A fictionalist account of open label placebo

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Abstract

The placebo effect is now generally defined widely as an individual's response to the psychosocial context of a clinical treatment, as distinct from the treatment's characteristic physiological effects. Some researchers, however, argue that such a wide definition leads to confusion and misleading implications. In response, they propose a narrow definition restricted to the therapeutic effects of deliberate placebo treatments. Within the framework of modern medicine, such a scope currently leaves one viable placebo treatment paradigm: the non-deceptive and non-concealed administration of 'placebo pills', or open label placebo (OLP) treatment. In this paper I consider how the placebo effect occurs in OLP. I argue that a traditional belief-based account of OLP is paradoxical. Instead, I propose an account based on the non-doxastic attitude of pretence, understood within a fictionalist framework.

1. Introduction

The placebo effect is traditionally defined as the psychological effect of a pharmacologically 'inert' substance (Beecher 1955). Within this narrow scope, the paradigmatic situation occurs when a clinician gives a sugar pill to a patient but tells them it is an active drug. The patient's belief in the effectiveness of the pill brings about a therapeutic effect. There is much experimental evidence for something like this effect (Benedetti 1996; 2014; Wolf 1950; Levine, Gordon, and Fields 1978; Wager et al. 2004) even if its value in the clinic is more disputed (Kienle and Kiene 1997; Hróbjartsson and Gøtzsche 2001; Hróbjartsson and Gøtzsche 2010; Hróbjartsson and Gøtzsche 2004; Wampold et al. 2005; Spiegel, Kraemer, and Carlson 2001).¹ However, the usefulness of the traditional definition faces two main problems: first, the paradox of inert substances having an effect (Miller 2018); and second, the difficulty of classifying any substance as inert (Howick 2017). To avoid these problems,

¹ Much debate on clinical effectiveness is focussed on a twice-updated meta-analysis of clinical trials including treatment, no-treatment, and placebo arms, which found little evidence for the placebo effect (Hróbjartsson and Gøtzsche 2001; Hróbjartsson and Gøtzsche 2004; Hróbjartsson and Gøtzsche 2010). In response, these meta-analyses have been heavily criticised for a number of conceptual and methodological reasons, including: that by including such a broad range of conditions they did not take into account that placebos are not likely to work uniformly across different disorders (Benedetti 2014; Spiegel, Kraemer, and Carlson 2001); that a re-analysis of the results does show clinically meaningful effects (Wampold et al. 2005); and that, in any case, clinical trials are just not a good method for assessing the placebo effect, thus the meta-analyses are conceptually flawed from the outset (Benedetti 2014).

the definition of the placebo effect has been widened to encompass an individual's response to the psychosocial context of a clinical treatment, as distinct from the treatment's characteristic physiological effects (Miller et al. 2013; Friesen 2020).

Although a wide definition of the placebo effect avoids the paradox of inert substances having an effect, it creates new problems that seem equally intractable. In particular, it replaces one paradox with another: the placebo effect without a placebo (Nunn 2009a). By including as placebo any therapeutic effect attributable to either the patient-clinician relationship or the non-characteristic effects of a treatment (Howick 2017; Grünbaum 1986), a wide definition raises questions about the usefulness of the concept. As other researchers have noted, most of the myriad practices that are encompassed by this wide definition do not need explanation in terms of the placebo effect; worse, invoking the placebo effect to explain many such practices risks merely obscuring what can be better explained more precisely (Turner 2012; Hardman, Hutchinson, and Ongaro 2020; Nunn 2009b).² This is emphasised by reflecting on a taxonomy of techniques it is argued might be used to harness the placebo effect in non-malignant pain (Bishop et al. 2017). The taxonomy defines 30 procedures that might contribute to the placebo effect, including conveying a positive therapeutic message, tailoring the intervention to the patient's social and cultural context, providing a sham physical intervention, administering products unlikely to be effective, obtaining a detailed psychosocial history, and deliberately engaging the patient with warmth, compassion, and empathy. It is not just that many of these situation-dependent practices cannot be explained simply by the dominant mechanisms in placebo studies research – such as responseexpectancy or conditioning – but that it is unlikely one concept could ever usefully encompass such a wide range of practices. Partly informed by these critiques, Miller (2018) recently rejected his previous wide definition of the placebo effect for a narrow definition restricted to the therapeutic effects of deliberate placebo treatments - with the distinction that the effects are not attributed to something *in* the placebo but something *about* the placebo, insofar as the placebo "functions as a sign or symbol interpreted by the patient or subject in a way that gives rise, by some psychobiological mechanism, to a therapeutic outcome" (Miller 2018, 338). In re-narrowing the scope of the placebo effect, Miller avoids the paradox of the placebo effect without a placebo. In adopting a semiotic account of the placebo effect (Miller and Colloca 2010) he avoids the paradox of inert substances having an effect. Miller's (2018) definition thus mitigates much conceptual confusion inherent to both wide and traditionally narrow definitions.

