high self-esteem improves their positive evaluation and reduces social anxiety, which ultimately reduces the fear of body image.

### P37

#### **Assessment of Job Stress and Workload among Rehabilitation Services Staff: A Comparative Study among Physical and Occupational Therapists, Orthotists and Prosthetists**

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Extensive job stress and workload are main causes of frustration and reduced efficiency among workers, and despite negative effects of these factors on employees' performance, related studies in rehabilitation staff are limited. The aim of this study was to evaluate job stress, workload and their related factors in rehabilitation staff. In this cross-sectional study, 150 employees in three rehabilitation professions including physical therapy (PT), occupational therapy (OT), and orthotics and prosthetics (OP) were selected randomly out of all the professionals in these careers in Tehran in 2013.

Socio-demographic questionnaire, job stress inventory (JSI) and the NASA task load index (NASA-TLX) were applied as research tools. To analyze the data, descriptive and inferential statistics were applied using SPSS.19 software. The results indicated that job stress in PT and OP is high, and although the difference in the mean job stress score between PT and OP was not significant, there is a significant difference between job stress in these groups and OT. The amount of workload in PT was significantly higher than OP and OT, but the difference in workload between OP and OT was not significant. Job experience had positive correlation with workload and job stress. No significant differences were identified in mean scores of job stress and workload with regard to gender, marital status and level of education. Significant higher job stress was found in public sector employees compared to private sector ones, and in temporary employees compared to those who had permanent contract. Due to high levels of perceived job stress and workload in rehabilitation staff, recognizing effective factors for modifying these problems and assessment of work related disorders among these professionals should be given a priority.

### P38

#### **Relationship between Scrupulosity, Obsessive-Compulsive Disorder (OCD), and OCD-Related Cognitive Styles in a Clinical Sample**

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Scrupulosity (also known as religious obsessive-compulsive disorder) is a sub-group of obsessive-compulsive disorder (OCD) that has not been well investigated internationally and in Iran. In recent decades, scrupulosity has been the researchers' subject of interest, and relevant literature, mostly with a cognitive approach, has attracted attention. In this regard, investigators have tried to shed a light on different aspects of this concept by identifying constructs that are mutually related to both obsessive-compulsive disorder and scrupulosity. OCD-related symptoms and cognitive styles are among these constructs. The objective of this research was to study the relationship between scrupulosity, obsessive-compulsive symptoms, and OCD-related cognitive styles (obsessive beliefs and thought-action fusion). For sampling, 30 individuals with obsessive-compulsive disorder were recruited from Shafa counseling center, Aramesh counseling center, and the Child and Family

Clinic of Shahid Beheshti University. In addition, 50 individuals with OCD were recruited via internet social networks. Obsessive-compulsive inventory-revised (OCI-R) was used for screening. Convenience technique was used as the sampling design. In order to collect data, Penn inventory of scrupulosity (PIOS), thought-action fusion scale (TAF), depression anxiety stress scale (DASS-21), obsessive-compulsive inventory-revised (OCI-R), and obsessive beliefs questionnaire (OBQ) were administered. Pearson's correlation coefficient and regression analysis were used to analyze the data. Results showed that there were significant relationships between scrupulosity and OCD symptoms total score, scrupulosity and obsessive beliefs, and scrupulosity and thought-action fusion. Results also showed that the variations in scrupulosity scores could be best predicted by anxiety and importance/control of Thoughts. The results showed a significant relationship between scrupulosity and OCD symptoms, which underlines pathology of scrupulosity. The results showed a significant relationship between scrupulosity and obsessing subscale of OCI-R, which means that scrupulosity is obsessive-based and is not associated with compulsive act. The results also showed a significant relationship between scrupulosity and obsession. Regression analysis demonstrated that the importance of thoughts/controlling thoughts subtype could significantly predict the variability of scrupulosity. As scrupulosity is strongly related to mental obsession, so it would inevitably show a strong association with importance of thoughts/controlling thoughts. According to results, there was a significant relationship between scrupulosity and thought-action fusion, and a stronger relationship between scrupulosity and moral thought-action fusion. As mentioned above, Sakovskis (1985) and Rachman (1997, 1998, 2003) have discussed the role of thought-action fusion in etiology and maintenance of OCD.

### P39

#### **Investigating the Social Factors Associated with the Mental Health of the Students in Faculty of Social Sciences of Allameh Tabatabaie University in 2011**

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Mental health plays an important role in ensuring the dynamism and efficiency of every community. Since human resources have crucial role in the cultural, social and economical developments of communities, students also are the brilliant segments of society and creators of future of each country; therefore, assessing of their mental health is of utmost importance. The aim of the

present study is the investigation of social factors like social support, social status and social skills associated with student's mental health in social sciences faculty of Allameh Tabatabai University in 2011. This cross-sectional study was conducted among the B.A. students. Data were collected using a standardized questionnaire GHQ-28 including 4 scale somatic symptoms, anxiety and insomnia, social dysfunction and severe depression and also the new questionnaire containing the variables of social support, social skills, social status and demographic data. Statistical analysis was performed using  $\chi^2$ , t-test, ANOVA and correlation coefficient. In this study, 300 students (218 girls and 82 boys) were examined, the average age of the participants was 21.95 ( $\pm 2.9$ ) years and 10.7% of the respondents were married. According to the current results, 53.3 % (n=160) was suspiciously recognized to have mental disorder based on the GHQ-28. Results showed that depression was significantly higher in boys than girls. Association analysis indicates a positive and significant relationship between social support and social skills with students' mental health. But there was not proven relationship between the social status and students' mental health. There is a diverse range of psychological problems among students and is influenced by cultural, social, economical and family factors as well as new conditions of life (university) and adjustment concerns with new conditions. The current findings imply that more than half of the students in the study were suspected to have mental disorders and mental health services are needed.

#### P40

### Effectiveness of Psychodrama on Reduction of Anxiety among Male Schizophrenic Patients

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Anxiety is one of the symptoms in chronic schizophrenic patients. Past research studies show that psychodrama as a group therapy is effective in treatment and rehabilitation of psychological disorders. The aim of this study is to explore the effect of psychodrama on the reduction of anxiety in schizophrenic patients. 26 male hospitalized chronic schizophrenic patients were randomly assigned into an experimental group (n=13) and a control group (n=13). Both groups were treated with antipsychotic drugs and were evaluated by using self-rating Anxiety scale. Then the patients in the experimental group received 20 sessions of the treatment of psychodrama. Finally both groups were evaluated again. The pre-test and post-test scores were comprised by using t-student test. After psychodrama therapy, the average of total anxiety scores and affective symptoms of anxiety

subscale decreased significantly in the experimental group ( $P < 0.05$ ), but there is no significant difference in somatic symptoms of anxiety subscale. The findings of our study support the idea that, as a non-pharmacological therapy method, psychodrama can reduce symptoms of anxiety in schizophrenic patients. On the other hand, analyses of the two subscales of the SAS revealed that the effect of psychodrama was significant in reducing emotional anxiety, but not as the same with physical anxiety. It can be argued that the effect of psychodrama on the emotional aspect of anxiety was so powerful that, despite its non-significant effects on the physical aspect, was able to reduce the total anxiety.

#### P41

### The Effects of Voice-Induced Stress on Mice Testes Parameters

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Reports indicate that one of the causes of harmful to the genital system, especially the testes stress. Stress could be created secondarily after some pathological conditions such as neurological diseases or environmental factors. One of the causes of stress could be scary voices, such as cat voice for mice. In this study we aimed to investigate the testes parameters in the animals that were exposed against cat voice to induce stress. Twenty male and clinically healthy mice (20-25 gr and 6-8 weeks old age) were divided to 2 groups including control and test groups. The stress was induced by using cat voice. The control animals were placed in a quiet environment and the test group was placed in a stressful environment. Cat voice was administered each 2 h for 35 days. At the end of experiment the testes were fixed in formalin and after tissue processing and staining with hematoxylin-eosin morphology tubular differentiation index (TDI), republication index (RI) and spermiogenesis index (SI) were investigated. The results of this study showed that despite the decrease in the each of TDI, RI and SI in the test group compared with the control group, But the differences were not significant ( $P > 0.05$ ). These results indicate that the stress has little effect on testes morphometric parameters.

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P42

**Effectiveness of Mindfulness Based Exposure Therapy on Obsessive – Compulsive Disorder: a Case Report**

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Obsessive compulsive disorder (OCD) is characterized by intrusive thoughts or images (obsessions) and/or rigid rituals that may be driven by obsessions (compulsions). Controlled outcome studies investigating the efficacy of psychological treatments for OCD and exposure and response prevention (ERP) has been found to be the “treatment of choice” for OCD. Moreover, mindfulness-based approaches have been proven-effective in treating OCD and anxiety disorders. In this study combination of mindfulness and exposure with response prevention in the treatment of OCD had been investigated. The aim of this research was to study the effectiveness of mindfulness based exposure therapy (MET) for OCD. In this research, single subject design with base line and 3 months follow-up was used. Participants were selected from clients of psychiatry hospital and received 8 sessions of MET. The patient was a 45 years man who suffered from OCD. Yale–Brown obsessive compulsive scale, Beck anxiety and depression inventories and SUD and process of treatment questionnaire were used in this study for analysis. Results showed that the patients acquired clinically significant change on outcomes measures. MET is effective for OCD, anxiety and depressive symptoms and SUD. Weekly analyses of process of treatment showed that distress, reaction to obsession moderated. The treatment gains were maintained at 3 month follow-up. Combination of mindfulness and exposure with response prevention can led to improvement of obsessive-compulsive symptoms. Our primary study showed mindfulness based exposure therapy can be useful for anxiety and depressive symptoms in OCD. Further research is needed for study the effectiveness of MET for OCD.

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P43

**The Study of Computer Anxiety: Positive and Negative Attitudes to it among Undergraduate Students of Kangavar Payam-e-Noor University**

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Computer anxiety as a kind of state anxiety that refer to “the negative emotional and cognitive reactions in some people that occur during work with the computer” and maybe considered as a challenge to their capabilities. In the present study, computer anxiety and positive and negative attitudes to it were examined among undergraduate students of Kangavar Payam-e-Noor University. This descriptive-comparative causal study was performed on 310 (197 female, 113, males) students were selected from different academic disciplines by quota sampling. Participants completed the computer attitude scale (Bandalos and Benson, 1999). The data in the statistical software SPSS-18 were recorded and descriptive statistics, t-test were used to analyze the data. The findings indicate that there were no gender differences in computer anxiety and positive and negative attitudes to it ( $P>0.05$ ). In addition, there were a remarkable difference in computer anxiety scores and positive and negative attitudes to it among students based on different academic disciplines. Results revealed that a higher frequency and percentage of negative attitude to computer in political science and management students than in other disciplines. According to the growing importance of the role of computers in academic achievement and career prospects in students, by placing computer related curriculum can be helped to reduce its negative attitude.

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P44

**The Effectiveness of Body Psychotherapy Techniques (BPT) on Stress and Salivary Cortisol Level in High School Students in Gorgan**

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Body psychotherapy technique (BPT) is a program that teaches people how to deal more effectively with stressors. In the present study, we evaluated the effectiveness of body psychotherapy treatment on stress and salivary cortisol level in high school girl students. This randomized clinical trials study with pre- post tests was performed on 20 female students as case group and 20 participants serving as controls (15-18 years) in Gorgan, Iran during 2012. To determine stress, Cohen stress scale were administered at two points of

measurement (before educational sessions and at the end of therapy), also their salivary samples collected directly after awakening as well as 15, 30, and 45 minute later (the day before and after treatment). BPT group-education was given to the experimental group in nine sessions during two months. 15 participants in each groups completed the study. Data analysis was performed using SPSS software and unpaired t-test. The mean of stress scale scores in the experimental group showed a significant ( $P<0.01$ ) decrease (from  $37.46\pm 3.87$  to  $32.66\pm 5.82$ ) in comparison to that in the control group (from  $35.66\pm 6.06$  to  $36.13\pm 5.80$ ). The salivary cortisol level were significantly ( $P<0.05$ ) decreased (from  $4.96\pm 2.61$  to  $2.68\pm 1.31$  ng/ml) in cases compared to controls (from  $5.37\pm 3.65$  to  $5.38\pm 4.25$  ng/ml) which remained unchanged. Findings indicate that BPT decreases the cortisol awakening response and were associated with lower stress scores.

#### P45

### Long-Lasting Effects of Repetitive Transcranial Magnetic Stimulation on Anxiety-Like Behaviors in Schizophrenic Developmental Model

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Transcranial magnetic stimulation (TMS) has been applied to a growing number of psychiatric disorders as a neurophysiological probe, a primary brain-mapping tool, and a candidate treatment. Although most investigations have focused on the treatment of major depression, increasing attention has been paid to anxiety disorders. The aim of this study is to long time (for 30 days) effect of repetitive TMS on anxiety-like behaviors in post-weaning social isolated (SI) Wistar rats. Four groups of Wistar rats were reared post weaning in social or isolated conditions for 10weeks. After last week, the effects of cortical induction of repetitive TMS (2Hz), on percentage open arm time (%OAT) and percentage open arm entries (%OAE) were determined. The result investigated the effects of rTMS in Wistar rats using the elevated plus-maze test. The induction of 30 days TMS on the cortex region produced significant anxiogenic-like responses in SI rats, whereas induction of SI for 10 week induced anxiolytic effects. These data imply that repetitive TMS may have anxiogenic-like effects in the cortex region in which SI condition.

#### P46

### Evaluation of Occupational Stressors on

### Educational Teacher (Case Study: Schools in Firoozkooch City)

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This study was designed to investigate the occupational stressors on teachers and their evaluation in schools Firoozkooch city. In this study, statistical sample is 174 male and female teachers of schools in the education of Firoozkooch so that they are selected using Quota sampling and citing Morgan as an example. In this study, data were analyzed using independent t-test. Results of this study indicate that: 1) there is a significant difference between the ranks of the inappropriate physical facilities, hard work, lack of professional development, poor working relations, characteristics and the role of financial problems. 2) There is a significant difference between male and female teachers teaching about the stressor are just about the poor working relationships. 3) There is a significant difference between male and female education specialist and non-specialist teachers to stress just about operating heavy. 4) There is no significant difference between the views of teachers, diverse work experience of stressors.

#### P47

### The Study of the Relationship between Social Anxiety and Self-Esteem in Adolescents between the Ages of 12-18

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The results of studies have shown that many factors are involved in the formation and development of social anxiety. Low self-esteem is a risky factor in the development of anxiety disorders, especially social anxiety in adolescents. The purpose of this study is to investigate the relationship between self-esteem and social anxiety in adolescents. The present study is cross-sectional and correlational. The statistical population is the guidance and high school students in Shiraz during 2013-2014 that 180 students include 101 girls and 79 boys were selected by cluster sampling. The age range

of subjects was 12 - 18 years and the mean age was 15.4. The instruments used in this study were Rosenberg's self-esteem questionnaire and social anxiety scale for adolescents (SASA). Data were analyzed using correlation and regression. Results showed a significant negative relationship between social anxiety and self-esteem ( $r=-0/453$ ,  $P<0.01$ ). Also, regression analysis indicates 20.5% of the social anxiety variance can explain by self-esteem. Adolescents with social anxiety have lower self-esteem and vice versa when they experience higher levels of self-esteem, their social anxiety reduces. Thus, low level of self-esteem is a strong factor in creating a negative self-assessment and there by experiencing the social anxiety. Therefore it could be conclude that self-esteem is the core issue in social and performance anxiety

#### P48

### Social Anxiety and Fear of Social Performance in Nursing Students

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High levels of mental health during studying in university, makes students able to deal effectively with numerous stressors they experience. Our aim of this study was to examine and compare social anxiety among first to fourth year student nurses of Ministry of Health affiliated universities of medical sciences located in Tehran, Iran in 2010. In this descriptive analytic study, 400 students from Tehran University of medical sciences were recruited by stratified sampling with proportional allocation. Data were collected during the first semester in 2010. Students completed two-part questionnaire include of Liebowitz social anxiety inventory and demographic information. Data collected with using descriptive statistics and analytical test were analyzed by statistical software SPSS. There was no statistically significant difference in total scores of social anxiety of first to fourth year students. The mean score of avoidance of social interaction dimension in fourth year students were significantly lower than first year students ( $P<0.05$ ). Regard to deniable relationship social anxiety and interpersonal communication as in dissociable part of nursing care, decrease of social anxiety of students could play an important role in their mental health. According to results of this study seems

that placement of students in nursing education system does not produce any changes in their social anxiety. It is recommended to consider the mental health promoting strategies as a priority in programs of nursing education.

#### P49

### Prevalence of Anxiety in Pre-Surgical Patients in Shahriar Hospital in 2014

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Many of people have hospital anxiety, fear of surgery, and are afraid to take medicine. Nosocomephobia is the name of the phobia relating to the fear of hospitals. Reducing the anxiety is a routine part of pre-operative nursing care. The aim of this study is to investigate the prevalence of anxiety in pre-surgical patients. This descriptive study was done in Shahriar hospital. Sample size was 110 patients. The cases were matched by age, gender, marital status and surgery type. Data was gathered by Spielberger questionnaire in different time. Data were analyzed by using SPSS version 20. According to the finding of this study, high levels of anxiety were experienced before admission to operation room and in operation room before surgery. In terms of gender, woman experience the greatest anxiety. Most anxiety is also found in patients who had Cesarean section. According to our result, the lowest level of anxiety was experienced by patients who had surgery in morning. Pre-operative anxiety is associated with gender and surgery time. Therefore, elective surgery should be performed in the morning and pay more attention to woman patients.

#### P50

### The Effect of Preparatory Education to Reduce Anxiety in Pre-Surgery Adult Patients in Shahriar Hospital, Tehran, in 2014

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Surgery can be stressful situation and anxiety can

cause sings such as tachycardia, hypertension, and post-operation bleeding. The necessary information about surgery can help the patient and medical team to reduce anxiety. This experimental study was done in Shahriar hospital in Tehran and 110 patients chosen and randomly divided into two interventional and control groups. Intervention was done through giving information booklet and educational program to the interventional group. Significant differences were seen between the experimental group and control group in the level of anxiety one hour before surgery. Mean systolic and diastolic blood pressures at one hour before surgery in the intervention group were 14.5 and 8.6 and in the control group were 16.3 and 9.1 mm Hg respectively. The results showed a significant difference between the experimental and control group. According to the findings of the study it is suggested that in the process of admitting and in the night before surgery, in addition to routine examination and testing, the patients should be educated. Therefore, undesirable effects, anxiety, and postoperative recovery period will be reduced.

## P51

### **Efficacy of Cognitive Behavioral Therapy on Anxiety and Worry of Children with Generalized Anxiety Disorder**

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Generalized anxiety disorder is one of the psychological disorders in childhood that is usually neglected. The purpose of this research was to determine the efficacy of cognitive behavioral group therapy on anxiety and worry of children with generalized anxiety disorder. In this semi-experimental study, 38 children were identified among female students in third grade who responded to the screen for child anxiety related emotional disorders. To ensure their generalized anxiety disorder, they were assessed through the interview. Finally 14 patients with generalized anxiety disorder were randomly assigned to two experimental and control groups. The experimental group received 12 sessions cognitive behavioral therapy. Both groups completed revised children's manifest anxiety scale and Pennsylvania state worry questionnaire-child version at the pre-test and post-test. Findings of analysis of covariance showed that the mean scores of anxiety and worry in experimental group was significantly lower than control group in post-test ( $P < 0.05$ ). Cognitive behavioral group therapy is effective in reduction of anxiety and worry of children with generalized anxiety disorder.

## P52

### **Worry, Cognitive Avoidance, Intolerance of**

### **Uncertainty and Metacognitive Beliefs as Transdiagnostic Factors in Generalized Anxiety Disorder and Obsessive Compulsive Disorder**

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High comorbidity between psychological disorders causes attention to the mechanisms responsible for this comorbidity and common cognitive factors involved in these disorders. These are known as transdiagnostic factors. Similarity evidence and high comorbidity between generalized anxiety disorder (GAD) and obsessive compulsive disorder (OCD) introduce them as neighboring disorders. The purpose of the present study was to examine worry, cognitive avoidance, intolerance of uncertainty and metacognitive beliefs as transdiagnostic factors in GAD and OCD. Two hundred patients with GAD and OCD (66 GAD, 74 OCD, 60 GAD and OCD) participated in this study. Participants completed Penn state worry questionnaire (PSWQ), cognitive avoidance questionnaire (CAQ), intolerance of uncertainty scale (IUS) and metacognitive beliefs questionnaire (MCBQ). Findings showed that there is no significant difference between patients with GAD and OCD in total scores of these questionnaires. Patients with comorbidity of GAD and OCD showed significantly higher scores in these questionnaires than patients with GAD or OCD. It can be concluded that these are transdiagnostic factors which are shared between GAD and OCD. Also, they are significantly increased when GAD and OCD become comorbid and disease conditions get worse.

