The First International Talent Management Congress

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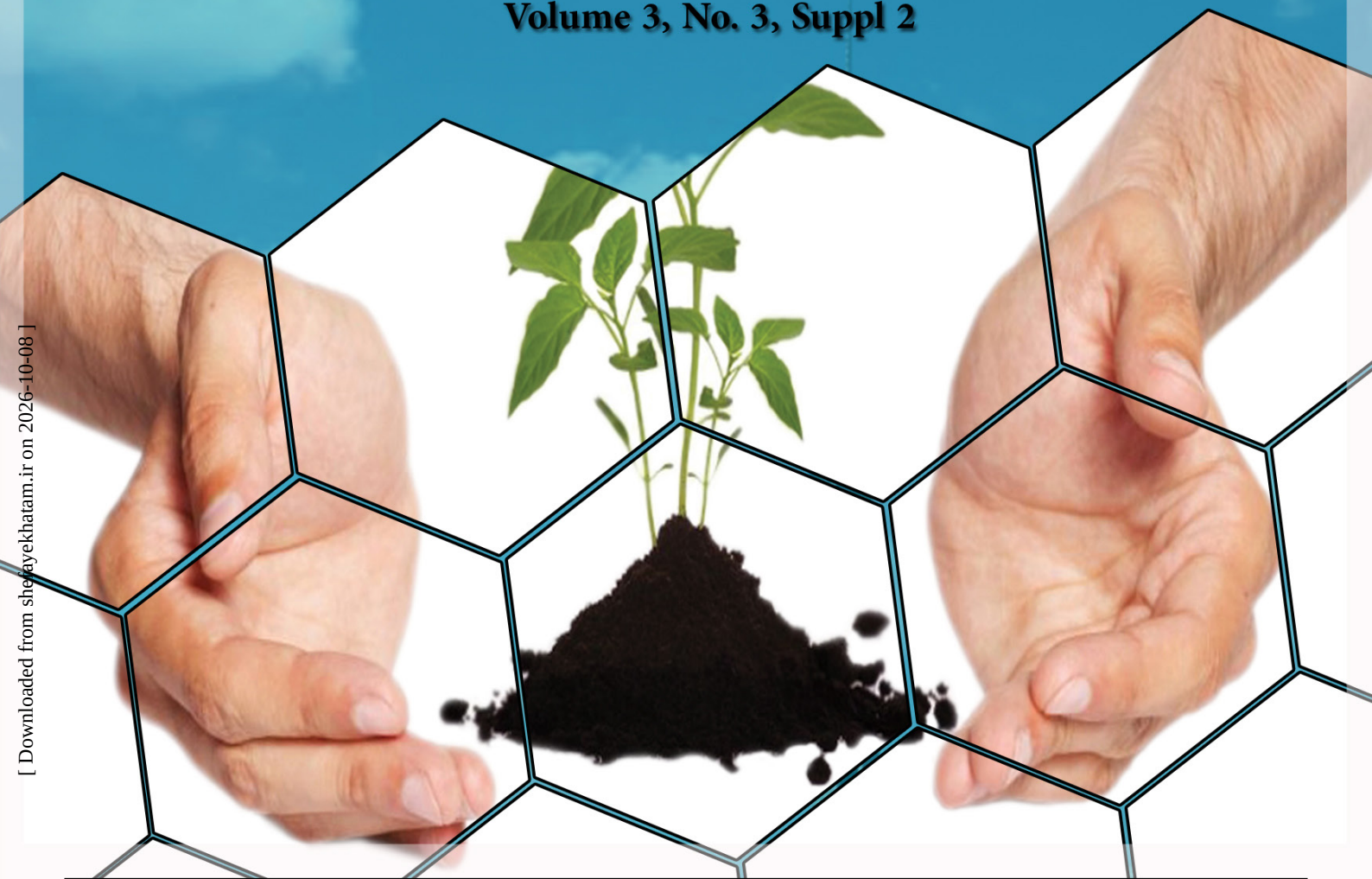

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Oral Presentations

O1

Defining Talent: A Cultural Perspective

Tracey Tokuhama-Espinosa

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The Neuroscience Journal of Shefaye Khatam, 2015; 3(S2): O1

What is talent? How can it be identified? Who is responsible for identifying it? Are there universally valued talents, or are they all culturally bound? There are at least three different levels of analysis to explore these questions. On the government level, we must philosophically decide on how our country chooses and expresses its values through what is taught, to whom, and for what periods of time, and with what kind of teacher. On the second level of analysis, we must consider if the individual has the proper conditions in which to learn. And at the neuronal level, have we created the best conditions under which people can maximize their potential? We will explore how each of these different levels must work together to help both individuals and countries develop successfully.

O2

Neuroscience and Talent: How Neuroscience Can Enhance Successful Plan of Talent Strategy

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The Neuroscience Journal of Shefaye Khatam, 2015; 3(S2): O2

Performance and development are based on hard work, experience and learning. Learning how to change different behaviors is crucial to successful talent management plans. Within the brain there are complex connected circuits that can identify threats. The brain reacts to change as a threat. There is also a collection of brain structures tied to a natural reward system that are involved in the regulation of various behaviors. The brain is capable of adjusting its behavior by alerting the reward system and minimizing threat. Emotions are also important and are controlled by subcortical structures of the brain. Training of connected brain circuits enhances their plasticity and this is critical for learning, memory, and behavior. Neuroscience studies ways to create optimal learning conditions and improve behavioral approaches. Neuroscience research also can explain how we can implement a better talent development and management strategies in order to adopt successful policies.

O3

Talent Management in Entrepreneurial Competencies Who Are More Responsible? Parent or Teachers?A Case Study from Iranian Students

Reza Zaefarian[1], ***Nasim Shahorkhian***[2], ***Nakisa Hosseinzadeh***[2], ***Farnaz Asgari***[2], ***Misagh Tasavori***[3]

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The Neuroscience Journal of Shefaye Khatam, 2015; 3(S2): O3

Kaashef is a project with the aim of Talent Management in Entrepreneurial Competencies in Iran. In this project, students (children) are trained over the years in order to learn how to establish their own business in the future. This project, which has developed through collaboration of Faculty of Entrepreneurship of University of Teheran, Ministry of Education and Ministry of Labour and Social Affairs, has been recently welcomed and appreciated by UNESCO and Unesco Chair in Entrepreneurship (UCE) in Iran. Kaashef program has several stages: identification, evaluation and development of entrepreneurial characteristics and capabilities. The first stage of this project focused on

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identification of key entrepreneurial characteristics in Iran. It was carried out through a deep study on Iranian entrepreneurs. The findings of this research revealed 15 key characteristics of successful entrepreneurs in Iran. In the second stage, students studying in the primary and secondary schools are evaluated in terms of these characteristics. In the third stage, a training programme is offered to enhance these characteristics and familiarise students with the concept of entrepreneurship. This program aims to develop entrepreneurial culture among families and children and enable students to start their own business after graduation from school or university. Kaashef designs an exam in the form of a customized questionnaire, to evaluate students` competencies and skills. A pilot study has been carried out on a sample of four thousand students to ensure the accuracy of the questions. In Addition, Kaashef has designed a customised questionnaire for parents and teachers to evaluate their skills in developing entrepreneurial orientation in students (children). This test is carried out with the help of The National Education Assessment Organization (first year) and Ministry of Education (second year), in an annual basis and throughout the whole country at the same time. In this countrywide exam, we found that, in entrepreneurial competencies development, students' behaviour in some competencies are more dependent to their parents besides of their teachers. Parents and teachers have different influence on students (children) and usually their recommendation weaken entrepreneurial orientation in students.