As Miller notes, although his reduced scope – which he terms 'reining in' the placebo effect – does mitigate much conceptual confusion, it substantially restricts the prospects for harnessing the placebo effect in clinical practice. Within the framework of modern medicine, Miller's proposed scope leaves just one viable placebo treatment paradigm: the non-deceptive and non-concealed administration of 'placebo pills', or open label placebo treatment (OLP).³

² This critique can also be levied at attempts to recast the placebo effect in similarly broad terms, such as, for example, the meaning response, context effect, healing response, etc.

³ Other possible treatments such as deceptive administration of placebo pills or sham surgery do not meet the standards of modern bioethics and risk harming the patient-clinician relationship and thus patient outcomes.

In this paradigm, the clinician gives the patient a sugar pill (or suchlike) but does not deceive them by telling them it is an active drug. Interestingly, small studies suggest that OLP could be effective for conditions including, *inter alia*, irritable bowel syndrome (Kaptchuk et al. 2010), chronic back pain (Carvalho et al. 2020; Carvalho et al. 2016) and episodic migraine (Kam-Hansen et al. 2014). As OLP represents the only potentially viable treatment paradigm within a reasonable scope of the placebo effect, in this paper I consider how the placebo effect occurs in OLP. In §2 I consider and reject the dominant belief-based account of open label placebo for being either paradoxical or rendering OLP pragmatically unnecessary. In §3 I consider another attitude that has been invoked in the placebo effect: hope. I first consider the standard version of hope, which I reject for relying on at least some degree of belief. I then consider a more substantial version of hope that does not rely on belief but on the process of acting 'as if'. Given substantial hope is more precisely the process of acting as if, in §4 I consider the dominant philosophical paradigm in which acting as if is explored, fictionalism, and propose a pretence-fictionalist account of open label placebo.

2. Belief

Conscious belief underpins many explanatory accounts of the placebo effect, including directly through response expectancy (Kirsch 2018) or contributing to a model in predictive processing (Ongaro and Kaptchuk 2019).⁴⁵ Beliefs responsible for the placebo effect have been posited as interactive (depending on the patient-clinician relationship), situated (occurring in particular clinical contexts), and grounded on higher order beliefs about the beliefs of others, particularly clinicians (Chiffi and Zanotti 2016; Zanotti and Chiffi 2017). In the classic deceptive case of a clinician prescribing a placebo pill to a patient but telling them it is an active drug, invoking belief seems unproblematic:

P1: The patient believes the pill is an active drug.

P2: Belief that the pill is an active drug causes a positive therapeutic effect.

C: Therefore, the patient experiences a positive therapeutic effect.

