

Addiction: Current Updates

Kiran Mayee K*

Department of Pharmaceutical Analysis and Quality Assurance, Osmania University, Telangana, India

Review Article

Received: 02/02/2017
Accepted: 23/02/2017
Published: 28/02/2017

*For Correspondence

Kiran Mayee K, Department of
Pharmaceutical Analysis and
Quality Assurance, Osmania
University, Telangana, India, Tel:
8686672772.

E-mail:

kondabarthinilight@gmail.com

Keywords: Addiction, Drug
sensitization, Drug withdrawal,
Physical dependence,
Psychological dependence,
Substance use disorder

ABSTRACT

Addiction is a disorder of the brain's reward system which arises through transcriptional and epigenetic mechanisms and arises over time from chronically high levels of coverage to an addictive stimulus (e.g., morphine, cocaine, sexual intercourse, gambling, etc.).

Most drugs affect the brain's "reward circuit" by inundating it with the chemical messenger dopamine. This reward system controls the body's capability to feel pleasure and motivates a person to repeat behaviors needed to thrive, such as eating and spending time with loved ones. This overstimulation of the reward circuit causes the extremely pleasurable "high" that can lead people to take a drug again and again.

INTRODUCTION

Addiction is a disorder of the [brain](#)'s reward system which arises through transcriptional and epigenetic mechanisms and arises over time from chronically high levels of coverage to an addictive stimulus (e.g., morphine, cocaine, sexual intercourse, [gambling](#), etc.).

Most drugs affect the brain's "reward circuit" by inundating it with the chemical messenger dopamine. This reward system controls the body's capability to feel pleasure and motivates a person to repeat behaviors needed to thrive, such as eating and spending time with loved ones. This overstimulation of the reward circuit causes the extremely pleasurable "high" that can lead people to take a drug again and again ^[1-10].

[Open access journals](#) offer more prominence and approachability to the bibliophiles in gaining the required information. The ongoing researches all over the world, which are being revealed through open access journals, serve as the main source of information in numerous fields ^[11-15].

To enlighten quality research among the people, entity of physicians and research fellows bond to form a [society](#) or an organization. Major societies like [The American Society of Addiction Medicine](#) dedicated to increasing access and improving the quality of addiction treatment, educating physicians and the public, supporting research and

prevention, and promoting the appropriate role of physicians in the care of patients with addiction [16-20]. [The International Society of Addiction Medicine](#) targets:

- Development of knowledge about Addiction seen as a treatable disease
- Acknowledgment that physicians worldwide have a major role to play in its management
- Enrichment of the credibility of the physician's role
- Prominence of the importance of educational activities

[American Academy of Addiction Psychiatry](#) promotes evidence-based screening, valuation and management for substance use disorders and co-occurring mental disorders [21-25]. Society of Addiction Psychology endorses developments in research, professional teaching, and clinical practice within the extensive range of addictive behaviors including problematic use of alcohol, nicotine and other drugs and disorders involving gambling, eating, sexual behavior or spending [26-30].

Open Access literature plays a major role in demonstrating the information and modern researches across the earth. [Neuropsychiatry \(London\)](#) provides vital research on the advancements & clinical cases in the fields of Neurology & Psychiatry studies. [Addictive Behaviors, Therapy & Rehabilitation](#) is a global peer-reviewed academic journal, which circulated the papers across the world in the arenas of Addiction & Rehabilitation all over its Volume till date [31-40].

[Journal of Addiction Research & Therapy](#) covers the basic knowledge and provides cutting-edge research approaches in the expansion of updated addiction research [41-45]. [Journal of Depression and Anxiety](#) is a leading provider of information on addiction studies and novel methods of treatment followed. The above mentioned Open access journals on Addiction are the [peer-reviewed journals](#) that preserve the importance of the journal content, reviewer's accord and respective editor's authorization in order to publish an article. These journals confirms the barrier-free circulation of its content through online open access and thus benefits in improving the citations for authors and accomplishing respectable [journal impact factors](#) [46-52].

MOST PREVALENT ADDICTIONS ACROSS THE GLOBE

The most common addictions include Food Addiction, [drug Addiction](#) (Cannabinoid, Nicotine, Opioid), sexual addiction, [gambling](#) addiction, video game addiction and shopping addiction, Internet addiction, etc. According to 2016 statistics, about 22 million Americans require treatment for an addiction to drugs [53-60]. One-third of inpatient hospital costs and 20% of all deaths in the US every year are the outcome of untreated addictions and risky substance use. In spite of the enormous complete economic cost to society, which is larger than the cost of diabetes and all forms of cancer pooled, most doctors in the US lack the training to effectively address a drug addiction? [61-65].

