

TRUST IN PLACEBOS

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Trying to explain the placebo effect has forced researchers to consider human beings as a whole and not as the sum of their organs. Just as polluted particles in the air can make us cough, our own beliefs can make our symptoms disappear. Placebo effects operate through the socio-cultural beliefs that an injection, or a pill, is a healing agent in itself, independently of its actual constitution. These beliefs are naturally tightly linked to the meaningfulness of our environment. The white coat of the doctor, the hospital room, or words pronounced by an authority figure all have the power to create a physiological effect. The literature on placebos has not paid sufficient attention, however, to the meaning the patient assigns to her relationship to the doctor. It is plausible that there is a psychological difference between a doctor who is perceived to be both competent as well as acting with the patient's well-being in mind as against the doctor who is perceived to be merely competent. That is to say, there is a distinction between trusting a doctor because we believe she cares for us and has our best interests at heart, as against trusting a doctor because we believe her to be merely reliable. Could this distinction make a difference in the context of placebos? In this paper, we develop the hypothesis that it could. We provide evidence from the literature supporting this hypothesis and suggest ways to test it. If correct, the hypothesis has implications not only for the theory of placebos but for healing more generally.

INTRODUCTION

One of the most illuminating accounts of the placebo effect holds that placebos are effective in virtue of the meanings attached by a patient to various features of the healing environment: "... what people know and understand about medicine, what they experience about healing" (Moerman, 2002, p. 20). The white coat of the doctor (Blumhagen, 1979), the color of the pill (De Craen, Roos, de Vries & Kleijnen, 1996), words pronounced by an authority figure (Desharnais, Jobin, Côté, Lévesque & Godin, 1993; Thomas, 1987) all have the power to create physiological effects. To the extent that all medical care is carried out in meaningful environments, the placebo effect is a component of all healing. Although it is widely accepted that the relationship between doctor and patient is among the important meaningful features of the placebo effect, the literature on placebos has not adequately explored the distinction between the meaning the patient assigns to the healing agent, on the one hand, and the meaning attached to their relationship with their doctor. There are likely to be a variety of independent features of the doctor-patient relationship, and too little attention has been given to exploring whether these features make independent contributions to the placebo effect and, if so, how substantial these contributions are.

Among the salient features of the doctor-patient relationship is the trust placed in the doctor by the patient. However, the importance of trust as a contributor to the placebo effect, and to medical outcomes more generally, has not been explored experimentally. In addition, there has been no exploration in the literature on placebos of the varieties of trust relations and the question of whether these may correlate differentially with a placebo effect. In this paper, we make a case for the potential importance of trust in the placebo effect. We further discuss two varieties of trust which we hypothesize may be relevant to placebos and for the psychology of healing more generally.

PLACEBOS AND THE DOCTOR-PATIENT RELATIONSHIP

The patient's relationship to the doctor is at the core of the healing process. In recent years, this relationship has narrowed; sometimes it amounts to little more than an exchange of information about symptoms, the biological investigation of the disease, and the prescription of therapy for symptom remediation or cure. Research on placebos, however, has provided considerable evidence that the meaning of the exchange between doctor and patient also contributes to the healing process (Moerman, 2002). Because a treatment that is physiologically inert can induce a reduction or

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disappearance of symptoms and make the patient feel better, it is very plausible that the context in which the treatment is given—the color of the pill (Spiro in Harrington, 1997), the words spoken by the doctor, and, presumably, the attitudes of patient to doctor—have physiological effects that can be curative (Harrington, 1997; Price, Finniss & Benedetti, 2008).

That the relation of doctor and patient is relevant to healing should hardly be surprising given that social relations are well known to have effects on health. For example, people with many friends and qualitatively good relationships live longer (Berkman & Syme, 1979) and are typically in better health than people without such ties (Ertel, Glymour & Berkman, 2009; Everson-Rose & Lewis, 2005). The relationship maintained between a patient and her doctor is part of the patient's social network and is bound to affect health outcomes no less than other social ties, in particular because the doctor's primary function is explicitly to care for the patient. Indeed, warm and friendly attitude on the part of the doctor is thought to lead to better health outcomes than a neutral and formal attitude (diBlasi, Harkness, Ernst, Georgiou & Kleijnen, 2001; Gryll & Katahn, 1978). Feeling “cared for” may itself have health benefits (Barrett et al., 2006). In short, the relationship of doctor to patient is a vehicle for a healing effect.