If the patient believes the pill is an *inactive* drug, however, the set of beliefs seems paradoxical. At this stage, it is necessary to note that in philosophy there are different characterisations of the notion of a paradox. For example, Quine (1997) proposes three types of paradox: veridical, whose conclusion is true despite its absurdity; falsidical, whose conclusion is obviously false or self-contradictory; and an antinomy or intractable paradox that cannot seem to be resolved. However, such a characterisation has been criticised as ignoring the influence of background beliefs in both the clarification of a paradox and the

Miller (2018) also highlights the potential practice of using placebo pills in a dose reduction strategy (e.g. Sandler, Glesne, and Bodfish 2010) but himself notes that the promise of such a strategy has yet to be demonstrated. As such, in this paper I focus solely on OLP.

⁴ There are of course examples of the placebo effect occurring in the absence of conscious belief (e.g. Benedetti et al. 1999; Jensen et al. 2012) leading to alternative explanations of the phenomenon – notably some form of conditioning or learning. Debate on the validity of conditioning accounts notwithstanding (De Houwer 2018; Montgomery and Kirsch 1997), in this paper I focus on attitudes that might be involved in the placebo effect. ⁵ Although predictive processing is sometimes framed in placebo research as some kind of cognitivist theory, as

Ongaro and Kaptchuk (2019) note, it is really a theory of brain function. As such, one could argue that it can apply to non-doxastic as well as doxastic accounts of the placebo effect.

preferred way of resolving one (Lycan 2010). As such, I adopt a simpler characterisation of a paradox as "an inconsistent set of propositions, each of which is very plausible" (Lycan 2010, 618), and a similarly simple and pragmatically useful approach to resolving a paradox whereby "to resolve a paradox is to decide on some principled grounds which of the propositions to abandon" (Lycan 2010, 618). With these terms in mind, let us consider replacing the proposition that the pill is an active drug for one in which the pill is an inactive drug:

P1: The patient believes the pill is an inactive drug.

P2: Belief that the pill is an active drug causes a positive therapeutic effect.

C: Therefore, the patient experiences a positive therapeutic effect.

Here we can see that set of beliefs is paradoxical because the individual propositions are plausible but the set inconsistent. A simple way to resolve this paradox is to abandon the conclusion; however, that would render OLP treatment ineffective, which conflicts with extant empirical findings. The first proposition also cannot be abandoned as, within a beliefmodel, it is central to the whole treatment paradigm. Thus, the only remaining option is to abandon the second proposition. In accounts of OLP it is commonly abandoned and replaced thus:

P1: The patient believes the pill is an inactive drug.

P2: Belief that the inactive drug will stimulate endogenous healing causes a positive therapeutic effect.

C: Therefore, the patient experiences a positive therapeutic effect.

With this set of beliefs there is no longer inconsistency between the propositions. However, although commonly presented as a valid belief in OLP, the second proposition is internally contradictory, inasmuch as if a pill is inactive then it cannot logically stimulate anything. As Miller (2018) notes, there is nothing *in* the placebo that gives rise to a therapeutic effect. Here we find the problematic self-fulfilling placebo belief proposed by Cave (2001) and Hutchinson (2020): the patient's belief in the 'placebo' is not grounded in anything independent of their belief. Such self-fulfilling belief has been posited as either a) involving an illicit form of bootstrapping dictating disbelief , or b) if one rejects the illicit bootstrapping critique for misleadingly treating one's beliefs as fixed prior to the process of deliberation, as a process whereby evidence underdetermines *any* doxastic attitude (Antill 2019). In any case, either interpretation renders such placebo belief problematic. Faced with this problem, we can try again:

P1: The patient believes the pill is an inactive drug.

P2: Belief that the psychosocial context of administering the inactive drug will stimulate endogenous healing causes a positive therapeutic effect.

C: Therefore, the patient experiences a positive therapeutic effect.

