#### **BOOK REVIEW**

### SUGGESTION AND SUGGESTIBILITY: THEORY AND RESEARCH

# Edited by Vilfredo De Pascalis, Vladimir A. Gheorghiu, Peter W. Sheehan and Irving Kirsch

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## Reviewed by Edward J. Frischholz

This book is divided into three parts:

- Six chapters on general psychological and psychophysiological aspects of suggestion and suggestibility.
- Five chapters on cognitive and social-psychological aspects of suggestion (considered from an attributional perspective).
- Four chapters on suggestion and hypnosis.

I shall comment briefly on each section.

Part I: General psychological and psychophysiological aspects of suggestion and suggestibility

This first section contains the following six chapters:

- 'The Domain of Suggestionality: Attempts to Conceptualize Suggestional Phenomena. 1. Particularities of Suggestion' (Vladimir A. Gheorghiu).
- 'Suggestion and Suggestibility: Theoretical and Psychophysiological Aspects' (Vilfredo De Pascalis).
- 'What is Suggestion? A Psychophysiological Approach' (Vezio Ruggieri).
- 'Suggestion, Suggestibility and the Placebo Effect' (Lars-Gunnar Lundh).
- 'Friendliness and Suggestibility: An Ecosystems Perspective' (David P. Fourie).
- 'Suggestion as Social Influence' (Enno Schwanenberg).

I found this to be the most disappointing section in the book. No chapter made any attempt to propose operational definitions of either the term 'suggestion' or 'suggestibility'. For example, 'suggestion' has been typically characterized by its antecedent conditions, whereas 'suggestibility' has typically been studied by a person's consequent responses to various types of suggestion conditions. Similarly, there is a growing literature that uses qualitative terms, such as 'waking suggestibility' (for example, Hull), 'imaginative suggestibility' (Kirsch), 'hypnotic suggestibility' (Weitzenhoffer and Hull), 'interrogative suggestibility' (Gudjonsson), 'sensory suggestibility' (De Pascalis), 'placebo responsivity' (Evans and Shapiro), 'primary suggestibility' and 'secondary suggestibility' (Eysenck), and 'direct-versus-indirect

suggestion' (Erickson). However, quantitative scores, which have attempted to measure individual differences in response to these various types of 'suggestion', have not always correlated very highly with one another and sometimes do not significantly intercorrelate at all. For example, scores on the Gudjonsson Suggestibility Scale have not been found to be significantly correlated with scores on the Stanford-type of individual or group hypnosis scales. In contrast, De Pascalis' measure of 'sensory suggestibility' (that is, SST), discussed in Chapter 2, correlated 0.54 with scores on the Stanford Form C scale in the study presented in his chapter, but correlated only 0.15 with it in an earlier study.

There is also little or no discussion of the previously established finding that the administration of a hypnotic induction ceremony (HIC) leads to a significant increase in subjects' responsivity on a standard hypnosis scale relative to their level of responsivity on the same scale when this is not preceded by an HIC. Kirsch has recently questioned the validity of this finding and reported that so-called 'waking' or 'imaginative' suggestibility correlates highly with later measured hypnotic responsivity (almost as high as the internal consistency reliability of the particular suggestibility or hypnosis scale). In addition, Kirsch has also proposed that administration of an HIC does *not* produce a meaningful gain in level of responsivity relative to a person's responsivity on the same scale in a non-HIC condition. I believe that any set of chapters that purport to discuss and evaluate 'general psychological and physiological aspects of suggestion and suggestibility' should have addressed and evaluated what I believe are the basic primary issues in this domain of research.

By contrast, I found the chapter by Professor Ruggieri to be extremely interesting regarding the classic question of whether a suggested (hypnotically? imagined?) sensory/perceptual experience produces the same kind of neurological stimulation as exposure to the same, real sensory stimulus. Unfortunately, he presents no new empirical data on this topic. Professor De Pascalis does provide data allegedly showing that different types of brain activation interact with a subject's level of 'imagination suggestibility' (that is, SSK-G), but this measure appears to be different from his 'sensory suggestibility' (that is, SST) measure, which is discussed earlier in his chapter. In addition, De Pascalis' findings were not predicted a priori by some previously presented physiological theory of suggestibility and are in need of independent laboratory replication and clarification before such a neurophysiological interpretation seems warranted.