O4

Talent Management in Organizations

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The Neuroscience Journal of Shefaye Khatam, 2015; 3(S2): O4

Successful organizations take action to ensure that they have the human resources to meet their current and future business needs. Organizations require much greater flexibility to account for individual needs than in the past and have to find new ways to manage resulting challenges. Talent Management (TM) will play a critical role in this context to help businesses succeed. Talent Management is defined as the process of choosing, supervising, and encouraging talent so individuals can perform their best in organizations. The fundamental purpose of TM is choosing the right people, with the right skills, at the right time, and for the right jobs; this is crucial for guaranteeing the health and advancement, as well as effective functioning, of the companies now and in the future. TM works to nurture each person's potential toward success and happiness.It is important to recognize that Talent Management is an effective strategy for achieving organizational goals while also helping businesses become more competitive in the job market. TM comprises different but related components that aim to identify, preserve, and boost these goals:

- Selection and recruitment
- Capability assessment
- Training and development
- Performance management
- Employee engagement
- Succession planning
- Leadership development

These concepts are among the significant factors that resulted from research in Iran's power generation and transmission and distribution management company (TAVANIR) and its 90 subsidiary companies, as well as a series of programs that have been implemented in the field of TM since 2001. As a best practice, the stages of the plan and the results will be offered in this presentation.

O5

The Role of Positive Psychology in Talent Identification and Development

Peggy Kern

Center for Positive Psychology, Melbourne Graduate School of Education, Melbourne, Australia

The Neuroscience Journal of Shefaye Khatam, 2015; 3(S2): O5

Positive psychology as a field focuses on identifying and supporting internal strengths and external resources to promote optimal functioning, flourishing, and resilience in individual, organizations, and communities. Research and interventions from the field are helping people be happy, productive, and resilient. From this perspective, each person has a unique set of strengths, which when used appropriately, helps the person feel good and function well. This workshop will introduce the positive psychology perspective and explore the possibilities and limitations of a strengths-based approach to talent identification and development.

O6

The Development of the EU Talent Support Network-Enrichment, Openness, Cooperation

Csilla Fuszek

Founding Director of the Budapest European Talent Centre, Budapest, Hungary

The Neuroscience Journal of Shefaye Khatam, 2015; 3(S2): O6

At the moment, 14 European Talent Centres belong to the recently formed European Talent Support Network, which, in the long run, can bring new dimensions to pan-European cooperation in supporting young talented people all over Europe. Exchange and adaptation of best

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practices, spread and application of scientific results, possibilities of mutual visits of young talents, their teachers, mentors, parents and all the experts devoting their life to talent support can be all be expanded. A long process preceded the acceptance of the idea of this network and the initial documents on forming EU Talents Centres in 2014. The Accreditation Committee chosen by the European Council for High Ability worked for several months to put together the criteria of an EU Talent Centre. During their work lots of questions arose. In September 2015 the network began its operation and in November the Call for being a European Talent Point was published as well. The presentation will focus on the background of the accreditation and possible results of the EU network thinking, the criteria of an EU Talent Centre and Talent Point will be also discussed.

O7

Research on the Brain and Learning: Plasticity and Variability and Their Impact on Talent Identification

Tracey Tokuhama-Espinosa

Latin American Faculty for Social Science in Ecuador (FLACSO), Ecuador

The Neuroscience Journal of Shefaye Khatam, 2015; 3(S2): O7

This talk will introduce the idea that talent development is related to learning where learning is the physiological process of neuro-plastic changes in the brain. To develop talents, individuals must move from novice or beginner's status to expertise levels of knowledge or skills in a particular domain. Learning depends on maximizing an individual's potential through the experiences he or she has. This means that both nature (one's genes) and nurture (one's experiences) play roles in talent development. What is the definition of neuro-plasticity? How does the brain learn? How much human variability is there in learning potential? What is the most up-to-date knowledge about the brain and learning and the conditions under which plasticity thrives? This presentation will share current examples and new findings related to the variability of neuro-plasticity and its impact on talent identification.

O8

The Importance of Promoting Talent in all Students

Leslie Williamson

Executive Director, Center for School Success, USA

The Neuroscience Journal of Shefaye Khatam, 2015; 3(S2): O8

The educational system is designed for some students' kind of minds (e.g., those with strengths in attention, memory, language, social skills), for others, it is a daily struggle. Unfortunately, the academic setting rarely accounts for this variability. Regardless, at some point in time (for whatever reason), almost all students "hit a wall" (or face a challenge) which can make them doubt whether they have the capacity to succeed. Studies from multiple fields indicate that the impact of "differences in learning" on society may be much broader and deeper than previously realized, affecting not only students' ability to succeed in school, but their overall health and well-being into adulthood.Learning difficulties can be experienced at any age because the expectations of school change over time, such as the volume, rate and complexity of information that students are required to process and/or produce. In addition, students can spend years hiding their learning challenges in fear of not living up to the real or perceived expectations of their parents and teachers (or even themselves), which consequently manifests through a range of bio-psycho-social-emotional issues.When students struggle, the focus tends to be on what they can't do, rather than what they can do. Yet, every child has have a unique set of strengths and talents that needs to be recognized and nurtured. The Center for School Success has identified key learning trends that can serve as either risk or protective factors related to a student's performance at different times in his/her school career. These trends have been corroborated by a large-scale US National Institutes of Health study on the reciprocal nature of health and learning. This presentation will explore the areas that most impact school success and offer an approach that incorporates recent brain research to maximize learning, support the neurodiversity in classrooms and discover the potential in every learner

O9

Youth Health Promotion Using Virtual Space

Mohammadtaqi Ahmadian

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The Neuroscience Journal of Shefaye Khatam, 2015; 3(S2): O9

Virtual technology can be a useful tool for designing models of healthy urban environments. The resilience and sustainability in any urban environment involves the establishment and maintenance of the health of its citizens. The well-being of youth, the future workforce of every society, is a highly important consideration in the design of cities. Cities are only truly sustainable when the workforce is guaranteed physical, mental, and social health. Therefore, the economy, environment, individual health, and infrastructure must be well defined and ideally optimized for diverse individuals. This presentation discusses how achieving sustainable health initiatives efficiently is possible through creating virtual health environments in order to train, innovate, and transfer health information to urban society.