With this set of beliefs there is no inconsistency between the propositions, and the second proposition is now not internally contradictory (i.e. plausible). The belief is no longer self-fulfilling as it is grounded in belief in the therapeutic power of the psychosocial context of treatment. However, in ascribing the therapeutic effect to the psychosocial context of treatment surrounding the pill, rather than the pill itself, it is questionable whether this set of beliefs supports the use of OLP. Rather, it just accounts for the general notion that the psychosocial context of *any* treatment has an effect. On these terms, OLP works by merely setting up a treatment situation so as to benefit from the psychosocial context of its administration - conceived in myriad ways such as ritualisation, semiotics, etc. If this is the case, however, then we would not need the controversial open label placebo treatment itself, as any treatment situation (many of which are less contentious and already established in both mainstream and alternative medicine (Ainsworth, Hardman, and Thomas 2019)) would do. In practice, therefore, once one resolves the paradox of self-fulling belief in OLP, the resulting belief-based account of OLP – grounded in the psychosocial context of treatment – renders it pragmatically unnecessary. With this in mind I explore replacing the problematic attitude of belief in OLP with another attitude, hope, that has previously been invoked in OLP.

3. Hope

The importance of hope has been explored in a number of medical fields (Kube et al. 2019). For example, oncology research has found that patients regularly maintain hope by reinterpreting unfavourable prognostics (Thorne et al. 2007; Thorne et al. 2006), and chronic pain research suggests that hope is an active and dynamic process contingent on personal experiences (Eaves et al. 2014). More specifically with respect to the placebo effect, Kaptchuk (2018) highlights the results of studies exploring patients' views and experiences of treatments that suggest hope is more important than expectation (Eaves et al. 2014; Di Blasi et al. 2005; Kaptchuk et al. 2009; Eaves, Nichter, and Ritenbaugh 2016; Hsu et al. 2014). For example, in one study exploring the views of patients receiving placebo acupuncture treatment for irritable bowel syndrome, participants spoke of hope in rather than expectation of improvement (Kaptchuk et al. 2009). Such hope was also frequently accompanied by despair, whose dialectical relationship has historically been central to existential accounts of hope (Marcel 1995; Mattingly 2010). In another study exploring attitudes about treatment allocation in a randomised controlled trial on the effectiveness of corticosteroid for heel pain, most participants denied having prior expectations, instead invoking hope that something would help (Di Blasi et al. 2005).

Invoking hope in OLP seems worthwhile because doing so avoids the problematic belief-based account:

P1: The patient hopes the pill is an active drug.

P2: Hope that the pill is an active drug causes a positive therapeutic effect.

C: Therefore, the patient experiences a positive therapeutic effect.

So far so good. However, for the account to be useful we need to be clearer on what we mean by hope. The standard philosophical account takes hope to consist of two components: a desire or wish for an outcome and at least some degree of belief in that outcome's possibility (Martin 2016; Meirav 2009). In psychology, hope has similarly been proposed as a two stage motivational construct involving a desire to strive for a goal, and belief (or expectancy) about how to achieve it (Snyder 2002; Snyder 1995). Thus, more precisely, the patient holds the attitude that '*this pill will make me feel better because I wish and have some degree of belief that it will make me feel better*'. This will not do. We have smuggled belief back in, thus succumbing to the problematic nature of first-person belief about the placebo effect. If invoking hope is to be useful in explaining OLP, we need a different account.

One critique of the standard account of hope is that it does not explain the many instances in which we are hopeful about possibilities we do not really believe will occur. Pettit (2004, 154) thus distinguishes "superficial" hope, described by the standard account, from "substantial" hope conceived as "acting as if a desired prospect is going to obtain or has a good chance of obtaining" (Pettit 2004, 158). Thus, with a substantial account of hope:

P1: The patient acts as if the pill is an active drug.

P2: Acting as if the pill is an active drug causes a positive therapeutic effect.

C: Therefore, the patient experiences a positive therapeutic effect.

The substantial account of hope has been criticised for being irrational, inasmuch as it requires the hopeful person to act as if they have a false belief (Martin 2016). But this is not so much a criticism as a premise that hope must necessarily involve true belief. There is no logical reason to accept this premise. It is perfectly logical to propose that the very process of acting as if the pill is effective might invoke the placebo effect. People exploit the process of acting as if something is the case all the time (Appiah 2017; Vaihinger 2015) – that the sun rises, that electricity flows through cables, that Sherlock Holmes is a detective – so there seems no reason why patients might not do so to invoke a therapeutic effect. Indeed, some researchers have proposed that the process of acting as if might be integral to the placebo effect (Hardman and Ongaro, 2020; Kaptchuk, 2011; Kaptchuk et al., 2009).

