CHAPTER THIRTEEN

Placebo and Psychotherapy: Differences, Similarities, and Implications

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Abstract

The placebo and psychotherapy are both effective psychological interventions. Next to being characterized by their own and specific controversies and debates, there is a persistent—and least for psychotherapy—looming notion that these two interventions share more than just the first letter. Based on Grünbaum's influential conceptualization of placebo, this chapter critically reviews both the time-honored claim that psychotherapy is a placebo as well as the argument that the placebo concept does not translate to psychotherapy. We conclude that there is an unwanted proximity between these two interventions and that empirical attempts to separate the "wheat from the chaff" in psychotherapy research face several distinctive challenges and thus are often methodologically comprised by the integrity of the placebo. However, drawing on recent, innovative research, we conclude that psychotherapy can be saved, i.e., shown to be distinct from the placebo, by employing study designs derived from the placebo research. We conclude that the placebo concept has profound implications for psychotherapy, psychotherapy research, and last but not least its ethical practice.

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1. PSYCHOTHERAPY AND PLACEBO: DEFINITIONS AND DISTINCTIONS

Psychotherapy is a generic label for a large and growing number of interventions, which share certain and defining characteristics, such as being intended to be therapeutic, being based on psychological principles and their derivative treatment methods, and being delivered by trained professionals. As such, psychotherapy—or more precisely psychotherapies—are well established, efficacious, and accepted treatments for an array of mental disorders and psychological problems (Goldfried, 2013). While the same can be said about the placebo or more precisely placebos and maybe with the exception that its use still *not* widely legitimated but nevertheless common in clinical practice (Fässler, Meissner, Schneider, & Linde, 2010, *BMC Medicine*), equating these interventions is seen unwarranted or as Irving Kirsch eloquently put it:

> *There is a problem with identifying psychotherapy with the placebo effect. A placebo is something that is sham, fake, false, inert, and empty. Psychotherapy is none of these. In this sense, it is different from medical placebos, and it does not deserve the pejorative connotations associated with the term.*
>
> **Cited from Kirsch (2005, p. 797)**

While there is little reason to doubt that relevant psychotherapy bodies as well as psychotherapists do their best to ensure the legitimacy of their professional actions, the aforementioned distinction between psychotherapy and placebo rests on the assumption that an intervention is only a placebo if given intentionally, since giving something that is inert and empty openly would not qualify as being sham or fake (Kaptchuk et al., 2010).

Defining the placebo can be seen as either a simple or a difficult matter. With regard to the former, *placebos are drugs, devices, or other treatments that are physically and pharmacologically inert* (and that) *do not, by definition, have any direct therapeutic effects on the body* (cited from Wager & Atlas, 2015). In this understanding, *placebo effects are thus brain–body responses to context information that promote health and well-being* (cited from Wager & Atlas, 2015). While this perspective focuses on the properties of placebos and elegantly avoids the conundrum of defining the placebo by its effects, it poses a problem as it by definition would also include psychotherapy as a placebo, as it is *pharmacologically inert* and it has no *direct therapeutic effects on the body*. And with regard to the latter, Adolf Grünbaum conceptualization (1981, 1986) *has been*

proposed by some authors as the best attempt thus far (cited from Howick, 2016) and is *arguably the most sophisticated model in the literature* (cited from Alfano, 2015). Interestingly and relevant to the question at hand, Grünbaum's definition of what constitutes a placebo is based on the respective treatment theory for a given disorder as well as on the communication of the treatment provider and not on its properties or effects. Thus, on Grünbaum's model, a given treatment consists of a treatment theory-driven distinction between characteristic and incidental constituents, and *the generic distinction between placebos and non-placebos (depends on) whether the characteristic treatment factors do play a therapeutic role for (a given disorder) … or not* (cited from Grünbaum, 1986, p. 33). A generic placebo is understood as an intervention containing no characteristic constituent for the disorder at hand on the basis of the respective treatment theory and which becomes an intended placebo when knowingly administered by the treatment provider to a patient, who remains otherwise ignorant of the true nature of the intervention. This theory-driven definition has the advantage to avoid the aforementioned trap to equating placebo and psychotherapy on the basis of their non-pharmacological properties.

With regard to the distinction between placebos and psychotherapy and according to Grünbaum's distinction between intended and inadvertent placebos, one might be tempted to easily rule out the possibility that psychotherapy is based on the intentional use of incidental treatment constituents, i.e., which do not play a therapeutic role for a given disorder. But this proposition rests on the assumption that the assumed characteristic constituents are truly responsible for an observed treatment effect, which implies that the underlying treatment theory correctly identifies and differentiates between incidental and characteristic treatment constituents. If this were not the case, psychotherapy would run the risk of qualifying as an inadvertent placebo.

