LOOKING OVER THE SHOULDER OF THE HIDDEN OBSERVER: IS THERE ANYTHING FOR THE HIDDEN OBSERVER TO OBSERVE?

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Abstract

In dissociation theory, a strong distinction needs to be drawn between the dissociatedexperience model and the dissociated-control model. From the point of view of dissociated experience, a 'hidden observer' might conceivably make contact with effort expended but previously blocked from consciousness; however, from the point of view of dissociated control, the sense of hypnotic effortlessness was never illusory in the first place, and there is no hidden effort for the hidden observer to observe. Issues of study design, subject selection and dependent variables affect the ability to discriminate these models from each other and from sociocognitive theory. Copyright © 2005 British Society of Experimental & Clinical Hypnosis. Published by John Wiley & Sons, Ltd.

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Introduction

A research study is inescapably a very finite enterprise. During its design, execution and analysis, researchers are forced to make many choices about the distinctions that could possibly be embodied in the study. In any study, some possible distinctions will be featured, whereas other possible distinctions will be ignored.

Accordingly, in commenting on Green, Page, Handley and Rasekhy's study of the 'hidden observer' (this issue) we wish to draw attention to some potentially crucial distinctions that the researchers did not make, as well as raising questions about some of the distinctions that they did. We address (1) the theoretical framework being tested in the study, (2) the predictions and design of the study, (3) the selection of participants, and (4) the specific task and dependent variable investigated in the study. In the process, we touch on several important controversies in hypnosis research.

Theory

In advancing the theoretical framework for their study, Green and his colleagues contrasted dissociation theory with sociocognitive theory. However, they failed to draw an essential distinction between two quite different versions of dissociation theory: the theory of *dissociated experience*, and the theory of *dissociated control*.

Bowers (1992) was the first to make this distinction, which was then extended and elaborated in subsequent publications (e.g. Miller and Bowers, 1993; Woody and Bowers, 1994; Bowers and Woody, 1996; Woody and Sadler, 1998a). Bowers pointed out that Hilgard's (1977) seminal framework of a hierarchy of superordinate and subordinate control structures actually implied two very different explanatory models for hypnotic

responding. According to the dissociated-experience view, hypnotic subjects execute hypnotic responses by expending effort in the usual way, but in hypnosis this effort is dissociated, or blocked, from the person's awareness. According to this theory, the sense of hypnotic effortlessness or involuntariness is illusory (just as it is in sociocognitive theory). By contrast, according to the dissociated-control view, hypnosis alters the actual underlying control of behaviour, such that subsystems of control are initiated relatively directly by the suggestions, with reduced involvement of higher executive control. According to dissociated-control theory, hypnotic responses are truly initiated with reduced executive effort and therefore the subject's experience of effortlessness is correct, not illusory.

Thus, the dissociated-experience and dissociated-control theories pose completely different mechanisms for why the sense of effort and volition is altered in hypnosis. It is particularly unfortunate, then, that Green and his colleagues ignored this distinction in theoretical models, because the object of their study was specifically the sense of effort during hypnotic responding. From the point of view of dissociated experience, a 'hidden observer' might conceivably make contact with effort expended but previously blocked from consciousness (presuming that the mechanism that blocked awareness is readily reversible). However, from the point of view of dissociated control, the sense of hypnotic effortlessness was never illusory in the first place. According to dissociated-control theory, there is no hidden effort for the hidden observer to observe.

Predictions and design

Green and his colleagues referred to two kinds of predictions for their study. First, they argued that according to dissociation theory, 'hidden reports of the amount of effort needed to complete an ideomotor task will (a) be greater than what was reported during hypnosis and (b) resemble baseline reports' (p. 125, this issue). The problem with these hypotheses is that sociocognitive theory would make exactly the same predictions. In the hypnosis trial, subjects were told the task would be 'easy and effortless', not requiring 'nearly as much effort ... as it did when you were not hypnotized' (p. 127). Furthermore, during hidden reports subjects were told, 'Your hidden observer is more aware than the hypnotized part of your mind about how much effort is really needed' (p. 128). Given the sociocognitive position that the hidden observer phenomenon is 'a social construction shaped by the demands of the instructions' (Spanos and Coe, 1992), it is clear that its predictions for this particular study do not distinguish it from the dissociated-experience model.

Second, Green and his colleagues argued that according to dissociation theory, 'the wording of the hidden observer instructions would not be expected to affect participants' reports' (p. 125). This prediction reflects a misconception of dissociation theory. Specifically, *highly hypnotizable subjects are just as susceptible to demand effects as everyone else*. No sensible advocate of dissociation theory would argue otherwise. Therefore, all subjects should respond to direct instructions about what the hidden observer is supposed to observe, and the prediction of differential response cannot correctly distinguish between dissociation theory and sociocognitive theory. Furthermore, according to the dissociated-control model highly hypnotizable subjects cannot genuinely become more aware of hidden effort; therefore, as the experimenter told them what the hidden observer was supposed to be noticing, their *only* possible recourse would have been to respond to demand effects.