## P53

### **Anxiety and Depression among Hospitalised Patients in Mashhad**

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Nonpsychiatric hospitalized patients are frequently exposed to psychiatric disorders, such as anxiety and depression, which significantly influence the patient's subsequent admission days and the rate of recovery. The aim of this study was to evaluate the prevalence of anxiety and depression among hospitalised patients in Mashhad hospitals and to compare the level of

anxiety in patients admitted to different departments. This study assessed 264 patients (166 women and 98 men) admitted to internal medicine, general surgery, obstetrics-gynecology and neurology departments of four hospitals in Mashhad during 2012. The level of anxiety and depression was evaluated by hospital anxiety-depression scale (HADS). Demographic characteristics and information from medical records was extracted. Data analysis showed that anxiety is related to gender ( $P<0.001$ ), economic status ( $P=0.004$ ), employment status ( $P<0.001$ ), history of chronic medical illness ( $P=0.004$ ), history of psychiatric illness ( $P<0.001$ ) and history of usage of psychiatric medicines ( $P<0.001$ ). Depression was related to age ( $P<0.001$ , positive correlation), level of education ( $P=0.002$ , illiterate>secondary and tertiary education), economic status ( $P<0.001$ , poor>moderate), employment status ( $P=0.011$ , students>others), history of chronic medical illness ( $P<0.001$ ), history of psychiatric illness ( $P<0.001$ ) and history of usage of psychiatric medicines ( $P<0.001$ ). High prevalence of anxiety and depression among hospitalised patients, mainly in women, reminds us the necessity of performing psychiatric consults in physical patients in order to decrease the burden of disease, hospitalisation days, and omission of coexisted psychiatric disorders.

#### P54

### Predicting Obsessive-Compulsive Disorder Symptoms on the Basis of Difficulties in Emotion Regulation, Impulsivity and Anger

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P54

Obsessive-compulsive disorder is characterized by the presence of recurrent and persistent thoughts, urges or images as well as repetitive behaviors or mental acts. According to the existing evidence, it can be predicted that difficulties in emotion regulation, impulsivity, and anger are related to obsessive-compulsive disorder in one way or another. The aim of the present study was to predict obsessive-compulsive symptoms on the basis of difficulties in emotion regulation, impulsivity and anger. A total of 171 individuals from Tehran general population (71 men, 100 women) participated in this study as volunteers. Participants completed the difficulties in emotion regulation scale (DERS), Barratt impulsiveness scale (BIS), multi-dimensional anger inventory (MAI), and the obsessive-compulsive inventory-revised (OCI-R). The results indicated that obsessive-compulsive symptoms could be predicted by non-acceptance of negative emotions, limited access to effective emotion regulation strategies, cognitive impulsivity, motor impulsivity and anger-in. According

to the results of the present study, it can be concluded that psychopathology, prevention and treatment of obsessive-compulsive disorder recall precise attention to risk factors of difficulties in emotion regulation, impulsivity and anger.

#### P55

### Mediation Role of Cognitive Emotional Regulation for Emotional Safety and Emotional Problems

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The study aimed to check the mediation role of cognitive emotional regulation for emotional safety and emotional problems such as stress, anxiety and depression. The sample of this study consisted of 240 high school students in Fasa, Fars (120 girls and 120 boys). The method of sampling was multistage cluster sampling. The mean age for the sample was 16.3 years old with  $SD=1.5$ . The scales that were used in this research include: A) depression, anxiety and stress scale (DASS), B) cognitive emotional regulation questionnaire (CERQ) and C) security in the family system (SIFS). The results of this research using path analysis method showed that totally 36% of anxiety was predictable by catastrophizing, other-blame and rumination and also non-security and disengagement. Altogether, we can conclude that cognitive emotional regulation played a significant mediating role for emotional security and emotional problems such as anxiety.

#### P56

### The Association of Emotional Disturbance and Quality of Life with Severity of Restless Legs Syndrome

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P56

Restless leg syndrome (RLS) is a common cause of painful legs. The leg pain of restless leg syndrome typically eases with motion of the legs and becomes more noticeable at rest. Stress or emotional upset can make symptoms worse. The purpose of the present study was to examine the relationship of emotional

disturbance and quality of life to the severity of RLS. Using a descriptive-correlational research design, a purposive sample of 50 elderly men and women with RLS were compared with 50 healthy controls matched for age and gender. Participants provided information on the symptoms of the RLS as well as on their perceived levels of stress, anxiety, depression and quality of life. The RLS rating scale, depression, anxiety and stress scale, and the WHO quality of life scale were used to collect data. The obtained data were analyzed using Pearson's correlation coefficients, multivariate analysis of variance and multiple regression analysis. Findings revealed significant group differences. The elderly reporting RLS symptomatology reported greater anxiety and lower quality of life than their healthy counterparts. Furthermore, although anxiety, stress, depression and quality of life correlated significantly with severity of RLS symptoms, only anxiety and quality of life emerged as significant predictors. Regression analysis revealed that anxiety accounted for 16.7%, while quality of life explained an additional 7.8% of the variance in symptom severity. Findings imply that interventions that address the anxiety experienced by the elderly with RLS can aid in providing relief from the symptoms.

## P57

### **The Relationship between Personality Traits and the Rate of Anxiety Tolerance**

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The objective of this study was to determine the relationship between the personality traits associated with the rate of anxiety. This study was causal-comparative design. Study population included all students of Imam Khomeini International University during the academic year 2012-2013. The study sample consisted of 360 students who were selected by convenience sampling method. Data were collected by using the Neo-scale research instrument (NEO-FFI) and the Kattle anxiety scale and were analyzed by using descriptive statistics include mean and standard deviation, and Pearson correlation coefficients. The results showed that from components of the characters of personality, the neuroticism and introspection have a significant correlation with anxiety ( $P < 0.01$ ). Gender was also a significant component ( $P < 0.05$ ), so that female students showed more anxiety than male students. Personality traits and gender are factors that can be associated with the rate of anxiety tolerance.

## P58

### **The Impact of Cognitive-Behavioral Group Therapy on Anxiety, Intolerance of Uncertainty, Negative Self-Beliefs and Self-Esteem of People with Social Anxiety Disorder**

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P58

Cognitive restructuring and exposure therapy have been integrated into a highly structured package for the treatment of social phobia termed cognitive-behavioral group therapy (CBGT). The first two sessions of CBGT for social phobia are devoted to training clients in the basic tenets of cognitive therapy. Clients learn to identify their own irrational thoughts and to challenge the content of these thoughts. Each of the remaining ten sessions begins with a review of homework assignments followed by two or three restructuring/exposure exercises. CBGT has been evaluated in controlled trials with favorable outcomes. The aim of this study was to investigate the impact of group cognitive therapy on anxiety, intolerance of uncertainty, negative self-beliefs and self-esteem of people with social anxiety disorder. An experimental research design with a single group and pre- and post-test method was used. The population in this study comprised all the students with social anxiety at the University of Mohaghegh Ardebili in 2013-2014 academic years. Using a purposive sampling procedure, the study sample consisting of 10 students with social anxiety disorder was selected through a social anxiety diagnostic questionnaire. Data were collected using the social anxiety scale, interactive anxiety inventory, intolerance of uncertainty inventory, negative self-beliefs and the self-esteem scale. The statistical analysis was performed using Wilcoxon signed test. The results of this study showed no significant differences between pre-test and post-test scores on interactive anxiety, self-esteem and negative self-beliefs variables. But there were significant differences between pre-test and post-test scores of social anxiety and intolerance of uncertainty. Findings imply that group cognitive therapy has an immediate effect on social anxiety and intolerance of uncertainty, while its effects in terms of improved self-esteem and decreased negative self-beliefs may be delayed or require longer duration of therapy.

## P59

### **Internet Addiction: A Clinically Valid Construct and its Correlates**

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P59

Although the internet has become one of the most important information resources for university students, excessive internet use can be defined as uncontrolled and harmful use of the internet, in other words, Internet Addiction. Internet addiction (IA) can be described as a maladaptive preoccupation with internet use impairing social, occupational and other areas of a person's functioning. Recent reviews have suggested a relationship between IA and psychological symptoms or disorders. Yet, IA is a less researched entity in psychiatry, especially in Iran. The intent of this study was to find the association of IA with socio-educational characteristics, internet use patterns, character and temperament dimensions and psychological variables, namely depression, anxiety and stress. 1246 undergraduate students participated in this study. Young's internet addiction test, Cloninger's temperament and character inventory and depression anxiety and stress scale were utilized to assess IA, personality traits and the psychological variables respectively. Data were analyzed using logistic regression analysis to determine the predictors of IA. Findings indicated that 14.6% of the students had IA. Time spent online, usage of social networking mobile applications, novelty seeking, anxiety and stress emerged as significant predictors of IA. Age, gender, self-rated academic achievement and perceived socioeconomic status did not predict IA. IA appears to be a relevant clinical construct with a significant prevalence rate. Findings imply that a host of other factors may be associated with IA. To get a clear picture of the construct, further research into its correlates is necessary.

## **P60**

### **The Relationship between Job Stress with Personality Characteristics and Organizational Commitment in Hospital Nurses**

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P60

The aim of this study was to investigate the relationship between job stress with personality characteristics and

organizational commitment. This study is descriptive and correlational. The study population comprised all nurses in 13-Aban hospital of Ghods city. The sample group consisted of 120 nurses who were selected through convenience sampling. Research instruments were HSE job stress questionnaire, NEO five-factor personality questionnaire and Meyer and Allen's organizational commitment questionnaire. Data was analyzed using SPSS software and Pearson's correlation and t-test. The results showed that there is a significant relationship between job stresses of nurses with personality characteristics and organizational commitment. Job stress has a significant positive correlation with the responsibility and neuroticism. Job stress showed a significant negative relationship with flexibility. There is a significant positive relationship between organizational commitment with responsibility and flexibility. A significant negative relationship was found between work experience and job stress. A significant negative relationship between age and job stress was observed and a significant positive relationship between job stress and organizational commitment of nurses was found. The results showed that nurses who are older and have more work experience, have fewer job stress and more organizational commitment, and positive personality traits reduce the level of stress and occupational anxiety.

## **P61**

### **The Relationship between Irrational Beliefs with Anxiety in Adolescent's Girls**

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Irrational beliefs are messages about life we send to ourselves that keep us from growing emotionally. They are unfounded attitudes, opinions, and values we hold to that are out of synchrony with the way the world really is. The aim of this study is investigation the relationship between irrational beliefs with anxiety in adolescent's girls. This study is descriptive and correlational. The study population comprised all high school girl of one of the Andisheh city's schools. The sample group consisted of 100 students who were selected through convenience sampling. Research instruments were Jones irrational beliefs questionnaire and Beck anxiety inventory that completed with participants. Pearson correlation was used for data analysis. The results showed that there is a significant positive relationship between irrational beliefs and anxiety. Irrational beliefs like high

expectations of self, tendency to blame self, reaction to failure, preoccupation with anxiety, dependence, despair on changes and perfectionism showed a significant positive relationship with anxiety. This means the higher the level of irrational beliefs, the increase is in the levels of anxiety. It can be suggested that irrational beliefs are effective factors in the increase of people anxiety especially adolescents.

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## P62

### **Fear of Death in Iranian Nurses**

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Death fear is defined as a morbid, abnormal or persistent anxiety of one's own death or the process of his/her dying. Fear of death is a feeling of dread, apprehension or solicitude (anxiety) when one thinks of the process of dying, or ceasing to 'be'. Nurses, as healthcare professionals, are exposed to dying patients and their beliefs about death phenomenon can impact on their general health. The aim of the present study was to examine the death fear and to compare this emotional phenomenon with those of other women. The subjects were 112 women (56 nurses and 56 comparison women). Nurses were selected from a general hospital, and the control group was matched for age, education, marital status, employment status and years of work experience. They completed Collett-Lester fear of death scale (CLFDS). Data were analyzed by independent t-Test. On the CLFDS, the nurses had higher scores in the total and subscales of your own death, your own dying, the death of others, and the dying of others than the control group but these differences were not significant. Nurses have negative emotions about death and dying. They have to monitor their fear of death. The research opens rooms for a dialogue on the use of death education program on the nurse's workplace. The generalizability of the present findings to other healthcare professionals and population merits further research.

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## P63

### **Social Anxiety: The Role of Perceived Childhood Attachment, Family Functioning and Attributional Styles**

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The purpose of this study was to explore the role that perceived childhood attachment, family functioning and attribution styles have in social anxiety of high school students. 430 Iranian students were selected by multistage cluster sampling from high schools of Isfahan city. Participants completed measures of childhood attachment to each parent (Hazan and Shaver, 1986), the family adaptability and cohesion evaluation scale (Olson, Portner and Lavee, 1985), attributional styles questionnaire (Peterson and Seligman, 1984) and social anxiety scale (Watson and Friend, 1969). Results revealed that attribution styles, insecure to mother and family cohesion had direct relationship with social anxiety; attachment to parents had a relationship with social anxiety through family cohesion and success attribution. The results showed that family cohesion and success attribution decrease social anxiety, whereas, insecurity to mother and failure attribution increase social anxiety.

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## P64

### **The Role of Components of Perfectionism and Anxiety in Prediction of Sleep Quality in Students**

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Little is known about the etiology of the links between sleep disturbance and anxiety and perfectionism. The purpose of this study was to determine the role of components of perfectionism and anxiety in anticipation of sleep quality in students. The statistical population of this research consisted of all the Shiraz University's students in the academic year 2012-2013 (1391-1392s.c.). The sample of the research were 226 students, consisted of 115 female and 111 male students who were selected through multistage cluster-random sampling from Shiraz University. The Frost multidimensional perfectionism scale (FMPS), Spielberger anxiety inventory (STAS) and Pittsburg sleep quality index (PSQI) were used as measurement instruments. The statistical methods correlation and regression were applied to analyze the data. The results showed that anxiety is significantly able to anticipate sleep quality ( $P < 0.0001$ ). and from components of perfectionism, only excessive concern over making mistakes and perception of frequent parental criticism are significantly able to anticipate sleep quality ( $P < 0.03$ ). Generally, these findings show that perfectionism and anxiety play a major role in the quality of sleep.

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## P65

### **The Role of Attachment Styles and Cognitive**

## Emotion Regulation Strategies on Adolescent's Social Anxiety

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P65

The aim of this study was to determine the role of attachment styles and cognitive emotion regulation strategies in adolescents' social anxiety. 430 Iranian high school students (200 boys and 230 girls) were selected by multistage cluster sampling method from high schools in Isfahan city and completed a battery of scales including attachment styles scale (Collins and Read, 1990), cognitive emotion regulation questionnaire (Garnefski, Kraaij and Spinhoven, 2002) and adolescent's social anxiety scale (LaGerca and Lopez, 1998). Results obtained from stepwise regression analysis indicated the significant role of ambivalent and secure attachment styles in predicting social anxiety components. Furthermore, it was found that the components of maladaptive cognitive emotion (i.e., rumination, self-blame and catastrophizing strategies) and the components of adaptive strategies (i.e., reappraisal and putting into perspective and refocusing on planning strategies) predict social anxiety. The results showed that the insecure attachment styles and ineffective coping strategies effect on social anxiety.

### P66

## The Effects of Mindfulness-Based Stress Reduction Training on Stress of Working Mothers According to Stressor Trait of Mother-Child

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Present research with the aim of the studying the efficacy of training of mindfulness based stress reduction (MBSR) in the reduction of occupying mothers in proportion to mother-infant has carried out. The way of the present search is a study quasi-experimental. The method of its pre-test and post-test with control and experimental groups. In this research, nurse mothers of Rasht with the tool of measurement, with high stress have been recognized and among them 30 persons of nurses who have achieved the highest rate of stress, in the way of convenience sampling, have been selected. Participants were administered by the Philip L. rice job stress questioner and parenting stress index (PSI)

questioners. 15 persons as experimental group that were under training of mindfulness based stress reduction (Kabat-Zinn) have been located and 15 persons control group who have not been under intervention. From both group pre-test have taken, then experimental group were under training of mindfulness based stress reduction for 8 weeks, but, the controlled group didn't receive any training. The level of stress in both groups was assessed before and after the training. Information obtained from the questionnaires was analyzed by ANCOVA. The findings showed that mindfulness based stress reduction training influence in reduction of life stress of occupying mothers. Also the findings showed that mindfulness based stress reduction in the reducing of job stress of occupying mothers and in traits mother-infant are effective.

### P67

## The Effectiveness of Pivotal Response Treatment (PRT) on Decrease of Clinical Symptoms in Children with Autism and their Parental Stress

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This study was aimed at investigating the effectiveness of training of pivotal response treatment (PRT) to mothers with 6 to 12 year old autistic children on reducing the autism symptoms. Also, the impact of PRT on reduction of parenting stress was addressed in this study. In a clinical trial work, 14 mothers of autistic children in a rehabilitation clinic for autistic children in Tehran city, selected based on inclusion criteria. They were assigned to intervention and comparison groups randomly. The intervention group received treatment programs in addition of routine programs of clinic within 12 training sessions, while the control group continuing its only routine program. The autism evaluation treatment checklist (Rimland and Edelson, 2005) and parental stress questionnaire (Berry and Jones, 1995) were used for measuring autism symptoms and parenting stress, respectively. The results of covariance analysis revealed that this treatment method is effective in reducing the parental stress of mothers of autistic children ( $P \leq 0.01$ ). Furthermore, this method resulted in an improvement in communication abilities, social interaction, cognitive-sensory ability and behavior of autistic children ( $P \leq 0.01$ ).

### P68

## The Relationship between Early Maladaptive Schemas, Parenting Styles and Coping Styles with Anxiety in Students of Karaj Azad University

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P68

The main purpose of the present study was to investigate the multiple relationships between early maladaptive schemas, parenting styles and coping styles with anxiety. Therefore, a sample consisting of 200 students, from Islamic Azad University of Karaj, were selected by multistage cluster sampling method. The research instruments were Beck anxiety inventory (1988), short form of Young early maladaptive schema (YSQ-SF, 2002), perceived parenting styles questionnaire (1999) and short form of the coping inventory for stressful situations (CISS) (Endler and Parker, 2002). The data were analyzed at two descriptive and inferential statistics levels. At descriptive level, the mean and standard deviation were calculated for all variables and at inferential level, using Pearson correlation and stepwise regression, the relationships between predictor variables (early maladaptive schemas, parenting styles, and coping styles) with criterion variable (anxiety) were examined. The calculations were performed using SPSS software. The statistical analysis results indicated that there was significant positive relationship between early maladaptive schemas, parenting styles (rejection and overprotection), and emotion-oriented coping with anxiety; and there was a significant negative relationship between task-oriented coping with anxiety. Moreover, early maladaptive schemas including mistrust-abuse, vulnerability to harm and illness, and social isolation-alienation were able to predict anxiety. Thus, it can be concluded that changes in these variables would be associated with changes in anxiety.

**P69**

**Prevalence of Obsessive Beliefs and Intolerance of Uncertainty among College Students**

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P69

Intolerance of uncertainty (IU) is increasingly conceptualized as a transdiagnostic factor underlying anxiety disorders and depression. Current understanding of the relationship between intolerance of uncertainty and specific obsessive compulsive symptom domains remains limited. The purpose of the present study was to explore the prevalence of obsessive compulsive beliefs

and intolerance of uncertainty among college going youth and to explore for any possible associations. A multistage cluster sampling procedure was used to collect data from a sample of 200 students (100 boys and 100 girls) ranging in age from 18 to 26 years. Data was collected using a socio-demographic information sheet, obsessive-compulsive beliefs questionnaire and the intolerance of uncertainty questionnaire. Findings revealed obsessive thoughts in 20.8% of males and 11.5% of females. Extreme intolerance of uncertainty was reported by 16.7% of the males and by 7.7% of females. Males and females differ significantly on perfectionism and importance regarding control of thoughts, with females reporting greater perfectionism and males endorsing greater beliefs regarding thought control. Significant age differences emerged only with regard to uncertainty regarding one's ability to perform, with greater intolerance reported by male students. In both groups, obsessions regarding responsibility and threat estimation correlated with stress of uncertainty and expectation of negative events. Perfectionistic beliefs were associated with expectation of negative events in both groups and in the female group they were also associated with uncertainty regarding performance and stress of uncertainty. Obsessive beliefs regarding loss of control over thoughts were related to all the components of intolerance of uncertainty only in males. Regression analysis indicated that intolerance of uncertainty can be predicted by beliefs about perfectionism in females and by beliefs of thought control in males. The prevalence of obsessive beliefs and intolerance of anxiety is greater in males. Intolerance of anxiety can be predicted by beliefs about perfectionism in males and by beliefs about thought control in females.