The claim that psychotherapy is—or more precisely: psychotherap*ies* are—effective as a result of its incidental treatment constituents is far from new and dates back to the 1930s:

> *It is justifiable to wonder whether the factors alleged to be operating in a given therapy are identical with the factors that actually are operating, and whether the factors that actually are operating in several different therapies may not have much more in common than have the factors alleged to be operating.*
>
> **Cited from Rosenzweig (1936, p. 412)**

Interestingly, this assumption marked the beginning of the more recent, so-called *great psychotherapy debate* (Wampold & Imel, 2015) which has

influenced psychotherapy research and practice today (Hofmann & Barlow, 2014; Laska & Wampold, 2014) and has recently been addressed prominently:

> *The old debate about whether or not psychotherapy and placebos have similar mechanisms consists of ascertaining whether psychotherapy is nothing but a placebo effect, and thus whether a placebo procedure is a very simple form of psychotherapy.*
>
> **Cited from Benedetti (2009, p. 141)**

Furthermore, different psychotherapy approaches have been related to placebo, such as Eysenck's infamous claim that *psychotherapy* (i.e., any psychotherapy excluding behavioral therapy) *works, as far as it does, by means of nonspecific or placebo effects* (cited from Eysenck, 1994, p. 490), the puzzling argument that due to the *significant epistemic pressures in the therapeutic encounter, the insight-oriented psychotherapies are highly susceptible to generating placebo insights, that is, illusions, deceptions, and adaptive self-misunderstandings that convincingly mimic veridical insight but have no genuine explanatory power* (cited from Jopling, 2001, p. 19), the proposition that *because psychotherapy is less burdened by doubts about the placebo effect that it was able to come to its aid when it was orphaned by medicine (and that) it is vain to expect something with so long a history as the placebo effect to disappear from the practices of healing* (cited from Justman, 2011, p. 95), and McNally's (1999) equation of modern-day eye movement desensitization and reprocessing with mid-18th century animal magnetism (Franklin et al., 1784/2002)—the former is an accredited psychological treatment by the Society of Clinical Psychology of the American Psychological Association.

Thus, there are strong reasons to address the theoretical as well as empirical similarities and differences between psychotherapy and placebo in order to elucidate their relationship and the possible practice implications for using psychological treatments.

2. EMPIRICAL APPROACHES TO CONTROL FOR INCIDENTAL TREATMENT CONSTITUENTS IN PSYCHOTHERAPY

In order to establish the effectiveness of specific factors of a given intervention in clinical trials, its incidental treatment constituents, such as expectancy and a caring patient–practitioner relationship, usually are controlled for with the administration of a placebo treatment; ideally placebos should be indistinguishable from the verum counterpart among patients as well as the treating clinicians and/or researchers. In order to control for

incidental treatment constituents, the placebo should therefore mimic the verum in every respect except the characteristic factor hypothesized to be remedial. In psychotherapy outcome research, ideally, these control conditions would contain all and only treatment constituents which are considered incidental by the respective treatment theory. Due to this dependency on each respective treatment theory, control conditions in psychotherapy clearly differ in content and focus between trials. But while this does not automatically impose a psychotherapy-specific methodological problem, as medicinal placebos also differ in content and focus between trials, the problem in psychotherapy arises from the fact that neither single nor double blinding is possible in psychotherapy. Given that psychotherapy fully relies on the verbal interaction between psychotherapists and patients, it is hard to imagine how we might implement control conditions in psychotherapy trials without psychotherapists and patients being fully aware of the true nature of their treatment. Of course, it should be emphasized that breaking blind also regularly occurs in pharmacological placebo-controlled trials (Margraf, Ehlers, Roth, et al., 1991) and the knowledge among trial participants and clinicians that they are receiving or administering an active medication can have clear effects on trial outcomes (Rutherford et al., 2017) as can the use of active placebos, which mimic the side effects of active verum (Moncrieff, Wessely, & Hardy, 2004). In summary, the de facto transparency of the control condition can *play havoc with the logic of the design* (cited from Baskin, Tierney, Minami, & Wampold, 2003, p. 974). Where this is evident in biomedical clinical trials, the situation is accentuated in psychotherapy research. In principle, we argue that while the use of controls is conceivable in psychotherapy research, designing adequate placebos is fraught with many more challenges than are (typically) present in biomedical contexts.

