

Square to be HIP: The perils of the Hypnotic Induction Profile

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Several years ago, two prominent psychiatrists were having dinner alongside a young cognitive scientist. The trio of hypnosis practitioners were seated at Elaine's, the gone-but-not-forgotten hotspot of 90s New York, where the group was dining with the young scientist's wife. The psychiatrists—a renowned academic duo—decided to skip over lesser forms of pre-dinner entertainment, and asked to test the wife's hypnotizability. The test, the two men assured, would only take a minute.

“It's quite simple,” one man explained. “If you score a zero, you're going to have difficulty being hypnotized. If you score a four, you're as hypnotizable as they come.”

The young scientist's wife obliged.

“Two!” observed the elder, satisfied.

“Four!” exclaimed the junior, with complete assurance.

Had the senior practitioner's years of experience taught him to discriminate degrees of hypnotizability with greater care? Had the junior's eyes discerned a detail omitted by his colleague? And, more importantly, perhaps—were the men measuring what they had hoped to measure?

The vignette, recalled years later by the cognitive scientist, is a striking example of the difficulties which professionals dealing with hypnosis continually face. In this issue, the target article tackles the definitional problem that invariably confronts all serious hypnosis researchers: when we measure hypnotizability, what is it that we actually measure?

Hypnosis has always been a nebulous concept. Since its inception, both signifier and term have undergone several dramatic metamorphoses. Its various names, relying on sundry theoretical explanations, have ranged from animal magnetism to nervous sleep (Harrington, 2008). By the time that the scientific community had settled on hypnosis as its preferred label, knowing precisely how the phenomenon operated was no longer a prerequisite for its study: King Louis XVI, who mounted the royal commission that debunked the ideas of mystical energy which underpinned animal magnetism, was no longer a career-threat if one's functional explanation happened to miss the target.

Naturally, the tools of hypnotizability assessment have likewise matured, keeping pace with—and occasionally overtaking—the development of hypnosis research over the past century. The most significant instances in the psychometric development of hypnosis came about in the early 60s, with the advent of the Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS:A), and the Stanford Hypnotic Susceptibility Scale, Form C (SHSS:C); these scales, while over a half-century old, have scarcely shown their age and exemplify the gold standard of hypnotizability measurement (Barnier & Council, 2010).

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The time constraints imposed by the HGSHS:A and the SHSS:C, comprising a testing time in excess of two hours, led clinicians to seek more succinct solutions to the problem of measurement. The answer arrived in 1972, in the form of Herbert Spiegel's Hypnotic Induction Profile (HIP). The HIP proved appealing due to both its ease and brevity: the procedure required only several minutes, and consisted of a physiological measure in the form of an eye roll. Spiegel surmised that the amount of sclera visible between the lower eyelid and the lowest part of the iris, when the eyes were rolled up and the lids shut, would yield a putatively accurate physiological correlate for hypnotizability.

Clinical expediency, however, frequently reveals itself to be at odds with research findings. While the HIP's brevity and alleged physiological foundation proved seductive, the eye roll failed to correlate with either the SHSS:C or the HGSHS:A (Eliseo, 1974; Wheeler, Reis, Wolff, Grupsmith, & Mordkoff, 1974). As John Kihlstrom noted almost three decades ago in a thorough review of the field, even if the induction component were sufficient, the eye roll would still fail to meet the standard of validity; unfortunately, the induction component, too, proves to be an untenable measure due to its insufficient number of items (Kihlstrom, 1985). And, while Ernest Hilgard discussed the specious statistical allure of HIP in the early 80s, the measure continues to draw the controversy and contention of academic scuffles to this day (1982).

As psychological research has gradually incorporated the most recent trends in imaging, hypnosis researchers have begun to investigate the neural correlates of hypnotizability with renewed vigor. Neuroimaging, including measuring the neural activity from the brain of dead salmon (Bennett et al. 2009), is a slippery—if not fishy—medium that requires a measured and meticulous statistical approach; this caveat is particularly resonant in today's climate of interdisciplinary research.

Indeed, a recent study published in the *Archives of General Psychiatry* exemplifies the dangers of pairing neuroimaging with the mounting balkanization in research specialization (Hoefl et al., 2012). The group of academics who sought the biological basis of hypnotizability comprised of several highly reputable researchers. Only one amongst the team of seven, however, had substantial experience with hypnosis; and, while the results ostensibly testified to presence of physiological differences underlying hypnotizability, performing the neuroimaging analyses had been a moot point—the study had employed the HIP to assess hypnotizability. Twenty years after publishing Hilgard's dissection of the HIP, the *Archives* put forth a study sorely lacking in psychometric foundation, and thereby suffering from the cardinal sin of garbage in, garbage out.

As hypnosis research matures and interdisciplinary teams become the de rigueur approach in a growing body of work, we must be wary of egregious partitions of expertise and inordinate divisions of methodological labor—whether cognitive scientist, psychiatrist, or neuroscientist, that, at least, is something all hypnosis researchers are likely to agree on. Perhaps it would even help with academic table talk.

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