



شبكة المعلومات الجامعية  
التوثيق الإلكتروني والميكروفيلم

# بسم الله الرحمن الرحيم



**MONA MAGHRABY**



شبكة المعلومات الجامعية  
التوثيق الإلكتروني والميكرو فيلم



# شبكة المعلومات الجامعية التوثيق الإلكتروني والميكرو فيلم



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# جامعة عين شمس

## التوثيق الإلكتروني والميكروفيلم

### قسم

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علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



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**MONA MAGHRABY**

# **Addictive Behaviors (Gambling-Internet) in Patients with Psychoactive Substance Use disorder**

*Thesis*

Submitted for partial fulfillment of M.D. degree  
in Psychiatry

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

# قالوا

سبّحانك لا علم لنا  
إلا ما علمتنا إنك أنت  
العليم العظيم

صدق الله العظيم

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## List of Abbreviations

<i>Abbr.</i>	<i>Full-term</i>
<b>ADHD</b>	: Attention Deficit Hyperkinetic Disorder
<b>AMHH</b>	: Abbassia Mental Health Hospital
<b>APA</b>	: The American Psychiatric Association
<b>ASI</b>	: Addiction Severity Index
<b>BNST</b>	: Bed Nucleus Of The Stria Terminalis
<b>CB1,2</b>	: Cannabinoid-Type 1,2
<b>CBT</b>	: Cognitive Behavioral Therapy
<b>CREB</b>	: Camp Response Element-Binding Protein
<b>CRF</b>	: Corticotrophin-Releasing Factor
<b>CSB</b>	: Compulsive Sexual Behavior
<b>DA</b>	: Dopamine
<b>DLPFC</b>	: Dorsolateral Prefrontal Cortex
<b>DSM-III-R</b>	: Diagnostic And Statistical Manual Of Mental Disorders-3 <sup>rd</sup> -Revised
<b>DSM-IV-R</b>	: Diagnostic And Statistical Manual Of Mental Disorders-4 <sup>th</sup> -Revised
<b>DSM-5</b>	: Diagnostic And Statistical Manual Of Mental Disorders-5
<b>ECBs</b>	: Endocannabinoids
<b>ERN</b>	: Event-Related Negativity
<b>FMRI</b>	: Functional Magnetic Resonance Imaging
<b>GA</b>	: Gambler's Anonymous



<b>GABA</b>	: Gamma Amino Butyric Acid
<b>GAF</b>	: Global Assessment Of Function
<b>GAT</b>	: Gambling Addiction Test
<b>GD</b>	: Gambling Disorder
<b>HS</b>	: Highly significant
<b>ICD-10</b>	: The Tenth Revision Of The International Classification Of Diseases And Health Problems
<b>IA</b>	: Internet Addiction
<b>IAT</b>	: Internet Addiction Test
<b>IGD</b>	: Internet Gaming Disorder
<b>IPA</b>	: Internet Pornography Addiction
<b>I-RISA</b>	: Impaired-Response Inhibition And Salience Attribution
<b>MAO</b>	: Monoamine Oxidase
<b>M-CPP</b>	: Meta-Chlorophenylpiperazine
<b>NAcc</b>	: Nucleus Accumbens
<b>NE</b>	: Norepinephrine
<b>NIH</b>	: National Institutes Of Health
<b>NMDA</b>	: N-Methyl-D-Aspartate
<b>NS</b>	: Non-significant
<b>OCDs</b>	: Obsessive-Compulsive Disorders
<b>PC</b>	: Personal Computer
<b>PCP</b>	: Phencyclidine
<b>PET</b>	: Positron Emission Tomography

<b>PFC</b>	: Prefrontal Cortex
<b>POMC</b>	: Pro-Opiomelanocortin
<b>PPT/LDT</b>	: Peduncular Pontine Tegmentum/Lateral Dorsal Tegmentum.
<b>RDS</b>	: Reward Deficiency Syndrome
<b>SIA</b>	: Specific Internet Addiction
<b>SIG</b>	: Significant
<b>SOGS</b>	: South Oaks Gambling Screen
<b>SPECT</b>	: Single Photon Emission Computed Tomography
<b>SPIU</b>	: Specific Problematic Internet Use
<b>SPSS</b>	: Statistical Package For The Social Sciences
<b>SSRIs</b>	: Selective Serotonin Reuptake Inhibitors
<b>SUD</b>	: Substance Use Disorder
<b>VHS</b>	: Very highly significant
<b>VMPFC</b>	: Ventromedial Prefrontal Cortex
<b>VP</b>	: Ventral Pallidum
<b>MTA</b>	: Ventral Tegmental Area
<b>5-HIAA</b>	: 5-Hydroxyindoleacetic Acid
<b>5-HT</b>	: Serotonin (5-Hydroxytryptamine)

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## Introduction

The American Society of Addiction Medicine (ASAM) expanded their definition of addiction to include both behaviors and substances (*Love et al., 2016*).

Addiction professionals and the public are recognizing that certain nonsubstance behaviors—such as gambling, Internet use, video-game playing, sex, eating, and shopping—bear resemblance to alcohol and drug dependence. Growing evidence suggests that these behaviors warrant consideration as nonsubstance or “behavioral” addictions and has led to the newly introduced diagnostic category “Substance-Related and Addictive Disorders” in DSM-5. Current evidence points to overlaps and differences between behavioral and substance-related addictions in phenomenology, epidemiology, comorbidity, neurobiological mechanisms, genetic contributions, responses to treatments, and prevention efforts (*Yau and Potenza, 2016*).

Although disordered gambling is the only best arguably -studied behavioral addiction to date in the main section of DSM-5, several other conditions have been included in Section III—the part of DSM-5 in which conditions that require further study are located. In particular, the DSM-5 work group has flagged “Internet gaming disorder” as a possible candidate for future inclusion in the addictions category (*Potenza, 2014*).