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O10

Why Preschool Education Programs Is So Important

Mansoureh Karimzadeh

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Neurological development is largely a result of the learning that takes place starting at birth and during the earliest years of life. Child Care and Preschool Education Programs are key to predicting ultimate success in school and life. Children who attend preschool or other early education programs have enhanced cognitive, verbal, and social development (which is maintained into the first few years of school). They also enter school better prepared to learn, have significantly higher IQs and achievement, are less likely to need individual education support, are less likely to exhibit delinquency and antisocial behavior, and tend to have good social development.Children in low-income families often are not able to participate in early education or quality child care programs. Children growing up in poverty or near poverty also face many health and environmental risks. Many facilities that offer child care for children living in poverty do not provide the kind of quality care that supports optimal development and may actually compromise their health and safety. Quality care and early education are essential components of every child's life. Policymakers should be clear about their expectations for children entering school and create policies make a priority opportunities and experiences that promote the best neurodevelopment of all children

O11

Applying the Methods of Psychological Assessment in Diagnosis of Talented People: Issues and Solutions

Ebrahim Alizadeh

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The Neuroscience Journal of Shefaye Khatam, 2015; 3(S2): O11

Measuring individual talent is a prerequisite of talent management. In order to do so, there are methods which have been established such as intelligence tests, general and individual tests, ratings scale and the literature of educational performance. Applying these methods are effective, if measurement error is low and validity is high. All current available methods are faced with issues related to inaccurate talent measurement. Issues of methodology in tools for talent identification will be discussed, such as ambiguity in the conceptual definition of talents, how to design a question, how to estimate reliability, and how to collect evidence of validity. Through an investigation of these theories, a solution for accurate talent measurement emerges.

O12

Modern and Traditional Media:A Chance to Discover Ingenuity and Talent

Ali Zarean

Iranian Comprehensive Media for Children and Teenagers, Tehran, Iran

The Neuroscience Journal of Shefaye Khatam, 2015; 3(S2): O12

If we plan to collect the talent and ingenuity of the next generation, we must help them succeed from an early age. A comprehensive understanding of how to nurture the creativity and talent of young people could lead to its presence in adulthood, as talent creates opportunities for human development and fulfilment. The media is a powerful industry for constructing, influencing, and maintaining child identities and talents; indeed a major part of a person's identity forms before the age of seven. One of the media's largest roles is to showcase the news and talent of famous individuals, which gives them a seemingly higher status and self-importance. Similarly, the media can be the platform for children to show self-assurance, confidence, and talent, especially as primary users and viewers of media. The new age of media has created new opportunities for recognizing talent and ability that were nearly impossible before. This presentation will discuss the roles and future of technology and media in talent identification.

O13

Positive Education and Flourishing Schools: Strategies for Building Well-Being and Resilience in Students and Staff

Peggy Kern

Center for Positive Psychology, Melbourne Graduate School of Education, Melbourne, Australia

The Neuroscience Journal of Shefaye Khatam, 2015; 3(S2): O13

Positive education focuses on helping students not only achieve academically, but also to thrive. This workshop will consider what well-being and flourishing is and how well-being science applies to education. Core constructs and positive interventions that can be used with individuals, groups, and organizations to build well-being and resilience will be explored. Specific activities that can be used with students and staff will be provided.

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O14

Televiewing and Children's Development

Linda Pagani

University of Montreal, Montreal, Canada

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Participants will be introduced to the risks associated with excessive early childhood televiewing and develop an understanding of the current recommended guidelines for children's television exposure. My research agenda in Montreal (Canada) addresses modifiable factors in early childhood that influence human development. From birth through the preschool years, exponential brain maturation is characterized by increasingly effective cognitive problem-solving, communication, and interpersonal skills. These skills acquired during this developmental period are the result of rapid brain growth. Consequently, children are particularly sensitive to environmental input through live social interaction and active play with persons and objects across different social contexts. Rapid and extensive brain growth also implies considerable vulnerability in less stimulating or neurotoxic home environments.The overall goal of this congress is to help children and adolescents strengthen and maximize their potential and to build satisfying lives. Television viewing is a common pastime in very young children. Although some preschool programming is geared toward developmentally appropriate content, our research (and that of others) suggests that excessive screen time reduces time spent engaging in developmentally enriching activities and tasks which require more mental effort and thus foster brain development. The time spent televiewing diminishes essential social exchanges and child monitoring in the home environment, which is daunting given that family interaction remains the primary vehicle of intellectual and social development in childhood. Thus, early childhood televiewing represents an intellectually and physically sedentary activity that can be considered neurotoxic when it becomes an excessive pastime. We will discuss the bio-psycho-social outcomes associated with too much televiewing in early childhood.

O15

The Use of New Technologies in Justice Oriented TalentIdentification

Amirhossein Asadi

Research Center of Technology and Lifestyle, Sharif University of Technology, Tehran, Iran

The Neuroscience Journal of Shefaye Khatam, 2015; 3(S2): O15

Humans are born with potential abilities which may emerge due to certain circumstances. In educational environments, needs, interests and capacities of individuals are wide and varied. Therefore, developers and educators of training programs must provide special facilities to identify talented people in the way that justice is observed for all people. Meanwhile, there is no doubt that technology could have a major role in identifying talented people with observance of justice. This presentation will discuss ways to identify, promote and develop people's talents using new technologies with the focus on justice. The findings show that technology could be a useful tool for identifying talented people and enhance their potential abilities.

O16

Structural Turns in the School Curriculum to Meet the Requirements of Detecting and Developing Specific Talents

Mahmoud Mehr Mohammadi

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The Neuroscience Journal of Shefaye Khatam, 2015; 3(S2): O16

In the macro education plan for Iran (2010-2025), twelve years of schooling has been characterized as "General" education. Such a characterization is prone to certain misconceptions. General education does not equal "Uniform," or standardized, education and should refrain from identifying as such. Yet it is misinterpreted that there is a relationship between offering a General type of education and policy makers' lack of concern about specialized education; such education is the mission or the territory of higher education. But, of course, the General education system should act in a fashion that detects and nurtures different aptitudes effectively. Otherwise, specialized education at the higher education level will face an efficiency crisis, since such individualized attention has been delayed for too long. In order to prevent such a catastrophic state of affairs in the education system, it is imperative that a Uniform education in the schooling years be discouraged. The type of education that does not take into account the spectrum of interests and abilities is, ultimately, anti-educational. In this presentation, the idea of "soft specialization" is proposed and resulting implications for structuring the school curricula is discussed. From this perspective, and for aptitude detection and development to occur in the schooling years devoted to General education, three major components should be incorporated in the curricula for all stages of schooling: "prescriptive," "semi- prescriptive," and "non-prescriptive" elements.