Drug Addiction or substance use disorder, is a dependency on a legal or illegal drug or medication. Open access healthcare entity works to deliver information of innovative research in the addiction research [66-70]. Glance on few articles provide basic knowledge on Addiction studies. Article titled [Reduction of harmful consumption versus total abstinence in addiction treatment](#) written by Michael Musalek, explains drug consumption-oriented treatment goals, and, in particular, abstinence-oriented treatment goals, remain the treatment of choice in the field of addiction treatment research [71-76]. Other article on Drug addiction [Buprenorphine for opioid addiction](#) by Walter Ling, Larissa Mooney, Matthew Torrington provides the knowledge on Buprenorphine & its research. Buprenorphine is a partial opioid agonist at the m receptor and is used as a daily-dose sublingual tablet or filmstrip for managing opioid addiction. Recent article on treatment of Drug addiction include [lbudilast for the treatment of drug addiction and other neurological conditions](#), by Kirk W Johnson, Kazuko Matsuda & Yuichi Iwaki [77-80].

Internet addiction disorder, more generally called problematic Internet use (PIU), refers to extreme Internet use that interferes with daily life. In a manuscript entitled [Internet addiction update: diagnostic criteria, assessment and](#)

[prevalence](#) authored by Roberto Poli provides review the internet addiction research with regard to diagnostic criteria, tools for assessment and prevalence in general adult population [81,82].

Apart from the articles, presentation at conferences, symposiums, workshops provides improved exposure to health information and innovative technologies that are being invented in the present generation. [5th International Conference and Exhibition on Addiction Research & Therapy held at Atlanta, USA](#) presented the Unifying the new discoveries and advanced approaches toward Addiction. The conference highlights included Addiction treatment and rehabilitation, Drug addiction and neurotoxicology, Alcoholism and Substance Abuse, Addictions and addictives, Advanced Research Techniques in Addiction Treatment, etc [83-87].

Other [Conferences in 2017](#) with more perspectives in Addiction research are:

[8th International Conference and Exhibition on Addiction Research & Therapy](#) which is going to be held during November 13-15, 2017 in Las Vegas, USA, [7th International Conference on Addictive Disorders and Alcoholism](#) during July 03-04, 2017 at Kuala Lumpur, Malaysia, "[6th World Congress on Addiction Disorder and Addiction Therapy](#)" which is going to be held during August 29-31, 2017 in Prague, Czech republic, etc [88-90].

NOVEL ADDICTION TREATMENT RESEARCH

Types of [Addiction Therapy](#)

[Drug therapy](#) (For opioid addiction, for tobacco addiction, for alcoholism, for video gaming addiction).

[Psychotherapy](#) (Cognitive Behavioral Therapy (CBT), Dialectical Behavioral Therapy (DBT), Motivational Interviewing, Group Therapy, Family & Couples Therapy).

Other Treatment Options (Adventure therapy, Art therapy, Equine therapy, Eye Movement Desensitization and Reprocessing (EMDR), Motivational incentives, Recreational therapy, Wilderness therapy).

Research by the Substance Abuse and Mental Health Services Administration (SAMHSA), National Institute of Drug Abuse (NIDA) and National Institute of Mental Health (NIMH) shows that comprehensive, integrated care significantly increases long-term recovery and quality of life success rates. Therefore, medical and psychiatric assessments and supplements are offered throughout the management stay [91-100].

CONCLUSION

Addiction disorder is most prominent and prevalent in USA. Many innovative treatment modes have been developed to reduce the disturbance in life style & mortality due to addiction [101,102]. Overall this information can be viewed in open access research literature which reveals the new techniques and innovative researches taking place in the research field. Many professionals share their views; suggestions through the [open access](#) literature which can be accessed by all in order attain knowledge on addiction.