**P70**

**The Effect of Mindfulness and Acceptance-Based Group Therapy on Decreasing Fear of Scrutiny by Others in Patients with Social Anxiety Disorder**

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P70

Social phobia is characterized by a fear of negative evaluation within social or performance situations, where individuals believe that they are under scrutiny and may be embarrassed (American Psychiatric Association, 2013). The present study was carried out to examine the effectiveness of mindfulness and acceptance-based group therapy on decreasing fears of scrutiny by others in patients with social anxiety among female students. In the first stage, social phobia inventory (SPIN) (Conor

et al, 2000) was administrated to 402 female student of Shahed University. In the second stage 23 socially anxious student screened by SPIN and (Structured Clinical Interview for DSM-IV) (SCID-I) (First et al,1996) were randomly assigned to experimental group (12 subjects) and control group (11subjects). Then mindfulness and acceptance-based group therapy administered to the experimental group, while control group didn't attend in any treatment session. All participants completed measure of social phobia scale (Mattick and Clarke, 1989) at pre-treatment and post-treatment. The result of Mann Whitney test revealed significant reduction in fear of scrutiny by others ( $Z=-3.45$ ,  $P<0.0001$ ) in experimental group than control group. In sum, mindfulness and acceptance-based group therapy can improve fear of scrutiny by others among a sample of Iranian female students. Therefore a ground has been provided to apply this approach preliminary in psychological centers on patients with social anxiety disorder.

#### P71

### Which Variables Predict the Response of Patients with Social Anxiety Disorder to Cognitive-Behavior Therapy?

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P71

Social anxiety (or social phobia) disorder is defined as a constant fear of being embarrassed or negatively evaluated in social situations or while doing activities in the presence of others. Several studies have examined the role of certain variables that might predict response to treatment and may affect treatment outcome. The purpose of this study was to identify predictive variables of change and improvement. The English version of the SPIN (Connor et al., 2000) was translated into Persian (Iranian language) and used in this study. In addition to SPIN, the measures including clinical interviews with the DSM-IV (Spitzer, Williams and Gibbons, 1994); and depression, anxiety and stress scale-21 (DASS-21) (Lovibond et al., 1995), the credibility/expectancy scale (Davilly and Borkovec, 2000) and homework compliance scale (Primakoff, Epstein and Covi, 1986) respectively were administered to a sample of 59 participants with social phobia ranging from 18 to 40 years of age. Research population included adults with social anxiety disorder. Based on a purposive sampling method, 59 social phobic patients were selected after the clinical interview and considering the inclusion and exclusion criteria. Among the variables, compliance in doing the homework (HCS), depression (in DASS-21 (and the level of education were significant in prediction

of socially anxious patients' response to cognitive-behavior therapy. The regression model correctly predicted 87% of changes in the responses of SAD patients to cognitive-behavioral therapy.

#### P72

### The Comparison of Sleep Anxiety in Autistic and Normal Children.

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P72

Sleep disorders in children can lead to considerable complications. In some mental disorders including autism, it has more importance. Despite the importance of sleep in children developments and lives, few researches have conducted in this area; therefore this research is going to investigate sleep behavioral disorders in children and compare with normal children. Research design was causal-comparative study and statistical population was composed of all autistic and normal preschool children. Sample population was 97 children including 47 autistic children and 50 normal children were selected by random sampling. Children sleep habits questionnaire (CSHQ) was used as instrument that reported by parents. This scale has 33 items and 8 subscales. Statistical findings were analyzed by 19th version of SPSS. Results from multivariable variance analysis showed that sleep behavioral disorders in autistic children had significant difference with normal children ( $P<0.05$ ). In other words, there were significant difference in bedtime resistance, sleep onset delay, sleep duration, sleep anxiety, night wakening and parasomnias between autistic children and normal children. Nevertheless, sleep-disordered breathing and daytime sleepiness had not significant difference in two groups ( $P>0.05$ ). Sleep is an entrance to everyone social, family and emotional function. While sleep disorder should always place in differential diagnosis of children problems, therefore it is recommended that sleep is considered as an important and effective factor in children health field, especially autistic children and educational sessions are designated for parents in this area. However, the results of this research recommend the importance of attention to normal children sleep.

#### P73

### Anxiety Sensitivity and Coping Motives Predict Substance Use Craving and Relapse.

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Substance use disorder is conceptualized as a chronic relapsing condition where relapse is usually defined as the return to problematic substance use following treatment. An issue of great importance is the identification of the predictors of relapse and the development of treatments that may help prevent relapse. One of the strongest predictors of relapse is craving. The purpose of the present study was to study the effect of anxiety, anxiety sensitivity, and coping motives on craving. Participants ( $n=74$ ) were male opiate users recruited from a semi-private clinic providing detoxification and treatment services for substance users. Anxiety, anxiety sensitivity, coping motives and craving were assessed using relevant questionnaires. The addiction severity index was used to assess addiction severity. All patients were methadone maintained and one year after detoxification, 36 patients (48.64%) relapsed. Stress and anxiety, anxiety sensitivity, addiction severity and coping motives predicted craving and relapse. Anxiety sensitivity specifically predicted early relapse. Substance use is a severe mental disorder, with high relapse rates. Substance users high in anxiety sensitivity are particularly prone to relapse during the first six months of treatment. Addiction severity and coping motives need to be taken into account when providing interventional services for substance users. Findings imply the significance of additional psychological attention to methadone maintained patients to prevent craving and relapse.

## P74

### The Role of Emotion Dysregulation and Anxiety Sensitivity in Sleep Disturbance in Students.

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In recent years, emotion dysregulation and anxiety sensitivity have been introduced of the most effective factors in sleep disturbance. The purpose of this study was to examine emotion dysregulation and anxiety sensitivity as potential contributor to sleep problems in students. The statistical population of this research consisted of all the Bu-Ali Sina University's students in the academic year 2013-2014 (1392-1393s.c.). The sample of the research was 300 students, consisted of 145 female and 155 male students who were selected through multistage cluster-random sampling. The study group answered the anxiety sensitivity scale (ASI-R),

difficulties in emotion regulation scale (DERS; Gratz and Roemer, 2004) and Pittsburg sleep quality index (PSQI). The results showed that anxiety sensitivity is significantly able to anticipate sleep disturbance ( $P<0.002$ ). Furthermore, from components of emotion dysregulation, only limited access to emotion regulation strategies (STRATEGIES), impulse control difficulties (IMPULSE) and lack of emotional awareness (AWARENESS) are significantly able to anticipate sleep disturbance ( $P<0.04$ ). In general, these findings show that emotion dysregulation and anxiety sensitivity play a major role in causing sleep disturbance. Therefore, the present findings suggest that psychotherapists should consider the role of emotion dysregulation and anxiety sensitivity during psychotherapy with sleep disturbances and to advisesome strategies to resolve these dysfunctional processes.

## P75

### A Study of Perfectionism, Anxiety Sensitivity and Sleep Disturbance in the Generalizing Anxiety Disorder and Normal People

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Perfectionism, anxiety sensitivity and sleep disturbance are among the main causes of generalizing anxiety disorder. This study aims to compare perfectionism, anxiety sensitivity and sleep disturbance between patients with generalizing anxiety disorder (GAD) and control group. The present study was a cross-sectional and ex-post facto investigation (causal comparative method). Statistical universe constituted all patients who had been referred for the first time to the Bu-Ali Sina University's consultation center in the 2013-2014. In this study, 32 clients with GAD and 32 control group were selected accessibility. The study groups answered the anxiety sensitivity scale (ASI-R), the Frost multidimensional perfectionism scale (FMSP), and Pittsburg sleep quality index (PSQI). Significant differences were observed in terms of sleep disturbance total measure between the normal and GAD and control groups ( $P<0.001$ ). Also, the same result was deducted in anxiety sensitivity's total findings ( $P<0.001$ ). Perfectionism, however, was not different in the generalizing anxiety disorder and control groups ( $P>0.05$ ). In sum, the findings in this research show that perfectionism, anxiety sensitivity, and sleep disturbance play a major role in causing generalizing anxiety disorder. As such, applying perfectionism, sleep disturbance and cognitive structures in anxiety sensitivity can act as influential approaches in reducing anxiety.

## P76

## The Mediating Role of Difficulties in Emotion Regulation in the Relationship between Dysfunctional Attitudes and Anxiety Sensitivity among Students of the Islamic Azad University of Hamadan

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The aim of this study was to evaluate the mediating role of difficulties in emotion regulation in the relationship between dysfunctional attitudes and anxiety sensitivity among students of the Islamic Azad University of Hamadan. The research method was correlation. The statistical population of this study consisted of all the university students from among which 200 students (120 females, 80 males) were chosen by random cluster sampling and were asked to complete difficulties in emotion regulation scale (DERS, Gratz and Roemer, 2004) and dysfunctional attitudes scale (Weissman and Beck, 1978). The data were analyzed by Pearson's correlation coefficient and multiple regressions. The results showed that dysfunctional attitudes are significantly able to anticipate anxiety sensitivity. Also, results showed that difficulties in emotion regulation were important intermediate factor in relation between dysfunctional attitudes and anxiety sensitivity. In generally, this finding suggests that difficulties in emotion regulation are important in understanding the pathogenesis of anxiety.

### P77

## Reliability of Persian Form of Quality of Life Questionnaire-36 Items in Patients with Bipolar I Disorder

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The aim of study was to evaluate the reliability of Persian form of quality of life questionnaire -36 Items in the patients with bipolar I disorder. Present study was cross sectional-descriptive. 50 patients with bipolar I disorder were selected from Mehregan hospital by convenient sampling. They were assessed with using of

Persian form of quality of life questionnaire-36 items. 20 patients (40%) were in major depression phase and 30 patients (60%) were in manic phase of bipolar I disorder. One-week test-retest reliability were 0.79 in physical health, 0.54 in mental health, 0.57 in social relationships, 0.64 in social environmental health dimensions and 0.81 in the total scores of Persian form of quality of life questionnaire-36 items. Findings showed a good and appropriate reliability of Persian form of quality of life questionnaire-36 items amongst patients with bipolar I disorder. Therefore, this questionnaire can be used in the studies of related to these patients.

### P78

## Prevalence of Anxiety and Depression in Hospitalized Patients in Surgical and Internal Departments

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To determine the level of anxiety and depression in hospitalized patients in surgical and internal departments. A cross sectional study on 359 hospitalized patients who were recruited from internal and surgical wards of Khatam Alanbia hospital. Hospital anxiety and depression scale was used to collect information. Borderline cases of anxiety and depression were 26.7% and 24.8%. Probable cases of anxiety and depression were 39% and 29.5%. There were no anxiety and depression in 26.18% of patients. There was significant correlation among normal, borderline and probable groups of anxiety according to gender and duration of disease. The differences between the level of depression and age groups were statistically significant. This study showed significant association between depression and anxiety and did not find significant differences between internal and surgical wards in prevalence of anxiety and depression. Prevalence of anxiety and depression was high in hospitalized patients.

### P79

## The Effectiveness of Stress Management Training on the Well-Being of Divorced Women

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The purpose of current survey is to determine the effectiveness of stress management training on the well-being of divorced women who are under support

of Baharestan Township Welfare Organization. The method used for this survey was quasi-experimental by designing pretest- posttest with evidence group. Statistical population of the study includes 587 divorced women who were under support of Baharestan Township Welfare Organization. The top 30 women in well-being scale were selected and randomly replaced by two experimental and evidence groups (15 women, each of which). Ryff psychological well-being questionnaire (2002) was the basis (tools) for survey. The experimental group was trained stress management based on cognitive-behavioral approach (Antoni, M.H., Ironson, G. and Schneiderman, N, 2007) during ten 2-hour weekly sessions. By the contrast, the evidence group received no interference. For the purpose of analyzing data, covariance analysis and variance analysis of repetitive measurements were used. Results of the study demonstrate that the interference was led to promotion of well-being ( $P=0.001$ ). In addition, the occurred changes had no impact on the pursuance of permanence. Based on the findings of this survey, stress management training program led to short-time increase of well-being mood. Therefore, for further permanence of impact, group treatment and personal treatment are recommended to be conducted in addition to increasing the number of group training sessions.

## P80

### Investigation of Interactions between Glucocorticoid and Opioid Receptors on Anxiety Modulation in Mice

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Recent studies have shown that glucocorticoids may have modulatory effect on anxiety reactions. This effect may occur with opioid system interference. According to that, the purpose of this research is to assess the effect of dexamethasone as glucocorticoid agonist and its interaction with opioidergic system on the anxiety modulatory effect in plus maze model in mice. Male white mice with medium weight 20-30 g were used in this study. Thirty minutes before test and also five minutes before assessment of anxiety, dexamethasone (0.5, 1 mg per kilogram, subcutaneous) and naloxan (0.5, 1 mg per kilogram, intraperitoneal) respectively used in test group. For control group mice, normal saline was injected intraperitoneally. Then before test, mice were put in a black wall box till their curiousness and movement activities are improved and afterwards at regular time intervals mice were transported to plus maze. The anxiety standard indicators include the time spent in the open and closed arms were recorded through

observation. This study showed that the injection of dexamethasone alone at both doses significantly reduced levels of anxiety reactions ( $P<0.001$ ). But in group with injection of both dexamethasone and naloxan these effects were not significant ( $P>0.05$ ). Based on the above findings, it is likely that glucocorticoids play a major role in reducing anxiety reactions. Moreover, these effects are likely to occur through the interaction with opioidergic system.

## P81

### Psychosocial Stress of Maternal Deprivation Enhanced Volume of Lateral Ventricle in Rat Brain

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Brain areas implicated in the stress response include the amygdala, hippocampus, and prefrontal cortex. Neonatal stimulation of an animal by handling or by enhanced maternal care induces at adult age a decrease of the hypothalamo-pituitary adrenal (HPA) response to stressors, a decrease of anxiety in a novel environment, and neuroanatomical changes. In this present study we demonstrated that maternal deprivation can affect lateral ventricle volumes in rat brain. After 21 day of ages rats were divided two groups, that social and isolated for 8 weeks in separated case. In 8th week all brains were fixed and after tissue processing, Toloeiden blue staining was done. The histological data showed increased volume in lateral ventricle on isolated rats. The present data at least partly explain contrasting effects of social isolated on volume loss of lateral ventricle in rats.

## P82

### Anxiolytics Effect of $\alpha$ -Galycoceramide: As Novel Inhibitor of Glucocorticoid in Social Isolated Rats

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$\alpha$ -Galycoceramide ( $\alpha$ -Galcer) or the common name of krn7000 is an  $\alpha$ -gelasphin derivative. The  $\alpha$ -Galcer structure consists of a galactose combined with a ceramide in an  $\alpha$ -configuration. Social isolation (SI)

has been linked with enhanced inflammation, through modifications in transcriptional pathways linked with glucocorticoid, to stress. Our hypothesis is to investigate mediatory role of glucocorticoid and augmentation of anxiety in social isolation. The agent was injected intraperitoneally in rats and we performed elevated plus-maze. The administration of  $\alpha$ -Galcer decreased freezing and increased the number of entries into the open spaces and the time spent on the open arms in the plus-maze, indicating an anxiolytic effect. Our results indicate that  $\alpha$ -Galcer induces anti-anxiogenesis in rats. Moreover, we show for the first time that  $\alpha$ -Galcer reduced anxiety parameters, suggesting that the derivative may influence processes in pathway of glucocorticoid.

### P83

#### Role of Neuregulin 3 Genes Expression on Attention Deficits in Schizophrenia

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Genetic epidemiological studies strongly suggest that additive and interactive genes, each with small effects, mediate the genetic vulnerability for schizophrenia. With the human genome working draft at hand, candidate gene (and ultimately large-scale genome-wide) association studies are gaining renewed interest in the effort to unravel the complex genetics of schizophrenia. Linkage and fine mapping studies have established that the neuregulin 3 gene (NRG3) is a susceptibility locus for schizophrenia. Association studies of this disorder have implicated NRG3 variants in both psychotic symptoms and attention performance. These animals show increases in reaction time (RT) variability and false alarms on choice reaction time (CRT) tasks. The aims of the present study were to extend analysis of the association between NRG3 and psychotic symptoms and attention in animal model of schizophrenia. Twenty-one-day-old male Wistar rats were either reared in individual cages (isolated rats) or in group cages of six per cage (group-housed rats) for 8 weeks. After the CRT test and decapitation of brain, symptoms and performance scores were then tested for association with the NRG3 variant rs6584400 by polymerase chain reaction method. A significant association was found between the number of rs6584400 DNA and the CRT for reaction time in post weaning social isolation rats.

### P84

#### Prevalence of Information Seeking Anxiety in University Students

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Information seeking anxiety can be interpreted as the fear and/or apprehension of searching for information resources during the information seeking process. The current study aims to determine the prevalence and correlates of the information seeking anxiety among a group of graduate students. The target population of the study comprised 11000 postgraduate students enrolled in various graduate programs at a research intensive university in Kuala Lumpur, Malaysia. Using stratified random sampling method, a sample of 365 students was drawn from the population. Participants were asked to complete the 38-item information seeking anxiety scale (ISAS) which was developed and validated by the researcher. Results of the study revealed that different levels (low, mild, moderate and severe) of information seeking anxiety were reported to have experienced by 96.5% of the studied students. Therefore, results show that information seeking anxiety is a prevalent phenomenon among university students. Based on the mean score for various sub-scales of the information seeking anxiety scale (ISAS), the "barriers associated with libraries" dimension was found to be the most important source of information seeking anxiety. Moreover, among the various demographic factors, gender, level of study, age and frequency of library use were found to be correlates of the information seeking anxiety. Conversely, no associations were found between various subscales of the information seeking anxiety and nationality, information literacy skills instruction received, academic major and frequency of the internet use. The relatively high prevalence of information seeking anxiety among students strongly suggests the need for increased awareness of this phenomenon. By being aware of the prevalence of anxiety and characteristics of students who are at-risk, librarians and administrators will be in a better position to provide services and instructions which is the most effective to reduce levels of anxiety and, thus, prepare students to be more successful in their research activities.

### P85

#### Association of Social Anxiety and Personal Characteristics in Tehran Universities' Nursing Students

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Ability to have good interpersonal relationship without social anxiety is the inseparable component of an effective nursing care process. The purpose of this study was to determine relationship between social anxiety and some demographic characteristics in undergraduate nursing students. This descriptive analytic study includes 400 students from Tehran University of Medical Sciences who were recruited by stratified sampling with proportional allocation. Data were collected during the first semester in 2010. Students completed two-part questionnaire include of Liebowitz Social Anxiety Scale and demographic information. Using descriptive statistics and analytical test were analyzed by statistical software SPSS v.16. According to our study social anxiety was statistically related to student work experience and college education ( $P < 0.05$ ). There was not a statistically significant relationship between social anxiety and gender, semester, total mean grade, student's residence place, marital and economic status. Based on significant relationship between social anxiety with college education and student work experience it seems nursing education system with applied mental health promoting strategies needs a priority in educational programs and this facilitates and encourages the students to the student work and therefore to influence and control the levels of social anxiety in this important segment of society.

## P86

### **Anxiety Symptoms Prevalence and its Relationships with Plasma Cortisol Level in Nursing Students**

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Anxiety is one of the prevalent mental health disorders. Stressors by changes in physiology can increase risk of physical diseases. High levels of cortisol have many negative effects on health. This study aimed to determine Anxiety symptoms prevalence and its relationships with plasma cortisol level. This study was a descriptive-analytical cross-sectional that was conducted on 100 nursing students in Islamic Azad University of Rasht in 2013. For data collection we used demographic questions such as age, sex, occupation and marital status, also we used depression, anxiety and stress scale (DASS-

21). Plasma concentration of cortisol was measured by enzyme linked immunosorbent assays (ELISA). Mean of anxiety scale was  $8.98 \pm 7.60$ . Nineteen percent of students were in severity and high severity category. Mean of depression scale was  $9.18 \pm 7.96$ . Ten percent of students were in severity and high severity category. Mean of stress scale was  $15.36 \pm 7.85$ . Thirteen percent of students were in severity and high severity category. Mean of cortisol level was  $14.08 \pm 5.08$  ( $\mu\text{g/dl}$ ). Cortisol level was significantly correlated with depression scale ( $r=0.255, P=0.01$ ), and anxiety scale ( $r=0.202, P=0.044$ ), but between cortisol level and stress scale there was no significant correlation ( $P=0.515$ ). Based on our findings with increase in depression and anxiety scales, cortisol level is increased. But changes in stress scale don't have any effects on cortisol level. Concentration of cortisol as stress biomarker should be interpreted with considering personality, level of stress, and type of chronic and acute stress.

## P87

### **Studying the Relationship of Mental Health, Social Anxiety and Fear of Body Image in Adolescents: Investigating Role of Mediator Variables**

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Mental health in adolescents is influenced by several factors. Body image is one of the factors in predicting mental health. Moreover, it affects social communication and creates the social anxiety. The present study is cross-sectional and correlational. The statistical population is the guidance and high school students in Shiraz in 2013-2014 that 180 students include 101 girls and 79 boys were selected by cluster sampling. The age range of subjects was 12-18 years and the mean age was 15.4. The instruments used in this study were the general health questionnaire (GHQ), fear of body image of littleton et al and social anxiety scale for adolescents (SASA). Data were analyzed using correlation and regression. There is a significant relationship between mental health and fear of body image ( $r=0.400, P<0.01$ ). There is a significant negative correlation between mental health and social anxiety ( $r=0.213, P<0.01$ ). Between social anxiety and fear of body image there is a significant relationship ( $r=0.280, P<0.01$ ). Hierarchical regression shows that social anxiety variable plays a mediatory

role in the relationship between the fear of body image and mental health. In this study, the role of fear of body image and social anxiety has been shown on mental health. The relationships among variables suggest that social anxiety have a mediatory role in relationship to fear of body image and mental health. Therefore, high fear of body image causes to increase social anxiety and high social anxiety reduces mental health. On the other hand, low fear of body image reduces social anxiety which, in turn, is associated with increasing the level of mental health.