We have referred to the typical rhetoric of the sociocognitive position as 'nothing but'

(Woody and Sadler, 1998b). There is a problem with this rhetoric: the inability of a study to show that hypnotic behaviour is more than demand effects may possibly reflect a design shortcoming, rather a disconfirmation of non-sociocognitive theory. More specifically, the design of the present study does not seem to offer the *possibility* of distinguishing dissociation theory from sociocognitive theory.

Selection of participants

Green and his colleagues used a single screening on the Harvard Group Scale of Hypnotic Susceptibility, Form A (HGSHS:A; Shor and Orne, 1962) to select their high and low hypnotizable subjects. As a limitation of their study, they raised the concern that a second assessment of hypnotizability, such as with the Stanford Hypnotic Susceptibility Scale, Form C (SHSSC; Weitzenhoffer and Hilgard, 1962), would have 'confirmed hypnotizability status' (p. 134).

We would put the underlying issue differently. Sophisticated factor-analytic work on a item pool formed by combining the HGSHS:A and the SHSS:C has shown that the HGSHS:A, like the SHSS:C, is a very good measure of general hypnotizability (Woody, Barnier and McConkey, 2005). However, the more specific abilities tapped by the two scales proved to be remarkably different. In particular, the HGSHS:A was a poor predictor of the relatively complex, perceptual-cognitive phenomena typically studied in many hypnosis experiments.

Thus, it is unsafe to assume that high scorers on the HGSHS:A have the same individual-difference profile as the high hypnotizable subjects in previous research on the hidden observer, which has emphasized the SHSS:C as a subject-selection instrument. Given differences in the underlying individual differences, it is possible that Green et al. may have been tapping into a different set of phenomena from the classic hidden-observer studies. Although the HGSHS:A measures general hypnotizability well, it appears to measure a different set of specific abilities from the SHSS:C (Woody, Barnier and McConkey, 2005).

Task and dependent variable

The behaviour that Green and his colleagues investigated was the directly instructed suspension of one's arm in mid-air for 30 seconds. As mentioned earlier, the suggestion they gave in hypnosis was that this task would be 'easy and effortless' (p. 127) compared to when not hypnotized.

Green and his colleagues alleged this is an 'ideomotor suggestion' (p. 135), but it is not. In an ideomotor, or direct-motor, suggestion, the idea of a motor movement invokes the movement itself, which is then experienced, indirectly, as involuntary. In contrast, in the arm-suspension task no idea of movement was suggested and the experience of effortlessness was directly indicated.

Nor, despite the lack of movement, is the arm-suspension task akin to a classic motorchallenge suggestion. A motor-challenge suggestion combines the idea of an inability to move with an explicit challenge to try to make the movement; the subject's inability to move is then experienced, indirectly, as involuntary (happening despite great effort). In contrast, the arm-suspension suggestion directly instructed the subject to experience not moving as 'easy and effortless'.

All motor items on classic hypnosis scales, such as the HGSHS:A and the SHSS:C, can be readily identified as either direct-motor or motor-challenge suggestions. Thus, the

arm-suspension task of Green and his colleagues would not fit into the recognized scales, and indeed it is possible to question whether it falls within the recognized domain of hypnotic behaviours at all. Unfortunately, the design of their study did not include nonsimulating low hypnotizable subjects; therefore, we cannot check the usual criterion for a truly hypnotic behaviour, namely that high hypnotizable subjects respond more to the suggestion than do low hypnotizable counterparts.

We believe the underlying issue is that Green and his colleagues have confused lack of motor effort and muscle ease, on one hand, with lack of cognitive effort and involuntariness, on the other. For example, one can lift a pencil easily, but the experience is not involuntary. The authors adopt Weitzenhoffer's (1980) definition of the classic suggestion effect as the experience of things happening by themselves, without volition. However, this is not the phenomenon that they investigated, because their task had nothing to do with involuntariness, either directly or indirectly.

Finally, the dependent variable that Green and his colleagues employed was self-report of effort. According to the dissociated-experience and sociocognitive theories, hypnotic subjects actually expend substantial effort but misperceive themselves as expending little effort; in contrast, the dissociated-control theory posits that hypnotic subjects actually expend low effort and their self-perceptions are essentially correct (there is nothing to 'hide'). In short, the distinction between real underlying cognitive effort and the selfperception of this effort is crucial for testing these theories. Thus, future work needs to supplement self-report of effort with non-self-report indices of executive effort. In some of our own research, we have explored the use of heart rate as such an index (Sadler and Woody, 2003); other possibilities might profitably be draw from cognitive psychology.

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