O17

The Analytic Model of Talent

Mansour Sadeghi Mal Amiri

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The secret of success for organizations is the discovery and application of their employees' "talent." Yet, the most important matter is for individuals to discover their own top talent. Research findings show that each individual has his or her own unique inborn and acquired feature, including special temperament instinct and innateness. Humans' temperaments and instincts actualize naturally. However, it depends on the individual whether he or she will choose to nurture this innateness or not. Each person has a set of unique talents ordered according to a pyramidal system. The base of the pyramid shows weaker talent while at the top lies a person's strongest talents. Individuals are supposed to follow the career which goes with this top talent. They must invest in the talent positioned on the top of the pyramid. Yet, identification of this top talent which is the most important one can be hard to detect. This presentation will explore the nature of talent in order to help individuals identify specific indicators that can lead them, like a compass, towards those talents which are most important for them.

O18

Talent Management in Sport

Laleh Hakemi

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The Neuroscience Journal of Shefaye Khatam, 2015; 3(S2): O18

Talent finding in sports can not only lead to winning teams but also ensure individuals continue to participate, improve their talents, and take preventive measures against injuries. Athletic talent often develops as the result of morphological, physiological, or psychological characteristics. Many of these characteristics are inherited, and genetics have important implications for talent. Talent finding and training leads to the appropriate management and support for the individuals' diverse body types, physiology, medical history, and mental health that contribute greatly to athletic performance. Although these services pose expenses on sports organizations, they would be cost-effective in the long-term in order to prevent injuries and appropriately care for athletes. Moreover, with the proper identification and management of individual talents, sports organizations can unlock the true potential of every athlete.

Poster Presentations

P1

Negative Television and Memory

Arezou Eshaghabadi, Sajad Sahab Negah

Shefa Neuroscience Research Center, Khatam Alanbia Hospital, Tehran, Iran

The Neuroscience Journal of Shefaye Khatam, 2015; 3(S2): P1

According to reports about 30-thousand people spent watching television had the impact on their memory and recall that the results showed no differences between men and women. The people who watched less than an hour a day did better at every memory function. As these contributors watched negative political ads, physiological responses indicated that their body was reflexively preparing to move away. Memory differences were discovered before, during, and after the presence of negative compelling images. Memory for visual material presented after compelling negative images was better than memory for material presented before compelling negative images. There has been reported that the presence of negative video in news stories increases attention, increases the amount of capacity required to process the message, increases the ability to retrieve the story, facilitates recognition of information presented during the negative video and inhibits recognition for information presented before the negative video. Studies have been indicated that the introduction of negative video increases the self reported negative emotional impact of the story - making it more arousing and more negative. When capacity is controlled, arousing messages are remembered better than calm messages. When arousal is controlled, positive messages are remembered better than negative messages. Memory was worse for material that preceded the negative scenes. During negative scenes, memory was worse for semantically intact audio information such as speech than for nonsemantic aural information such as screams or crashing noises.

P2

Neocortex and Memory

Arezou Eshaghabadi, Sajad Sahab Negah

Shefa Neuroscience Research Center, Khatam Alanbia Hospital, Tehran, Iran

The Neuroscience Journal of Shefaye Khatam, 2015; 3(S2): P2

The human prefrontal cortex differs from all other mammals: the seat of complex cognition, abstract thinking, planning and future forecasting, and behavioral inhibition. Using our prefrontal cortex is a significant energy drain on the body, so despite its

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impressive capabilities, it's daily capacity is limited. Some researchers estimate a mere 2-3 hours per day of activity depletes the prefrontal cortex. The prefrontal cortex modulates our limbic instincts and lets us to respond mindfully to emotionally charged situations – to a degree. An extensive body of research has shown that disruption of the hippocampus primarily affects recently formed memories, but does not impair recollection of remote memories, believed to be stored in the neocortex. In the 70's, it has been proposed that the hippocampus serves as a simple moment-by-moment capturing system, while the neocortex stores information in a structured way. The neocortical representational areas are reciprocally connected to the hippocampus enabling linking of the neocortical representational areas by the hippocampus. The hippocampus is needed for rapid initial storage, while memories are slowly incorporated into the neocortex for stable long term storage. The slow restoration of memories in the neocortex is suggested to take place by repeated replay of the new information by the hippocampus.

P3

Mechanisms of TrkB-Mediated Hippocampal Long-Term Potentiation in Learning and Memory

Ali Jahanbazi Jahan-Abad, Hassan Hosseini Ravandi

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Long-term potentiation (LTP) is a process that certain types of synaptic stimulation lead to a long-lasting enhancement in the strength of synaptic transmission. Studies in recent years indicate the importance of molecular pathways in the development of memory and learning. Tropomyosin receptor kinase B (TrkB) is a member of the neurotrophin receptor tyrosine kinase family, that its ligand is brain-derived neurotrophic factor (BDNF). In recent years, Research has been shown that TrkB has an important role in LTP formation in hippocampus and after ligand binding activates several intracellular signaling cascades. Three important intracellular signaling cascades are triggered by the TrkB receptor includes: Ras-mitogen activated protein kinase (MAPK) pathway, phosphatidylinositol 3-kinase (PI3K)-Akt pathway and PLCγ-Ca 2+ pathway.

P4

Self-Management and Talent Management

Leyla Bayan[1], Sajad Sahab Negah[1, 2]

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Self-management has been a point of discussion among number of researchers. The teacher can manage discipline in the class by employing self-management strategies. Furthermore, it can also help students in managing their behaviors for long periods of time. Organizations need people who are more willing to work and adhere to the requirements on their own. They must understand how they can make best use of their skills, talents and how they can utilize their time so as to achieve higher efficiency. This requires self-management. Self-management can be defined as the use of behavioral strategies to modify one's own behavior. Self-management also refers to methods, skills, and strategies by which individuals can effectively direct their own activities toward the achievement of objectives, and includes goal setting, decision making, focusing, planning, scheduling, task tracking, self-evaluation, self-intervention, self-development, etc. Self-management includes self-monitoring, where one observes one's behavior and identifies the presence or absence of the target behavior, and self-reinforcement, where one reinforces oneself in the presence of the target behavior. The change in self-management is brought by the individual himself. The main objective of the current study was to evaluate the effect of self-management practices on individual work behavior.