## P88

### **The Effect of Behavior Management Training on the Mother's Anxiety of Children with Deafness**

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The birth or presence of a child with hearing defect provides unique and different challenges for family. However, in this situation all family members are hurt and their functions are impaired, but the mother, due to the traditional role of caregiver for these children to have more responsibility, more psychosocial problems may be encountered. The assumption is that the problems associated with the care of such children, parents especially mother are at risk of mental health problems, particularly anxiety. Considering the importance of the subject, the present study to evaluate the impact of behavior management training on the mother's anxiety of children with deafness was performed. For this purpose, by multi-stage sampling, patients were selected from two randomly selected special schools for deafness, and finally among them 60 their mothers were randomly selected and then were divided into two experimental and control groups. In the pre-test, a general health questionnaire of Goldberg & Hillier (GHQ) was performed on both groups of mothers of deaf children. Then training to behavior management on mother's in experimental group was performed and the post-test, again GHQ was administered to two groups. Results obtained by using an analysis of covariance. It was found that the rate of anxiety of mothers in experimental group after participating in training sessions has decreased compared to control group ( $P < 0.001$ ). Overall, the findings suggest that behavior management training significantly decrease anxiety of mothers of deaf children.

## P89

### **Effect of Homeopathic Argentum Nitricum on State and Trait Anxiety among Healthy Volunteers in Mashhad**

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Complementary medicines are being increasingly considered as potential anxiolytics. Homeopathy is one of the old complementary/alternative therapies that is suggested as a cost-effective way to reduce anxiety. Several clinical trials have shown homeopathy superior to placebo; however some others have demonstrated that it has similar effects to conventional treatments. Nevertheless the database on studies of homeopathy and anxiety is limited and there isn't any data about Iran. Therefore, we planned this study to evaluate the influence of homeopathic Argentum nitricum on state and trait anxiety among healthy volunteers from June to September 2014. A double blind randomized controlled trial has been done on 70 healthy university students in Mashhad. They are randomly divided into 2 groups to receive either Argentum nitricum or placebo. Each group received oral administration of Argentum nitricum or placebo twice a day for 4 days. State-Trait anxiety questionnaire is fulfilled by volunteers before treatment, 15 minutes after treatment and then after four days. Demographic characteristics and adverse reactions are noted by other questionnaires. Our study findings and clinical experiences would be shared in this congress.

## P90

### **The Study of Effectiveness of Some Art Therapy Techniques in Reducing Anxiety of Fifth Grade Students of Yazd**

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Art is a tool for children to enjoy life. Rhythmic activities, narration, and using attractive educational methods are devices to express feelings, problems, thoughts, and beliefs. Art therapy methods create unique opportunities to express and challenge feelings, and lead to improvement of mental health and personal promotion indirectly. Regarding the fact that art therapy methods are seen in most psychological viewpoints, we tried to use some of them in reducing primary boys in

fifth grade of elementary schools anxiety. The current study is an experimental study with pre and post testing. The statistic society is all boys in fifth grade of elementary schools in Yazd and 28 are chosen through accessible sampling that had anxiety with Katel anxiety test. The experimental model was done in 20 sessions and included: painting therapy, theatre therapy, film therapy, sand therapy, and narration. The post test was done one month after the last session. Findings showed that there is a meaningful difference in pre and post testing. A reduction of 39.28 percent in anxiety was seen compared to the first session. Free expression of art by kid Art therapy, as a medic method, is the best predictor of unconscious personalities. Art therapy helps us get aware of kids' imagination, feelings and unsaid words in the simplest way. Anxiety, as an unwanted psychological mood, can disorganize kids' mental and physical health and art therapy can be lessened anxiety.

### P91

#### **Effect of Group Assertive Training on Social Anxiety, Social Skills and Academic Performance of High School Students**

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The purpose of this study was to explore the effects of group assertive training on social anxiety, social skills and academic performance of high school adolescents in Isfahan city. The sample includes 60 students selected by random multistage sampling method. They were randomly divided into experiment and control groups. Participants in this study completed a battery of scales including watson & friend's anxiety scale and eisler miller's social skills rating scale. In this method, self-assertive are defined for the participants at first and students get familiar with their rights such as rights of self-assertive and election freedom. Then, it is discussed about instrument-based behaviors and substitution behaviors, for example why we get angry? Is anger disturbing? And some cases such as psychic pressure, increasing sincerity, contravention, solutions to control anger and admitting or rejecting a request are discussed. The research design was pre-test-post-test with the control group. For analyzing the data MANOVA method was used. The results of MANOVA revealed that, at least there is a significant difference between two groups in one of the dependent variables. Then, ANOVA method confirmed significant difference between two groups in all three variables. Results showed that group assertive training increase social skills and school performance

and decrease social anxiety of experimental groups in compare with control groups.

### P92

#### **Investigation of the Role of Glucocorticoid Receptors on the Anxiety in Mice: A Preliminary Report**

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P92

Some studies suggested that glucocorticoid receptors activities can modulate fear and anxiety. According to that, the purpose of this research is to assess the modulatory effect of glucocorticoid receptors on the anxiety assessed in plus maze. In this research mice with medium weight of 20-25 g were used. The male and female animals separately sorted in two groups as control and experiment randomly. For experiment groups 0.5-1 mg/kg dexamethasone was intraperitoneally injected as glucocorticoid receptors agonist and for control groups normal saline was injected thirty minutes before test. Before test, mice were put in black wall box for five minutes till their curiousness and movement activities are improved. While assessing their anxiety, the standard indicators were recorded for five minutes through observation. This study indicated that the dexamethasone in experiment groups reduces the anxiety. In comparison with control groups, they needed a significant longer period of time to pass on the arm of the maze ( $P < 0.01$ ). This result shows that glucocorticoid receptors activities have important modulatory role in anxiety reactions in plus maze assessment model.

### P93

#### **The Anxiety Effect of Social Negative Evaluation in Children's Social Seclusion**

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The Purpose of the present research was study anxiety effect of social negative evaluation in children's social seclusion aged 8 to 12 in Tehran city. Therefore, 250 children (125 boys and 125 girls) were randomly chosen in order to answer fear short scale of negative evaluation (BFNE) and social seclusion scale (UCLA). The data from this research were analyzed by using of Pearson's product moment correlation, linear regression and t-test. The results of this research revealed in children positive and meaningful relationship between

anxiety of social negative evaluation and social seclusion. Also t-test showed meaningful different between mean girls and boys in anxiety of social negative evaluation and social seclusion. The results are discussed that whatever is over anxiety of social negative evaluation thereby will be more social seclusion. Also, the children girl in comparison boys to suffer from over anxiety of social negative evaluation and social seclusion.

#### P94

### The Comparison Psychological Symptoms PTSD in Male and Female Patients

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This research has been conducted to compare purpose psychological symptoms post-traumatic stress in male and female patients. The sample of this study selected from two group PTSD male and female patients (each group 40 people) they were randomly chosen and matched groups by Age and IQ, when they completed WAIS-R. Also examined by Watson PTSD diagnostic interview (repetitious experience, avoidant symptoms and over activation ) and SCL90 phobia, aggression, anxiety, compulsion, hypochondria, thinking disorder, paranoia, depression and individual sensitivity) test. The results of this research showed that PTSD female patients had less over activation and aggression and paranoia in comparison to male patients. Against, avoidant symptoms, compulsion and phobia had showed in female more of the other group .The data from this study is indicate the meaningful different in psychological symptoms PTSD between male and female, and so onthe results are discussed the relation meaningful between psychological symptoms Post Traumatic Stress and sexuality specifications people.

#### P95

### Self-Focus Attention and Interpretation Bias in Social Phobia Patients and Compared with Normal Subjects.

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This study compared focus attention and interpretation biases in social phobia patients and normal subject. In this study with causal-comparative method 100 subjects with social phobia and 100 normal individuals have compared. Subjects were selected through cluster

sampling among Tabriz university students. Data scale of social phobia, attention bias and interpretation of the data was performed using multivariate analysis of variance and was analyzed with SPSS 16 software. This study showed that there are significant differences in self-focused attention, and bias to interpret the words of others between the two groups of patients with social phobia and normal subjects, however there was no significant difference between the groups studied in focused attention on others. The results showed that people with social phobia in social situations focused their attention on themselves and interpretation bias (of self and others), they are intensive than normal subject.

#### P96

### Anxiety Problems in Students with Learning Disabilities

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This paper provides an overview of the results of research related to anxiety disorders within the context of learning disabilities. About 8% of the student population in Iran suffers from learning disabilities (LD). Most of the criteria for anxiety disorders in ICD-10 or DSM-IV-TR can be applied reliably and validly in individuals with mild-to-moderate learning disabilities. Besides the clinical cognitive and physiological features of anxiety in LD students usually the most common behavioral manifestations of anxiety are avoidance and absenteeism. Anxiety problems may directly affect child's learning due to the initial cognitive deficits or by indirectly influencing achievement by undermining the resources children have to overcome their learning difficulties. This article presents the results of two separate studies using different intervention programs (VAKT and relaxation; and cognitive-behavior therapy), addressing learning difficulties and anxiety problems in students with learning disabilities in Iran. Two groups of second through fourth graders, with a prior diagnosis of learning difficulties, participated in each study. One of the research samples consisted of six students. One student from each grade was randomly assigned to the experimental and control group. An anxiety test and nine sets of spelling and reading tests (separate forms for each grade with the same difficulty level) were used as the pretest, posttest and follow-up test in these researches. In the 1<sup>st</sup> study the designed combined program was implemented for the experimental group for 14 two-hour sessions. In each session, program comprised of different fun, innovative, hands-on, and grade-appropriate VAKT learning activities along with relaxation exercises. Exercises were used twice in every session. Sample of the 2<sup>nd</sup> research comprised of

22 LD students. 11 students were randomly assigned to experimental and control groups. The intervention phase for the experimental group started and continued for 12 two-hour sessions. The package included the individually designed cognitive-behavioral therapy and learning activities. In the 1<sup>st</sup> study to examine changes in dependent variables, the mean scores were calculated for the experimental and control groups, figures were drawn and looked for the indexes of level, variability and trend. For the 2<sup>nd</sup> study ANCOVA test was used ( $F= 58.62$ ,  $P<0.001$ ). The results showed that the experimental group from both the studies benefited from the use of the intervention programs, with a significant decrease in learning problems and anxiety level. The joint effect of the programs look promising in promoting learning and reducing the anxiety problems in students with LD.

### P97

#### **Comparison of Post-Traumatic Syndrome Disorder (PTSD) in War-Affected and Fire-Damaged People**

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The purpose of this study was to compare symptoms of PTSD among war affected people and employees in the fire station. Totally, 60 people affected by war and 60 fire workers were selected using simple random sampling. By completing PCL inventory, samples of PTSD were characterized. Data was analysed through SPSS software by independent t-test. As the results showed, severity of PTSD symptoms among fire workers was more than that of war affected people. Beside physical problems, PTSD generally creates more psychological problems for war-affected people and particularly fire workers.

### P98

#### **Effect of Attentional Focus of Self-Statements in Basketball Practice on State Anxiety of Novice Players before Free Throw in front of Audience**

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The purpose of present study was investigation of the effect of attentional focus of novice players' self-statements in basketball free throw practice on their state anxiety in transfer test with spectators' presence. Therefore, 38 novice females (mean of the age=22 yr) who had intermediate trait anxiety were selected randomly by sports competitive anxiety test (SCAT). The participants were assigned to 3 matched groups according to the pretest and performed 120 basketball free throws with repetition of the words "wrist" (self-statement with internal focus) and "center of ring" (self-statement with external focus), and without self-statement (control) during 6 sessions. Transfer test was performed 2 days after the acquisition phase with spectators' presence. Throw accuracy and trait anxiety in pretest, last session of acquisition, and transfer test were measured by a 5-point scale and Illinois self-evaluation questionnaire (CASI-2), respectively. Results of mix 2-factor MANOVA did not indicate significant difference among trait anxiety of groups in different phases ( $P>0.05$ ). Thus, variation of attention direction of novice players' self-statements during basketball free throw practice has not considerable effect on their state anxiety before throw in front of audience and coaches can entrust the selection of instructional self-statements to players without spending time and energy for it but these results show that we need to more researches in the future.

### P99

#### **Transactional Analysis Group Therapy Techniques in Patients with Post-Traumatic Stress Disorder**

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Transactional analysis (TA) is a theory of personality that can be applied in virtually all fields of psychology: educational, counseling, organizational and psychotherapy. The atmosphere that supports transactional analysis is one of comfort, security and respect. A positive relationship is forged between the clinician and the client in order to provide a model for subsequent relationships that are developed outside the therapy arena. TA group therapy techniques can help the psychosocial patient such as child anxious, personality disorder. In this study reviewed post-traumatic stress

disorder (PTSD) patients that had personality disorder and other psychological disorder also TA group therapy techniques on improvement of personality disorder. Post traumatic stress disorder is classified as an anxiety disorder in the diagnostic and statistical manual of mental disorders (DSM V); the characteristic symptoms are not present before exposure to the violently traumatic event. Several interviews are available for assessing PTSD. These interviews vary in merit when compared on stringent psychometric and utility standards. Within the overarching framework of transactional analysis, more recent transactional analysts have developed several different and overlapping theories of TA: cognitive, behavioral, relational, rededication, integrative, constructivist, narrative, body-work, positive psychological, personality adaptational, self-reparenting, psychodynamic, and neuroconstructivist. Adult ego in PTSD state enables us to form a narrative self or coherent sense of identity. Trauma interferes with this integrative capacity, creating excluded ego states and a disorganized self.

#### P100

### Avoidance of Social Interaction in Nursing Students

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High levels of mental health during studying in university, makes students able to deal effectively with numerous stressors they experience. Our aim of this study was to examine and compare social anxiety among first to fourth year student nurses of Ministry of Health affiliated universities of medical sciences located in Tehran city, Iran in 2010. In this descriptive analytic study, 400 students from Tehran Universities of Medical Sciences were selected by stratified sampling with proportional allocation. Data were collected during the first semester in 2010. Students completed two-part questionnaire include of Liebowitz social anxiety inventory and demographic information. Data were analyzed using descriptive and analytical tests with SPSS software. There was no statistically significant difference in total scores of social anxiety of first to fourth year students. The mean score of avoidance of social interaction dimension in fourth year students were significantly lower than first

year students ( $P<0.05$ ). Based on deniable relationship between social anxiety and interpersonal communication as undissociation part of nursing care, decrease social anxiety of students could play an important role in their mental health. According to results of this study it seems that exposure of students with nursing education system does not produce any changes in their social anxiety. It is recommended to consider the mental health promoting strategies as a priority in programs of nursing education.

#### P101

### The Efficacy of Cognitive-Behavioral Therapy on Reducing Driving Phobia and Driving Cognitions in Women of Shiraz City

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The fear of driving can be severe enough to be considered a phobia. It is often great enough that people will avoid driving at all costs and instead find someone to drive them or use public transportation, regardless of how inconvenient or expensive. This fear will cause many to avoid driving, create excuses to not drive, or even refuse to get a driver's license for years. The aim of this study was to determine the efficacy of cognitive-behavioral therapy on reducing driving phobia and driving cognitions among women of Shiraz city. The design of this study is an experimental pre-test post-test with control group. At first, 40 subjects were chosen and then driving cognition questionnaire and driving situation questionnaire were completed. In the second stage 30 subjects who have more score in both of tests selected after interview and divided to 2 groups, experimental and control. Experimental group participated in 12 sessions of therapy. In this research, the main idea of the driving fear program which is related to Rich Presta has been used. 7 sessions were related to method of cognitive therapy for specific phobia and 5 sessions included behavioral practice with car by helping a driving instructor. Data analyzed by SPSS 16. The results showed that this treatment significantly had reducing effects on driving phobia and driving cognitions ( $P<0.001$ ). This finding showed that cognitive-behavioral therapy can be useful for women who suffer from driving phobia.

#### P102

### The Relationship between Emotional Intelligence and Anxiety in Students Payam-E-Noor University Mashhad

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Anxiety is a psychological and physiological state characterized by somatic, emotional, cognitive and behavioral component. Emotional intelligence (EI) which defines as the ability to perceive, monitor, employ, and manage emotions within one's and others, is strongly related to healthy psychological functioning. Various studies have been conducted in this field that reveal the role and importance of EI in people's various aspects of life such as education, employment, and living conditions. Hence, this study examines the relationship between emotional intelligence and anxiety in college students. This research is a correlation study, in which 60 students (32 female and 18 male) of Payam-e-Noor university of Mashhad were selected by convenience sampling. The students completed the Bar-On emotional quotient inventory (EQ) and Beck anxiety questionnaire. Afterwards, the data were analyzed using SPSS software V. 19 through Pearson correlation. The findings of the study showed that there was a significant correlation between emotional intelligence and anxiety at ( $P < 0.01$ ) level. Also, there was a negative and significant relationship between all EQ components (15 components, except empathy  $P > 0.05$ ) and anxiety. Regarding the findings of the study particularly the significant correlation between emotional intelligence and anxiety, it seems that attention to emotional intelligence is very effective and valuable in improving mental health and reducing anxiety. The strategies are recommended to improve emotional intelligence, such as through special workshops in the universities.

### P103

#### **The Effect of Educating Mindfulness to Reduce Physical Anxiety in Obese Women in Karaj County**

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Obesity is one of the most serious problems concerning health in the world today. Many problems, ranged from the risk of early death and chronic diseases that reduce life quality to psychological disorders, such as anxiety and depression, are consequences of obesity. The objective of this research is to study the effect of educating mindfulness to obese women in order to relieve their anxiety. Mindfulness, focus on becoming aware of all incoming thoughts and feelings and accepting them, but not attaching or reacting to them. the goal of mindfulness-based cognitive therapy (MBCT) is to teach the participants to focus less on

reacting to incoming stimuli, and instead accepting and observing them without judgment. This mindfulness practice allows the participant to notice when automatic processes are occurring and to alter their reaction to be more of a reflection. A quasi-experimental pre-test and post-test research plan was devised in this research and as well a control group. The population included the obese women who had paid a visit to two obesity treatment clinics in Karaj. Forty five out of these women, who scored highest degree of anxiety based on the related scale, were chosen. After replication, the persons were randomly divided into the treatment and control groups. Research tools were demographic data; physical, cognitive, behavioral and SCBAI anxiety questionnaires. The treatment group was provided with lessons on mindfulness based on cognitive therapy in eight sessions once a week but the control group did not receive any education. To analyze the data the analysis of covariance and the analysis of variance with replicated measurements were used. The result of the research showed intervention reduced physical anxiety significantly ( $P = 0.001$ ). The treatment endured at least for 45 days. According to findings of this research, mindfulness education can be employed as an effective intervention to reduce physical anxiety in obese women.

### P104

#### **Occupational Stress: its Affected Factors in One Factory**

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In recent decades, the issue of stress and its negative consequences such as violence in the workplace, increased accidents at work, absenteeism and burnout, have deleterious effects on the efficiency and economy. The aim of this study was to determine the occupational stress of pelletizing industry workers and its determinants. This study was descriptive-analytical and cross sectional. Among workers 120 subjects were selected (randomly) and according to the shift, they are divided into two groups of Shift and non-shift work and for the estimation of stress, 120 occupational questionnaires with 92% reliability was completed and statistical data was analyzed by the SPSS software. 88% of employees had severe stress. Severe stress was observed in shift work (90%), low age (96.2%) and experience (94.7%) (in both shift and non-shift). 92.6% of smokers also had severe stress. Between job stress and levels of education and marital status and sleep problems there were not significantly association ( $P > 0.05$ ). According to the result of present study, shift work, smoking, low age and experience were the causes and triggers of stress. Therefore it is suggested, to take

into account the selection and periodic examinations of workers with these characteristics for stressful jobs and so identify sources of stress to reduce causing factors as systematically.

### P105

#### Developing and Obtaining the Reliability and Validity of Eight-Item Short Form of Spielberger Stat-Trait Anxiety Inventory (STAI)

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The aim of this study was to develop and obtain the reliability and validity of 8 items short form of Spielberger stat - trait anxiety inventory (STAI) for use in circumstances where the full form is inappropriate. In this study a correlational method is carried out. Using the available sampling, the sample subjects were selected from 161 patients who referred to one of hospitals of Isfahan. In this study item-remainder correlations was used and the most highly correlated anxiety-present and anxiety-absent items were combined, and correlated with scores obtained using the full-form of the STAI. Findings of this study show that items 5, 9, 16, 17 ( $r > 0.80$ ,  $P < 0.05$ ) have significant correlation with total score of trait anxiety and items 4, 8, 15, 17 ( $r > 0.80$ ,  $P < 0.05$ ) have significant correlation with total score of stat anxiety. Cronbach Alpha of 4 item of trait was 0.9 and this rate for 4 item of stat was 0.89. To obtain acceptable validity level of stat and trait anxiety short form was compared with long form. Correlation of two forms was larger than 0.90 that show acceptable validity for short form of STAI. According of these findings the eight-item version offers a briefer and more acceptable scale for subjects who are in immediately sittings such as hospital sittings.

