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Sommario/riassunto	Although pathological gambling is a prevalent disease, its neurobiological and psychological underpinnings are not well characterized. Various lines of research suggest aberrant dopaminergic function may lead to pathological gambling. For example, human imaging studies have revealed dopaminergic activation coinciding with the performance of gambling-related tasks. Furthermore, dopamine D2-type receptor deficiency facilitates gambling behaviors and dopamine receptor agonist treatments for Parkinson's disease have been shown to increase patient vulnerability to gambling. Pathological gambling is often co-morbid with drug addictions, and exposure to drugs of abuse has been shown to enhance motivation to gamble. The

activation of midbrain dopamine neurons, as well as their terminal projection fields, is involved with the development and maintenance of various addictions. Importantly, recent articles have demonstrated that repeated exposure to conditions of gambling-like uncertain reinforcement lead to enhanced drive to seek reward, potentially through increasing the incentive motivational value of conditioned cues. Signaling molecules other than dopamine may also influence reward-seeking behaviors in pathological gamblers. For example, stress-related alterations in glucocorticoid signaling may effect decision making and influence gambling behavior. Together, these findings suggest common pathways exist that mediate gambling, drug dependence, stress, and movement disorders, and that cross-reactivity between these ailments may potentiate disease symptomology. The goal of this Research Topic is to further our understanding of the neurobiological mechanisms underlying the development of pathological gambling.

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