We identify four interrelated challenges when it comes to the problem of designing adequate placebos in clinical trials in psychotherapy:

1. *Patients' expectancies*: Patients' perceptions about the credibility of therapists as well as of version of therapy may mediate response expectancies. These factors are not consistently empirically assessed nor adequately controlled for. Recognition of this problem can be traced back to Kazdin and Wilcoxon (1976) who stated with regard to claims of specificity of systematic desensitization—notably a founding tenet of behavior therapy—that *(the) vast majority of studies have not determined empirically whether desensitization and nonspecific treatment control conditions are equal in credibility and expectancy for improvement generated in the clients*. In a follow-up analysis of

Kazdin and Wilcoxon's (1976) seminal paper—which coincided with a substantial decline in scientific interest in systematic desensitization (McGlynn, Smitherman, & Gothard, 2004)—Locher, Hasler, and Gaab (2016) also concluded that the restrictions in control conditions are a prerequisite to find specific effects in this line of outcome research.

2. *Mimicking the structure of psychotherapy*: The failure to operationalize the structure of verum psychotherapy in control conditions poses a serious threat to the validity of outcome research. The differences may be subtle, but they can lead to clinically relevant effects. For example, Baskin et al. (2003) meta-analyzed 21 studies comparing a specific psychological treatment with placebo controls, i.e., that lacked the active ingredients of the specific treatment. Based on a careful rating of the structural qualities (such as number, length, format of sessions, and thematic restrictions), aggregated specific effects i.e., differences between psychotherapy and placebo conditions in studies with dissimilarly structured placebo control groups were $d = 0.47$, while those in studies with equivalently structured placebo control groups were negligible, i.e., $d = 0.15$.
3. *Researcher allegiance*: One possible cause of the subtle changes in the operationalization of placebo control conditions in psychotherapy research is researcher allegiance (Gerger & Gaab, 2016). Research has demonstrated that controlling for researcher allegiance reduced otherwise observed differences between active psychotherapy treatments and placebo control conditions to virtual zero (Cuijpers et al., 2012; Miller, Wampold, & Varhely, 2008).
4. *Differentiating between characteristic and incidental factors*: Finally, the problems with placebo control groups in psychotherapy outcome research might be considered a consequence of the challenges involved in differentiating between incidental and characteristic factors in psychotherapy. For example, Serfaty et al. (2009) fashioned a talking control condition to establish specific effect of cognitive-behavioral therapy for depressed older people in primary care. Although patients rated the talking control condition as acceptable (Serfaty, Csipke, Haworth, Murad, & King, 2011), it included the exclusion of dialogue about emotional issues. For example, *if the patient said, "My daughter does not like me as she never comes to visit me," the therapist would ask, "How many children do you have?"* (cited from Serfaty et al., 2009, p. 1334). Does this imply that talking about emotional issues is a characteristic constituent of psychotherapy?

The omission of reference to any dialogue referencing emotional subjects, or indeed, of emotional affect, would render many professional as well as normal social encounters highly unusual. Consider, for example, the range of emotional issues that are referenced outside of psychotherapy, including in close relation and friendships, with clerics, hairdressers, and barbers or even vendors in the local grocery store. Theoretically, placebo control groups should ideally only be restricted to characteristic treatment constituents—those considered specific according to the underlying treatment theory. Clearly, disclosing, addressing, and discussing personal and emotional relevant topics are not a specific psychotherapeutic feat but rather a genuine aspect of human interactions (Wampold, 2012). Based on these considerations the differentiation of placebo and psychotherapy from an empirical point of view is linked to the operationalization of the employed placebo and is dependent on how clinical researchers theoretically delineate between treatment incidental and characteristic constituents in therapy. The aforementioned problems have led prominent placebo and psychotherapy researchers to claim that *in evaluating the efficacy of psychotherapy, the placebo effect cannot and should not be controlled* (cited from Kirsch, Wampold, & Kelley, 2016, p. 121).

3. PLACEBO AND PSYCHOTHERAPY: UNWANTED PROXIMITY

But while the argument *not* to control for the placebo effect in psychotherapy research appears justified from a methodological perspective, it is deeply problematic insofar as it rules out the possibility of establishing the effectiveness of specific factors, i.e., on Grünbaum's account: the characteristic factors, in psychotherapy. In this regard, Cuijpers and Cristea (2015) pointed out that using waiting-list control groups results in larger effect sizes and listed this approach as a method that can help to *prove that your intervention is effective (even when it is not)* (cited from Cuijpers & Cristea, 2015, p. 3).