### P106

#### Content Analysis of Recent Persian Songs (2013-2014) According to Emotions of Anxiety, Depression, Anger, Fear and Happiness

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P106

The purpose of this study was to investigate the content

analysis of recent Persian songs (2013-2014) according to emotions of anxiety, depression, anger, fear and happiness. The research method was content analysis type. The sample consisted of 50 Persian songs from 2013 to 2014 which they were selected by simple sampling. To analysis of data, messages were categorized in emotions of anxiety, depression, anger, fear and happiness. Then Kappa coefficient was used to investigate of evaluators' agreement. Also descriptive statistic and frequency distribution were used. The results of the study revealed the rate of evaluators' agreement or Kappa coefficient equaled 80%. Also the most frequent of emotions in recent Persian songs includes: depression (38.5 %), anxiety (37.5%), and anger (13%). Emotions of fear (8%) and happiness (3%) included less percentage than others. According to results of this research depression and anxiety emotions have the most percentage among other emotions. This could due to several psycho-social factors such as catharsis factor. According to this approach music and art are refuges for artists' painful emotions.

### P107

#### Investigation of Anxiety in Students with Learning Disabilities Based on Parenting Style

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P107

In attention to the role of relationship between child and parents in child development, the purpose of the present study was to determine the relationship of anxiety in students with learning disabilities based on parenting style. This study was causal-comparative design. Study population included all parents of children with learning disabilities attending special centers during academic year 2012-2013, in which 150 parents of children with learning disabilities were selected as a sample group by using of multi stage cluster random sampling. Data were collected by using the Conner's rating scale and the short form and the Robinson, Mandlece, Olsen, and Hart parenting styles questionnaire. The data were analyzed by using correlations. The results of this study revealed that there is a significant and positive correlation between authoritarian and permissive parenting style (The authoritarian style, parents are demanding and receptive to the needs and desires of children. Also, a permissive style of parenting, exercise less control over their children, and their demands are not unreasonable) with anxious problems of students with learning disabilities ( $P < 0.01$ ), but significant correlation was not observed between authoritative parenting style (parents who use an authoritative style, convey facts to allow their children, and their children

are more willing to accept the reasons for rejecting a guide to show) and anxious problems of students with learning disabilities. The results showed that students with learning disabilities are problems with anxiety and parenting practices have a significant relationship exist. The finding is in line with most previous research in this area. In general, authoritarian and permissive parenting style is an important factor in the development of psychological disorders.

## P108

### **Prevalence of Obsessive Compulsive Hoarding and its Association with Intolerance of Uncertainty and Impulsivity**

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P108

Hoarding is characterized by the persistent difficulty discarding or parting with possessions, regardless of the value others may attribute to these possessions. Hoarding resembles obsessive compulsive disorder (OCD) in several ways. The avoidance of and difficulties with discarding seem to be driven by fears of losing something significant or being responsible for a bad outcome. These could be thought of as obsessional fears. Just as in OCD, the decision-making difficulties in patients with hoarding may arise from intolerance for uncertainty. On the other hand, hoarding has also been observed in specific impulse control disorders (ICDs). Therefore, the current study tested the hypothesis that hoarding would be as strongly related to impulsivity as it is to intolerance of uncertainty. The intent of the study was to determine the prevalence of obsessive-compulsive hoarding among university students and to examine its association with intolerance of uncertainty and impulsivity. Using a stratified random sampling procedure, a large sample of 1263 students was recruited for the study. Data were collected by administering the intolerance of uncertainty scale, Dickman impulsivity inventory and the saving inventory (revised). Multivariate analysis of variance and multiple regression analysis were employed to analyze the data. Findings reveal that obsessive-compulsive hoarding was reported by 16.17% of the sample. No gender differences emerged in any of the components of obsessive-compulsive hoarding. An examination of gender differences on the other variables revealed that boys tended to report greater functional impulsivity. Regression analysis revealed only one factor of intolerance of uncertainty, points to the belief that uncertainty has negative behavioral and self-referent implications. This negative effect accounts for 13.6%, and dysfunctional impulsivity accounts for 5.6% of the variance in hoarding. Findings imply that hoarding bears similarities to both OCD and ICD and

both intolerance for uncertainty and impulsivity are likely to be attenuated in hoarding.

## P109

### **Effect of Ambient Odor of Lavender on Dental Anxiety**

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Dental anxiety is defined as an abnormal fearing or dread toward preventive or therapeutic visits by a dentist and unreasonable anxiety against dental procedures. It is estimated that dental anxiety affects one-third of the general population. Its physical and cognitive symptoms may result in behavioral issues such as avoidance of early dental visits that troubles both patient and dentist. In order to discount this type of anxiety, various approaches have been suggested, such as anxiolytics and general anesthesia. However, most of them are potentially dangerous (drug interactions or allergy), or are not routinely available and cost-effective. Therefore, alternative medicine and utilizing the benefits of nature is a cost-effective way and studies have stated that smelling ambient odors have some positive physiologic effects. This study was planned to assess the effect of ambient odor of Lavender on the level of anxiety in clients of 2 general dental clinics in Mashhad during 2012. 390 patients had the inclusion criteria, divided randomly into 2 groups, Lavender odor exposed (case group=195) or distilled water (control group=195) in waiting room and then, they answered the anxiety tests (State-Trait Anxiety Inventory, Dental Anxiety Scale) before the dental procedure, while being unaware of the type of the odor. Mean scores of DAS, anxiety state and anxiety trait were similar between 2 groups. So, it seems that 2 groups had a similar level of anxiety. According to non-significant effect of Lavender oil in this article, further studies with the other forms of Lavender such as Lavender scent and oral administration of Lavender should be carried out.

## P110

### **The Effectiveness of Mindfulness-Based Training on Anxiety in Students of Islamic Azad University-Karaj Branch, 2014**

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P110

Anxiety is one of the most common mental disorders in human societies and is believed that stress and anxiety are responsible for 75% of somatic disease. Hence attention to preventive methods to control anxiety and stress and coping strategies need to be considered. Therefore, this study aimed at evaluating the effectiveness of mindfulness training on anxiety in students of Islamic Azad university of Karaj branch. The study design was pre-test-post-test with control group, in which 60 students were participated through random sampling method and divided randomly into experimental and control groups during academic years during 2013-2014. Experimental group at 8 sessions was instructed with mindfulness methods. Mindfulness-based interventions as a third-generation or third-wave cognitive-behavioral therapy should be considered. In this model, the mind is conscious, deliberate focus on one of the expertise that is currently underway; it features a non-judgmental attention, along with acceptance. The tool used in the research was test anxiety inventory (TAI). Data was analyzed with analysis of variance using SPSS 19 software. Results showed that mindfulness-based training in reducing anxiety of the experimental group compared with the control group was significantly effective ( $P < 0.01$ ). Regarding to effectiveness of mindfulness-based training in reducing anxiety, promoting mental health of students, relevant authorities in the form of a comprehensive and preventive program can be applied practically, at the university level.

#### P111

### Effectiveness of Group Meta-Cognitive Therapy on Metacognitive Beliefs and Anxiety of Patients with Generalized Anxiety Disorder

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The present study examined the effect of grouped meta-cognitive therapy on meta-cognitive beliefs of patients' anxieties suffering from generalized anxiety disorder. This research is a quasi-experimental with pre-test and post-test design with control group in which two groups of experiment and control are used. The present study population includes all state universities, Islamic Azad Universities of Tabriz students and East Azarbaijan Science and Research Branch that referred to above mentioned consulting centers correspondent with 4<sup>th</sup>

edition of diagnostic and statistical mental disorders suffering from generalized anxiety disorder help book criteria. From the above community 20 persons (10 persons experiment group and 10 persons control group), (10 male and 10 female) with the use of structured clinical interview for mental disorders (SCID\_I/CV), standard meta-cognitive beliefs questionnaire (MCQ\_30), generalized anxiety disorder scale (GADS) and Back's anxiety questionnaire (BA\_21) were selected and accidentally replaced in two groups of experiment and control. Participants' age range is between 18 to 30 years old with the mean of 27.78 and 2.60 variance. Grouped meta-cognitive therapy was performed in 10, 120 min sessions during 2 months in experimental group and participants in control group have received no treatment. All participants completed research questionnaire before and after treatment and in 3 months follow-up period. The present study, multivariate analysis of covariance demonstrated that grouped meta-cognitive therapy has significant effect on reducing negative meta-cognitive beliefs and also this therapy method has different effect on meta-cognitive beliefs' subdivisions of patients suffering from generalized anxiety disorder. Additionally, results suggest that grouped meta-cognitive therapy has a significant effect on patients' anxiety suffering from generalized anxiety disorder. The above mentioned results are maintained in follow-up period.

#### P112

### Psychometric Properties of Separation Anxiety Assessment Scale (Parent Version)

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P112

Separation anxiety disorder (SAD) is the most commonly diagnosed and impairing childhood anxiety disorder. Given that SAD symptoms in early childhood have been linked to later psychopathology, early identification and treatment of it is critical. The aim of the present study was the examination of validity and reliability of separation anxiety assessment scale-parent version (SAAS-P) (Hahn, Hajilian, Eisen, Winder, & Pincus, 2003) in a sample of 4-6 years old children of Tehran. The SAAS-P is a 34-item self-report instrument that was proposed to measure four symptom dimensions of separation anxiety: fear of abandonment, fear of being alone, fear of physical illness and worry about calamitous events. The current study evaluated several aspects of the SAAS-P's psychometric properties. First we translate the SAAS-P and translate it back into english. It revealed appropriate conceptual fitness. Then

the mothers of 302 children from sixteen kindergartens in district 1 in Tehran were selected by available sampling and were asked to complete the SAAS-P and preschool anxiety scale (PAS) (Spence, Rapee, McDonald, & Ingram, 2001). Validity evaluation yielded positive results, in addition to face validity that was confirmed by specialists, criterion-references validity was supported by high (0.69) correlation with preschool anxiety scale. Moreover all subscales of SAAS-P displayed moderate to high internal consistency (0.63 to 0.73) and had good reliability. The confirmatory factor analysis supported the four-factor model of the scale. The analyses of the psychometric properties suggest that the SAAS-P is a promising measure of separation anxiety that can be used in clinical situations and is able to screen the children with separation anxiety.

### P113

#### **Predicting Body Image Anxiety Based on Positive and Negative Perfectionism and Body Mass Index**

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P113

Body image is an internal representation of the external appearance which includes physical and perceptual aspects, and attitudes toward them. Body image anxiety can cause weight problems. In addition, perfectionism, the trend or effort to be perfect and flawless can cause extreme thinking and self-criticism. Perfectionism can provoke anxiety and concerns for body image and weight, especially in women. This study was aimed to investigate the relationship between body image anxiety, perfectionism, and body mass index (BMI). Participants were 200 women took part in fitness programs in two regions of Shiraz (districts one and three). They filled body image concern inventory (Littleton), and positive and negative perfectionism scale (Terry-Short). The body mass index was assessed using self-reported data. Descriptive statistics and multiple regression (ENTER method) were used for analyzing data. Results showed that there are significant relationships between dimensions of body image anxiety and negative perfectionism and BMI. Regression analysis also revealed that negative perfectionism and BMI positively predict body image anxiety. Based on the results presented, body image which includes internal attributions about individual's body and impressions from others can be affected by negative aspects of perfectionism and the body mass index. In other words, women's body image is affected by the negative dimension of perfectionism which is a representation of anxiety.

### P114

#### **The Relationship between Social Anxiety, Irrational Beliefs and Emotional Intelligence with Homesickness in the University of Tehran Dormitory Students**

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Moving away from home always lead most university students to feel homesick that negatively impacts their academic performance and excessive acculturative stress can contribute to eating and sleeping problems, low energy, and headaches. Severe homesickness is classified as an adjustment disorder with mixed anxiety and depressed mood that in some critical cases leads to suicide. To consider this issue, the purpose of this study was to examine the correlation between social anxiety, irrational beliefs and emotional intelligence with homesickness in University of Tehran dormitory students. Three hundred and fifty-five undergraduate students (198 males and 157 females) were selected using cluster sampling method. Participants responded to the social anxiety questionnaire (SAQ) (Watson & Frennd, 1969), irrational beliefs test (IBT) (Jones, 1968), emotional intelligence scale (Petrides & Furnham, 1998), and the homesickness scale (Van vliet, 2001). Multiple regression analysis showed that social anxiety and irrational beliefs had significant positive correlation with homesickness ( $P < 0.01$ ), respectively ( $r = 0.56$ ), ( $r = 0.28$ ), while emotional intelligence had significant negative correlation ( $r = -0.52$ ) with homesickness ( $P < 0.01$ ). Overall, the results of multiple regression analysis predicted 0.55 changes of homesickness. Results suggest that social anxiety is the most effective factor among other tested variables to predict homesickness. In fact, behavioral responses of people from a new culture are not predictable enough for immigrant students and it is because of this that they experience more anxiety in social situations and cannot create suitable social bonds to be supported by others that results in feeling more homesick. This has significant implications for educators to instruct social skills and rational thinking to immigrant students in dealing with a new environment since emotional intelligence and irrational beliefs can affect homesickness and social anxiety as well.

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**P115**

**Religious Spiritual Well-Being in College Students: A Cross-Cultural Study**

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Spirituality is one of the dimensions of human health. Religious spiritual characteristics including forgiveness, hope, transcendence, immanent and sense of integration to surroundings can cause better adjustment and more health and welfare in the life. There is a near relationship between culture and psychology. The aim of the present research was to study cross-cultural aspects of religious spiritual well-being among college students. 603 students (320 Iranian and 283 Austrian college) selected by a multistage stratified cluster sampling. They completed multidimensional inventory for religious spiritual well-being (MI RSWB 48). Data were analyzed by independent t- test. On the MI RSWB 48, Iranian students obtained higher significant scores in subscales of global religiosity, connectedness and component of transcendent. Austrian students obtained higher significant scores in subscales of experiences of sense and meaning, forgiveness, hope transcendent and component of immanent. Female students had higher score in forgiveness component than male students. Quantitative, interview and group focused discussion studies for future research, is recommended. Present findings can be considered in the spiritual religious-oriented interventions in two countries.

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**P116**

**Reminiscence Therapy Efficacy in Reducing Symptoms of Anxiety in Elderly Nursing Home Residents in Tehran**

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P116

Getting old is not a sickness. It is actually a social-personal experience and one of the sensitive and vital stages of human development that is regarded as a

normal trend of passing of life. Anxiety is among the major problems of senescent period. Research shows that the memory of group treatment among the elderly is not only useful but also considered as a type of treatment. This method helps the elderly to cope with the disasters and changes during their life and with what they have missed and to accept the present condition by resolving the previous conflicts. Also, the aim of this study is to determine the efficacy of the memory of group treatment on reduction of anxiety signs among the elderly. As a start, a number of 30 elderly people were accidentally chosen from Kahrizak nursing-home in Tehran. Having received population information, their anxiety status was measured using Beck anxiety questionnaire. Then, they were divided into experiment and control groups. The first group (n=15) were under the memory of the group treatment and the second group (n=15), as control group, received no treatment. After finishing the treatment period, the anxiety rate of the people was measured. The results of co-variance analysis show that there is a meaningful difference between these two groups in such a way that the anxiety score in treated group has been decreased, comparing that of control group. Regarding these findings, we find that the method of memory of group treatment significantly influences the anxiety among the elderly living at the nursing-homes.

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**P117**

**The Comparison of Self-Efficacy and Coping Styles among Students with High Test Anxiety and Students Normally**

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P117

Test is the majority of student's life and test anxiety is an experience that has commonly been observed during exams. In fact, anxiety is a vague feeling and very uncomfortable that so often considered to be associated with one or more physical sense, for instance, the empty feeling of heart palpitations, headache and sweating. The purpose of this study is to investigate and to compare the self-efficacy beliefs and coping styles among students with high test anxiety. This study is a cross-sectional comparison. The study population consisted of all high school students in Tehran studying in 2014. Subjects consisted of 52 students with high test anxiety and 52 students were normal using matching method (based on sex, age, school grade, school and socio-economic status). Information about the variables of interest was collected through questionnaires of general self-efficacy Sherer and colleagues and coping with stress questionnaire (CISS). Results of multivariate analysis of variance showed that the two groups of students in self-

efficacy and coping style, there is a significant difference ( $P \leq 0.01$ ). This means that students with high test anxiety are more likely to experience low levels of self-efficacy and had avoidant emotion-focused coping styles. While normal students have a higher self-efficacy and coping styles is a problem-focused. These results may have important implications in the field of education and counseling services for students with high test anxiety. Problem-focused coping skills in schools can increase self-efficacy in terms of life skills training to prevent test anxiety. A regular program of teaching them to cope properly and efficiently may help reducing anxiety and increasing the level of self-efficacy in students.

## P118

### **The Comparison of Early Maladaptive Schema in People with Different Levels of Trait Anxiety in Two Ethnic Groups of Iranian Students**

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Anxiety affects the culture of society so that content of each culture has permanent effects on behavior, feeling and psychological features of people. The purpose of this research was the comparison of early maladaptive schemas between two ethnic groups (i.e. Kurds and the Persians students) with high and low levels of trait anxiety. The research design was descriptive and ex post facto type. 159 female students (78 Kurds and 81 Persians) were selected by multistage cluster sampling method. The research tools were including Young's schemas questionnaire (the short form) and Spielberger's trait anxiety questionnaire. The data were analyzed by MANOVA test. The results showed that there are significant differences between Kurd and Persian students with high level of trait anxiety in unrelenting standards/hyperlicolness schema. In addition, when the students with high and low levels of anxiety were compared with each other in each ethnic group, the results showed that they have significant difference in their early maladaptive schema and only in Persian students did not found significant difference in two subscales (self-sacrifice schema and unrelenting standards/hyperlicolness schemas). According to results of this research it can be said that variants of between and within ethnic groups in early maladaptive schemas indicated the influence of culture on appearance of mental disorders.

## P119

### **The Relationship between Quality of Life, Anxiety, and Job Satisfaction in Women Employees**

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P119

The aim of this study was to investigate the relationship between quality of life, anxiety and job satisfaction in women employees in Ray zone in tehran welfare organization. in this research, participants were asked to answer which of the variables of quality of life and job satisfaction is a strong predictor for anxiety. The population of the study consisted of all female employees in Tehran welfare organization Ray region in 2013-2014. A total of 234 women were randomly selected and Beck anxiety inventory (1988), quality of life (sf-12) (1930), and job satisfaction Stephen Robbins (1994) were completed. Type of study, according to data gathered from the research is correlational. The descriptive statistics (mean, standard deviation) were used to describe the results of the questionnaires. The multiple regression method was used to test the research assumptions. Results showed that overall satisfaction with the elements of nature of work, supervision, coworkers, promotions, salary and benefits, working conditions, job satisfaction scale for predicting quality of life in female employees. On the other hand, all components except the nature of the job satisfaction of women employees in the organization were predictors of anxiety

## P120

### **The Relationship between Anxiety and Self Efficacy in Active and Inactive Postmenopausal Women**

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Menopause is one of the steps in women's life which is accompanied by reducing physical and psychological abilities. Because estrogen and other hormonal influences during menopause affect the brain's regulation of mood, hormonal changes can cause some women to experience anxiety during menopause. Anxiety is a psychological state characterized by excessive and persistent worry, tension, and nervousness. Exercise and movement is one of the most effective ways to prevent menopause disorders and postpones aging processes. The women who exercise have better health and vitality. Accordance with importance of life quality in these ages, this study investigates the relationship between self-efficacy and

anxiety between active and inactive postmenopausal women. The research method was descriptive. Statistical population was the postmenopausal women who attended in Isfahan parks to exercise, as well as ones who attended to spend leisure time without any activity. Convenience sampling was used to select 170 women as statistical sample. Personal information and activity experiences interviews, self-efficacy scale (Sherer et al. 1982) and depression, anxiety, stress scale (DASS-21) (short version of the scales) were used. The data were analyzed by SPSS-15 software, t-test and Pearson correlation test. The results showed that self-efficacy and anxiety between active and inactive postmenopausal women are significantly different, and active women compared with inactive ones have more self-efficacy and less anxiety. Also there was a negative and significant relationship between self-efficacy and anxiety. According to these results, exercise and physical activity can help postmenopausal women to reduce anxiety. Another important finding was that exercise can help women to increase self-efficacy in their lives. Other researches on anxiety and exercise show that the psychological and physical benefits of exercise can also help reduce anxiety and improve mood.

