

# Reconciling myths and misconceptions about hypnosis with scientific evidence<sup>†</sup>

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## SUMMARY

This issue of *BJPsych Advances* includes an article on the use of hypnotherapy in psychiatric practice. The article contains a number of errors and misconceptions regarding the characteristics and practice of hypnosis that we address in this commentary.

## KEYWORDS

Hypnosis; hypnotherapy; psychiatry; mental healthcare; individual psychotherapy.

Hypnosis remains among the most widely misrepresented practices in psychology and allied disciplines (Lynn 2020). In particular, there is a pronounced discrepancy between how hypnosis is used in clinical settings and understood within contemporary scientific research and how it is portrayed in popular culture. Although much of the blame falls on members of the media, who often exaggerate, misinterpret or sensationalise certain features of hypnosis, many misconceptions and outright myths about hypnosis continue to be disseminated by clinicians and hypnosis educators. Although Chan et al (2023, this issue) have nicely highlighted the clinical value of hypnosis for several psychiatric conditions and provided an accurate account of recent research on the neurophysiology of hypnosis, they continue the unfortunate practice of propagating long-discredited myths about hypnosis. Spreading misinformation about hypnosis drives non-scientific and inaccurate beliefs about the practice and pushes the field away from the evidence base. Doing so can have potential detrimental consequences regarding how clinicians apply hypnosis, including communicating myths about it to patients. To ensure that psychiatrists and other mental health professionals are well-informed about hypnosis, here we correct multiple errors in Chan et al's account of hypnosis and its characteristics.

## What hypnosis is not

Chan et al's account incorrectly presents hypnosis as a 'special state' where defence mechanisms are

reduced and as a 'unique state of physical relaxation and conscious unconsciousness' that allows us to 'enter our subconscious depths through hypnosis'. The proposals that responses to hypnotic suggestions are facilitated by these cognitive processes amount to clinical anecdotes (defence mechanisms) or hypotheses that have not yet been rigorously tested (unconscious intentions; Dienes 2007). Moreover, there is no robust neurophysiological evidence to demonstrate that hypnosis is a special or unique state (Terhune 2017). Similarly, relaxation is not necessary to experience or use hypnosis (Banyai 1976). Aside from being a contradiction in terms, 'conscious unconsciousness' is an inaccurate depiction of hypnosis, because even the most highly suggestible individuals remain fully conscious and cognisant of their surroundings when responding to hypnotic suggestions. It is more parsimonious to consider hypnosis as a set of procedures in which verbal suggestions are used to modulate awareness, perception and cognition (Terhune 2014), rather than to unnecessarily invoke 'special states'.

Chan et al make further mistakes when describing the principal features of hypnosis. They state that hypnosis is characterised by increased suggestibility; however, 54% participants are equally, or less, suggestible following a hypnotic induction (Brafman 1999). They highlight that in hypnosis, participants display 'blind obedience' to the clinician, such that participants respond to suggestions 'irresistibly'; this is patently false – there is no systematic evidence that individuals lose control over their actions during hypnosis – and reinforces media misconceptions that hypnosis is something being *done to you* and that hypnosis can be used to control someone. Chan et al further state that hypnosis is characterised by 'enhanced memory'. Although hypnotic suggestion can improve working memory in some individuals with traumatic brain injury (Lindeløv 2017), this is hardly a common feature of hypnosis. They make a similar claim regarding amnesia; however, spontaneous amnesia is incredibly rare in the context of hypnosis (Lynn 2020). Verbal suggestions can be used to

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produce forgetting and hallucinations, but such effects are typically only clearly observed in highly suggestible individuals (Woody 2008) and do not amount to a common feature of hypnosis.

### Assessment tools and the evidence base

Chan et al provide a valuable review of the evidence base for the use of hypnosis in a variety of conditions, but there are additional limitations in their presentation that are worth addressing. Although the measurement of hypnotic suggestibility is an important practice in clinical settings, their discussion of assessment tools is limited. The authors cite only the Hypnotic Induction Profile, without mentioning more rigorous and established measures, and fail to provide a balanced overview of available scales. Relatedly, it is essential to motivate the use of such scales by noting that hypnotic suggestibility is a predictor of treatment outcome (Milling 2021). Finally, although they do offer a generally accurate review of the evidence base for different conditions, their discussion lacks criticism of it, and at times overstates the results of studies with underpowered sample sizes and methodological limitations.

Ultimately, we commend Chan et al in their attempt to provide a review of the psychiatric use of hypnosis so that it may be more widely used, thereby making the beneficial effects of hypnosis more accessible to patients. We hope this response brings greater attention to common discrepancies between clinical practice and the evidence base and further contributes to psychiatrists receiving training and credentialing in this valuable, but often misunderstood, technique.

### Author contributions

All authors contributed to the the initial outline. M.V.S. and D.B.T. drafted the initial manuscript;

S.J.L. provided comments and feedback. All authors approved manuscript before submission.

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### Declaration of interest

None.

### References

- Banyai EI, Hilgard ER (1976) A comparison of active-alert hypnotic induction with traditional relaxation induction. *Journal of Abnormal Psychology*, **85**: 218–24.
- Braffman W, Kirsch I (1999) Imaginative suggestibility and hypnotizability: an empirical analysis. *Journal of Personality and Social Psychology*, **77**: 578–87.
- Chan NA, Zhang Z, Yin G, et al (2023) Update on hypnotherapy for psychiatrists. *BJPsych Advances*, this issue. [Epub ahead of print] 7 Sep 2021. Available from: <https://doi.org/10.1192/bja.2021.54>.
- Dienes Z, Perner J (2007) Executive control without conscious awareness: the cold control theory of hypnosis. In *Hypnosis and Conscious States: The Cognitive Neuroscience Perspective* (ed GA Jamieson): 293–313. Oxford University Press.
- Lindeløv JK, Overgaard R, Overgaard M (2017) Improving working memory performance in brain-injured patients using hypnotic suggestion. *Brain*, **140**: 1100–6.
- Lynn SJ, Kirsch I, Terhune DB, et al (2020) Myths and misconceptions about hypnosis and suggestion: separating fact and fiction. *Applied Cognitive Psychology*, **34**: 1253–64.
- Milling LS, Valentine KE, Lostimolo LM, et al (2021) Hypnosis and the alleviation of clinical pain: a comprehensive meta-analysis. *International Journal of Clinical and Experimental Hypnosis*, **69**: 297–322.
- Terhune DB (2014) Defining hypnosis: the pitfalls of prioritizing spontaneous experience over response to suggestion. *Journal of Mind-Body Regulation*, **2**: 116–7.
- Terhune DB, Cleeremans A, Raz A, et al (2017) Hypnosis and top-down regulation of consciousness. *Neuroscience and Biobehavioral Reviews*, **81**: 59–74.
- Woody EZ, Barnier AJ (2008) Hypnosis scales for the twenty-first century: What do we know and how should we use them? In *The Oxford Handbook of Hypnosis: Theory, Research and Practice* (eds MR Nash, AJ Barnier): 255–82. Oxford University Press.