Things are further complicated by the fact that "common factors"—which include response expectancies; the therapeutic alliance; therapist empathy; therapists' positive regard for patients which are considered to be the major determinants of psychotherapy outcome across different psychotherapy modalities by some (see Cuijpers, van Straten, Andersson, & van Oppen, 2008; Wampold & Imel, 2015)—are often classified as "placebo"

outside psychotherapy research. While there is still some controversy among researchers about the role of these so-called common factors, there is widespread agreement among psychotherapy researchers and psychotherapists that—whatever the role of specific treatment factors—common factors are significant mediators of outcome (Cuijpers, 2016; Huppert, Fabbro, & Barlow, 2006; Lambert & Barley, 2002; Marcus, O'Connell, Norris, & Sawaqdeh, 2014). However, it is important to emphasize that typically these common factors are considered incidental constituents of treatments as they are actively controlled for by the majority of researchers who undertake clinical research into psychological treatments.

Interestingly and relevant to the matter at hand, placebos and psychotherapy have independently been classified as meaning-transforming interventions (Frank, 1986; Moerman & Jonas, 2002). This indicates a rather disagreeable proximity between these treatments, which otherwise are associated with rather different connotations. In this perspective, both interventions are thought to provide an alternative meaning to the experience of symptoms, which would be delivered in the context of an empathetic and trustful clinical encounter. Interestingly, as it is part of the trick for placebos that the explanation given does not need to be true or verum, but only plausible, the same holds true for psychotherapy (Wampold, 2007).

However, these considerations are only consequential for the clinical application of psychotherapy if indeed psychotherapy is correctly conceived as a placebo—or put otherwise, if a psychotherapy placebo—i.e., an otherwise *sham, fake, false, inert, and empty (intervention)* (cited from Kirsch, 2005, p. 797), which would be deceptively administered as an active psychotherapy treatment—is possible and has clinically significant effects. In this regard, it is interesting to note that although placebos can and do take many forms, including acupuncture needles (Kaptchuk et al., 2008), surgical procedures (Jonas, Crawford, Colloca, et al., 2015), and even cleaning hotel rooms (Crum & Langer, 2007), the plethora of placebo research employs placebos with a more or less explicit medicinal meaning, such as pills, and that placebos with a psychotherapeutical meaning are comparably scarce. In this line of reasoning and according to the understanding of placebo effects as meaning responses (Moerman & Jonas, 2002) a psychotherapy placebo would not need to fully resemble "real" psychotherapy, but just do so sufficiently well so that patients would accept the administered placebo to have a psychotherapeutical meaning.

Given that the gold standard of clinical trials aims to establish the effectiveness of specific treatment components, how can one fashion a placebo

that would lack only its specific components and yet would also convincingly mimic a verum treatment? One intriguing way to handle this problem has been proposed by Kim, Wollburg, and Roth (2012) and directly compares two opposing psychotherapeutical treatments, i.e., breathing trainings to either increase or decrease end-tidal partial pressure of carbon dioxide in patients with panic disorder. Notice that such an approach prevents patients, therapists, and researchers from identifying which of the administrated treatments is the placebo; yet it clearly rules out the possibility that both can be "verum," since both treatments have opposing characteristic constituents, i.e., hyper- or hypnocapic breathing. Thus, from the perspective of the opposing treatment (and its underlying treatment theory), either treatment could be considered a placebo. Interestingly, both treatments showed the same, impressively stable effects, both at postintervention and at follow-up, while a wait-list control group did not show a significant change. Furthermore, the quality of the patient-rated therapeutic alliance as well as patient-rated confidence that the therapy would produce improvement was the main and only predictors of observed remedial effects (Kim, Roth, & Wollburg, 2015). Finally, and relevant to this discussion, it is interesting to note that both interpersonal psychotherapy, which has been found to be effective for an array of mental disorders (Cuijpers, Donker, Weissman, Ravitz, & Cristea, 2016), and present-centered therapy, which is now a now empirically supported treatment (American Psychological Association, Society of Clinical Psychology, 2018), were originally devised as control conditions in a pharmacological and psychotherapy trials, respectively (Frost, Laska, & Wampold, 2014; Weissman, 2006).

4. THE IMPLICATIONS OF THE RELATIONSHIP BETWEEN PLACEBO AND PSYCHOTHERAPY

The study of Kim et al. (2015, 2012) clearly demonstrates that placebos with a psychotherapeutical meaning are both possible and clinically effective. Although we cannot infer that psychotherapy is placebo, neither can we preclude the possibility. Thus, and reframing Kirsch's aforementioned statement, psychotherapy is not *sham, fake, false, inert, and empty*—but it can be. This possibility has important implications, which in our view could be seen as both a challenge and an opportunity for psychotherapy research.

