Withdrawal Symptoms in Gaming Disorder: Experimental Longitudinal Studies Using the Experience Sampling Method (ESM)

Video games are one of the most popular forms of entertainment worldwide, with over 3.3 billion players across the world. While gaming can offer numerous benefits, such as skill training, educational development, and improved cognitive and social functioning, some individuals develop problematic gaming patterns characterized by loss of control. This phenomenon is officially recognized in diagnostic classifications as gaming disorder. Research shows that the prevalence of this issue is relatively high and intensified significantly during the COVID-19 pandemic.

One of the key manifestations of any addiction is the **withdrawal syndrome**, which refers to unpleasant physical or psychological reactions that occur when an addictive behavior is reduced or stopped. In the case of gaming disorder, this may include irritability, anxiety, or low mood after discontinuing play. These symptoms can be so distressing that individuals return to gaming to relieve them. Despite its clinical relevance, scientific understanding of withdrawal in gaming is still limited. Existing studies do not provide consistent answers regarding what exactly withdrawal symptoms are, how long they last, or what helps alleviate them.

The **main goal of this project is to experimentally investigate withdrawal symptoms in adult highly involved gamers using an innovative method – the Experience Sampling Method (ESM)**. Participants – individuals who game at least 20 hours per week – will complete short, real-time surveys on aspects such as mood, stress levels, and gaming urges. This approach allows for capturing the dynamics of withdrawal symptoms in everyday life. The project involves two longitudinal field experiments using different gaming reduction strategies, along with follow-up assessments several months later. This design will make it possible to observe not only the presence of symptoms but also their trajectory, reversibility, and impact on recovery.

The studies planned in this project are significant for several reasons. First, they will provide the first detailed description of the course of withdrawal symptoms in gaming disorder. The research will also help identify factors that intensify or mitigate withdrawal symptoms. Second, the project carries important clinical and social implications. A better understanding of withdrawal symptoms will enable more effective support for individuals struggling with problematic gaming. The findings may help psychologists and therapists improve diagnostic procedures and create more effective therapeutic strategies to help individuals cope with “gaming cravings” during the early stages of abstinence. Ultimately, the integration of findings from this project will enrich scientific knowledge about behavioral addictions and contribute to the advancement of clinical psychology - particularly in the area of prevention and treatment of emerging digital-era disorders.