#### P121

### Effectiveness of Eclectic Model Based on Acceptance and Commitment and Metacognitive Therapy in Patients with Pure Generalized Anxiety Disorder

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The purpose of this research was to investigate the effectiveness of eclectic model based on acceptance and commitment therapy (ACT) and metacognitive therapy (MCT) on symptoms in patient with pure generalized anxiety disorder. The research method was clinical experimentation with pre-posttest and control group. Statistic community was all of the men and women patients that suffered from pure generalized anxiety disorder and selected by structured interview based on axis 1 DSM-IV-TR. Sampling way was purpose orientated. Participants allocated through randomization in 2 groups: eclectic model based on ACT and MCT (n=14) and control group (n=16). Experimental group received related intervention included in 14 psychotherapy session for eclectic model based on ACT and MCT, and control groups not received any intervention. Pre-posttests data collected by

Pennsylvania worry questionnaire (PSWQ). For analyze we used descriptive statistic and ANCOVA by SPSS-18 software. The findings showed that the intervention had significant effect on reducing the mean score of worry in patients ( $P<0.01$ ). We can conclude that eclectic model based on ACT and MCT reduce the severity of anxiety symptoms.

#### P122

### Family Communication Patterns and Social Anxiety in Students: The Mediating Role of Coping Strategies

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Research findings suggest that the family context and communication patterns have high correlation with adolescent's mental health indicators such as anxiety. Therefore, the current study aimed to investigate the mediator role of coping strategies in relation between family communication patterns and students social anxiety. 140 students of Shiraz guidance schools were studied; they completed the family communication patterns scale (Ritchie and Fitzpatrick, 1990), social anxiety scale for adolescents (LaGreca, 1999), way of coping questionnaire (Lazarus and Folkman, 1982). The study was conducted based on path analysis. So the family communication patterns (conversation orientation and conformity orientation) were considered as exogenous variables, coping strategies (Problem focused and emotion focused approaches) as mediator variables and social anxiety as endogenous variable. Conversation orientation was the direct and significant predictor of problem focused strategy and conformity orientation was the direct and significant predictor of emotion focused strategy in students. On the other hand, emotion focused approach was the positive predictor of social anxiety. When the family system has the lower potentiality to listen or accept different opinions and the children are being pushed to the peremptorily assimilation with parents values, the coping strategies become more emotional and the children experience higher level of anxiety in social interactions. These findings have implications for the important role of parent's orientations toward their adolescents on family's mental health.

#### P123

### The Effectiveness of Coping Stress Skills Training on Stress and Problem Solving Skill

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P123

The purpose of this study was to examine the effect of coping stress skills training on stress and problem solving skill in Taleghani dormitory students in Kermanshah medical sciences university. The research method is experimental and has been done with pre-test, post-test and control group. Research tools were Harry inventory (2005) and Endler and Parker coping scale of stressful situation (1990). We selected 90 students from Taleghani dormitory by available sampling and evaluating them by Harry inventory. After analyzing, we found 15 students with highest score in stress and randomly assigned in two experimental and control group. Data analyzed by covariance method. Results of analysis of covariance showed that training coping stress skills are effective in reducing stress and increasing problem solving skill. Therefore, with this finding we conclude that training coping stress skills are one of the effective methods for treatment of stress and increasing problem solving skill.

#### P124

### **Anxiety in Motorcyclists; its Relation to Safety, Age, Riding Experience, Having License and Trauma History**

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Motorcyclists consist most of population of traffic foundation. More statistic of accident, more danger of injury, being in open and load environment can be of causes to make motorcyclists in exposure to more anxiety in comparison to other vehicles. Motorcyclist's anxiety can be one of the most significant reasons in accidents. In this study we surveyed the rate of anxiety in motorcyclists also comprised between their anxiety and the rate of helmet use, experience in riding, age, having license and trauma history. This study was done with presenting Beck anxiety inventory questionnaire to motorcyclists and was used of SPSS software to calculate results. From the all participants 73% had mild anxiety, 21% had moderate anxiety and 6% had severe anxiety. 85% of motorcyclists that always was using helmet had a mild anxiety and nobody had severe anxiety. According to our results, 81% of participants with trauma history more than 3 times had severe anxiety, whereas 67% of participants with trauma history less than 3 times had a mild anxiety. Anxiety level of motorcyclists that didn't

have riding license was a little less than others. 100% of participants with severe anxiety had more than 3 years motorcycle ridings experience. 60% of participants with age less than 25 years had a level of anxiety (mild: 43%, moderate: 12%, severe: 5%). In this study, we proved that there is a positive relation between anxiety with riding experience, having license and history of trauma and a negative relation with age and safety. Safe riding decrease level of anxiety and it related to helmet use. Anxiety in younger motorcyclists is significant and elevated rate of anxiety accompany with more trauma history in motorcyclists, so probably is better to legislator increase age of license taking.

#### P125

### **How Do Achievement Goals Affect Statistics Anxiety? The Mediation of Academic Engagement**

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P125

Statistics anxiety has a positive relationship with academic drop-out and deserves greater attention. This study examines a model explaining the impact of students' achievement goals on their statistics anxiety through levels of their academic engagement. Three hundred and fifteen undergraduate students (53 males and 262 females) who studied educational sciences and psychology in the state universities of Tehran and registered for courses of descriptive or inferential statistics were studied. Participants responded the questionnaire measuring subscales of students' achievement goals (Middleton and Midgley, 1997), statistics anxiety rating scale (STARS) (Cruise et al., 1985), effort (Dupeyrat & Mariné, 2005), and metacognitive strategies and task value (Pintrich & et al., 1991). Path analysis indicated that mastery goals and academic engagement had direct negative effects on statistics anxiety ( $P < 0.01$ ), whereas performance-approach and performance-avoidance goals had direct positive effects on it ( $P < 0.01$ ). although performance-approach goals had direct negative effects on two subscales of academic engagement (metacognitive strategies and task value), they affected effort positively ( $P < 0.01$ ). Additionally, while mastery goals had direct positive effects on academic engagement, performance-avoidance goals negatively affected it ( $P < 0.01$ ). Thus, achievement goals negatively affected statistics anxiety

through academic engagement ( $P < 0.01$ ). Overall, the tested model predicted 0.35 of variance of statistics anxiety. In consistent with goals' literature, results suggest that students with adaptive and maladaptive goals' patterns fundamentally differ in experiencing statistics anxiety. However, the direct positive effects of maladaptive goals' pattern on statistics anxiety can be mediated by students' academic engagement. This has implications for teachers to consider the fact that even when students pursue maladaptive goals, their statistics anxiety can be reduced as long as the instructor provides mastery class structure to engage them in academic tasks.

## P126

### Effectiveness of Group Meta-Cognitive Therapy on Meta-Cognitive Beliefs of Patients with Generalized Anxiety Disorder

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The present study examined the effect of grouped meta-cognitive therapy on meta-cognitive beliefs of patients' suffering from generalized anxiety disorder. This research is a quasi-experimental with pre-test and post-test design with control group in which two groups of experiment and control are used. The present study population includes all state universities, Islamic Azad Universities of Tabriz students and East Azarbaijan Science and Research Branch that referred to above mentioned consulting centers correspondent with 4th edition of diagnostic and statistical mental disorders suffering from generalized anxiety disorder help book criteria. From the above community 20 persons (10 persons experiment group and 10 persons control group), (10 male and 10 female) with the use of structured clinical interview for mental disorders (SCID-I/CV), standard meta-cognitive beliefs questionnaire (MCQ-30) and generalized anxiety disorder scale (GADS) were selected and accidentally replaced in two groups of experiment and control. Participants' age range is between 18 to 30 years old with the mean of 27.78 and 2.60 variance. Grouped meta-cognitive therapy was performed in 10, 120 min sessions during 2 months in experimental group and participants in control group have received no treatment. All participants completed research questionnaire before and after treatment and in 3 months follow-up period. The present study multivariate analysis of covariance demonstrated that grouped meta-cognitive therapy has significant effect on reducing negative meta-cognitive beliefs and also this therapy method has different effect on meta-cognitive beliefs' subdivisions of patients suffering from generalized anxiety disorder. The above mentioned

results are maintained in follow-up period.

## P127

### An Investigation on the Control and Improvement Motives Sources and its Convergence with Exam Anxiety

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The goal for this research is to study the relationship between locus of control and achievement motivation with test anxiety among the master students of the Azad University, Olum Tahghighat unit in 2010-2011. Considering the Morgan table the number of sample individuals for this research was 370. Also cluster double sampling method was used. For collection of data three questions and theories of the research were studied using descriptive and inferential statistics. The results have indicated that there is a meaningful relation between the locus of control and achievement motivation with test anxiety, also locus of control and achievement motivation, locus of control and test anxiety, achievement motivation and test anxiety. In addition, a significance difference was not found between males subjects and females in regard to locus of control and achievement motivation variables, however in regard to test anxiety variable there was a meaningful difference between two sex.

## P128

### Effectiveness of Dialectical Behavior Therapy on Anxiety and Depression among Young Male Prisoners with Antisocial Personality Disorder

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Antisocial personality has some clear symptoms as impulsivity, unstable emotions, aggression, drinking, use of drugs, early initiation of sexual behavior make some difficulties and problems in their relations with family members and those who have interaction with

them and at least in society. According to the mentioned symptoms of this personality disorder in this research project, it has been tried to solve its problems by comparing the effectiveness of dialectical behavior therapy on anxiety and depression among young male prisoners who have antisocial personality in Ilam prison. This semi experimental project has been done by pre and post-test. 32 subjects have been selected purposely between 18-40 years among male prisoners in Ilam prison. Three questionnaires have been used the Millon clinical questionnaire, Beck anxiety questionnaire and depression questionnaire. In the study of the effectiveness of the treatment of anxiety ( $P=0.014$ ) is not effective in treating depression ( $P=0.955$ ). According to the findings obtained appears to be a dialectical therapy, due to the nature of the treatment that the acceptance and credibility of the person making the attempt to change a person's psychological stresses therapeutic efficacy in the treatment of some of the characteristics of people with antisocial personality disorder.

### P129

#### **Effectiveness of Group Meta-Cognitive Therapy on Anxiety of Patients with Generalized Anxiety Disorder**

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P129

The present study examined the effect of grouped meta-cognitive therapy on anxiety of patients' suffering from generalized anxiety disorder. This research is a quasi-experimental with pre-test and post-test design with control group in which two groups of experiment and control are used. The present study population includes all state universities, Islamic Azad Universities of Tabriz students and East Azarbaijan Science and Research Branch that referred to above mentioned consulting centers correspondent with 4th edition of diagnostic and statistical mental disorders suffering from generalized anxiety disorder help book criteria. From the above community 20 persons (10 persons experiment group and 10 persons control group), (10 male and 10 female) with the use of structured clinical interview for mental disorders (SCID\_I/CV), generalized anxiety disorder scale (GADS) and Back's anxiety questionnaire (BA\_21) were selected and accidentally replaced in two groups of experiment and control. Participants' age range is between 18 to 30 years old with the mean of 27.78 and 2.60 variance. Grouped meta-cognitive therapy was performed in 10, 120 min sessions during 2 months in experimental group and participants in control group have received no treatment. All participants completed research questionnaire before

and after treatment and in 3 months follow-up period. The present study multivariate analysis of covariance demonstrated that grouped meta-cognitive therapy has significant effect on reducing patients' anxiety suffering from generalized anxiety disorder. The above mentioned results are maintained in follow-up period.

### P130

#### **Minnesota Multiphasic Personality Inventory Psychological Profile in Post-Traumatic Stress Disorder Patients with Chronic Pain**

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People with post-traumatic stress disorder (PTSD) have been found to be at a higher risk for a number of mental and physical health problems. In addition to these problems, people with PTSD are more likely than those without PTSD to experience problems with pain. The purpose of this study was to determine the psychological profile of veterans with PTSD and chronic pain and its comparison with profiles of patients with chronic pain. This is a cross-sectional study and comparison. 100 veterans with chronic pain and PTSD and 100 chronic pain patients, who were referred to Pain Clinic in Tehran Khatam Hospital, were randomly selected and MMPI questionnaire was used to assess mental profile of this patients. The results showed that the psychological profile in all of MMPI scales were significantly different between the two groups ( $P<0.05$ ) and the mean scores for all indicators in veterans with chronic pain and PTSD were significantly higher than from patients with chronic pain. The greatest differences were observed in the indices of hypochondriasis and depression. The results indicated that there are certain psychological profiles in patients with chronic pain. All of MMPI scales were significantly different between the two groups with the highest different in hypochondriasis and depression. The results suggest that there are certain psychological problems in veterans with chronic pain.

### P131

#### **Effectiveness of CBT in Reducing Symptoms of Anxiety in Children**

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The Neuroscience Journal of Shefaye Khatam, 2014; 2(S1): P131

Although some childhood fears and anxieties are as part of normal development in children, but relatively stable over time, and may have some anxiety problems

in adolescence and adulthood continue to increase. This study is done to determine the effectiveness of CBT (which was included: relaxation, visualization ideally, self-ordering in Maykenbam way, thinking-stop of anxiety in Wolpe way, and child's mother training) in reducing symptoms of anxiety in children. This study was a randomized clinical trial versus. Children 5 to 9 years who were anxious participants were treated with 8 sessions 45 min, individual CBT treatment, at the therapist's office. Score of symptoms before treatment and after treatment, was analyzed by paired t-test using SPSS software. The results showed that the mean score of anxiety in children reduced from 9.5 to 2.5, so CBT was effective in reducing symptoms of anxiety in children ( $P < 0.01$ ). According to the findings of this study, CBT for children with anxiety is recommended to treatment centers.

### P132

#### The Effect of Art Therapy in Reduction of School Anxiety of First Grade Students in Yazd

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The therapeutic value of kids' artistic activities has always attracted experts and medics' attention. It has a lot of usages in obtaining peace of mind and health in children. Art therapy is a new and organized way in solving social and mental problems and disorders that can lead to improvement, especially in children. School anxiety can be seen and reduced, in artistic activities, as a sign of alert to the unwanted stimulus. The current study is an experimental study with pre and post modeling. The statistic society is all first grade girls in Yazd, and 30 were chosen by accessible sampling. The experimental model was done in 20 sessions and included: painting therapy, drama therapy, sand therapy, film therapy, and storytelling. The post testing was done one month after the last session. The results show that art therapy techniques are effective on reducing the girls' school anxiety, and result in reduction and stability of school anxiety after 6 months. Regarding the fact that art therapy techniques are listed under non-medic therapies, they can substitute medic therapies. Regarding the results of the present study, using these methods can have a stable effect on reduction of kids' school anxiety.

### P133

#### Anxiety, Depression, Stress and Personal Well-

#### Being (Quality of Life) in Students

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Personal well-being is important structure that in low level results in depression and social isolation and reduction of mental and physical health (king, 2001). So, because of the high rate of depression and anxiety and association of them with stress among students, this article study and assessed the anxiety, depression, stress, and personal well-being (quality of life) among students. Hypothesis in this study is that between anxiety, depression, stress personal well-being (quality of life) there is a relationship. To address this issue, we used scales: DAS inventory (louyi band, 1995), well-being (quality of life) PWI-A inventory (kaminz, 2004). Our sample included 250 persons in Shahed University (Tehran-Iran) with the mean age 22.25 and standard deviation 3.04, 124 man and 123 woman (3 person not answered). There is a negative correlation between personal well-being and anxiety, depression, and stress. Depression explains important quota from variance of personal well-being. It means according to  $r^2$ , 28% personal well-being is related to depression components.

### P134

#### Investigation of Anxiety Level of Khatam Alanbia Hospital's Nurses in 2014

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Anxiety is a feeling of worry and excessive concern against obscure danger about inner or outer threat, which occur in form of ambiguous fear. It finally causes physical problem and impairs social and occupational functions. Anxiety is the most common mental disorder. Nursing totally is a difficult job and because of their working environmental and activity, they always encountering with damages arising from anxiety and it not only threaten physical and mental health, but also endanger familial, occupational and social relations. Taking this matter current study aimed at finding a relationship between the nurse's anxiety and working period to suggest solutions dealing with this problem. In

order to perform this descriptive study, standard anxiety questionnaire, containing 21 question were used. Sixty nurses randomly among the morning, evening and night were selected and all data were collected. Determination of anxiety level was according to questionnaire in this way: grade 0-7 none or the least, 8-15 slight, 16-25 middle and 26-36 sever. Data were analyzed using SPSS software. The results showed that 53.3% of nurses were in the age group 25-35 and 70% married. The most nurses on night-shift work had the highest range of anxiety (89.4%) and some of them (60%) were in the middle, while none of day-shifts exposed to that much of anxiety level. Chi square test indicated significant relationship between work shift and anxiety level ( $P=0.0001$ ). Based on the results of the present study which showed the highest range of anxiety level in nurses who works on night-shift, there are some suggestions available here: reduce working hours of night-shift's staff based on working years, avoid obligatory overtime working, have a at least 3 hours resting in home before beginning of night-shift, bringing positive excitement into being for them like reward, encouragement and solving their problems as much as possible and finally using adaptive mechanism in order to compromise on anxiety.

### Poster Presentations (Review)

#### P135

### A Systematic Review and Meta-Analysis on Controlled Treatment Trials of Meta-Cognitive Therapy for Anxiety Disorders

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To conduct a systematic review and meta-analysis on controlled treatment trials of meta-cognitive therapy (MCT) for anxiety disorders, studies were included if they employed controlled methodology and treated people above 18 years with anxiety disorders. Case studies (with less than 4 cases) and single case designed studies were excluded. A comprehensive literature search identified 15 trials for systematic review. All included studies showed better treatment results in the MCT arms compared to the control groups. We also statistically pooled the results across studies (when possible). The meta-analyses also showed that MCT had statistically significant better results compared to the control groups in generalized anxiety disorder (GAD) (both immediately post-treatment and 12 months

post-therapy results), obsessive-compulsive disorder (OCD), and post traumatic stress disorder (PTSD) ( $P$ -values ranged  $<0.0001-0.025$ ). Based on the results of our systematic review, MCT seems to be an effective treatment for anxiety disorders and can effectively control their psychological problems.

#### P136

### Role of Muscarinic Receptors in Schizophrenia

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Schizophrenia is a severe psychiatric illness with a lifetime prevalence of ~1% that imposes a huge toll on patients, their families and public health services worldwide. Delusions, hallucinations, disorganized speech, grossly disorganized or catatonic behavior and negative symptoms constitute the core symptoms of schizophrenia. Although the neurotransmitter dopamine plays a prominent role in the pathogenesis and treatment of schizophrenia, the dopamine hypothesis of schizophrenia fails to explain all aspects of this disorder. Neuropsychopharmacological studies have focused on the role of different neurotransmitter systems in schizophrenia and led to hypotheses as to the causes of this disorder. Since the beginning of the last century, acetylcholine has been recognized as a neurotransmitter both in the CNS as well as the peripheral nervous system. Acetylcholine is synthesized in neurons from acetyl-CoA and choline in a reaction catalyzed by the enzyme choline acetyl transferase, an enzyme that is almost exclusively located in high concentrations in cholinergic neurons. Evidence for an involvement of the muscarinic cholinergic receptors in schizophrenia has been gained from the study of CNS tissue obtained postmortem. Few studies have so far assessed the distribution of cholinergic neurons in schizophrenia. This review will focus on evidence that supports the hypothesis that the muscarinic system is involved in the pathogenesis of schizophrenia and that muscarinic receptors may represent promising novel targets for the treatment of this disorder.

#### P137

### The Effects of Traditional Medicine on Anxiety

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One of the horizons that always directs human to discover unknowns is nature and its valuable substances. Although it is a new branch in medicine but it has a valuable place from ancient times. During continuous years, natural drugs especially herbal drugs had become the base and even in some cases the only way for treatment and their primary substances are still being used in pharmacological industries. Nowadays supplementary medicine has been mentioned very much and depression and anxiety are some of indications of herbal drug consumptions. Depression and anxiety are common but serious diseases and the majority of patients need medication. Although numerous compositions are used to treatment anxiety, many of the drugs lead to different undesirable side effects. Therefore, effective drugs with less toxicity will be needed. In this study we mentioned the effects of some of these herbal drugs through reliable databases and traditional medicine references, but still further studies will be needed.

