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Primary Care and Population Sciences

From inert pills to subjunctive medicine: an exploration of the placebo effect in general practice

by

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Abstract

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FROM INERT PILLS TO SUBJUNCTIVE MEDICINE: AN EXPLORATION OF THE PLACEBO EFFECT IN GENERAL PRACTICE

Douglas Iain Hardman

The placebo effect is a complex concept with a long and contentious history. In the context of clinical practice, it pumps the intuition that beneficial treatment effects are not solely reliant on the specific biologically conceived mechanism that characterises a medical treatment. This is considered particularly relevant in general practice. However, despite a substantial body of research, considerable ambiguity exists regarding the conceptual coherence and clinical effectiveness of the placebo effect. In this thesis I explore the placebo effect in general practice, including how clinicians and patients conceive of the concept, and how it might be harnessed to improve patient care.

I first conducted a meta-ethnographic systematic review of patients' and clinicians' views on the placebo effect in the context of primary care. Through my findings I deconstructed the placebo effect from the predominant notion of the effects of 'inert' pills, towards the potential benefits of the therapeutic encounter. This deconstruction informed the second phase of this thesis: an ethnography of a general practice surgery in southern England. My ethnographic findings suggest that clinicians capitalise on the benefits of the therapeutic encounter – in the face of substantial constraints – by adopting good habits, which I broadly conceive in two categories: using expert judgement and taking patients seriously. I further suggest that clinicians do not merely will themselves towards these habits but maintain them by developing a secondary 'meta' habit of *enaction*. This suggests an important feature of the general practice consultation: it is conducted as much in the subjunctive as the indicative mood. Developing this proposition, I propose a more general form of medical practice – *subjunctive medicine* – grounded in the transitory, shared social situation each unique consultation creates.

Synthesising my meta-ethnographic and ethnographic findings, I argue that, in clinical practice, the placebo effect is an untenable concept grounded in an unrefined naturalist account of healing. As such I suggest that the placebo effect cannot be usefully harnessed to improve patient care in general practice. Beyond this conclusion I propose that subjunctive medicine represents an alternative expansive naturalist framework for general practice, which can more usefully accommodate phenomena the placebo effect purports to encompass.

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Research Thesis: Declaration of Authorship

I, Douglas Iain Hardman, declare that this thesis and the work presented in it are my own and has been generated by me as the result of my own original research.

Title of thesis: From inert pills to subjunctive medicine: an exploration of the placebo effect in general practice.

I confirm that:

1. This work was done wholly or mainly while in candidature for a research degree at this University;
2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
3. Where I have consulted the published work of others, this is always clearly attributed;
4. Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
5. I have acknowledged all main sources of help;
6. Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;
7. Parts of this work have been published as:

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List of Abbreviations

ADHD	Attention deficit hyperactivity disorder
CDA	Critical discourse analysis
COPD	Chronic obstructive pulmonary disease
fMRI	Functional magnetic resonance imaging
GP	General practitioner
HCA	Healthcare assistant
IBS	Irritable bowel syndrome
PET	Positron emission tomography
PFC	Prefrontal cortex
PIS	Participant information sheet
PPI	Patient and public involvement
SIPS	The Society for Interdisciplinary Placebo Studies
RCGP	Royal College of General Practitioners
RCP	Royal College of Physicians
RCT	Randomised controlled trial
vmPFC	Ventromedial prefrontal cortex

Chapter 1 Introduction

A patient had been suffering with persistent back pain for some time. After trying what he could at home he reluctantly booked an appointment with his GP. The chair in the surgery waiting room was hard. He waited, shuffling uncomfortably. His name was finally called and he walked gingerly down the long corridor to the consultation room. His GP was, as she always was, welcoming, positive and confident. After inquiring about his symptoms, she examined him carefully. She assured him that, although undoubtedly painful, this was a problem that should pass in a few weeks. She went through some exercises he could do to help and suggested some non-steroidal anti-inflammatory drug tablets. The patient thanked his GP and walked (a bit less gingerly) out of the consultation room and back down the corridor. For the rest of the day his back felt a little less painful. In a week he was moving around much as he normally did. In a month the pain was gone.