The fourth chapter by Professor Lundh tries to integrate conflicting findings about the nature of the association between placebo responsivity and suggestibility by attempting to delineate how they are similar, yet different. His distinctions are theoretically compelling but are unfortunately not empirically confirmed as of this time. Similarly, the chapter by Professor Fourie also questions theoretical conceptualizations of suggestibility as a trait, but he does not propose a way of testing his alternative theoretical conceptualization. Professor Fourie also goes on to criticize various tests of suggestibility, questions their validity, and seems to conclude that the empirical use of such tests may have actually limited current theorizing about suggestibility. I disagree and this is probably based on my strong bias towards the importance of measurement and its utility for facilitating the process of empirical verification.

The final chapter by Professor Schwanenberg considers suggestion as a form of social influence. Interestingly, he proposes that 'not every social influence amounts to suggestion, and not every and all suggestion is social influence' (p. 103). Professor

Schwanenberg goes on to propose a number of theoretical models for making such distinctions, but again, no empirical corroboration for his various formulations is presented.

Part II: Cognitive and social psychological aspects: suggestion and suggestibility considered primarily from an attributional perspective The second section contains the following five chapters:

- 'Lie Detection as an Attribution Process: The Anchoring Effect Revisited' (Klaus Fiedler, Jeannette Schmid, Stephanie Kurzenhauser and Volker Schroter).
- 'Suggestibility and Anchoring' (Rudiger F. Pohl).
- 'Social Influence and Suggestibility in Recognition Tasks' (Lioba Werth, Fritz Strack and Jean Forster).
- 'Suggestibility and Imagery during Attribution of Meaning to Ambiguous Figures (Francesco S. Marucci and Maria Meo).
- 'Initiation, Modification and Inhibition of Motor Reactions Through Indirect Suggestion Approaches' (Vladimir A. Gheorghiu, Elizabeth Koch and Christian Goetz).

Collectively, these chapters attempt to present a new way of looking at suggestibility, which I have not heard before.

The first chapter in this section meets my criteria for having a sound theoretical basis backed up by empirical evidence. However, it was unclear to me just how lie detection is related to the issue of suggestibility. The authors use an example of a used car salesperson trying to tout the virtues of a particular car in order to sell it, and the effect of the sales presentation on the prospective buyer depending on whether the buyer focuses on the message (that is, the sales pitch) or the speaker. Instead, this example seems more relevant to the issue of gullibility and I am not sure how it is related to any specific type of suggestibility. Although I found this chapter an interesting psychological topic in its own right, I believe its relevance to suggestibility should have been more clearly stated.

The second chapter, by Professor Pohl, does present a sound theoretical basis on the subject of anchoring, presents empirical data to support his formulation and attempts to relate anchoring to a measure of suggestibility (which seems similar to Gudjonsson's measure of interrogative suggestibility). Unfortunately, while the author's hypotheses about anchoring were confirmed, he found no relationship between anchoring and his measure of interrogative suggestibility.

The third chapter, by Werth, Strack and Forster, proposes that the terms 'suggestion' and 'suggestibility' are not actual social psychological terms. These authors propose that the most related such term is 'social influence'. The authors discuss earlier work on 'social influence' and how it affects a person's performance on recognition tasks. Empirical data are presented which lead the authors to make two conclusions:

- If a person has a clear recollection that an event occurred, it is difficult for him or her to accept a suggestion that it has not occurred.
- If a person has no recollection that a particular event occurred, but believes that he or she would have remembered it had it occurred, then it is difficult for that person to accept a suggestion that the event did indeed occur.

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Rather, the authors assert that social influences on memory are most successful when a person has no recollection that an event occurred, has no knowledge about the occurrence's potential for recollection and has low confidence that the event would have been encoded. I believe these authors make an important point for understanding the processes underlying whether a hypnotically suggested unlikely event would later be reported as having occurred. Unfortunately, this chapter is not cited in any of the chapters in Part III of this book on 'Suggestion and Hypnosis'.

The fourth chapter, by Marucci and Meo, investigated 'suggestibility and imagery due to the attribution of meaning to ambiguous figures'. I believe this is another type of suggestibility measure (that is, suggesting subjects organize their perception in a prescribed manner to multiple ambiguous stimuli) which has not been discussed above or in any other chapter in this entire book. Study subjects were classified as either high or low in suggestibility on the basis of the SSK-G of Gheorghiu et al. ('imagination suggestibility'; see above for the best clarification I can provide about this type of measure). Highly suggestible subjects were reported to be better at attributing meaning to such ambiguous figures than low-suggestible subjects. I found this finding fascinating because of the amount of times a subject responds to prescribed suggestions for perceiving otherwise ambiguous stimuli seems to be a suggestibility type measure of its own. Thus, I believe the authors have helped establish new ground in the nomological net of 'suggestion' and 'suggestibility' theories.