In foregrounding the process of acting as if, a substantial account of hope highlights how the placebo effect might occur in OLP. Given substantial hope is more precisely the process of acting as if, it is therefore worth exploring that process on its own terms. The dominant philosophical paradigm in which the process of acting as if has been explored is fictionalism. In the remainder of this article I thus explore whether fictionalism can provide a more useful account of how the placebo effect occurs in OLP.

4. A fictionalist account of the placebo effect

Fictionalist accounts come in many forms but share a common view that claims about or within a target discourse are useful but not necessarily true (Armour-Garb and Woodbridge 2015; Caddick Bourne 2013). There are many different accounts of fictionalism and it is beyond the scope of this paper to provide a comprehensive review. Nevertheless, it is worth highlighting two key distinctions. The first is between linguistic and ontological fictionalism. The linguistic thesis is broadly that the utterances of sentences about or within a discourse are not aimed at literal truth but some other purpose. The ontological thesis is broadly that

entities characteristic of the discourse do not exist. These theses are often combined, in part because much philosophical discussion on fictionalism is motivated by ontological concerns. For the purpose of understanding OLP, I hold to the linguistic thesis but take a deflationary view on the ontological. The second distinction is between hermeneutic and revolutionary fictionalism. Hermeneutic fictionalism is the view that we do not believe in the sentences in question within a particular discourse but only act as if we do. Revolutionary fictionalism is the view that when engaging in a particular discourse we ought *only* to act as if we believe in the sentences in question, insofar as the very point of engaging in the particular discourse would be achieved by acting as if. For the purpose of understanding OLP, I hold to the hermeneutic thesis but make no claim with respect to the revolutionary. In explicating the view that in making claims about or within a target discourse we only act as if those claims are true, fictionalist accounts often invoke two non-doxastic attitudes: acceptance and pretence. I will consider the usefulness of each attitude in explaining OLP.

4.1. Acceptance

In recent decades a number of researchers have proposed a distinction between belief and acceptance (Frankish 2004). Cohen (1989) proposes that to accept that p is to go along with the proposition as a premise, immediately or for the long term, for some purpose; in other words, to act as if we believe it. Cohen further proposes that believing that p is a disposition, whereas accepting that p is a mental act whereby we act as if we believe that p. Thus, in the case of OLP, acting as if is interchangeable with accepting:

P1: The patient accepts the pill is an active drug.

P2: Accepting that the pill is an active drug causes a positive therapeutic effect.

C: Therefore, the patient experiences a positive therapeutic effect.

Accepting that p without believing it has been proposed as a useful strategy in a number of fields, including the natural sciences (Van Fraassen 1980) and mathematics (Field 1980). For example, it seems reasonable that one could accept a scientific theory as if it were true because it allows for useful scientific work. It also seems reasonable that one could accept that abstract mathematical objects do not exist yet act as if they do in one's theorising because it is useful.

However, we need to make a distinction between acting as if a premise is true with reservations and acting as if a premise is true without qualms. The attitude of acceptance seems only to capture this first, qualified notion of acting as if. It is thus questionable whether acceptance is a strong enough attitude to invoke the placebo effect. Although acceptance seems to account for certain instances in which one goes along with a premise because it is useful to do so, going along with the premise that *'this pill will make me feel better'* seems to require something more on the part of the patient, insofar as it must transform health. I thus reject acceptance and consider the second attitude commonly invoked in fictionalist accounts: pretence.

4.2. Pretence

Pretence is part of many culturally significant activities and considered an important aspect of human development (Leslie 1987; Nichols and Stich 2000). There is no standard account of pretence but it is commonly considered to be a symbolic process in which one thinks of or sees one thing as another (Currie 2004; Leslie 1987; Nichols and Stich 2000). To separate it from delusion, pretence must not involve belief. Thus, in a pretence-fictionalist account of OLP, acting as if is interchangeable with pretending:

P1: The patient pretends the pill is an active drug.

