

THE NEUROSCIENCE OF INTERNET AND COMPUTER GAME ADDICTION - WHAT DO WE KNOW ABOUT WHAT IS GOING ON INSIDE OUR PATIENTS BRAINS?

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Internet and Computer Game Addiction will in the future be included in the diagnostic manuals for mental disorders (Internet Use Disorder, www.dsm5.org). During the past decades research in the epidemiology, risk factors and the clinical picture of IUD has emerged and convincingly contributed to the development of sound diagnostic criteria. However, there are two major areas where evidence of high quality is sparse. These are on the one hand the effectiveness and efficacy of tailored therapeutic interventions and on the other hand the neuroscientific underpinnings of Internet and Computer Game Addiction. The latter is strongly represented in the Asian Countries, where prevalence rates for the disorder are higher compared to rates in European and American samples. To bundle the knowledge and to further help strengthening the nosology of Internet and Computer Game addiction it is necessary to keep up to date on the current research findings investigating different aspects probably involved in Internet and Computer Game Addiction. These are for example impulse control, response inhibition, cue-reactivity and reward processing, however also genetic markers and general research in the neurobiological effects of Computer Game and Internet Use. For this purpose neuroscientific studies on Internet and Computer Game Use as well as Internet and Computer Game Addiction were systematically searched. The findings are presented with the aim to identify research areas in which investigations are necessary to complement existing data and to develop a sound model for the neurobiology of Internet and Computer Game Addiction.