P5

Memory and Talent

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The Neuroscience Journal of Shefaye Khatam, 2015; 3(S2): P5

A person, who is talented, performs in a certain capacity above the norm. Talent is different from intelligence which is a response to a circumstance using knowledge and skill. The attributes of talent are exceptional memory, rapid processing speed, and high motivation, an affinity for learning, creativity and optimal cognition. There is some proof suggests that certain aspects of talent are related with heritable code. Heritability of talent could be detected by structural and functional neuroimaging and genetics. Genetic studies provide evidence that some cortical areas like the corpus callosum, frontal parietal cortices, bilateral temporal cortices, insular cortex, and the dorsolateral performance cortex provide the structural basis of optimal intellectual talent. In contrast, brain structures that work for learning like hippocampus are more influenced by environment and experience. A study that investigates phenotypic, genetic and environmental relationship between talent and intelligence, reports

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that there are phenotypic relationships between self-report ability scores and measured intelligence scores; and these two scores have significant correlation at the genetic level. It also has been reported that phenotypic correlation are generally low between memory and heritability. When the brain is influenced by environment and individual experience, the levels of synapse and individual neuron change, and these changes are brain plasticity. Anatomical organization and functional algorithm are influenced by endogenous enrichment or atypical development in plasticity. Learning is a kind of plasticity that occurs between brain neurons and environmental factors; when these interactions cause an extraordinary performance in a person, we could observe talent. It could be concluded that talent is memory with an extraordinary performance. This high quality in performance is due to some genes which have different expression in different people. People are able to change their memory with different manner in getting input factors from environment, but talent is hereditary and could not be improve by personal attempt.

P6

Metabotropic Glutamate Receptor-Dependent Role in the Formation of Long-Term Potentiation

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The Neuroscience Journal of Shefaye Khatam, 2015; 3(S2): P6

Long-term potentiation (LTP) is a reflection of synaptic plasticity that induced by specific patterns of synaptic activity and has an important role in learning and memory. The first clue of the potential role of glutamate receptors in LTP was in 1991 with the observation that the mGluR agonists 1-amino-1, 3-cyclopentanedicarboxylic acid (ACPD), increased LTP. Studies have shown that ACPD induce LTP in CA1 and in the dentate gyrus. Scientists suggest that the modulatory impact of mGluR activation on LTP varied in N-methyl-D-aspartic acid (NMDA)-dependent and NMDA-independent pathways because LTP was unimpaired in mutant mice with mGluR1 mutation and produced with full strength in NMDA-dependent pathways of the hippocampus but was attenuated in NMDA-independent LTP in the mossy fiber synapses on CA3. Consequently, research has shown that in mutant mice lacking mGluR5 the potentiation of the NMDA response was absent but the potentiation of the AMPA response was maintained. The findings suggest that mGluR5 activation plays an important role in expression of NMDA receptor-dependent LTP.

P7

The Roles of Long-Term Memory on the Organization of the Knowledge for Educators

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The Neuroscience Journal of Shefaye Khatam, 2015; 3(S2): P7

Modern neuroscientific research help to solve the impotent challenge in curriculum design and teaching for enhancing students' ability to organize information in a way that makes it efficient in response to an appropriate context such as problem solving and critical thinking via knowing about the mechanism of different type of memories especially long term memory. At first, we should to clarify the difference between short-term memory (working memory) in modern usage and long-term memory. Working memory is dynamic and last short time (seconds to minutes). Working memory outfits information from long-term memory to administer when necessary. In fact it organize information for an especial purpose: e.g., application to a task, problem solving, and communication. Long-term memory is the information we have committed to long-term storage for retrieval at a later time. Long-term memory is more stable and can persist for a lifetime. Working memory is mediated by the frontal lobes, which are reciprocally connected (forward and backward) by nerve fibers to other parts of the brain such as occipital lobe (stored visual memory) and, the temporal lobes where verbal and conceptual knowledge is partially stored, and the somatosensory cortex where sensations of touch and body sensations are located. The nerve fiber interconnections permit the frontal lobes to access information stored as memories within each of these brain centers. The frontal lobes put on organizational control over the access and processing of stored information. There are other major nerve tracts interconnecting between frontal lobes and deeper region of the brain known as the limbic system. It has multiple function. It regulates new information to be stored in long term memory. Also limbic system mediates our emotional or affective responses. Since the frontal lobe can access and moderate our emotional sensations during information processing. We will refer to this as affective functions. It seems that these complex networks dynamically organize information as a memory to increase the networking of information during recall and its application.

P8

Thalamic Damage and Memory

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Memory is the cognitive ability that allows acquiring, store and recalling information. Anterior thalamic dysfunction creates memory deficits in rats and humans. Anterior thalamus forms a memory network in connection with the hippocampus. This connectivity profile proposes that ventrolateral and anterior thalamus may display a nexus between reminder and control functions, such as action or attentional selection. The recent research indicates that, with a substantial delay between post-surgery tests, controls show repeated relearning on a spatial working memory task whereas rats with neurotoxic anterior thalamic lesions showed repeated relearning deficits. Thalamic damage may trigger disconnection between areas involved in perceptual selection and mnemonic control, leading to inhibition of memory-matching signals. Hence, the deployment of attention is directed away from those items. Studies of patients with thalamic damage show that thalamus plays a role in several aspects of recognition.

P9

The Relationship between Emotional Intelligence and Job Satisfaction and Performance

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Emotional intelligence (EI) is a new concept and a type of intelligence that is described as "the ability to understand exactly, evaluate and represent emotion". Many studies were evaluated the effect of emotional intelligence on work satisfaction and performance. The results were shown that the employees with high level of emotional intelligence are valuable property for their organizations. In fact, increasing EI among employees dissolves many obstacles in health, education and management in work situation and it play an important role in organization. On the other words, job satisfaction is a significant topic in organizational success and it was determined that people with high level of EI have higher levels of internal job satisfaction. In addition, there is a remarkable relationship between EI and job performance and employees with high level of EI can control their own emotion and have favorable job performance and are able to adjust their own emotions that it can be influence their behavior and outcomes. In according to studies, people with high emotional and social capacity can have better management in their emotions which result in their good performance and it is a great advantage for their workplace and it has a main effect on their job satisfaction.

P10

Self-Directed Learning

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Developing and promoting self-directed learning, as an one of the goals in higher education is important because it expected from students to reach the high level of individual capabilities, and able to identify their training needs in order to fix it and evaluate their own learning, without being in a special education system. Conclusion: The literature review showed that self-directed learning is growing upward in trend development. Because of the benefits of self-directed learning, paying attention to this type of learning is fundamental for improving it and it is necessary as an important program in higher education.

