

# Cognitive Neural Mechanisms and Psychological Behavioral Interventions for Internet Gaming Disorder

**Date:** 21 January 2025 (Tue)

**Time:** 10:30-11:30

**Venue:** E33-2036, Faculty of Education

**Language:** Mandarin

**Registration:** Online Registration (<https://go.um.edu.mo/unb550zn> or )

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## **Speaker:**

Prof. Jintao ZHANG, Professor at the State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, and Ph.D. supervisor. A recipient of the Ministry of Education's Young Changjiang Scholar award, his recent research focuses on the behavioral and neural mechanisms underlying the development of adolescent internet gaming disorder (IGD), as well as the effects and mechanisms of psychological-behavioral interventions and transcranial electrical stimulation in addressing IGD.

Prof. Zhang has led and participated in several major projects funded by the National Natural Science Foundation of China, the Ministry of Science and Technology, the Academy of Military Sciences, and the Ministry of Education. He serves as an editorial board member for the international journal *Current Addiction Reports* and is a director or committee member for multiple academic societies. He has published over 90 research articles and reports in both Chinese and international academic journals, including *Brain*, *Journal of the American Academy of Child & Adolescent Psychiatry*, *The American Journal of Psychiatry*, *Computers in Human Behavior*, *Neuroscience & Biobehavioral Reviews*, and etc.

## **Abstract:**

Internet addiction among children and adolescents, particularly internet gaming disorder, has become a global public health issue, drawing significant attention from governments, academic communities, and society at large. With the growing accessibility of function magnetic resonance imaging (fMRI) technology and its integration with cognitive-behavioral experiments, researchers have identified a range of behavioral and cognitive neural abnormalities in individuals with internet gaming disorder. These abnormalities are strikingly similar to those observed in substance addiction and gambling disorder.

Building upon these foundational studies, this report will focus on the effects and underlying cognitive neural mechanisms of psychological and behavioral interventions for internet gaming disorder. Specifically, it will discuss interventions such as integrated craving behavioral intervention (including cognitive-behavioral therapy and mindfulness meditation training) and emotional bias correction training intervention. The findings aim to provide guidance for future research directions in this field.