

Placebo Psychotherapies and Nonconscious Learning in the Placebo Effect: Reply to Kirsch (2004)

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In this reply, the authors explore several issues raised by I. Kirsch (2004) concerning their original article (S. Stewart-Williams & J. Podd, 2004), which dealt with the roles of expectancy and classical conditioning in the placebo effect. The only notable disagreement concerns a definitional issue, namely, Stewart-Williams and Podd's claim that the placebo concept can be extended to inert psychotherapies. The authors defend this claim against the criticisms Kirsch raised. In addition, they comment on the suggestion that nonconscious learning processes play only a small role in human placebo effects, arguing that there are theoretical reasons to expect these processes to be more important than has previously been recognized.

The main goal of our original article (Stewart-Williams & Podd, 2004) was to resolve the debate between the two major approaches to the placebo effect: expectancy theory and classical conditioning. In his commentary on this article, Kirsch (2004) discussed the relationship between these approaches. His position is largely consistent with our own, and therefore we have little to say in response to this aspect of the commentary. Our only comment concerns Kirsch's suggestion that classical conditioning is included as a component of expectancy theory. Although we agree that conditioning is one cause of expectancy change, we would emphasize that it cannot be wholly subsumed by expectancy theory, as there are some instances of conditioning that do not involve expectancies (as Kirsch, 2004, recognized). Aside from this small point, the main focus of our reply is the question of placebo psychotherapies. We also briefly consider the issue of nonconscious learning in the placebo effect.

Placebo Psychotherapies

According to Kirsch (2004), there are two main problems with extending the term *placebo* to cover psychotherapies. One relates to the fact that psychological problems are often caused by people's beliefs and expectations and, consequently, that any successful treatment of these problems is likely to be mediated by a change in beliefs or expectancies. His concern is that if the possibility of a psychotherapy placebo were allowed, this would mean that many legitimate treatments would be relegated to the category of placebo. The treatments he has in mind are those in which "the active mechanisms match those that have caused the problem in the first place" (Kirsch, 2004, p. 342), that is, conditioning procedures, beliefs, and expectancies. Thus, the assumption appears to be that if the possibility of psychotherapy placebos is accepted, any psychotherapeutic technique that involves condi-

tioning or works through changing beliefs or expectancies would be dismissed as a "mere" placebo. Behavior therapy would be a placebo because it utilizes conditioning procedures, and cognitive therapy would be a placebo because it works by changing people's beliefs.

If we had defined placebos in terms of the mechanisms underlying placebo effects (e.g., expectancies), then Kirsch would be right: Many psychotherapy procedures would be inappropriately classed as placebos simply because they work via expectancy change. However, the key ingredient in our definition was not mechanisms but inherent causal powers. We defined a placebo as a substance or procedure that has no inherent power to bring about a particular effect (Stewart-Williams & Podd, 2004). If a procedure has the inherent power to bring about an effect, then it is not a placebo, regardless of the mechanisms through which the effect is achieved. Therefore, the fact that cognitive therapy works by changing people's beliefs and expectancies does not imply that it is a placebo. The question is whether this change is part of the inherent action of the therapy; in the case of cognitive therapy, presumably it is. On the other hand, if a procedure works only because it is expected to, it is a placebo—not because it is mediated by expectancies, but because it is not attributable to the inherent powers of the procedure. A person undergoing a completely different procedure but with the same expectancies would experience the same outcome. As such, there would be no useful sense in which the cause of this outcome could be located in the procedure.

Another criticism of our definition centers on Kirsch's (2004) claim that most psychotherapies would have no therapeutic effects if the individuals undergoing them did not have an understanding of the purpose and rationale of the therapy. As an example, he suggested that free association would not be beneficial for someone from a culture with no knowledge of psychoanalysis and no inkling that the purpose of this practice was to ameliorate distress. The implication is that the recipient's beliefs about the purpose and rationale of a therapy are integral to that therapy; consequently, the notion of the inherent effects of a psychotherapeutic technique—effects unrelated to an individual's beliefs about it—is problematic. In fact, from Kirsch's perspective, there are no such effects.

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It is not clear, though, that a proven psychotherapy would only work under the conditions Kirsch (2004) specified. We admit that the idea that free association would work in the absence of any knowledge of psychoanalysis seems implausible. But perhaps this is simply because it seems implausible that this technique has any inherent power to relieve psychological distress. If free association worked for the reasons Freud (1900/1954) thought it did, then presumably it would work in the absence of any understanding of its purpose. Similarly, if systematic desensitization works as a result of pairing a feared stimulus with relaxation, then presumably this effect is not contingent on an understanding of this rationale or on the expectation of a therapeutic effect. Without such an understanding or expectation, it might be difficult to persuade people to engage in a psychotherapeutic procedure. But this is true also of proven medical procedures and does not undermine the claim that such procedures have the power to produce effects through their inherent nature rather than through a belief or expectation related to the procedure. Of course, the expectation of an effect might lead to a stronger effect. However, if the cause of this latter contribution cannot be traced to the procedure, it should be classed as a placebo component and distinguished from the active components.

Kirsch is right to want to avoid the conclusion that all psychotherapies are placebos. However, his solution—which does not allow for any distinction between genuine psychotherapies and placebo psychotherapies—forces one to the equally undesirable conclusion that all possible psychotherapies are effective, no matter how outlandish or irrelevant. The criterion of inherent causal powers allows us to adopt an intermediate position, a position that avoids either extreme: Some psychotherapy procedures are inherently effective and some are placebos.

Nonconscious Learning in the Placebo Effect

Finally, we would like to comment on the role of nonconscious learning processes in the placebo effect. Kirsch (2004) downplayed the importance of these processes, noting, for instance, that we were only able to provide empirical support for one noncognitively mediated placebo effect. Although this is true, there is some reason to think that nonconscious contingency learning may

be more important than the existing placebo research suggests. According to Kirsch (2004), the “adaptive advantage of cognition is increased response flexibility,” and “to convey that benefit . . . it must be capable of overriding the influence of simpler automatic processes” (p. 342). Admittedly, it does appear that the selective pressures facing our ancestors have resulted in a higher degree of behavioral flexibility in our species than is found in any other (although we should avoid thinking that more flexibility is always better than less—often the reverse is true; see Anders, 1994; Tooby & Cosmides, 1992). Nonetheless, there are likely to be limits to the extent that cognition can override automatic, nonconscious processes. If such processes had not continued to be evolutionarily useful over the course of human cognitive evolution, it is quite possible that humans would no longer possess them, just as some bird species no longer possess the ability to fly because flying ceased to be useful for them. Thus, the mere fact that humans do possess these nonconscious learning processes suggests that they may still be significant in our species. This provides a theoretical reason to think that further empirical research may show that such processes make an important contribution to pharmacological placebo effects in humans.

References

Anders, T. (1994). *The maladaptive species*. Chicago: Open Court.

Freud, S. (1954). *The interpretation of dreams* (J. Strachey, Trans.). London: Allen & Unwin. (Original work published 1900)

Kirsch, I. (2004). Conditioning, expectancy, and the placebo effect: Comment on Stewart-Williams and Podd (2004). *Psychological Bulletin*, 130, 341–343.

Stewart-Williams, S., & Podd, J. (2004). The placebo effect: Dissolving the expectancy versus conditioning debate. *Psychological Bulletin*, 130, 324–340.

Tooby, J., & Cosmides, L. (1992). The psychological foundations of culture. In J. H. Barkow, L. Cosmides, & J. Tooby (Eds.), *The adapted mind: Evolutionary psychology and the generation of culture* (pp. 19–136). New York: Oxford University Press.

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