Given the effects of social relationships on health, one would expect that the social context of placebo administration would have a significant effect on the efficacy of placebos. And, indeed, it is widely accepted that the relationship between the doctor and patient is a significant contributor to, or modulator of, the placebo effect (DiBlasi et al., 2001; Harrington, 1997). In addition, it is a commonplace that among the most important features of the doctor–patient relationship is trust (see O'Neill, 2002). Studies show that the large majority of US patients trust their doctor completely (Kao, Green, Davis, Koplan & Cleary, 1998; Kao, Green, Zaslavsky, Koplan & Cleary, 1998) despite having less trust in doctors in general (Hall, 2006). Although the question of a possible association between trust and health outcomes has been mostly ignored (Pearson & Raeke, 2000), one study observed that patients' satisfaction, adherence to treatment and self-reported health improvements were associated with patients' trust in their doctor (Safran et al., 1998).

Since a belief in the efficacy of the placebo seems to be essential to its effects (even when it is known to be a placebo; see Kaptchuk et al,

2010), trust in the doctor is also thought to be a significant component of the placebo effect (Hunter, 2007). Studies have shown, for example, that saying “this drug will help you” may induce a faster or better recovery than saying “I'm not sure if this drug will have an effect” (Pollo et al., 2001; Thomas, 1987). Nonetheless, there has been relatively little formal investigation of the ways in which different features of the doctor–patient relationship may participate in enhancing or mitigating the placebo effect. In particular, the nature of the relationship of trust that must exist between doctor and patient has been all but ignored in the research on placebos. It is likely that there are a great many varieties of trust among people; the trust of a child in a parent, of an investor in a banker, of a jazz musician in the performers improvising with her, appear, at least at first glance, to be rather different relations. Which is required of the doctor–patient relationship? In the next section we make a beginning in the investigation of trust and placebos by considering two closely related forms of trust; we hypothesize that these two relations will be correlated with different placebo effects.

TRUST AND RELIANCE

In an influential theory of the nature of trust, Annette Baier (1986) distinguishes between trust and reliance:

We may have no choice but to continue to rely on the local shop for food, even after some of the food on its shelves has been found to have been poisoned with intent. We can still rely where we no longer trust. (p. 234)

To rely on someone, on Baier's view, is to depend on their behaving in particular ways. One can, in this sense, rely on somebody in the same way as one relies on an inanimate object. You rely on your computer to write files to the hard drive, but you don't trust it. Or, to take a case closer to our concerns, you can rely on a pill to get rid of your headache but you don't trust it to do so. What distinguishes trust from reliance then? Baier's (1986) proposal is that trusting someone

seems to be reliance on their good will toward one, as distinct from their dependable habits, or only on their dependably exhibited fear, anger, or other motives compatible with ill will toward one, or on motives not directed on one at all. (p. 234)

Baier’s suggestion, as Holton (1994) has argued, is not entirely successful and for reasons that Baier (1986) herself considers:

We trust our enemies not to fire at us when we lay down our arms and put out a white flag. In Britain burglars and police used to trust each other not to carry deadly weapons. We often trust total strangers, such as those from whom we ask directions in foreign cities, to direct rather than misdirect us, or to tell us so if they do not know what we want to know; and we think we should do the same for those who ask the same help from us. (p. 234)

In this passage, Baier may be using the word “trust” in a pre-theoretic sense and would actually judge these cases to involve reliance rather than full-blown trust. But it’s not obvious that these *aren’t* cases of genuine trust even though goodwill may be in question or clearly absent. There is honour, and perhaps trust, among thieves, though there be no good will.

Still, there is something quite right about Baier’s account. Trust seems to be different from reliance to the extent that trust, but not reliance, seems to depend in some way on the state of mind of the person trusted, although their state of mind may not be one of good will toward the trusting person. We trust our enemies not to fire when we surrender not because we believe they have good will toward us but because we believe that they will be motivated by the desire of a soldier to act honourably; perhaps police and burglars trust each other, despite an absence of mutual good will, because both are motivated by the desire to avoid senseless killing even when crimes are being committed; and we trust strangers to give us correct directions not because we think they feel good will toward us—can one feel good will toward a complete stranger?—but because we believe that they are motivated by a desire to be the sort of person who helps when help is easy to give. What distinguishes trust from reliance, therefore, is this. You rely on somebody when you believe that they will act in a certain way *whatever* their reasons or motives for action. But it is a necessary condition on trust that you trust someone only when you believe they have the right sort of reason or motive; that is, you trust someone when you believe their motives are such that they will act in your interest*.

Just what sort of motives for action invite trust is an important question that we can’t address here, but we speculate that those reasons will be significantly related to moral considerations even if good will isn’t among them. Two other issues

are worth noting. First, it seems plausible that there is more than one form of genuine trust. Children trust their parents; investors trust their bankers; and students trust their teachers. But it’s not obvious that the trust involved is the same in all these cases. One strategy for developing a taxonomy of trust would be to classify the varieties of trust according to the types of reason for action motivating the person trusted. Secondly, we mentioned above the idea that you can rely on your computer to do something, but you can’t trust it. If we are concerned with the behaviours of other people and the kinds of reason people have for action, we had better distinguish the idea of relying on somebody whatever their motivation, and relying on an inanimate object which has no motivations at all. In short, we can stand in at least three kinds of dependence relations: we can rely on an object to behave in a certain way just in virtue of its working right; we can depend on a virtue to act in some way or other whatever their motivations; and we can trust someone when we depend on them to act for the sort of reason or motive that invites trust.