REFERENCES

1. Berkun R, et al. Opioid Addiction: Addressing the Crisis of a National Opioid Overdose Epidemic. J Pain Relief. 2016;5:271.
2. Johnston SA. Sexual Addiction or Simply Cheating? J Forensic Res. 2017;8:368.
3. Dai Q. Gender, Grade and Personality Differences in Internet Addiction and Positive Psychological Health among Chinese College Students. Primary Health Care. 2016;6:248.
4. Johnson SA. Sexual Addiction or Rape. J Forensic Res. 2016;7:353.
5. Berkun R, et al. Opioid Addiction: Addressing the Crisis of a National Opioid Overdose Epidemic. J Pain Relief. 2016;5:271.
6. Eldahshan OA, et al. Medicinal Plants and Addiction Treatment. Med Aromat Plants. 2016;5: 260.

7. Busari AO. Academic Stress and Internet Addiction among Adolescents: Solution Focused Social Interest Programme as Treatment Option. *J Ment Disord Treat.* 2016;2:114.
8. Wani MA and Sankar R. Impact of Drug Addiction on Mental Health. *J Ment Disord Treat.* 2016;2:110.
9. Basak AK and Chatterjee T. An Insight into the Cellular Mechanisms of Addiction to Psychostimulants. *J Depress Anxiety.* 2016;5: 238.
10. Mesrahi T, et al. The Effect of Cognitive-Behavioral Group Therapy on Decrease in Addiction Relapse in Randomly Assigned Addicts under Drug Therapy: A Statistical Analysis. *Int J Neurorehabilitation.* 2016;3:214.
11. Appavu R. Nanovaccine Development for Cocaine Addiction: Immune Response and Brain Behaviour. *J Vaccines Vaccin.* 2016;7:313.
12. Rose JE, et al. The Sensory Impact of Nicotine on Noradrenergic and Dopaminergic Neurons of the Nicotine Reward - Addiction Neurocircuitry. *J Addict Res Ther.* 2016;7:274.
13. McGee MD. Contemporary Formulation-based Assessment and Treatment: A Framework for Clinical Discourse. *J Psychol Psychother.* 2016;6:259.
14. Venkiteswaran K, et al. Commentary on - Human Embryonic Retinal Pigment Epithelial (Rpe) Cell Transplants for Chronic Refractory Cocaine Addiction. *Health Care: Current Reviews.* 2016;4:165.
15. Cunningham PM. The Use of Sobriety Nutritional Therapy in the Treatment of Opioid Addiction. *J Addict Res Ther.* 2016;7:282.
16. Sunder KR. Why Does Mindfulness Create Resilience in Patients with PTSD and Addictions: A Summary of 3,000 Years of Wisdom and Current Evidence Based Science? *J Addict Res Ther.* 2016;7:e134.
17. Alduaij MY and Al- Amari. The Attitude of High School Students in Kuwait towards Internet Addiction and Its Effect on their Health. *Int J Adv Technol.* 2016;7: 154.
18. Ayu AP, et al. Illness Perceptions of Addiction and Substance Use Patterns among Psychology Students. *J Child Adolesc Behav.* 2016;4:279.
19. Amiri M, et al. Factors Affecting Tendency for Drug Abuse in People Attending Addiction Treatment Centres: A Quantitative Content Analysis. *J Addict Res Ther.* 2016;7:270.
20. Attia TH. Behavioral Addiction in Children. *Int J Sch Cog Psychol.* 2016;3:e107.
21. Koppel JDS. Evidence-based Drug Crime Policy: Looking beyond the Moral and Medical to a Multi-level Model of Addiction. *J Civil Legal Sci.* 2016;5:175.
22. Hiremath P. Alcohol Addiction among Nurses. *J Comm Pub Health Nursing.* 2015;1:e106.
23. Patrono E. Epigenetic Mechanisms on Food Addiction. *J Neuropsychopharmacol Mental Health.* 2015;1:e102.
24. Vignoli T, et al. Neurobiological Evidence in Alcohol Addiction Can Help Pharmacological Treatment Personalization. *J Neuropsychopharmacol Mental Health.* 2015;1:e103.
25. Peddicord AN, et al. A Comparison of Suboxone and Methadone in the Treatment of Opiate Addiction. *J Addict Res Ther* 6:248.
26. Missaoui SG, et al. Prevalence and Consequences of Internet Addiction in a Cohort of Tunisian Adolescents: A Pilot Study. *J Child Adolesc Behav.* 2015;3:257.
27. Ruan X and Kaye AD. The Debate on Urine Drug Testing in Pain and Addiction Management: Coverage or Non-Coverage? *J Pain Relief.* 2015;4:188.
28. Adermark L. Astrocyte Function in Alcohol Reward and Addiction. *J Alcohol Drug Depend.* 2015;3:e123.
29. Akoury D. Epigenetics Effects of Stress Influence the Genomics, Proteomics, Metabolomics of Addiction and Cancer Pathways. *Adv Genet Eng.* 2015;4: 122.
30. Marahatta SB, et al. Internet Addiction and Associated Factors among Health Sciences Students in Nepal. *J Community Med Health Educ.* 2015;5:362.
31. Leonardo Gucciardo P and Roegiers L. Zero Tolerance? About Minor Addictions during Pregnancy. *J Yoga Phys Ther.* 2015;5:205.
32. Mathis WS. The Neuroscientific Basis for Aesthetic Preference as an Intervention for Drug Craving Associated with Addiction. *J Addict Res Ther.* 2015;6:213.
33. Aslam N. Drug Addiction, Criminality and Birth Order. *J Alcohol Drug Depend.* 2014;3:191.
34. Rajajeyakumar M. Impact of Early Behavioral Modification in Food Addiction is Effective Method of Treating Obesity?. *J Obes Weight Loss Ther.* 2015;5:e116.