### P138

#### Are Depression and Anxiety Affected by Adenosine $A_{2A}$ Receptors?

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Adenosine acts as neuromodulator in the brain, which its involvement in a wide range of brain processes and diseases has been studied, such as epilepsy, sleep, anxiety, panic disorder, Alzheimer's disease, Parkinson's disease and schizophrenia. Adenosine receptors have been detected:  $A_1R$ ,  $A_2AR$  ( $A_{2A}R$ ),  $A_{2BR}$ , and  $A_3R$ .  $A_1R$  and  $A_2R$  inhibit cAMP production, while  $A_2AR$  and  $A_{2BR}$  stimulate cAMP production. These receptors are distributed in various areas of the central nervous system.  $A_{2A}R$  is highly expressed in the olfactory bulb, caudate putamen, nucleus accumbens, and tuberculum olfactorium. The function of several receptors such as dopamine  $D_2$  receptor ( $D_2R$ ) is influenced by activation of adenosine  $A_{2A}$  receptor. Three distinct dopamine projection pathways are formed from the substantia nigra-ventral tegmental area complex. Mesocortical pathway and mesolimbic pathway are known as first

and second pathways. Axons project to the striatum, described nigrostriatal pathway known as third pathway. This pathway completes the neural circuits of the basal ganglia responsible for motor control, although recent document also points to a very important role in the motor changes associated with severe depression. Adenosine  $A_{2A}$  receptor and  $D_2R$  are co-localized in the dorsal and ventral striatum and are mutual inhibitors. On one hand,  $A_{2A}R$ - $D_2R$  heteromers are formed and, when the  $A_{2A}R$  is activated, conformational changes are transferred to the  $D_2R$ . This ultimate to a reduction in  $D_2R$  recognition and signaling; on the other hand,  $D_2R$  activation inhibits cAMP mediated-effects of  $A_{2A}R$  by inhibiting adenylyl-cyclase. Finally, recent study showed that  $A_{2A}R$  overexpression is associated with depression, which may describe the depressive signs seen in aging, chronic stress, and Alzheimer's disease. We hypothesized that changes in expression of  $A_{2A}R$  in nigrostriatal system may contribute in creation of depression with motor disorders.

### P139

#### Role of Dopamine Receptor D3 in Depression and Anxiety

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Dopamine (DA) is one of the main catecholamines in the brain and is crucial for movement coordination, endocrine function, reward, mood, memory and emotions. The dopaminergic system is the primary therapeutic target in the treatment of Parkinson's disease (PD), drug addiction and schizophrenia. Notwithstanding, dysfunction of central dopaminergic neurotransmission has also been associated to depression, which has been linked to dysregulation of DA release or alterations in dopamine receptors expression or function. studies in humans indicated that the efficacy of dopamine receptor agonists with high binding affinity to  $D3R$  compared to  $D2R$ , including aripiprazole, cariprazine and pramipexole, a drug commonly used for the treatment of motor symptoms in PD but also effective for the treatment of major depression. Furthermore, reduction of DA release at synapses leads to increased  $D2R/D3R$  binding in temporal cortex of

depressive patients. Similarly, the treatment of animal models with antidepressant drugs increase the density of D2R/D3R binding sites in the nucleus accumbens without altering the density of binding sites for D1-like receptor. Interestingly, expression of D3R significantly increased in the shell of nucleus accumbens, when is used chronic administration of classical antidepressants and repeated electroconvulsive therapy in rats. This data suggested that D3R may play an important role in the pathophysiology of depression.

#### P140

### Lipopolysaccharide and BDNF in Anxiety and Depression

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Brain derived neurotrophic factor (BDNF) is a neurotrophin acting at several levels in the brain. Additionally, BDNF was shown to be responsible for the survival, maintenance and growth of neurons. Also, BDNF plays an important role in synaptic plasticity and memory processes. In activity-dependent synaptic plasticity, BDNF enhances long-term potentiation (LTP) in the hippocampus but blocks the induction of long-term depression (LTD) in the visual cortex. A relation between BDNF expression and anxiety was shown in the elevated plus maze where BDNF overexpression in mouse hippocampal astrocytes promotes local neurogenesis and elicits anxiolytic like activities. Moreover, BDNF is implicated in the pathophysiology of depression. Postmortem studies have shown that hippocampal BDNF levels are decreased in depressed patients and increased in patients receiving antidepressant treatment. On the other hand, it has been suggested that infections and inflammatory processes may act as causative factors in emotional disorders, including anxiety and depression. Lipopolysaccharide (LPS) is a component of the cell wall of gram negative bacteria and is known to induce a profound inflammatory and immunostimulatory response. Substantial evidence exists to suggest that the negative effects of LPS on synaptic function are due to the neurodegenerative effects. It elicits through its activation of proinflammatory cytokines such as interleukin-1 $\beta$  (IL-1 $\beta$ ). However, it has been proposed that LPS can affect expression of neurotrophins and

their receptors in the CNS and that this action may contribute to the functional impairments observed upon LPS injection; injection of LPS has been reported to significantly decrease BDNF expression in the hippocampus and several cortical regions may create to anxiety and depression.

#### P141

### Role of Dopamine in Anxiety Behavior

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The mesolimbic dopamine (DA) system contains both D1-like and D2-like receptors, has been connected to control of locomotor behavior. An apparent role for D1 and D2 receptors throughout the mesolimbic system in the alteration of locomotor behavior has been demonstrated in pharmacological studies. The nucleus accumbens (NAc) is comprised of a core and a shell subregion, which is a component of the mesolimbic DA system, and has been specifically implicated in locomotor behavior. Intra-NAc injections of D1 and D2 agonists have been found to increase locomotor activity. The DA system also plays a role in regulating anxiety-like and fear behavior. Pharmacological studies have shown that D1 and D2 receptors are involved in anxiety-like behavior. Findings seem to be dictated by a number of factors, including strain, route of administration, ligand selected and behavioral test. Fear behavior may often be indiscernible from anxiety-like behavior in animal models though the anatomical aspects may be different. Fear cues have been shown to decrease DA transmission in the NAc core, but increase transmission in the shell. Dopamine release in the NAc also appears to assist in encoding cues that predict punishment avoidance. These data suggest a role between fear and DA transmission and suggest that there may also be a role of accumbal DA in anxiety-like behavior.

#### P142

### The Prefrontal Cortex and Stress-Related Psychopathologies

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The prefrontal cortex (PFC) plays a central role in processing both normal and pathological affective states and it is among the brain regions most closely associated with stress-related psychopathology in humans. The ventromedial PFC (vmPFC) in particular has been shown to be required for healthy emotional regulation, social function, and risk assessment and decision-making. Also this region exhibits cerebral asymmetries on measures of this sort, which appear to be sex-dependent. In these and other studies, it has been suggested that emotional processing is more strongly lateralized to right brain structures in men, while women tend to be more left-biased. In the rat, the medial PFC has long been known to be very sensitive to stress and many of these studies have focused on the mesocortical dopaminergic (DA) system, which has been shown in numerous studies to exhibit functional and neurochemical hemispheric asymmetries. Excitotoxic lesions of the right, but not left, vmPFC suppress the autonomic, neuroendocrine and behavioral responses to stressful situations, suggesting that this region normally activates physiological and behavioral responses in times of challenge. In contrast, DAergic depletion or receptor blockade of the right vmPFC results in sensitivity to stressful challenges, implying that mesocortical DA plays a protective or adaptive role in coping with stress. Behaviors improved preferentially by the left cortex thus showed less evidence of sex differences than those modulated by the right. While mesocortical DA discharge effects are lateralized, the nature of these effects can vary with sex and specific behavior. More knowledge about the relation between PFC and stress can help us to manage stress related disorders.

### P143

#### **A Review on the Effects of Certain Anti-Anxiety and Sedative Herbs**

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Anxiety is one of the most common symptoms of mental

disorders, significantly affecting work function and interpersonal relationships. Its characteristics include a set of cognitive-, physical-, emotional-, and behavioral-symptoms. Some of these symptoms are: feeling empty heart, shortness of breath, palpitations, flushing, excessive sweating, numbness, dizziness, and shaking hands. Given the high prevalence of these symptoms and their significant impacts on the function of individuals, it is necessary to take fundamental steps for tackling with the raised issues. Commonly used medication for anxiety disorders has its own side effects; therefore, many studies have been conducted to find effective drugs with fewer side effects. Currently, the use of medicinal plants is progressing due to relying on the beliefs of a certain region people, fewer side effects, and being cost-effective. The aim of this study was to review anti-anxiety and sedative effectiveness of some medicinal plants used in traditional medicine of Iran. This study is of review article type. Psychology and medical journals were searched for anxiety keyword, and the related papers published in the years between 2000 and 2014 were reviewed. The results of literature review revealed that extract of *Portulaca oleracea L*, gum of *Pistacia vera L*, *Nardostachys jatamansi*, *Achillea millefolium*, *Rosa damascene*, extract of fenugreek, Extract Of *Cassia fistula*, *Feniculum vulgare* and *Silybum marianum* have anti-anxiety effects. In addition, there were no significant differences in anxiolytic effects between *Citrus aurantium* and diazepam, and *Passiflora caerulea* and oxazepam.

### P144

#### **Review of Deep Brain Stimulation Target Areas in Patients with Obsessive-Compulsive Disorder**

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Obsessive-compulsive disorder (OCD) is a psychiatric disorder manifested by thoughts and impulses that produce anxiety and result in patients performing repetitive rituals. Treatment generally consists of cognitive behavioral intervention and serotonin reuptake inhibitors. Up to 40% of patients will have functional impairment that significantly affects their quality of life. In the late 1990's, based on positive research results in anterior capsulotomies, deep brain stimulation (DBS) researchers first implanted electrodes in the anterior capsule of treatment-resistant OCD patients. The early results were promising. Three of the first four patients

experienced benefit. A worldwide study found that out of 26 patients with treatment-resistant OCD, 61.5% responded positively to DBS. This response rate is similar to the other surgeries described above. However, comparisons must be tentative since the number of patients treated with DBS is still relatively small. In this review we discuss about the target area of DBS in OCD. Since then, larger trials have been done and the target area of the brain has moved slightly to an overlapping part of the brain called the ventral capsule/ventral striatum.

## P145

### The Role of $\gamma$ -Aminobutyric Acid Receptor in the Social Anxiety Disorder

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Social anxiety disorder (SAD) is the one of the most common anxiety disorders. Despite its high prevalence, the disorder is still considerably undiagnosed and untreated. The disease places a massive burden on patient's lives, affecting not only their social interactions but also their educational and professional activities, thereby constituting a severe disability.  $\gamma$ -aminobutyric acid (GABA) system is known as mediator that play a crucial role in the pathophysiology of anxiety disorders. GABA<sub>A</sub> receptors that contain the  $\delta$  subunit ( $\delta$ GABA<sub>A</sub> receptors) are expressed in multiple types of neurons. Thus, this article reviews the role of GABA<sub>A</sub> receptors in anxiety disorders. It has been reported that reduction of GABA<sub>A</sub> receptor function may be related to the pathophysiology of anxiety. These receptors regulate a variety of important behavioral functions, including memory, nociception and anxiety, and may also modulate neurogenesis. Recent studies have reported that GABA<sub>A</sub> receptors can be novel therapeutic targets for the treatment of mood disorders. Previous findings reported the implicating of the GABA system in the pathophysiology of anxiety disorders. Also, they considered the potential role of agents that modulate GABA neurotransmission in the treatment of these disorders. In conclusion, this review suggests that GABA<sub>A</sub> receptors are neuromodulators for the physiology and pathophysiology of anxiety and they may constitute a novel therapeutic approach in the treatment of these disorders.

## P146

### Gamma Aminobutyric Acid (GABA) and its Alterations in Stress

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Gamma aminobutyrate (GABA) is a non-protein amino acid that is thought to play an important role in the modulation of the central response to stress. Mechanisms by which GABA may facilitate these responses to stress are metabolic and/or mechanical disruptions. Environmental stresses increase GABA accumulation through cytosolic acidification, induce an acidic pH-dependent activation of glutamate decarboxylase. Also stresses, such as cold, heat, salt, and transient environmental factors, increase cellular levels of Ca<sup>2+</sup>. Increased Ca<sup>2+</sup> stimulates glutamate activity and GABA synthesis. In addition, GABA plays an important role in integration of hypothalamo-pituitary-adrenocortical (HPA) stress responses. The HPA axis activation by corticotrophin releasing factor (CRF)-releasing neurons of the hypothalamic paraventricular nucleus (PVN) is hormone response to stress. The activity of the PVN is dependent on the regulation by GABA. In this review we will specifically evaluate and focus on the potential relevance of stress responses and regulation of GABA synthesis.

## P147

### Effect of Anxiety in Life Quality of People with Epilepsy

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Anxiety disorder is characterized by constant feelings of worry, excitation or alternative panic attacks. Anxiety becomes a disorder when the feelings are repeated or severe, and are produced by insignificant things or nothing at all, and interfere with our functioning. Epilepsy is determined as two or more unprovoked seizures. Many recent epidemiological studies have found the prevalence of depression and anxiety to be higher in people with epilepsy than in people without epilepsy. There is a relationship between the appearance of epileptics and levels of depression and anxiety. Almost 35% of people with epilepsy suffer from depression and anxiety. Depression and anxiety may lead to suicidal ideation or efforts and drug addiction and require further attention because they carry the risk of reduced quality of life. These experiences are also likely to increase the unfavourable effects associated with antiepileptic drugs and have been related to poor reaction to pharmacological and surgical treatments. Furthermore, people with depression or anxiety have been more likely to suffer from epilepsy than those

without depression or anxiety. It is better to consider the treatment of anxiety in these patients. Anxiety disorders in patients with epilepsy can be effectively treated with counselling and medical treatment.

#### P148

### Serotonergic Activity Promotes Sleep: Anxiety Disorders and Insomnia

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Sleep disturbance, known as insomnia, is a common symptom of many mental illnesses. Insomnia is one of the most prevalent sleep disorders characterized by sleep difficulty that affects our life and work safety. Several lines of evidence support the primary insomnia as a risk factor/predictor for depression and anxiety disturbances. Anxiety disorders and insomnia are common, debilitating, and highly comorbid. The findings indicated that reductions in the central serotonin activity might be involved in sleep-related disorders. It has been suggested that serotonin which is released into diencephalon and cerebrum might play a critical inhibitory role to help promote sleep. It has been known that stimulation of serotonergic activity promotes sleep. Anxiety disorder is strongly associated with sleep disturbances. In the current study the role of serotonin in sleep quality has been reviewed in order to treat anxiety. Altogether, this review considers the increasing activity of brain serotonergic system may be helpful for treating anxiety disorders and serotonergic strategies are usually recommended.

#### P149

### Depression in Cancer Patients: A Critical Review

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Cancer patients experience several stressors and emotional upheavals. Fear of death, interruption of life plans, changes in body image and self-esteem, changes in social role and lifestyle are all important issues to be faced. Moreover, depressive disorders may impact the course of the disease and compliance. The cost and

prevalence, the impairment caused, and the diagnostic and therapeutic uncertainty surrounding depressive symptoms among cancer patients make these conditions a priority for research. In this article we discuss recent data, focusing on detection of depressive disorders, biological correlates, treatments and unmet needs of depressed cancer patients.

#### P150

### Homeopathy and Anxiety

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Numerous therapeutics for prevention and treatment of anxiety have been suggested but many people select alternative medicine such as homeopathy. Homeopathy is an old system of medicine which is used as an effective treatment in both acute and chronic medical and psychological conditions. The "Homeopathy" term is a Greek word that means similar disease. Homeopathy has a holistic approach to treatment, as the central goal in homeopathic treatment is "like cures like". Homeopathic drugs are derived from mineral, herbal and animal products. Within the last several decades, the use of homeopathic medicines has developed worldwide since homeopathy is safe, harmless, and less expensive than conventional therapies. Furthermore, few side effects have been seen by utilizing homeopathic products. The aim of this study is to discuss the effect of homeopathy on anxiety by searching via Pubmed, ScienceDirect, Scopus, ECHO (European Committee for Homeopathy thesis database), WHO, IranMedex and SID databases up to November 2014.

#### P151

### Emotional Disorders and Anxiety During IVF-Treatment

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In vitro fertilization (IVF) and other assisted reproductive technologies present an enormous hope to couples with fertility difficulties. Assisted reproductive technology is one of the risk factors that can result in anxiety in these couples. Indeed, IVF-treatments cause a stress, for both the woman and her partner. The different stages of the IVF-procedure can affect the emotional life of the

man and the woman negatively. In fact, depression and anxiety are highly common in infertile women. These psychotic symptoms may either be the cause of infertility or the consequence of it, or both. Depressive and anxiety disorders existed in high frequency in women who were undergoing a new course of assisted reproduction treatment. Another reason of anxiety may be the ageing making them more anxious and disappointed about having a child. Other factors creating anxiety in women are exposure to high level of hormones, side effects of medication (ovarian hyper stimulation syndrome), surgical procedures and heavy costs of treatments. After an unsuccessful IVF-cycle, couples may experience high level of stress. Moreover, disappointment after an IVF-failure is common. Other commonly causes of unsuccessful IVF are sadness and anger, which are more observed in women than in men. Thus, it should be paid attention to this issue because anxiety in these couples may be constant and after pregnancy, these emotional disorders could influence their child.

## P152

### Functional and Structural Brain Changes across Childhood Traumatic Events

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Although childhood is connected with high neuroplasticity changes, but because of the immaturity of the neural and cognitive systems, it is ready to grow developmental deviations and future susceptibility for neuropsychological disorders. Young children face cognitive, emotional, and linguistic limits that may lead them more vulnerable to post-traumatic stress disorder (PTSD). PTSD prevalence differs between adults and children. In some reports, children are nearly 50% more likely to affect by this disorder, in response to a traumatic events. Developmental viewpoint for study stressful condition across the early stage of life could increase our understanding about etiology and pathology of PTSD and other anxiety disorder. Early experience of toxic stress or traumatic events in childhood associate

with high risk for various mental health difficulties, especially current and later PTSD. Biological approach to children and adult PTSD usually focuses on exploring irregularity of sympathetic nervous system (SNS) and hypothalamic pituitary adrenal (HPA) axis as two lower and vegetative stress responses and little known about its higher neural activity and its functional outcomes. Early long exposure to severe stress correlates with smaller brains volume. Using new neuroimaging techniques and analysis, research finding revealed that accumulative early life stressful events relate to structural change. These changes are detectable in prefrontal neural activity; change in the prefrontal wiring regions (like orbit frontal cortex), smaller prefrontal cortex volumes (selectively in prefrontal gray and white matter between the anterior cingulate and the frontal pole), structural change in amygdala, and finally dendrites shortening and neurodegeneration in the hippocampus. On the other hand, the same and parallel research findings show all these structural changes can be correlated with functional change that impair children cognitive abilities, specifically executive function, spatial working memory, attention-span, self-regulation, and episodic memory (remembering specific events). For discovering which neural or cognitive have the main role to modulate other ones needs more research. This review will summarize developmental viewpoint results that suggest structural changes in the many regions (e.g. prefrontal cortex, hippocampus, and amygdala) and also many cognitive functions may serve as a mediating mechanism which cumulative prior life stress affect susceptibility to PTSD and other anxiety disorders.

## P153

### Transcranial Direct Current Stimulation (tDCS) for the Treatment of PTSD: A Brief Review of Effectiveness

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Cognitive neuroscience prefers a reductionist approach to normal and abnormal brain functions. So, it tries to reducing causes and indices of cognitive and neural processes, in order to increases the accuracy in investigation and manipulation of variables. As a comparison, common diagnostic criteria for mental disorders utilize multidimensional global criteria that existence of some non-overlapping symptoms from a larger number of symptoms is vital for diagnosis. With regard to the fact, many groups of heterogeneous

patients classified under a single diagnosis, though show combination of the different symptoms and various pathology and etiology. The treatment process is often -but not always- based on this overall classification as well and in many cases is accompanying a nonselective modification. Although, cognitive neuroscience techniques as new ones has been used widely for clinical purpose but, traditional methods for evaluating them led to doubts about the applicability and effectiveness of these techniques. It seems such new techniques should be judged based on its micro-oriented capabilities on neural and cognitive processes. tDCS is a noninvasive, pretty cheap, without serious side effect and relatively effective methods for changing some neuropsychologic functions and treatment some symptoms of psychological (and neurologic) problems. In this technique passage of extremely weak electrical current through the scalp stimulates (a nodal and cathodal) special regions of the brain. According to the progress of this technique toward the HD-tDCS and tACS has been providing more opportunities for multifocal intervention, more precise regions and also diver's kinds of stimulation. Despite the fact that tDCS haven't FDA approved yet for treatment of disorders, but regarding many research about its effects on cognitive functions and different psychological indices, it can be used as a complementary treatment tool. Although there is a little evidence about anxiety disorders and especially PTSD treatment by tDCS, some studies are under running. In addition to brief review on the studies that focused directly on PTSD, there has been noted evidence in effectiveness of neurocognitive rehabilitation and neurotherapy on many related brain processes in which provide a guide to depict proper intervention protocols. Among critical applications of tDCS we could point to changes some symptoms that are common in PTSD and anxiety disorders (for example, memory impairments, severe emotional distress, negative effect, and headache). Therefore, concerning the heterogeneity in symptoms of this disorder, using tDCS can be potentially as a new supporting method that alleviates some important symptoms. Just on this basis, the possible micro-oriented protocols could propose and evaluate at next stage.