P2: Pretending that the pill is an active drug causes a positive therapeutic effect.

C: Therefore, the patient experiences a positive therapeutic effect.

Conceiving the process of acting 'as if' as pretence rather than acceptance, makes clear that acting as if does not have to occur with reservation. Acting as if within a pretence is a process conducted without qualms (Armour-Garb and Woodbridge 2015; Walton 1990). Pretence-fictionalism is a type of hermeneutic fictionalism that seems to provide theoretical benefit with respect to OLP because it allows one to utter sentences in a particular discourse that commit to unwanted or ontologically troublesome entities. A pretence account of a particular discourse can demonstrate the point of that discourse and justify its continued use (Liggins 2010).

In highlighting the useful function of pretence, pretence-fictionalist accounts are often grounded in Walton's (1993) framework of prop oriented make-believe, which is contrasted with a content-orientated account. In content-oriented make-believe, the function of the pretence is to allow for immersion in the make-believe world itself. So, for example, in a game of cops and robbers the children involved might pretend that a gun is real or that a box is a car, only insofar as it allows them to immerse themselves in a world where they can rob banks and catch criminals. In prop oriented make-believe, the pretence is not for the sake of the game but to better articulate and communicate facts about the props themselves. Walton's (1993) key examples are often metaphorical, such as electricians distinguishing between male and female connections, or navigators referring to the saddle of a mountain. Thus, for example, adopting the pretence that electrical connections are sexual organs is not done to further the pretence itself, but to help articulate and better understand the functional properties of those electrical connections. Walton proposes that utterances made within a pretence can convey information about the real world through what he calls *principles of* generation: rules that govern the use of the pretence. For example, within the pretence of electrical connections as sexual organs, if the right principles of generation are understood then uttering that the male should be inserted into the female coveys to a colleague that one type of electrical connector should be plugged into another. Adopting the pretence in the situation improves communication, thus justifying continued use of the discourse.

In the case of OLP, the patient and clinician adopt something like the pretence that the pill is an active agent or drug that will stimulate endogenous healing. Within that pretence, the clinician can utter sentences such as that the placebo effect is powerful and that the body can automatically respond to the pills themselves; sentences that, outside the pretence,

commit to ontologically troublesome entities. The use of pretence in OLP seems related to but not directly analogous with prop oriented make-believe. Although, as with prop oriented make-believe, the pretence in OLP communicates things about the real world, it does more than that. As studies suggest, openly taking a placebo pill can produce clinically significant effects (Kaptchuk & Miller, 2018). The pretence in OLP does not merely communicate information about the function of the 'placebo pill', but actively *transforms* its function and effectiveness in the real world.

One common critique of any fictionalist account is that it is unclear how the internal and external worlds in the framework interact. This is particularly relevant to the placebo effect, because many other explanatory accounts, such as semiotics (Miller and Colloca 2010), meaning response (Brody 1997; Moerman 2002), ritual theory (Kaptchuk, 2011; Thompson et al., 2009) etc., foreground such interaction. It is thus generally accepted that any explanatory framework for the placebo effect must account for such interaction. However, one can argue that this critique is grounded in an assumption that there is a clear distinction between 'internal' and 'external' worlds. This assumption is increasingly questioned, particularly within 4E cognitive science where, *inter alia*, active externalist, enactivist, and embodied accounts, attempt to break down this dichotomy. In an enactivist account of the placebo effect, for example, Ongaro and Ward (2017, 528) note that "the dynamical underpinnings of mind, body and culture are inseparably intertwined... [so] there is no mystery as to why tinkering with cultural and cognitive aspects of this dynamic system should have bodily effects." In line with such an account, the attitude of pretence transforms the interaction between clinician and patient in a way that loops back to have potential therapeutic effects (which could be conceived and/or measured biologically, psychologically, etc.). Foregrounding the transformative power of pretence accords with recent anthropological research highlighting the importance of ritual in the placebo effect, through which placebo treatment entails a subjunctive decoupling from everyday life (Hardman and Ongaro 2020). As in a pretence-fictionalist account of OLP, through a process of ritualization the patient and clinician engage in co-constructed make-believe that enacts the very effectiveness of the treatment in question (Hardman, Geraghty, Lown, et al. 2020). Moreover, in a recent study exploring participants' lay perspectives in an RCT investigating experimental OLP analgesia, participants actively questioned the role of expectancy and other belief-based systems, highlighting other potential mechanisms such as the power of ritual and the imagination (Locher et al. 2021). This gives further support to the idea that the attitude of pretence could be central to the therapeutic or 'placebo' effect in OLP.