P11

The Effect of Flavonoids in Memory

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Flavonoids may exert particularly powerful actions on mammalian cognition and may reverse age-related declines in memory and learning. Flavonoids can be modulated neuronal function and there by influencing memory, learning and cognitive function. Dietary supplementation with flavonoid-rich foods, such as blueberry, green tea and Ginkgo biloba lead to significant reversals of age-related deficits on spatial memory and learning. Recently, significant evidence has appeared to show that phytochemical-rich foods, and in particular those rich in flavonoids, may reverse age related deficits in cognitive function in both animals and human subjects. To impact flavonoids on brain function, must cross the blood–brain barrier. With regard to specific brain localization, several studies report anthocyanin in different regions of the brain of both rodents and pigs after supplementation with blueberry. Animal investigations have evidently denoted that flavonoid-rich foods are beneficial in retarding and/or counteracting functional age-related cognitive deficits. There is robust evidence that flavonoid-rich foods can impact on memory and learning and that this seems likely to involve, to some degree, regulation of signaling cascades, leading to changes in morphological aspects of neuronal cells that ultimately impact on synaptic

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plasticity and more sustained long term potentiation in the hippocampus. Studies suggest that flavonoid-rich foods are capable of inducing improvements in memory and cognition in animals and humans. There is evidence to suggest that blueberry flavonoids can cross the blood-brain barrier and reach the central nervous system, where they have the potential to directly regulate gene and protein expression in neurons. Flavonoids are likely causal agents in mediating the cognitive effects.

P12

Women Entrepreneurship and Talent Management

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Women entrepreneurship is the key to the economic development of any country. There is a great focus on developing women entrepreneurs in developing countries as this is realized to lead to employment creation and increasing the per capita income. Research indicates that successful women entrepreneurs are those who have benefitted from family support. This abstract is part of a several studies on women entrepreneurship and the main objective of the paper is to analyze the challenges of talent management for women entrepreneurs. These challenges include, labor burden, access to financial resources, limited access to markets, low education and training, less access to networks, and unfavorable government policies. The discussions on these issues appear to show serious limitation on female entrepreneurs compared to their male counterparts. To conclude, this abstract is confirming the view that women entrepreneurs face a number of challenges and one of the important one being talent management. As mentioned this paper is part of a larger study on women entrepreneurs and thus more investigations are being made.

P13

Potassium Channels and Long-Term Potentiation Formation

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Long-term potentiation (LTP) is a form of activity-dependent plasticity that occurs during learning. Potassium channels are the most diverse group of all ion channels that related to synaptic plasticity. Small-conductance calcium-activated potassium channels (SKs) are found in hippocampal CA1 neurons and by inhibiting of postsynaptic potentials are involved in synaptic transmission impairment. Studies have been shown that blockage of SKs result in increase of LTP so that blocking of these channels increased LTP process and vice versa. Large-conductance calcium-activated potassium channels (BKs) also are found in hippocampal CA1 neurons and by influencing synaptic plasticity play an important role in learning and memory.

P14

How to Find a Talent?

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Talents may be artistic or technical, mental or physical, personal or social. You can be a talented introvert or a talented extrovert. Learning to look for your talents in the right places and building those talents into skills and abilities might take some work, but going about it creatively will let you explore your natural abilities and find your innate talents. You're not going to find a talent without trying. You can only find your natural abilities, skills, and talents when you test your mettle and actively seek new experiences. If you never try, you'll never know. Seek out challenges and obstacles to see what innate skills and abilities you might be hiding. We can find our talents along 3 steps including looking for talents, getting creative and building on talent. For step 1: stop waiting for talents to appear, try things that are easy, try things that are hard, follow your obsessions, keep track of little successes and ignore the television. For step 2: take a personality quiz, talk to your friends and family, look at both your strengths and your weaknesses for talent possibilities and define talent for yourself. For step 3: commit to building your talent into a skill, find other talented people, and respect the complexity of your talent and practice.

P15

Hippocampus-Neocortical Communication in Learning

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The hippocampus is located in the medial temporal lobe and is a part of the forebrain. It plays a critical role in

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formation of declared memories. The hippocampus is banana-shaped and communicates with all parts of neocortex. Reptiles and birds have structures like hippocampus that potentially serve as navigation functions. During the mammalian evolution, the neocortex has a large expansion. There are Granule cells in the hippocampus with multitude functions which are not present in the neocortex. Physiological roles of granule cells reveal a key step to understanding hippocampal computation. At first, memories are stored in the hippocampal system via synaptic changes. In fact, when a new experience happens, it either disappears or consolidates into a long-term form of memory. It is shown that, during learning, synapses are strengthened through long-term potentiation (LTP). The hippocampus stored new input data then replays to neocortical system, and these recent memory changes reinstatements in the neocortex. Acetylcholine is essential for learning and its presence in the neocortex helps to restore memory following damage. The neocortex discovers the structure of items in ensembles of experiences, so it learns slowly, but the hippocampus system learns new items rapidly without disrupting this structure. The hippocampus permits reinstatement of new memories and integrates them into structured neocortical memory system via memory consolidation process, a process which in it memories are gradually transferred to neocortical stores. The hippocampus has a subsystem that encodes pathways between the neocortex and entorhinal cortex; and cholinergic system plays an important role in this process. Here, it could be concluded that learning new items happens in hippocampus via synaptic changes and these new items consolidate into a structured memory in the neocortex.

P16

The Effect of PTSD on Memory

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Post-traumatic stress disorder (PTSD), panic disorder and phobia manifest in ways that are consistent with an uncontrollable state of fear. Impaired memory for elements of the traumatic experience is a core feature of PTSD, and clinical complaints of memory impairment for non-trauma-related stimuli are common. Several studies have documented generalized memory impairment among patients with combat-related PTSD. The underlying mechanism is unclear, but some investigators have implicated stress-induced damage to limbic-temporal lobe structures. However, the etiologic role of stress in learning and memory impairments is clouded by high rates of comorbid psychiatric illness and substance abuse. Neuropsychological studies have consistently demonstrated impaired verbal memory in PTSD. Trauma-focused treatment for PTSD is thought to rely on memory, but it is largely unknown whether treatment outcome is influenced by memory performance. Poor verbal memory performance represents a risk factor for worse treatment response to trauma-focused psychotherapy. Memory measures can be helpful in determining which patients are unable to benefit from trauma-focused psychotherapy. Future research should explore how treatment perspectives of patients with poor verbal memory can be improved. trauma survivors, and in particular trauma survivors with PTSD, show reduced specificity in their recall of personal semantic information. Furthermore, among these trauma survivors, those with PTSD showed relatively reduced personal semantic knowledge recall compared to the survivors without PTSD.