First, in order to both better understand the mechanisms driving the impressive effects of psychotherapy and to be able to comply with the moral

principle of respect for autonomy and the patient's right to self-determination (Trachsel & Gaab, 2016), it is justified to on the one hand to investigate the role of those factors, which are considered incidental to most treatment theories, but which have been found to be underlying psychotherapy's impressive effects, and on the other hand—if necessary—to revise conventionally held theories about how these treatments work. If therapeutic alliance and treatment expectancies are highly relevant not only for placebo but also for psychotherapy effects, then how do they work and how does this translate to the different etiologies for different disorders? Clearly, psychotherapy could benefit from placebo research as this allows the controlled examination of treatment components (e.g., Kaptchuk et al., 2008) and could help to introduce new designs to test psychotherapy components for specificity. With regard to the latter, the open and hidden administration of a given treatment is one promising avenue. In open-hidden experiments an otherwise identical intervention is given to research participants who either know or do not know when (or if) the treatment will be administered or withdrawn. These experiments allow to examine the size of placebo effects within assumed verum treatments, without using placebos: any differences between open and hidden conditions are then understood to be placebo-like effects, since the intervention itself is not a placebo (e.g., Lund, Vase, Petersen, Jensen, & Finnerup, 2014). Using this approach, we recently observed differences in the effects of the psychotherapeutical method of expressive writing when administered open or hidden, which were of the same magnitude as the effects of this intervention itself (Tondorf et al., 2017).

Also, and importantly, these existing as well as future findings should be incorporated in existing psychotherapy treatment theories. For example, while psychotherapy treatment manuals and textbook in general contain some information on the importance of the therapeutic alliance and the plausibility and acceptance of the treatment rational to patients, this is seldom adequately incorporated in treatment theory or widely within psychotherapy education, nor is it typically communicated to patients (Locher, Meier, & Gaab, in press). Second and most important for the clinical practice of psychotherapy, patients have the right to be furnished with truthful information about how treatments work. Information about the nature of therapy—such as the importance of the therapeutic alliance, and patients' expectancies about treatment—is not morally trivial. Ethicists and clinical psychologists have argued that disclosure of so-called common factors (or in Grünbaum's terminology, the incidental features of

treatment) is a moral obligation, one that may even positively influence treatment effects (Blease, 2015; Blease, Lilienfeld, & Kelley, 2016; Gaab, Blease, Locher, & Gerger, 2016; Trachsel & Gaab, 2016). It might be countered that informing patients about the role of the therapeutic alliance and of treatment expectancies as well as *not* informing patients about the role of specific methods and techniques—as they are *not* responsible for the majority of possible effects—would both diminish the effects of just those very factors, i.e., impair the therapeutic alliance as well as decrease the expectancy of a treatment effect. First, we argue that this is an illogical argument—one cannot deny the importance of expectancy and therapeutic alliance on the one hand and on the other hand plead not to disclose the lack of importance of so-called specific as this would have a negative effect on these very factors, i.e., expectancy and alliance. Also, it is inconsistent to defend the importance of one set of (so-called) characteristic treatment constituents yet deny the disclosure of other treatment constitutes—those which the evidence-based indicates may be better labeled as characteristic constituents. Second, this line of reasoning may also be empirically doubted. It is possible that disclosure of common factors (especially those relating to the importance of the therapeutic alliance, and empathy) may positively influence patients' decisions to stay in therapy, or to find another therapist or version of treatment, rather than simply to drop out and leave therapy for good (Blease, Kelley, & Trachsel, 2018; Gaab et al., 2016). In addition, disclosure of (so-called) incidental treatment constituents may not diminish treatment outcomes. The administration of open-label placebos shows that full disclosure of placebo factors may still lead to clinically relevant effects (Charlesworth et al., 2017)—indeed, research shows that these effects are similar to deceptively administrated placebos (Locher et al., 2017).

In conclusion, the relationship, similarities, and differences between psychotherapy and placebo are interesting and highly relevant for the understanding of these two psychological interventions and thus should not be further neglected by research, psychotherapy education, and clinical practice. And of course, psychotherapy needs to be anything but *sham, fake, false, inert, and empty* (cited from Kirsch, 2005, p. 797), but it also needs a dose of deeper self-insight. It needs to understand why something that is *sham, fake, false, inert, and empty* has such sizeable effects.

CONFLICT OF INTEREST

The authors declare that they have no financial conflict of interest concerning this chapter.

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