

Musical pleasure and its influence on human memory

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Music represents one of the most rewarding stimuli throughout our lives. Recent research has shown that musical pleasurable responses rely on the activity of the reward mesolimbic system, with a main role played by dopaminergic transmission in regulating music hedonic and motivational responses.

Music, thanks to its strong evocative power, is also considered a powerful mnemonic tool for both normal and clinical populations. However, the mechanisms underpinning the music-driven benefits on memory remain unclear. Crucially, the dopaminergic system transmission also plays a role in memory formation: neuroscience research has shown that stimuli triggering dopamine release (such as money) could result in long-term memory improvements via the mesolimbic-hippocampal loop.

Through behavioural and neural evidence obtained in online, laboratory and real-life studies, this talk will explore the hypothesis that dopamine-dependent music pleasurable responses can enhance memory performance, thus opening potential new avenues for pedagogical and clinical applications.