P17

Human Resource Management in Organization

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Effective talent management, quantitative and qualitative need for the organization to talents will be determined based on strategy and business goals. As organizations face increasing competitive challenges of the future and capable to manage these challenges, managers need to be effective. Thus, talent management and management every day is very important in organizations and prospective. Each day will be more important and remarkable talent management because organizations or retire with the loss of a great talent managers will be a massive problem. It is not always the most talented management and organizational systems can coexist but they are supported and should be associated with trading strategies. Organizations should take the following five basic steps. These 5 steps are: 1 - recruitment and selection 2 - Assessment 3 - Review and Planning 4 -Development 5 - Engagement and retention. This is the fact that talent management systems and processes need to be strategically driven and are fully integrated with each other. Technical concept of effective human resource management activities or services are included all members of companies. The traditional activities such as human resource management (recruitment, training, employment, health and safety, regulation of labor relations, performance evaluation, manpower planning etc.) will be introduced as technical. Successful organizations are seeking for Strategy and its policies and procedures so that they can improve that talent is essential for their economic survival, to attract, develop and retain.

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P18

Signaling Pathway in Long-Term Potentiation

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Synaptic plasticity in the central nervous system (CNS) of mammals has been discussed for many years. Several forms of synaptic plasticity of mammal's CNS have been identified, such as those that occur in long-term potentiation (LTP). Different types of LTP have been observed in distinctive areas of the CNS of mammals. The hippocampus is one of the most important areas in the CNS that plays an important role in learning and memory formation and LTP. LTP of synaptic strength occurs during learning and the examination of the molecular and cellular mechanisms underlying these types of synaptic plasticity have been studied by several scientists. In this review, emphasis is focused on the role of synaptic ion channels, ionotropic and metabotropic glutamate receptors as well as TrkB receptor in LTP, and the importance and significance of these elements in understanding of the molecular biology of learning and memory.

P19

Long-Term Potentiation

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The term synaptic plasticity points to a series of persistent changes related to the activity of synapses. Long-term potentiation (LTP) is a reflection of synaptic plasticity that has an important role in learning and memory. LTP is a long-lasting increase of synaptic activity due to enhancement of excitatory synaptic transmission after a high-frequency train of electrical stimulations. Different types of LTP have been observed in distinctive areas of the central nervous system of mammals, such as the amygdala, cortex, stratum, cerebellum, and nucleus accumbens. LTP can be divided into N-methyl-D-aspartic acid (NMDA) receptor dependent and NMDA receptor independent (by voltage-dependent calcium channels type L). The LTP process can be differentiated into Early (E-LTP) and Late (L-LTP) phases.The early phase of LTP induced by a single train of stimulation. This phase doesn't lead to new protein synthesis. The late phase of LTP produced by repeated trains; results in gene expression. Since, the nervous system is a complex network of neurons and glial cells that are communicated with each other, so the molecular communication between these cells requires further studies.

P20

The Role of Protein Kinases in Memory

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When an experience is encrypted into a long-lasting memory, it is believed that specific sets of neurons in the brain of the animal undergo changes including the strengthening of preexisting synapses and the growth and maintenance of new synaptic connections. These activity-dependent synaptic changes appear to require the coordination of a variety of cellular processes in spatially separated cellular locations. Gene expression within the nucleus leads to structural changes at synapses and alterations. Whereas the establishment of short-term memory has been found to depend on the modification of preexisting cellular proteins, long-term memory requires new gene expression and the synthesis of new proteins. In the adult mammalian brain, more than 250 protein kinases are expressed, but only a few of these kinases are currently known to enable learning and memory. Based on this information it appears that learning and memory-related kinases either impact on synaptic transmission by altering ion channel properties or ion channel density, or regulate gene expression and protein synthesis causing structural changes at existing synapses as well as synaptogenesis. Activation of both protein tyrosine kinases and mitogen-activated protein kinases is required for much longer and may thus have a particular function during transformation from short-term into long-term memory. Quite different time courses appear for protein kinase C (PKC) and protein kinase A (PKA), which may function at two different time points, shortly after training and again much later. This suggests that PKC and PKA might play a role at early and late stages of memory formation.

P21

The Role of Educational Neuroscience on Talent Management

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Educational neuroscience or mind, brain, and education science was born in the past two decades from the mega of research findings of neuroscience, education, and psychology. These finding develop our understandings about teaching and learning. Our knowledge about different areas of the brain and their activity in the learning and memory process, effect of the different areas in training and specific behavior could help the psychologist and teachers to design appropriate strategy and a new academic discipline for educational practice. Insight into Educational neuroscience findings lead to teachers is working smarter, not harder. The advent of social neuroscience, art and effectiveness of the environment on the intelligence added our knowledge about attention, spatial skills, and creativity of educators. In conclusion, we should indicate that educational neuroscience is caused educational theory and practice became much more research-based, similar to the medical model.

P22

The Association between TrkB Signaling Pathway and NMDARs in LTP Induction

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Long-term potentiation (LTP) is a biological process of learning and memory after a high-frequency train of electrical stimulations. By binding of brain-derived neurotrophic factor (BDNF) to Tropomyosin receptor kinase B (TrKB) receptors in postsynaptic neurons, tyrosine kinase Fyn is bound to these receptors and hereby plays a mediating role to binding and activation of N-methyl-D-aspartic acid receptors (NMDARs). TrkB receptor can be initiated three different pathway includes: MAPK pathway, PI3K-Akt pathway and PLCγ-Ca 2+ pathway. So Fyn by playing a mediating role between TrkB signaling pathway and NMDARs has an important role in LTP induction.

P23

Use of Business Process through Talent Management

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The rapid change in business globalization has developed huge challenges for an organization to maintain sustainable innovation and growth. The change in economic condition increases the interest of business process reengineering to sustain growth and make progressive firm in the world, but 70% organizations in the world have failed to achieve the benefit of business process reengineering (BPR) and the cause of their failure is lack of top management commitment and inability to perform business process reengineering. That is the basic cause of the failure is inefficient manpower or workforce of employees in key positions in the organization. These key people play strategic roles in productivity, efficiency and sustainable competitive advantage. Talent management plays major role in the development of firm value. Organizations invest hung amount of capital to adopt technology and develop infrastructure to increase growth but strategies and polices does not fulfill the desired result due to inefficient manpower both who make strategies and operate these technology. Valerie et al. (2008) illustrate "focus" and "fit" as two key dimensions of managing talent in organization. The term "focus" provides clear picture of the strategies of the organization and the term "fit" represented the workforce that support to achieve strategic object of the organization. The term "Talent Management" (TM) refers to managing different level of workforce in an organization, and focus on the top key players in key positions in the organization. TM refers to managing the entire work life of employees till retirement. It identifies the key gap of managing the current and future demand of workforce. Management use systematic process to develop talent pool of high performers who have skills to fill the demand, Management select the key position which differently contribute overall performance to get competitive edge.

