

# Teaching: Phenomenological Control—What Is Reality, Really?

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Aimed at integrating cutting-edge psychological science into the classroom, Teaching *Current Directions in Psychological Science* offers advice and how-to guidance about teaching a particular area of research or topic in psychological science that has been the focus of an article in the APS journal [Current Directions in Psychological Science](#).

**[Also see Teaching: Big Smile—Distant Diversity Drives Emotion Culture.](#)**

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[Dienes, Z., & Lush, P. \(2023\). The role of phenomenological control in experience. \*Current Directions in Psychological Science\*, 32\(2\), 145–151.](#)

According to Zoltan Dienes and Peter Lush (2023), people can construct subjective experiences that distort objective reality, an ability that they term *phenomenological control*. Hypnosis is the most famous example of this control, where people enter a state of focused consciousness during which they show heightened ability to alter their subjective state (Elkins et al., 2015). For instance, participants who listened to hypnotic suggestions to add color to a grayscale image not only reported that they could change their perception of color in the image but also showed changes in V4 activation levels, an area associated with color perception (McGeown et al., 2012).

Similarly, people with fibromyalgia who listened to hypnotic suggestions to either increase or decrease their pain state reported that they felt their pain levels fluctuating according to the suggestions, and they also showed fluctuations in activity in their pain perception networks (Derbyshire et al., 2009). Clearly, some people are not just “faking” being hypnotized. Instead, people can control their conscious experience in a manner that changes their physical reality, and this phenomenological control over subjective states is mirrored by neurophysiological changes.

Relatedly, there are people who show greater capacity for phenomenological control than others. Some researchers suggest that phenomenological control is a manifestation of executive control (e.g., Faerman & Spiegel, 2021) rather than a traditional personality trait (Cardena & Terhune, 2014). Although the literature has yet to produce definitive answers to this question, the idea here is that phenomenological control involves focusing strongly on a suggestion to alter experience and ignoring information in the periphery, just like executive control. Building on the idea that phenomenological control is an ability, Lush et al. (2021) developed a series of 10 exercises to determine how strongly people could construct subjective experiences in which they “feel” their arm moving involuntarily, “hear” music that is not playing, and “taste” sweet and sour flavors that are not present.

People who score highly on Lush et al.’s (2021) Phenomenological Control Scale are also more likely to:

- be among the 20%–30% of individuals who, when they watch objects silently collide, hear the nonexistent colliding sound as if it were real (known as a visually evoked auditory response; Fassnidge & Freeman, 2018);
- feel ownership of a fake/rubber hand placed in front of them when the person’s real hand and the rubber hand are simultaneously stroked (Lush et al., 2020);
- experience a tingling sensation from the scalp to neck when listening to a whispering voice—known as the autonomous sensory meridian response, or ASMR (Lush et al., 2022).

Phenomenological control is hypothesized as the causal process underlying each of the above illusions, and according to Dienes and Lush (2023), this ability may exist to facilitate specific cultural beliefs that promote social bonding. They specifically point to spirit-possession experiences across human history as manifestations of phenomenological control that affirmed the person’s beliefs about the spiritual world and elevated their social status because of their unique connection to it.

This fascinating research area is still in the early stages of development, and much more remains to be learned about the functional importance, cognitive underpinnings, and neurobiological mechanisms that enable phenomenological control.

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### Teaching Activity

If an experimenter took out a hammer and struck a fake hand in front of you, you would flinch or shudder. But would you feel pain, as if the hammer had actually struck your hand? In some contexts, yes, some of you would.

Have your students watch this four-minute clip from Netflix's *Magic for Humans*: <https://youtu.be/xdxIT68ygt8>. After viewing the "rubber-hand illusion," ask students to provide a rating from 0% (not at all) to 100% (absolutely) as to whether they personally believe they would be susceptible to the illusion.

Next, test students' capacity for other forms of phenomenological control using a suggestion exercise from the Phenomenological Control Scale (Lush et al., 2021). Instruct students to close their eyes and use their imagination to see if they can control the way they experience hand movements. Ask them to slowly lower their hand but to try to feel that something is pulling their hand down. Encourage the students to immerse themselves in the different reality, as guided by the audio clip from 3:40 to 6:04 at the following link: [https://youtu.be/RSEgMkHn\\_mk?t=220](https://youtu.be/RSEgMkHn_mk?t=220).

After the guided exercise, ask students two questions:

1. Did your hand lower by more than six inches?
2. On a scale from 0 (felt normal) to 5 (felt very heavy), how strongly did you feel your hand becoming heavy?

With their ratings in mind, engage students in think–pair–share exercises to discuss with their neighbor (and then with the class) why they think they did/did not feel their hand being pulled down. Specifically guide them to consider whether phenomenological control is a stable personality trait or a cognitive ability that can be trained with practice. Then, have students brainstorm deeper: What might be beneficial about this phenomenological control process?

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