5. The consequences of a pretence-fictionalist account of OLP

I argue that a pretence-fictionalist account can help explicate OLP treatment. However, as with a child's game of cops and robbers, clinicians and patients must actively construct the pretence of OLP. One problem for proponents of OLP is that this is no small task. For example, in a randomised controlled trial in IBS testing whether OLP is better than no treatment (Kaptchuk et al. 2010), participants were first told that the study was for a novel mind-body management treatment, then told placebo pills have self-healing properties. Prior to treatment they were given a further 15 minute briefing on the placebo effect as a powerful

automatic body response. Halfway through treatment, participants were visited by a warm and supportive clinician who conducted a physical examination and asked some questions about how they were doing. As some researchers have implied, it is questionable whether clinicians and patients can invoke such a pretence in everyday practice on a regular basis (Ainsworth, Hardman, and Thomas 2019; Miller 2018).⁶ Moreover, in the case of the OLP trial in IBS, the participants were self-selected insofar as they were already attracted to a novel mind-body treatment. It is plausible that, more generally, patients are not as open to constructing the pretence of OLP in everyday clinical practice. The difficulty of constructing the pretence required for successful OLP treatment raises concern over its effectiveness as a clinical treatment; howsoever one interprets extant empirical findings, it is clear that further translational research is required before OLP can be promoted as a useful treatment paradigm (Kaptchuk 2018; Kaptchuk, Hemond, and Miller 2020).

As noted above, there are substantial practical issues with translating initial experimental support for OLP treatment into a new practical treatment paradigm. However, even if OLP turns out to be a mere token of a more important phenomenon, in identifying pretence as central to OLP I propose an answer to a troubling question in placebo studies research. Despite inherent paradoxes, the placebo effect pumps the intuition that beneficial treatment effects are not solely reliant on the (often) biologically conceived mechanism that characterises a particular medical treatment; there is something else going on which, if we can better understand, we can perhaps better harness in the clinic. What has troubled researchers is usefully identifying this 'something else going on'. As outlined in the introduction, invoking inert substances having an effect is paradoxical, yet invoking the psychosocial context of treatment renders the placebo concept unnecessary. In positing instead that the open co-construction of pretence characterises open label placebo, I propose a more precise answer within a useful scope. This could, I propose, shape the direction in placebo studies research away from focus on belief-based mechanisms towards identifying how pretence is usefully enacted in the clinic.

5.1. Pretence-fictionalism and extant accounts of the placebo effect

One important aspect of a pretence-fictionalist account of OLP is that it attempts to identify what particular attitude is important for OLP, rather than explain OLP with a wider framework for healthcare. This specificity, I propose, is important because the messy landscape of competing accounts of the placebo effect stretches not just across different explanations, but different explanatory domains, making comparison and integration difficult.⁷ Explanatory accounts of the placebo effect can broadly be situated in three domains: psychological theory (e.g. expectancy, conditioning, etc.); neurocomputational theory (e.g. predictive coding or processing, etc.); and clinical theory (e.g. the therapeutic relationship, ritual healing, etc.) (Kaptchuk, Hemond, and Miller 2020). These domains are at different levels, sometimes overlap, come from different research traditions, and cash out in

⁶ Also, as even proponents of OLP admit, current trials are small and thus it is not certain these results will be replicated (Kaptchuk, Hemond, and Miller 2020).