In the hypothetical situation above, did the tablets make the patient's back feel better? Did the exercises help or would he equally just have got better on his own? The honest answer – perhaps one that the patient's GP would have given – is that we just don't know. What we can say is that the act of receiving treatment in some way appears to have contributed to making the patient feel better. One way of conceptualising this is to say that the patient benefited from the 'placebo effect'. This complex concept has both captivated and confounded researchers and clinicians. As I will expound in this thesis, there is no standard definition of the placebo effect and substantial theoretical and practical problems with producing one. But we need to start somewhere. For now, we can take a broad view and say that the placebo effect "is generally understood as consisting of individuals' responses to the psychosocial context of medical treatments, 'inert' interventions, or clinical encounters, as distinct from the inherent or characteristic physiological effects of medical interventions" (Miller, Colloca, Crouch, & Kaptchuk, 2013, p. ix).

Researchers are generally interested in the placebo effect for three reasons (Miller et al., 2013). First, methodologically, to better understand the conduct of a placebo-controlled Randomised Controlled Trial (RCT). Second, to provide insight into how the mind or brain interacts with and influences bodily responses. And third, to understand how clinicians might harness the placebo effect in clinical practice. This thesis is broadly oriented towards the third reason, inasmuch as my focus is on exploring the placebo effect in the clinic, specifically in general practice where the placebo effect is thought to be particularly relevant.

Despite my focus on the *clinical* placebo effect, the three broad reasons for studying the placebo effect, outlined above, are interrelated and thus cannot be considered in isolation. Research into the potential clinical benefits of the placebo effect is likely to involve findings related to how the mind or brain interacts with and influences bodily responses. And the modern notion of the clinical placebo effect is, in any case, grounded in how we validate the existence of therapeutic effects, through the RCT (Miller & Brody, 2011). In a RCT a particular mechanism – often a drug mechanism – is isolated by controlling for other factors that might influence the outcome of the trial, including, for example, natural history and regression to the mean. By using a 'placebo' to control for these factors, the RCT has been an effective tool in the advancement of modern medicine (Friedman, Furberg, DeMets, Reboussin, & Granger, 2015; Pocock, 1983). From a clinical perspective, in order to isolate the particular mechanism under investigation, the process of establishing treatment and control groups in a certain way also purports to control for psychological or socio-cultural effects that can occur naturally during treatment (Avins, Cherkin, Sherman, Goldberg, & Pressman, 2012; Howick, 2009a; Walach, Falkenberg, Fønnebø, Lewith, & Jonas, 2006). In this way the natural occurrence of these effects – and the idea that they can be deliberately induced in clinical practice – has in modern medicine come to be understood in part through the concept of the placebo effect.

As I hope to make apparent, the placebo effect is a slippery concept – at once powerful and paradoxical. This informs a divided body of research which on the one hand promotes harnessing the placebo effect for clinical benefit, and on the other derides the phenomenon as incoherent. In this thesis I initially set out from a broadly positive perspective, intending to produce an account of how the placebo effect operates in general practice, potentially leading to recommendations for how clinicians might induce it. However, through the process of inquiry I have come to see the placebo effect – and the history of how researchers, clinicians, and patients have come to conceive of it – more critically, as a denial of the limits of mechanistic medical knowledge; a denial of how mechanistic medical knowledge overreaches itself in the face of explicit warnings. Despite such an account, however, this thesis is not purely deconstructive. From such deconstruction I move beyond the placebo effect to produce an ethnographically derived framework for general medical practice which I suggest can accommodate phenomena the placebo effect purports to encompass.

In this introductory chapter I briefly outline the existing evidence for and controversies surrounding the placebo effect, its relevance to general practice, and thus the initial mandate and rationale for this thesis. I then propose my guiding research questions

and objectives before summarising my approach to answering those questions. Finally, I present an outline thesis structure.

1.1 The placebo effect

As I noted previously, there is no standard clinical definition of the placebo effect. In order to have at least one foot on the ground at the outset, I proposed a wide definition of: individuals' responses to the psychosocial context of medical treatments. This represents a comparatively recent turn to wider definitions of the phenomenon, which dominate current placebo studies research. However, this definition can be compared with a more traditional, narrower definition, which focusses on the 'placebo' as much as its effect: "pharmacologically inert substances… having a psychological effect" (Beecher, 1955, p. 1602). As colleagues and I have illustrated elsewhere, this narrower definition is more in line with the lay definition of the placebo effect (Hardman, Geraghty, Howick, Roberts, & Bishop, 2019)[1].