35. Bonnet U and Scherbaum N. Striking Similarities between Clinical and Biological Properties of Ketamine and Ethanol: Linking Antidepressant-After Effect and Burgeoning Addiction?. *J Alcohol Drug Depend.* 2015;3:198.
36. Kınık MF, et al. Addiction of Oxybutynin: An Adolescent Case Report. *J Addict Res Ther.* 2015;6:228.
37. Griffiths MD and Pontes HM. Internet Addiction Disorder and Internet Gaming Disorder are Not the Same. *J Addict Res Ther.* 2014;5:e124.
38. Spas JJ, et al. Dynamic Baseline Variables Predict Treatment Outcomes for Addiction Generally, and Smoking in Particular. *J Addict Res Ther.* 2014;5:e125.
39. Hahn MK, et al. Low-Dose, Off-Label Quetiapine Use, Metabolic Syndrome and Impaired Fasting Glucose in an Elderly Man: A Case Report. *Brain Disord Ther.* 2015;4:149.
40. Assailly JP. An Integrated Model of Addiction: When Will We Integrate Biological and Affective Processes? *J Psychol Psychother.* 2015;5:166.
41. Mpora OB, et al. Glucose Addiction and Glycemic Control in Type 2 Diabetes Mellitus: A Case Report. *Endocrinol Metab Syndr.* 2014;3:150.
42. Soron TR. Successful Management of Facebook Addiction in Bangladesh: A Case Report. *J Psychiatry.* 2015;18:247.
43. Tracy K, et al. Treatment Process and Participant Characteristic Predictors of Substance Use Outcome in Mentorship for Addiction Problems (MAP). *J Alcohol Drug Depend.* 2014;2:171.
44. Giannini M and Scabia A. Workaholism: An Addiction or a Quality to be Appreciated? *J Addict Res Ther.* 2014;5:187.
45. Marie-Josée Fleury and Serge Brochu. Addictions with Co-occurring Problems: Statistics and Challenges. *J Addict Res Ther.* 2014;S10:e001.
46. Horton A. Addiction. *J Alcohol Drug Depend.* 2014;2:173.
47. Rudolph RL, et al. Young Female Users of Social Media and Internet Addiction. *J Mass Communicat Journalism.* 2014;4: 177.
48. Fabian LA, et al. Pain Assessment and Treatment Guidelines across Addiction Status. *J Addict Res Ther.* 2014;5:182.
49. Matalí-Costa J, et al. Social Isolation and the “Sheltered” Profile in Adolescents with Internet Addiction. *J Child Adolesc Behav.* 2014;2:139.
50. Wijngaarden-Cremers PJM, et al. Addiction and Autism: A Remarkable Comorbidity?. *J Alcohol Drug Depend.* 2014;2:170.
51. Storie M. Recovery-Oriented Concepts, Values and Practices are Widely Accepted in the Addiction Profession, but Gaps Still Remain. *J Alcohol Drug Depend.* 2014;2:165.
52. Platt A. The Language of Addiction. *J Alcohol Drug Depend.* 2014;2:e117.
53. Canales JJ. The Trace of Non-classical Biogenic Amines: A New Road to Addiction Recovery. *J Addict Res Ther.* 2013;4:166.
54. Griffiths MD. Social Networking Addiction: Emerging Themes and Issues. *J Addict Res Ther.* 2013;4:e118.
55. Amen-Ra NS. The Amen Anti-Addiction Intervention: Theoretical Foundations of an Alternative Protocol for the Prevention and Treatment of Addiction. *Altern Integr Med.* 2014;3:148.
56. Shonin E, et al. Mindfulness as a Treatment for Behavioural Addiction. *J Addict Res Ther.* 2014;5:e122.
57. Vidyachathoth, et al. Correlation between Affect and Internet Addiction in Undergraduate Medical Students in Mangalore. *J Addict Res Ther.* 2014;5:175.
58. Sudraba V. The Perception of Various Physician Specialists on Addiction Treatment Methods in Latvia. *J Alcohol Drug Depend.* 2014;2:149.
59. Blum K, et al. Clinical Practices that can Combat Endemic Legal Opioid Dependence: Genetic Addiction Risk Score (GARS)[™], KB220Z[™], Comprehensive Analysis of Reported Drugs (CARD) and Electrotherapy. *J Genet Syndr Gene Ther.* 2013;4:e122.
60. McDonough M. Addiction, Co-morbidity and Chronic Disease Management. *J Alcoholism Drug Depend.* 2013;2:e108.
61. Blum K and Badgaiyan RD. Addiction Research and Therapy in the 21st Century: Providing a Forum for Evidence -Based Addiction Medicine. *J Addict Res Ther.* 2013;4:e117.
62. Boules M, et al. Novel Therapy for Nicotine Addiction in Alcohol Dependent Rats. *J Addict Res Ther.* 2013;4:161.