PLACEBOS AND TRUST

When a doctor gives a placebo to a patient, the patient will have beliefs about the properties of the placebo. We hypothesize that the patient will also have beliefs—whether fully formulated or inchoate, conscious or unconscious—about the behaviour of the doctor as they pertain to the treatment decision. The central difference between the set of beliefs about the physical placebo and the beliefs about the doctor’s behaviour is that doctors, unlike pills or other physical objects, do what they do for reasons. If we want to explore the ways in which the doctor–patient relationship may contribute to the placebo effect, there is no getting around the question of what the patient believes about the motivations behind the doctor’s giving the patient the pill.

To see how these motivations may differ, consider three different scenarios. In the first, the patient believes the doctor is prescribing a pill because writing a prescription is quick, and the doctor is motivated by a desire to see as many patients as possible consistent with providing competent medical treatment. A second patient given the same pill believes the doctor is prescribing it because the doctor always acts out of a desire to provide medical care that is competent and that never strays from the guidelines about appropriate treatment. A third patient given the pill believes the doctor is motivated by a desire to alleviate her discomfort and distress. Arguably, the first two patients rely on the doctor, but only the

* The distinction between reliance and trust is manifest in the logic of the two relations. Reliance is a three-place relation: subject *S* relies on agent *A* to carry out action *F*; in contrast, trust is a four-place relation: subject *S* relies on agent *A* to carry out action *F* for motive *M*. (We are grateful to two anonymous reviewers for pointing this out.)

third trusts him. (Notice that the doctor's motive to care for his patient isn't sufficient for trust: if you believe your doctor cares about your suffering but is incompetent, you won't trust him even though you may value him or his attitude to you.) These scenarios do not by any means exhaust all the possibilities, and we suspect that there are distinct forms of both reliance and trust that may hold between doctor and patient.

We hypothesize that the beliefs of the patient receiving a placebo will make a difference to how efficacious the placebo is. In particular, we hypothesize that a relation of trust on the part of the patient towards the doctor will significantly enhance the placebo effect compared with relations of mere reliance. That is, while reliance will produce a placebo effect and enhance the healing effect produced by a drug or other intervention, trust will produce a bigger effect. The distinction between reliance and trust should be visible in the magnitude of the placebo effect. The literature includes some findings that are consistent with the idea that trust can enhance the placebo effect. The quality of social ties is of essential to health outcomes. Social support from friends and family enhances recovery from disease, whereas social conflict can have the opposite effect (Everson-Rose & Lewis, 2005). We are not claiming that trust is solely responsible for the placebo effect but is rather one among many possible contributors to it. We are making two narrower claims: first, that trust is likely to be a significant contributor to the placebo effect, and, secondly, that subtle, but important, distinctions in the varieties of trust may also be significant to placebo outcomes.

Although we believe the investigation of trust and placebos is important, there are methodological challenges to be faced; confounding variables are likely to create limitations in this type of

research (Hróbjartsson, 2002). For example, as we have noted, the mere interaction between the doctor and patient has potential placebo effects (Pollo et al., 2001; Thomas, 1987). In addition, people are reassured by what is familiar to them, independently of the efficacy of the source of familiarity (Litt, Reich, Maymin & Shiv, in Press; Moreland & Zajonc, 1976; Zajonc, 1968). The simple fact that doctors are often familiar and are believed to have some effect on health outcomes is likely to contribute to the placebo effect independently of the presence of a trusting relationship. A valid paradigm would thus need to control for these effects, as well as for the other effects that are likely produced by the many meaningful features of the doctor–patient interaction (Brody, 1997, in Harrington). Building on established placebo research protocols, a new paradigm might investigate patients' perception of doctors' reliability on the one hand, and doctors' good intentions on the other as potential contributors to the placebo effect. If the behavior of doctors can be shown to be reliance-inducing and/or trust-inducing in patients, their impact on health outcomes could then be explored in the manner of Kaptchuk et al.'s study (2008).

Despite the challenges to be faced, the benefits of research into trust and placebos may be significant. If trust in one's doctor contributes to the power of placebos—and by extension to the power of all medical care—this fact will have profound implications for the social structure of health-care delivery. The extent and the nature of trust in the doctor–patient relationship will matter where decisions about the use of out-patient clinics, as against family doctors, or about the role of insurance companies in healthcare delivery have to be made.

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