#### P154

### Fermented Foods and Microbiota: New Approaches for Mental Health Promotion

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Fermentation may amplify the specific nutrient or

phytonutrient content of foods, the ultimate value of which is associated with mental health; furthermore, the microbes associated with fermented foods may also influence brain health via direct and indirect pathways. This review is intended to guide the development of fermented foods for enhanced human mental health benefits. We searched databases PubMed and Google using "fermented beverages", "traditional foods", "lactic acid bacteria", "microbiota", "anxiety", and "depression" to identify articles related to fermented foods, intestinal microbiota, and mental health. Fermentation induced bacterias as the class of probiotics, are capable of producing and delivering neuroactive substances such as gamma-aminobutyric acid and serotonin, which act on the brain-gut axis. Preclinical evaluation in rodents suggests that certain psychobiotics possess antidepressant or anxiolytic activity. Effects may be mediated via the vagus nerve, spinal cord, or neuroendocrine systems. So far, psychobiotics have been most extensively studied in a liaison psychiatric setting in patients with irritable bowel syndrome, where positive benefits have been reported for a number of organisms including *Bifidobacterium infantis*. Evidence is emerging of benefits in alleviating symptoms of depression and in chronic fatigue syndrome. Such benefits may be related to the anti-inflammatory actions of certain psychobiotics and a capacity to reduce hypothalamic-pituitary-adrenal axis activity. Results from large scale placebo-controlled studies are awaited. Microbes (for example, *Lactobacillus* and *Bifidobacteria* species) associated with fermented foods may influence brain health via direct and indirect pathways.

#### P155

### Differential Diagnosis of Panic Attacks: Using a Decision Tree

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Panic attacks are discrete episodes of intense fear or discomfort accompanied by symptoms such as palpitations, shortness of breath, sweating, trembling, derealization and a fear of losing control or dying. Although panic attacks are required for a diagnosis of panic disorder, they also occur in association with a host of other disorders listed in the 5th version of the diagnostic and statistical manual of mental disorders. This paper presents the steps in making a differential diagnosis of panic attacks. Detailed explanations with appropriate examples are provided to illustrate each of the decision-making process. The first step in the differential for a panic attack is to rule out the presence of etiological substance or medication use. When taken in high enough

doses or during substance withdrawal, a number of substances and medications can lead to a panic attack. Next, possible etiological general medical conditions such as hyperthyroidism or pheochromocytoma, should be considered. Once it is clear that panic attacks are not the direct physiological consequence of a substance or medical condition, the next step is to determine the relationship between the panic attacks and a possible situational trigger. Finally, panic attacks triggered by a realistic event do not warrant a diagnosis of a mental disorder. An illustrative flow chart which will facilitate the differential diagnosis of panic attacks is provided in this review.

### P156

#### **A Review on the Effectiveness of Antioxidants on the Anxiety**

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Oxidative stress (OS), which has been implicated in pathogenesis of many acute and chronic diseases, plays an important role in diverse neurological disorders including depression and anxiety. OS is caused by a large amount of reactive oxygen species or impaired enzymatic or non-enzymatic defense against it. OS has been suggested to contribute to etiology of mentioned disorders. This review intends to investigate some existing evidence for the role of OS in these neuropsychiatric diseases. Anxiety is a normal human emotion to a perceived threat and stressful situations. But when in some cases becomes excessive and out of control, panic and anxiety symptoms shifts into panic and anxiety attacks. This situation may be an anxiety disorder. It characterized by feelings of panic, fear, uneasiness, tension, worried thoughts and physical changes like sweating, increased blood pressure, dizziness or a rapid heartbeat. There is an increasing number of scientific publications reporting contribution of anxiety level and oxidative status in both neuronal and glial cells. Recent evidence is reviewed indicating involvement of OS in anxiety-like behavior in animal models. In addition pharmacological induction of OS causes anxiety-like behavior in rats. Neuroprotective antioxidant activity of some drugs against anxiety has also observed. These observations strongly suggest positive relationship between peripheral oxidative status and the level of anxiety not only in animal models but also in the human. It thus plays a critical role in

neurodegeneration, neuroinflammation, and following neurological-related disorders.

### P157

#### **Anxiety and Emotional Disorders in Infertile Couples**

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Infertility, usually defined as the failure of a couple to conceive after 12 months of regular unprotected intercourse. Infertility sometimes is occurred with psychoemotional distress such as anxiety, interpersonal problems, disappointment, sadness, anger and depression. During the time infertile couples attempt to get pregnant, women with fertility problems experience more negative emotional feelings and psychosocial effect than women who ultimately conceive instinctively. It was noticeable that women with a history of unsuccessful IVF treatment have shown emotional disorders. The longer period during which they were trying to conceive and the disappointment of their failed attempts might have played a role in this way. Moreover, women who had experienced more than one IVF cycle, even after successful pregnancy, still had higher anxiety levels than women who got pregnant after one IVF cycle, which highlights the potential long-term results of such disappointment. Furthermore, anxiety and/or depression had negative correlation with education, is that with the increase of education level, anxiety and/or depression reduce. Thus, depressive and anxiety disorders need much clinical consideration because they usually accompanied by infertility problems and greatly affect the patients' quality of life. On the other hand, Several studies have indicated anxiety has a detrimental consequence on fertility and that decline of anxiety raises pregnancy rate.

### P158

#### **Epilepsy and Anxiety: A Brief Review**

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Epilepsy is a brain disorder that causes people to have recurring seizures. The seizures happen when clusters of nerve cells, or neurons, in the brain send out the wrong signals. Up to 50 or 60% of patients with chronic epilepsy have various mood disorders including depression and

anxiety. Although the affective and cognitive effects of epilepsy have long received attention, the anxiety spectrum of psychiatric complications of epilepsy has not been well-studied. Anxiety is a general term for several disorders that cause nervousness, fear, apprehension, and worrying. These disorders affect how we feel and behave, and they can manifest real physical symptoms. The goal of this investigation was to review the different views about the relationship between anxiety and epilepsy. We performed a systematic literature search, using PubMed with the following entry: "Epilepsy"[Mesh] AND "Anxiety"[Mesh]. The search resulted in identifying 580 studies. Full texts of articles which met the inclusion criteria and their finding are discussed in this study. Increased recognition of anxiety disorders among patients with epilepsy, offers a potentially rich nexus for theoretical and empiric investigation of the neurocircuitry and psychological mechanisms underlying each phenomenon.

### P159

#### **The Efficacy of Homeopathic Remedies as an Adjuvant Therapy in Patients with Social Phobia**

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Social phobia is an anxiety disorder characterized by heightened fear and avoidance of one or more social or performance situations, including public speaking, meeting new people, eating or writing in front of others, and attending social meetings. People with social phobia are typically anxious about the possibility that others will evaluate them negatively and/or notice symptoms of their anxiety. Symptoms of social phobia can be effectively treated with evidence-based treatment, including cognitive behavior therapy (CBT) and psychopharmacological medications. However, not all individuals respond to treatment and many of them do not show long-term improvement. Thus, alternative treatments are needed. Several clinical trials have shown the effectiveness of homeopathy as an adjuvant therapy in anxiety disorders such as social phobia especially in patients with mildly to severely symptomatic conditions.

### P160

#### **Study of the Methods Used in the Prevention and Treatment of Post-Traumatic Stress Disorder in Iran**

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The growing trend of disasters in world and Iran, expanded range of different psychological consequences of disasters and according to them Parallel Physical consequences. Post-traumatic stress disorder may be considered the most common psychological consequences of disasters. In the absence of prevention and treatment, it can affect a person's quality of life and normal functioning of the family and community and faced with the difficulty and delay the return to normal conditions. There are a variety of methods to prevent activation at the risk and treating the disorder. Most of these methods are based on two categories of methods including: 1-expression and modification experience a painful and frightening experience of events including psychological debriefing techniques and reprocessing and 2-behavioral and cognitive-behavioral techniques such as eye movement desensitization and reprocessing (EMDR) and imaginal exposure. These two categories methods have been used between 2002 to 2013 in natural disasters in Iran. In this paper we will introduce and review different methods used in the prevention and treatment of severe post-traumatic stress disorder in Iran and will describe and compare the effectiveness of these methods in the cases reported and finally presented a monolithic integrated conclusion and opinion.

### P161

#### **Attachment Anxiety**

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Anxiety is one of the most controversial issues in mental disorders that its prevalence is increasing in today's society. Preclinical anxiety that is causing some anxiety disorders in adults can help us in the prevention of mental disorders. In this paper an attempt has been made to have an analytical review of attachment anxiety and its significance in childhood and adulthood. Attachment patterns in childhood will be founder of many social-interpersonal interactions and underpinning of many personality anxieties and is fundamental in adulthood. During the research that has been done, insecure attachment in childhood cause maladjustment disorders, lack of trust in others, avoidant pattern or dependent personality disorder.

### P162

#### **Stress and Reduce of Stress in Gestation**

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Stress is the way that our body responds to something that is out of the normal. When we are under stress, our body makes chemical and physical changes to try to maintain it. Everyone responds to stressful status in their own way. Researches show anxiety and stress during pregnancy can have both immediate and long-term effects on her offspring. In addition, the emotional state of the pregnant mother maybe affects her unborn child. The chances of having a healthy baby increases in the mothers are healthy. Anything can cause stress but stress alone cannot cause birth defects. Pregnancy can be a stressful time for many mothers. We can reduce our stress with different techniques for example: talking about our feelings with our friend, family, husband, employer, mental health professional or a trained counselor, having a healthy diet, eating regularly and nutritiously, drinking lots of water, trying to have fun, feeling positive, following an exercise plan with her health care provider's approval, avoiding stressful people and stressful situation, relaxing, listening to music, writing a journal, resisting to drink alcohol, smoke or taking herbal products or drugs, resting when body needs it. All of the above can be helpful for us to reduce our stress in pregnancy.

### P163

#### **Prevalence of Depression and Anxiety in Epileptic Patients**

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Anxiety and depression are very common in population and occur in a wide range of clinical states and is very common in epileptic patients. Many recent epidemiological studies have found a high prevalence of depression and anxiety in epileptic patients. These studies found that epileptic patients suffered from depression and anxiety than those without epilepsy. The prevalence of depression or anxiety is higher in drug refractory epilepsy, especially temporal-lobe epilepsy. Depression and anxiety have been associated with increased adverse events in response to anti-epileptic drugs in epileptic patients. Structural abnormalities, monoamine pathways, cerebral glucose metabolism, the hypothalamic pituitary adrenal axis, and interleukin-1 $\beta$  all plays a crucial role in the common pathogenesis of these conditions. Studies that have examined depressed patients using high-resolution brain MRI have shown reductions in the volumes of various areas, including the

frontal, temporal, limbic regions and hippocampus (the left and right hippocampus in temporal-lobe epilepsy and depression). Findings of reductions in hippocampal volume suggest that depression and epilepsy reflect common structural abnormalities. The symptoms of depressive disorders in epileptic patients can be classified according to their temporal relationship with seizures. The psychiatric and clinical effects of depression and anxiety can impair the quality of life of epileptic patients. Therefore, early detection and management of depression and anxiety are critical for the management of epileptic patients.

### P164

#### **The Role of Mast Cells in the Pathogenesis of Anxiety Disorders**

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Mast cells are a heterogeneous population of granulocytic cells in the immune system. Mast cell granules contain numerous mediators, including neurotransmitters, cytokines, chemokines and lipid-derived factors. In addition to their well-known role in immune inflammation, the presence of mast cells in the meninges and perivascular space in the central nervous system points to their role in brain physiology and their potential involvement in the development of neurological disorders. Of interest, activation of mast cells and their interaction with glial cells have been shown to be involved in altering the permeability of blood brain barrier, a phenomenon which is a key part of neuroinflammatory/degenerative processes. Mast cells have also been reported to exert protective effects against neuroinflammation likely through releasing anti-inflammatory compounds or degrading inflammatory mediators. While diseases like multiple sclerosis, Alzheimer's disease and stroke are considered as classical examples of neuroinflammation, the role of low-grade inflammation in the pathogenesis of psychiatric disorders has recently attracted the attention of investigators. Herein, we summarize some of the findings about the role of mast cells in the pathogenesis of psychiatric disorders including anxiety disorders.

### P165

#### **A Pre-Review: The Psychodynamics of Torture under the Totalitarian Control**

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Torture is aimed to create a living dead. Pressing systematic control on individuals who are in opposition to the ruling authorities, persons' sense of self would be damaged. Such an aversive situation is caused by intentional human action rather than natural causes. Torture occurs in more than 90 countries (Abu Ghraib prison is a prominent example); however, epidemiologic data are limited. The victim's identity is attacked by some specific torture techniques such as the good guy/bad guy and impossible choice techniques. This review is aimed to offer a pre-review of some of the main articles related to this topic. Experiencing more severe symptoms in torture survivors rather than what patients with PTSD experience, it can be called complex PTSD or Disorder of extreme distress. Exposing to burdensome and unavoidable aversive torture under the totalitarian control elaborates more complex and stable symptoms in comparison to facing other traumatic events. Victims are likely to suffer mental death. This experience characterized by a loss of the identity one had before the interpersonal trauma. The main features of mental death are symptoms including guilt and shame, distrust and alienation from others, ineffectiveness and loss of autonomy, loss of core beliefs and values, and a sense of being permanently damaged. Based on Kelly's theory, engaging actively in building a structure to explain the routine life and its relationships, people have a framework to make the predictions and behave accordingly. Occurrence of a traumatic event may cause three core presuppositions be demolished: invulnerability of human, meaningfulness (i.e., orderly and comprehensible) of the world, and human's autonomy. Furthermore, Silove suggests that torture impress constructs related to identity, safety, trust, attachments, justice, and existential issues. While the DSM4 defines PTSD criteria for syndrome occurs after a threat to the physical integrity of the self, other researchers discussed different symptoms containing changes in core beliefs and active coping, loss of predictability and control, mental defeat, and alienation by experiencing totalitarian control.

## P166

### Torture as a Complex PTSD: An Overlook to the Treatment

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Torture entails the deliberate infliction of severe physical and mental pain and suffering through cruel, inhuman, or degrading treatment and punishment to silence individuals and oppositions to the ruling authorities. Such victims experience mental death, difficulties in coping, memory and concentration impairment, loss of core beliefs, feelings of shame and guilt, mental defeat, and alienation, which make their symptoms as well as their treatment more complex than other PTSD's patients. Although no specific treatment regimen for complex PTSD has been set yet, comprehensive approach to the treatment of survivors including medical care, psychotherapy and psychopharmacology interventions, and social services should be applied. These victims have less therapeutic alliance to exposure therapy in comparison to the ones with standard PTSD. It is noteworthy that the structure of exposure therapy is not adapted to the underlying mechanism of mental death experienced by the survivors of torture. Since the main obstacle for these patients to participate in therapy is negative thoughts and mistrust, an essential step toward any kind of treatment is to establish a trustful relationship between the therapist and victims. Decreasing the suffering caused by the annoying symptoms may elevate the level of cooperation and trust. For this purpose, pharmacotherapy may be necessary. Psychotherapy also provides a foundation for any safer and more trustful therapy. The initial psychotherapy stage should be based on the victim's stabilizing. According to Janoff-Bulman, the core beliefs of victims would be damaged by experiencing psychological torture, as a result, an important part of treatment is to help them rebuild their assumptive world including their views of themselves. Moreover, individuals with specific psychological manifestations, like alienation or mental defeat, also need special interventions and further evaluations. Supportive therapy, CBT, psychodynamic psychotherapy and group therapy are of the main helpful psychotherapy methods. Some studies also suggest that there are substantial similarities between the treatment of torture's survivors and individuals with identity problems, like those with borderline personality disorder.

## P167

### Effect of Mitochondrial Mutation on Depression and Anxiety

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Mitochondria are membrane-enclosed organelle found in most eukaryotic cells, which known as power house in cells. This organelle transforms energy into forms that are usable by the cell. The most common psychiatric disorders such as depression and anxiety can be linked to mitochondrial disorders. Furthermore, mutations of mitochondrial or nuclear DNA (mtDNA and nDNA, respectively) have been linked to deprecation and anxiety. Gene sets play a crucial role in the development of personality property including also affective temperaments, in the mediation of the effects of environmental factors, and in the interaction of these elements in the development of anxiety. Mutation of mitochondrial DNA such as deletion or decreased gene expression has direct effect with psychiatric disorder that the details of this mechanism have not been detected. The aim of this study is to review the literature on the relationship between neuropsychiatric disorders especially, depression and anxiety, with DNA mutations and mitochondrial alterations.

## P168

### **Anxiety Disorders in the Workplace**

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Anxiety and depression has increased sharply in recent years. Depression has a very large impact on at-work performance, due to the prevalence of depression and its ability to impair work performance. Depression among employees has been estimated to have a prevalence of approximately 10%. There is growing evidence that the workplace can have an important role in the development of anxiety problems and disorders. The symptoms of depression suggest possible interference with work performance; for example, inability to concentrate, low energy and easy fatigability, exaggerated self-doubts, indecisiveness and disturbed sleep might all impair work performance. Moreover, depression often is accompanied by other forms of ill health, such as anxiety, substance abuse or other medical conditions. With treatment, most people find significant improvement. Several standard approaches have proved effective. The health care professional will use one or a combination of these treatments: therapy, medication, complementary and alternative treatment, relaxation techniques.

## P169

### **The Effect of Math Instructional Interventions on Math Anxiety and Attitude towards Mathematics**

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In recent years, mathematics is an essential aspect of all areas of daily life and the best predictor of being successful in economic situations of society. For many students, the mathematics accompanied with frustration, anxiety and negative attitudes towards mathematics. These students believe their anxiety have been derived from their math teachers, math misconception and weakness in math assignments that derived from traditional classes. New perspectives in math teaching emphasize on cooperative learning, problem solving, exploring, action, self-instruction, self-assessment and using manipulative tools for learning math. The purpose of this study is to examine the effect of some new math interventions on math anxiety and negative attitudes towards mathematics in girl students. The method of research was Quasi experimental with pre-post test. For data collection, mathematics anxiety scale for children from Chui and Henry and Aiken attitudes towards mathematics scale were administrated on eighty-nine girl students that randomly placed in control and experimental groups. Results from covariance analyzing of data showed that new math interventions significantly reduced math anxiety and attitudes towards math, that is, math interventions improved negative attitudes towards math. Because of importance of math in all areas of new technology, new math instructional methods based on psychological and educational researches should be tested by the teachers in math classes that reinforce cooperative learning, cause positive attitudes towards math and lead to the high achievement level in international evaluations.

## P170

### **Predictors of Test Anxiety: Perfectionism and Goal Orientation**

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Test anxiety as a common disorder is a physiological condition in which students experience extreme stress, anxiety and discomfort during and/or before taking a test. This kind of anxiety results from the sense of threats like fear of failure, lack of confidence and setting unattainable goals in learning and wishing to be perfect in academic situation. Resulting anxiety disrupts attention, memory function, and finally academic

performance that were evaluated by test. This research was done with the purpose of the study of relationship between perfectionism and goal orientation with test anxiety in girl students of Tehran Province. The method of research is correlational. Participants were 180 students that were selected by Cluster sampling from the high schools of Tehran Province. For data collection, goal orientation scale of Elliot and Murayama (2008), multidimensional perfectionism scale of Hewitt and Flett (1991) as well as test anxiety questionnaire by Sarason (1985) were used. Data were analyzed by SPSS 20 software in correlation and multivariate regression analysis. Results showed positive significant correlation between perfectionism and test anxiety, as if this variable explains 38% of variance of test anxiety. Also, there was positive significant correlation between performance-avoidance goal orientation and mastery-avoidance with test anxiety. Mastery-avoidance and approach-mastery explains 0.27 and -0.17 of variances of test anxiety respectively. Create challenging and available goals in learning reinforce the academic performance and lead to correct achievement motivation. This means encouraging a community of learners who have accessible goals in learning, are willing to take risks and make mistakes for the sake of learning.

#### P171

### The Relationship between Levels of Anxiety and Social Adaptation in Female Students

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Most people have experienced anxiety in their lives. Anxiety is necessary to continue the life but intense anxiety can be reduced person's efficiency and avoided rational thinking and decision making. The goal of this study was to determine the relationship between levels of anxiety and social adaptation in female students of Science and Research Branch, Islamic Azad University, Tehran, Iran. 120 female students with 20-30 years old were randomly selected at all levels of university degrees. Cattell anxiety test and Rotter's Locus of control questionnaire (internal-external) were employed in this research. Results showed that relationship were significantly increased between mild anxiety and average social adaptation and also between severe anxiety and weak social adaptation ( $P < 0.01$ ). Finding showed that the mild to intense levels of anxiety had relationship with the social adaptation, so that anxiety can be influenced on social adaptation.

#### P172

### The Relationship between Levels of Anxiety and Locus of Control in Female Students

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Locus of control is a very important issue in the psychological science and it can help people to overcome many psychological disorders. The main assumption of the present study was the relationship between both internal and external locus of control, as a hypothetical variable. The aim of this study was to determine the relationship between locus of control and levels of anxiety in female students in Science and Research Branch, Islamic Azad University, Tehran, Iran. 120 female students with 20 to 30 years old were randomly selected at all levels of university degrees. Cattell anxiety test and Rotter's Locus of control questionnaire (internal-external) were employed in this research. Results showed that relationship were significantly increased between mild anxiety and internal locus of control and also between external locus of control and severe anxiety ( $P \leq 0.01$ ). Internal locus of control would be more successful in controlling students' anxiety however external locus of control would be accompanied by severe anxiety in students.

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الْإِسْخَاطَ فِي  
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In the remembrance of God do hearts satisfaction.



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