63. Blum K, et al. Genospirituality: Our Beliefs, Our Genomes, and Addictions. *J Addict Res Ther.* 2013;4:162.
64. Blum K, et al. Coupling Genetic Addiction Risk Score (GARS) with Electrotherapy: Fighting Iatrogenic Opioid Dependence. *J Addict Res Ther.* 2013;4:163.
65. Downs BW, et al. Have We Hatched the Addiction Egg: Reward Deficiency Syndrome Solution System™. *J Genet Syndr Gene Ther.* 2013;4:136.
66. Papadakos PJ. The Rise of Electronic Distraction in Health Care is Addiction to Devices Contributing. *J Anesthe Clinic Res.* 2013;4:e112.
67. Chessor D. An Effectiveness of a Group Residential Intervention Program for Young Men with Drug and Alcohol Addiction. *J Addict Res Ther.* 2013;4:144.
68. Pezoa-Jares RE, et al. Internet Addiction: A Review. *J Addict Res Ther.* 2012;S6:004.
69. Kim Penberthy J. Mindfulness Based Interventions for Addictions: What is Next? *J Addict Res Ther.* 2012;3:e116.
70. Ryabini AE. Evolutionary Perspective on Animal Models of Addiction: Diverse Models are Welcome. *J Addict Res Ther.* 2012;3:e113.
71. Coppola M and Mondola R. Bromo-DragonFly: Chemistry, Pharmacology and Toxicology of a Benzodifuran Derivative Producing LSD-Like Effects. *J Addict Res Ther.* 2012;3:133.
72. Coppola M and Mondola R. Is the 5-iodo-2-aminoindan (5-IAI) the New MDMA? *J Addict Res Ther.* 2012;3:134.
73. Hassan BAR. Negative Effects of Addiction. *Pharmaceut Reg Affairs.* 2012;1:e113.
74. Grigore AD. Chocolate Addiction Causes Decreased Muscle Endurance and Apathy in a Healthy Young Adult Male: A Case Report. *J Clin Case Rep.* 2012;2:209.
75. Schütz CG. DSM V, RDoC and Diagnostic Approaches in Addiction Research and Therapy. *J Addict Res Ther.* 2012;3:e107.
76. Carpenter CL. Food Addiction: Cause or Consequence of Obesity. *J Nutr Food Sci.* 2012;2:e110.
77. Sandy PT and Mgtushini T. Integrating Religiosity into Motivational Interviewing and Nicotine Replacement Therapy for a Patient with Schizophrenia and Nicotine Addiction: Lessons from a Mental Health Service. *J Addict Res Ther.* 2012;3:127.
78. Deady M, et al. Social Influence, Addictions and the Internet: The Potential of Web 2.0 Technologies in Enhancing Treatment for Alcohol/Other Drug use Problems. *J Addict Res Ther.* 2012;S8:002.
79. Wöfling K, et al. Construction of a Standardized Clinical Interview to Assess Internet addiction: First Findings Regarding the Usefulness of AICA-C. *J Addict Res Ther.* 2012;S6:003.
80. Liu PK. Toward In Vivo Gene Transcript Targeting MRI in Addiction Research and Therapy. *J Addict Res Ther.* 2012;S3:e001.
81. Blum K, et al. Neuro-Genetics of Reward Deficiency Syndrome (Rds) as the Root Cause of "Addiction Transfer": A New Phenomena Common after Bariatric Surgery. *J Genet Syndr Gene Ther.* 2011;S2:001.
82. Petit A, et al. Methamphetamine Addiction: A Review of the Literature. *J Addict Res Ther.* 2012;S1:006.
83. Sato N, et al. Assessment Scales for Nicotine Addiction. *J Addict Res Ther.* 2012;S1:008.
84. Mohammadpoorasl A, et al. Addiction Relapse and Its Predictors: A Prospective Study. *J Addict Res Ther.* 2012;3:122.
85. Kuss DJ. Substance and Behavioral Addictions: Beyond Dependence. *J Addict Res Ther.* 2012;S6:e001.
86. Nechifor M. Magnesium and Zinc Involvement in Tobacco Addiction. *J Addict Res Ther.* 2012;S2:005.
87. Haile CN, et al. Methamphetamine Cured my Cocaine Addiction. *J Addict Res Ther.* 2010;1:103.
88. Doukas N and Cullen J. Addiction Counselors in Recovery: Perceived Barriers in the Workplace. *J Addict Res Ther.* 2011;2:112.
89. Demarie D, et al. Long QT Syndrome (LQTS) in Opiate, Cocaine and Alcohol Addiction, with HIV+ / HCV+ Co-Infection in Antiretroviral Therapy (HAART). *J Addict Res Ther.* 2011;2:114.
90. Ash BL and Djouma E. Galanin Receptors as Pharmacological Targets in the Treatment of Addiction. *J Addict Res Ther.* 2011;S4:003.
91. Dani JA, et al. Neurophysiology of Nicotine Addiction. *J Addict Res Ther.* 2011;S1:001.
92. Baldwin PR, et al. The Role of the Habenula in Nicotine Addiction. *J Addict Res Ther.* 2011;S1:002.
93. Doukas N and Cullen J. Recovered Addicts Working in the Addiction Field: How do Substance Abuse Treatment Agencies Work with Substance Abuse Relapse among Addiction Counsellors who are in Recovery? *J Addict Res Ther.* 2010;2:106.

