

**A literature review of psilocybin administration in anxious mice.
Highlighting the need for a more fundamental understanding of the cellular and molecular
dynamics emerging from psychedelic experiences, for the treatment of anxiety.**

Layman Summary

The current state of psychedelic research is still in its preliminary stage, and the effects observed thus far are largely dependent on the experimental protocols and procedures employed. Despite the major challenges to standardization and translational applicability, animal biobehavioural research with psilocybin has provided critical insights into the potential role of this compound as an alternative solution for the treatment of anxiety. Although animal models have limitations, they allow for the study of the mechanisms underlying specific molecular, neurobiological, physiological, and behavioural dynamics, thereby facilitating the development of therapeutic responses to pharmacological agents. However, the efficacy of psychedelics in treating anxiety depends not only on the intensity of the experience but also on the quality of the subjective experience. Consequently, an integrative framework that combines the acute effects of psilocybin within a psychotherapeutic context must be developed. Such a framework should be based on the results of animal and human research, and its effectiveness should be evaluated by clinicians in clinical practice to facilitate an integrative laboratory-to-clinic and vice versa dialogue and approach. Although natural substances with "mind-bending" properties have played a critical role in human development throughout history, researchers must exercise caution when using these substances in clinical settings to ensure their safety and minimize any adverse social consequences.