P24

The Role of Ionotropic Glutamate Receptors in the Induction of LTP

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Long-term potentiation (LTP) is a reflection of synaptic plasticity that has an important role in learning and memory. LTP is a long-lasting increase of synaptic activity due to enhancement of excitatory synaptic transmission after a high-frequency train of electrical stimulation. The role of α-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid (AMPA) receptors in excitatory synaptic transmission and LTP formation uncovered over recent decades. The activity regulation of AMPA receptors (AMPARs) has a significant role in the LTP induction. AMPARs are homomeric or heteromeric receptors combined of four subunits GLUA1 to GLUA4. GluR1 have a critical role in LTP formation in the CA1

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region of hippocampus and is necessitated for synaptic delivery of AMPA receptors.

P25

Talent and Perseverance

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Many people think that all you need to succeed at anything is talent but talent alone without perseverance and determination, cannot help you achieve success. Talent is helpful but perseverance ensured one achieves success. A child can show an exceptional talent for storytelling, but if he ignores his teacher's comments and doesn't work on his stories, he will never be a great novelist. Talent is an in born quality which makes us capable of achieving success whereas perseverance enables us to achieve something. A person with talent may have the capability to achieve success but to achieve it you have to work towards it. A person without talent but having determination can achieve success. They help in shaping a human's future. People having talent, determination and perseverance might be successful. It can be achieved if the person sticks to his goal.

P26

Long-Term Potentiation: The Mechanisms of CaMKII in Lerarning and Memory

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Long-term potentiation (LTP) is a form of activity dependent plasticity that induced by high-frequency stimulation or theta burst stimulation and results in synaptic transmission. Several Studies have been shown that LTP is one of the most important processes in the CNS that plays an important role in learning and memory formation. Ca2+/calmodulin-dependent protein kinase II (CaMKII) is a major synaptic protein that involved in many signaling cascades and has an important role in the induction of LTP and certain forms of learning. This kinase consist of 12 subunits (alpha and beta) and activated by calcium–calmodulin and expressed presynaptically and postsynaptically. In one of the most important pathways, CaMKII is phosphorylated α-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid receptors (AMPARs) and increased conductance of the ion-channels. On the other hand, CaMKII increased the insertion of AMPARs at the postsynaptic membrane and enhanced the density of receptors at the neurons. Therefore, CaMKII seems prone to be a mediator of essential significance in connecting transient calcium signs to neuronal plasticity.

P27

Brain Network as a Pivotal Part in Intelligence Function

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Neuroimaging findings have proposed that some brain regions including the precuneus, posterior cingulate, and medial prefrontal cortex play an essential role of a structural core in the brain. Network organization endures rapid alterations in development with changes in axonal synaptic connectivity, white matter volume, and the thickness of corresponding cortical regions. Structural maturation of white matter as well as cortical and subcortical areas is powerfully related with intellectual abilities from early childhood throughout adolescence. However, there is little investigation about the relationship of network properties derived from axonal white matter tracts such as network efficiency with intelligence during childhood has received. Intelligence can be described as the individual's capacity for mental functioning across a variety of domains including reasoning, executive function, information processing speed, memory and spatial manipulation - termed, general intelligence (g). Efficient and economical information processing among the distributed brain regions along white matter fibers is thought to contribute to general intelligence capacity. The parieto-frontal integration theory suggests that the dorsolateral prefrontal cortex and the parietal cortex comprise an important neuronal network associated with efficient intellectual functioning.A brain network perspective provides a quantitative model for elucidating the association between the efficiency of brain networks and intelligence. Since brain development in childhood is associated with large-scale changes in synaptic connectivity, gray matter thickness and myelination, these relationships could be quite different than those observed in the adult brain.

P28

The Effects of Omega-3 and 6 Fatty Acids on Hippocampus and Learning

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One of the most nervous system evolution are memory and learning in humans. Learning is a skill that enhances synaptic activity in the hippocampus of prefrontal cortex. In fact, basic passive learning is communication between the conditioned and Unconditioned stimulation Passive learning involves three steps: habit, education and remember. According to the results of investigations, the hippocampus is a part of prefrontal cortex that has very important role in spatial learning and memory stabilization. During the learning, blood flow and oxygen consumption increases and it is influenced by hormones, drugs and various substances strongly. The Short-term and activator of excitatory pathway in Some areas of limbic system in cortex lead to severe increasing in synaptic strength. Two families of omega-3 and 6 fatty acids are important for health which must be received through diet, because they are not synthesized by body. Therefore, they are known as essential fatty acids. Unsaturated fatty acids are the main components of cell membranes in the body and present at high concentrations in the central nervous system, especially brain. They absorbed in brain actively and Leads to improved memory and learning. Unsaturated fatty acids directly intervene in the brain exercise via nerve cell membrane structure and change the activity of membrane. The long-chain fatty acids are important in brain especially for development of optimal nerve cells and also for releasing neurotransmitter and cell signaling. This review discussed about the effect of fatty acids on the hippocampus and learning and its importance role. According to our result, omega-3 and six fatty acids are important in the development of the central nervous system, especially hippocampus and they have a great influence on learning. Omega three and omega six fatty acid chains are very important for nerve cells' development and neurotransmitter release and thus have a significant effect on learning.

P29

Changes in Thickness and Intelligence

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Neuroimaging research indicates that human intellectual ability is associated to brain structure including the thickness of the cerebral cortex. Most studies show that general intelligence is positively associated with cortical thickness in areas of association cortex allocated throughout both brain hemispheres. Changes in cortical thickness over time have been related to intelligence, but whether changes in cortical surface area are related to general cognitive functioning is unknown. At 10 years of age, more intelligent children have a slightly thinner cortex than children with a lower Intelligence quotient (IQ). This relationship becomes more pronounced with increasing age: with higher IQ, a faster thinning of the cortex is found over time. In the more intelligent young adults, this relationship reverses so that by the age of 42 a thicker cortex is associated with higher intelligence. In contrast, cortical surface is larger in more intelligent children at the age of 10. The cortical surface is still expanding, reaching its maximum area during adolescence. With higher IQ, cortical expansion is completed at a younger age; and once completed, surface area decreases at a higher rate. These findings suggest that intelligence may be more related to the magnitude and timing of changes in brain structure during development than to brain structure per se, and that the cortex is never completed but shows continuing intelligence-dependent development.

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