94. Torban MN, et al. Practices and Attitudes of Addiction Treatment Providers in the Russian Federation. *J Addict Res Ther.* 2011;2:104.
95. Monyakane MMME. Irrationality in South African Crime of Possession and Use of Nyaope and Its Possible Influences on the Missing Health Oriented State Interventions for Nyaope Addicts. *J Addict Behav Ther Rehabil.* 2016;5:4.
96. Sumanasekera WK and Spio K. Cannabis (Marijuana): Psychoactive Properties, Addiction, Therapeutic Uses, and Toxicity. *J Addict Behav Ther Rehabil.* 2016;5:3.
97. Friebel AS and Kapoor H. Internet Addiction: A Multi-Faceted Disorder. *J Addict Behav Ther Rehabil.* 2016;5:1.
98. Sun C and Koji Lum J. When to Survey? Influences of a 24-hour Internet Abstinence on Self-evaluations of Internet Overuse Assessed using Internet Addiction Test (IAT). *Int J Ment Health Psychiatry.* 2016;2:1.
99. Karamitsa AT and Skordilis EK. Internet Addiction of Greek Adolescent High School Students: Validity and Reliability Evidence and Relationship to Depressive Symptoms and Physical Activity. *J Addict Behav Ther Rehabil.* 2015;4:4.
100. Voggeneder K, et al. Aggression and Emptiness: Case Study of a Young Man Coping with Substance Abuse. *J Addict Behav Ther Rehabil.* 2015;4:3.
101. Eichenbaum A, et al. The Role of Game Genres and the Development of Internet Gaming Disorder in School-Aged Children. *J Addict Behav Ther Rehabil.* 2015;4:3.
102. da Silva TL. Compulsive Buying: Psychopathological Condition, Coping Strategy or Sociocultural Phenomenon? A Review. *J Addict Behav Ther Rehabil.* 2015;4:2.