⁷ It is also worth noting that, for reasons of scope, this paper focusses on the placebo effect; however, it is acknowledged by most placebo researchers that a full understanding of the placebo effect cannot be gained in isolation of the *nocebo* effect. As such, further work would be required in this domain.

different research programs. For example, psychological explanations focus on the mechanisms by which the placebo effect occurs, whereas clinical explanations are much more holistic and wide-ranging.

As I note above, a pretence fictionalist account can be conceived as semiotic, insofar as pretence is a symbolic process in which one thinks of or sees one thing as another. Therefore, a pretence-fictionalist account could be situated under the broader semiotic model of the placebo effect. Miller and Colloca (2010) propose that the semiotic model can incorporate and replace the meaning model by explaining meaning in terms of the functioning of signs, which they argue can be connected to psychological learning mechanisms such as conditioning and expectancy. Although the semiotic model is often conceived in terms of the attitude of belief, it could equally be conceived in terms of the attitude of pretence, which I argue is the particular attitude of import in OLP. Importantly, in arguing for a pretencefictionalist account of the placebo effect, I do not consider the psychosocial context of treatment (howsoever conceived theoretically) unimportant; it is, of course, central to any therapeutic effect. In a recent enactivist account of the placebo effect, Arandia and Di Paolo (2021) conceive of placebo interventions not as original causes of therapeutic effects but as modulators or triggers that regulate tensions between extant embodied and interpersonal processes. In line with this account – and other explicitly processual accounts of the placebo effect (Hardman, Geraghty, Lewith, et al. 2020; Hardman and Ongaro 2020) - I conceive of pretence as the central attitude involved in open label placebo that serves the function of modulating the psychosocial context in such a treatment paradigm.

As well as being compatible with broader semiotic, ritualisation, and enactivist models of the placebo effect, a pretence-fictionalist account can too be compared to neurocomputational models. For example, Ongaro and Kaptchuk (2019) propose that predictive processing, a Bayesian approach to perception, can explain OLP, whereas Arandia and Di Paolo (2021) argue that within such a framework the information that the pill is inert is more precise, thus more strongly weighted, rendering the tension between contradictory information at the heart of predictive processing untenable. Within a pretence-fictionalist account, however, this information is not rendered as belief, thus not succumbing to the critique. This accommodation notwithstanding, it is questionable how clear the relation is between such different explanatory domains, and (perhaps more importantly) whether *any* sub-personal account of the placebo effect can be pragmatically useful (Hutchinson 2020).

Last, if as I argue pretence serves a central semiotic function in modulating therapeutic effects in OLP, emotions too can have a non-doxastic role in the construction of the meaning of the placebo effect. A full treatment of this issue is beyond the scope of this paper. However, in a recent article, Hutchinson (2020) makes a useful parallel between the problems in placebo research and those in emotion research. Hutchinson proposes that, as in placebo research, cognitive theories of emotions face intractable problems, including the problem of epistemic deficit and the problem of recalcitrant emotions. Given these interesting parallels, further exploration seems necessary on the relation between a pretence-fictionalist account of the placebo effect and the import of emotions.

6. Conclusion

To mitigate conceptual confusion, the definition of the placebo effect has been constrained to the therapeutic effects of deliberate placebo interventions (Miller 2018). Inasmuch as one accepts this definition, the prospects of harnessing the placebo effect in clinical practice are restricted to one treatment paradigm: the non-deceptive and non-concealed administration of placebo pills, or open label placebo treatment. Within this paradigm, I argue that a traditional belief-based account of the placebo effect is incoherent. Instead, I propose that an account based on the non-doxastic attitude of pretence, understood within a fictionalist framework, is more useful. I thus promote inquiry in placebo studies research focussed on explicating how patients and clinicians enact this process of pretence, and how it can be encouraged and supported.

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