The fifth and final chapter in this section seems to me to have little relation to attribution theory. It appears to describe the psychometric properties of a newly constructed ideomotor suggestibility scale which was administered in a repeated-measures (13 suggestibility items), within-subjects (neutral (phase a) versus treatment (phase b)) design under three between-subjects conditions, that is:

- Explicit mention of an expected reaction.
- Explicit mention of expected reaction and non-reaction.
- No explicit mention of an expected reaction or non-reaction.

The 13-suggestibility items consisted of five initiation-of-motor-response items, five modification-of-motor-response items and three inhibition-of-motor-response items. The main finding indicated that suggestibility was significantly higher when some type of explicit response expectation was present (conditions 1 and 2, both of which contained an explicit reaction or explicit reaction/non-reaction expectation) than when there were no explicit expectations (condition 3). Based on a partial analysis of the suggestibility item data from condition one, an eight-item ideomotor suggestibility scale was constructed (four initiation-of-motor-response-items; three modification-of-motorresponse items; and one inhibition-of-motor-response item). However, as the authors concede, more empirical work will need to be done to see what other types of suggestibility scales (discussed above in my comments on Part I on placebo responsivity, secondary suggestibility, interrogative suggestibility, etc.) this new ideomotor suggestibility scale correlates with in addition to other established measures of ideomotor suggestibility (postural sway, primary suggestibility, imagination suggestibility (for example, Stanford-type hypnosis scale administered under an imagination condition instead of a hypnotic induction condition), etc.

# Part III: Suggestion and hypnosis

The third and final section contains the following four chapters:

- 'Memory Distortions and Suggestibility in the Hypnotic Setting' (Peter W. Sheehan).
- 'Autobiographical Memories, Hypnotizability and Suggestion' (Steven J. Lynn, Peter Malinoski, Lisa Marmelstein, Jane Stafford and Joseph P. Green).
- 'Hypnosis and Placebos: Response Expectancy as a Mediator of Suggestion Effects' (Irving Kirsch).
- 'On the Interaction of Two Orthogonal Risk Factors, (1) Hypnotic Ability and (2) Negative Affect (Threat Perception) for Psychophysiological Dysregulation (Sympathetic and Parasympathetic) in Somatization Disorders' (Ian Wickramasekera).

The first chapter, by Sheehan, describes a broad programme of research, which attempted to identify those variables (for example, administration of an HIC, hypnotizability, type of false information exposure, and timing of false information exposure) that have been found to influence memory performance (both hypnotic and nonhypnotic) significantly. Sheehan concludes that no variable studied in the laboratory seems to have been found to improve the accuracy of 'hypnotically' influenced memory performance. However, a number of variables, most notably a subject's level of hypnotizability, seem to significantly influence memory distortion and subjective confidence. Sheehan notes that highly hypnotizable subjects (not subjects just exposed to an HIC) show greater susceptibility to memory distortion and increased confidence despite no corresponding increase in memory accuracy. I believe Sheehan's findings have some interesting implications if his interpretations are corroborated by other laboratories. First, if only highly hypnotizable subjects (whether hypnotized or not?) show significant memory distortion and increased confidence effects, to what proportion of the population can we generalize his results? Approximately 10-15% of the general population is considered to be highly hypnotizable. This suggests that significant memory distortion and increased confidence effects are unlikely to be observed in the majority of the population. Second, it calls into question why so few experts who practice either forensic or clinical hypnosis do not routinely recommend or use standardized hypnotizability tests. Nevertheless, I find it amusing to think that an eyewitness's credibility would be called into question by his or her scoring highly on a hypnotizability scale. Lastly, I believe that one of Sheehan's most important findings is that administering a HIC to a subject does not necessarily lead to increased memory distortion and false confidence. Yet, this is the way most courts in the USA and most experts who testify about this issue seem to have defined hypnosis (that is, by whether the subject was or was not administered an HIC). If this way of defining hypnosis as a risk factor for increased memory distortion and false confidence has no scientific validity (based on Sheehan's findings and interpretations), why does it continue to be used?

The second chapter summarizes a programme of research on autobiographical memories, hypnotizability and suggestion apparently conducted in Professor Steven J. Lynn's laboratory. The first part of their chapter discusses this group's empirical attempts to study normal autobiographical memory in a sample of college students. A new Autobiographical Memory Scale (AMS) is presented, which has yielded results that have led the authors to conclude that there are individuals in their sample who:

- Recall events that are covered by the temporal boundaries typically reported for infantile amnesia.
- Recall implausible events (that is, those that are covered by infantile amnesia) with

greater perceived detail and vividness than those individuals who recall later autobiographical memories.

• Are more fantasy-prone than individuals who recall events later in life.

It should be noted that no objective corroboration of the accuracy of earlier memories was attempted; therefore, reported memories were not necessarily inaccurate. The authors also, not surprisingly, found that reported autobiographical memories had higher ratings of perceived detail and vivdness. Collectively, the authors found wide individual differences in the ability to remember or report early autobiographical memories. However, the correlation between reporting earlier autobiographical detail and fantasy proneness was not very strong (r = 0.2), although it was statistically significant in this large sample.

The second set of studies presented in the chapter by Lynn et al. examined the relation between hypnotizability and scores on the AMS. I was stunned to see that 'context effects were not evident in this research'. This must be one of the few papers from Professor Lynn's laboratory where significant context effects were not found. In addition, hypnotizability scores were significantly correlated (averaging about 0.3) with scores on the AMS regardless of context. In other words, highly hypnotizable subjects seemed to report earlier autobiographical memories than moderately or low-hypnotizable subjects and also rated these memories as more vivid and containing more perceived detail. This finding is interesting in the light of Sheehan's conclusions that hypnotizability (not exposure to an HIC) is the important correlate of memory performance. Based on these findings, the authors go on to hypothesize how psychotherapists who believe that exposure to early childhood trauma (for example, sexual and physical abuse) is the cause of adult psychopathology may tend to elicit false early autobiographical memories of abuse (especially if they use 'hypnotic' techniques). However, this proposal was just speculation on the part of the authors and was not tested either directly or empirically in their study.

In the third chapter in this section, Professor Kirsch proposes that 'response expectancies' may act to mediate responses to both hypnosis and placebos. Furthermore, Kirsch hypothesizes that 'response expectancies' are the nature by which suggestive processes exert their influence. None of Kirsch's arguments are new and have been published elsewhere. Although I do not dispute that his 'response expectancy' model is a powerful theory that helps describe the data patterns previously observed between various measures of placebo responsivity and hypnotic responsivity, I disagree with his proposal that any variance still left unexplained by the 'response expectancy' model is probably error variance. Interestingly, Dr Kirsch does not even cite or acknowledge the other chapter from Part I of this book, by Lundh, that covers this same topic. Therefore, I believe that other theories of hypnosis, suggestion and placebo may help explain some of this leftover variance. In addition, I do not think Professor Kirsch would dispute the fact that wide individual differences in responsivity to hypnosis and placebos exist. Therefore, I would have found his argument more compelling if he had presented empirical data that showed that hypnotizability scores were highly correlated with positive responses to placebos in a counterbalanced design.

The last chapter in this book, by Wickramasekara, seems to me to be more of a theory on how hypnotic responsivity relates to different types of psychopathology. I am not sure how this helps us to better understand the nature of 'suggestion' or 'suggestibility' and I think the author should have made this point more clearly. This is not to say that

Professor Wickramasekera's 'High Risk Model of Threat Perception' is not an interesting theoretical model in its own right, but it seems to be tangential to the primary topic of this book.

#### Evaluative summary

This book purports to contain contributions that summarize current research on the nature of suggestion and suggestibility from multidisciplinary theoretical perspectives. Although there are many new ideas presented in the various chapters, unfortunately there is no overall cohesive format that provides a comprehensive organizational structure for understanding the central topic of interest. In addition, prior conceptualizations about the various types of suggestions, the nature of the suggestive process, and individual differences in measured suggestibility are not adequately summarized nor integrated into these allegedly new areas of enquiry. Whilst almost every chapter is worth reading in its own right, I believe the book as a whole fails to integrate its component chapters, which could have been better tied together by several obvious and easily identifiable themes. Rather, this process of integration is left up to the reader and it may well be the limitations of my own knowledge about this topic that made it so difficult for me to accomplish this goal. Nevertheless, the book does make an important contribution to the accumulating theoretical and empirical literature on the nature of 'suggestion' and 'suggestibility'.