Central to these definitional debates is the essential paradox of the placebo phenomenon: how can something which is 'inert' have an effect? Proponents of a wide definition in a sense discard the paradoxical inert substance – the famous placebo pill – insofar as "'placebo' names a social situation not a substance" (Kirmayer, 2011, p.121). Others claim that expanding the placebo effect beyond its traditional lay definition is unhelpful and that "it is useful to limit the 'placebo effect' to situations in which deliberate placebo interventions are deployed" (Miller, 2018, p. 345)[2]. Both approaches are problematic. In a narrow approach the central placebo paradox remains, which even proponents of the view accept, insofar as "the placebo effect concept is inherently confusing" (Miller, 2018, p. 345). In a wider approach, although the paradox of 'inert' substances is avoided, we have to account for why it is useful to talk about the 'placebo effect' (in terms of the psychosocial context of treatment) without invoking the 'placebo' as it is traditionally conceived. As others have noted, it does seem problematic to talk about the placebo effect without a placebo (Nunn, 2009c).

Setting aside potential paradoxes for now, both narrow and wide definitions of the placebo effect pump the intuition that beneficial treatment effects are not solely reliant on

[1] See Appendix I for the full version of this article.

[2] Whereby a 'deliberate placebo intervention' is "an intervention, such as a pill with no medical ingredients or an injection of saline, known or believed to lack specific efficacy in treating a medical condition" (Miller, 2018, p. 377).

the specific 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. In attempting to develop this intuition, much placebo studies research has bypassed serious attempts to resolve the conceptual issues briefly outlined above, in favour of attempting to provide a more mechanistic explanation of the placebo effect. Through this approach it is hoped that the definitional debates will, in turn, dissolve.

As I will outline in more detail in Chapter 2, this approach has broadly been conceived as a process of explaining the 'mechanisms' underpinning the placebo effect. These are usually conceived psychologically, as either 'expectancy' or 'conditioning' (Benedetti, 2014; Kirsch, 2018). In the first account it is posited that a person's conscious beliefs and expectations about a treatment influence their response to it. In the second, processes of non-conscious learning of relations are held responsible. However, the distinction between these accounts is not always clear, and in modern placebo studies research both accounts are increasingly conceived as interrelated within a broader social learning framework (Colloca & Miller, 2011b). Furthermore, an increasing wave of neurobiological research purports to provide 'objective' evidence for these mechanisms, insofar as particular associated neural pathways can be identified (Eknoyan, Hurley, & Taber, 2013; Geuter, Koban, & Wager, 2017; Pollo & Benedetti, 2009). This body of (mostly laboratory based experimental) work leads many placebo studies researchers to suggest that the placebo effect is a 'real' phenomenon that has potential clinical application (Pollo & Benedetti, 2009).

1.2 The placebo effect in general practice

Conceptual contradictions notwithstanding, there is a significant body of evidence suggesting it may be possible to harness something like the placebo effect in the clinic. Given general practice is an environment in which the psychosocial context of treatment is considered particularly relevant (Greenhalgh, Howick, & Maskrey, 2014; Royal College of General Practitioners, 2018), the potential for harnessing the placebo effect is notable in general practice. Moreover, conditions that are generally considered sensitive to the placebo effect – including pain (Benedetti, Amanzio, Rosato, & Blanchard, 2011; Gracely, Dubner, Wolskee, & Deeter, 1983; Petrovic, Kalso, Petersson, & Ingvar, 2002), depression (Kirsch, Moore, Scoboria, & Nicholls, 2002; Kirsch & Sapirstein, 1998) and gastrointestinal disorders such as IBS (Kaptchuk et al., 2010; Kaptchuk et al., 2008) – are

particularly common in general practice (NHS Digital, 2018). This further suggests that general practice is a worthwhile environment for exploring the clinical placebo effect.

However, despite the potential outlined above, there remains substantial uncertainty regarding the placebo effect in general practice (Fässler, Meissner, Schneider, & Linde, 2010; Linde et al., 2018). This was particularly manifest in a study exploring UK GPs' views on the placebo effect, in which there was considerable uncertainty on the conceptual coherence, effectiveness, and ethics of the placebo effect in general practice (Bishop, Howick, et al., 2014). Therefore, although there is a substantial body of laboratory based experimental research, considerable ambiguity remains on the conceptual coherence of the placebo effect and the practicalities of harnessing it in general practice. In response to these issues, I conducted an exploration of the placebo effect in general practice, aiming to provide a rich interpretation of how the placebo effect might be harnessed to improve care.

1.3 Research questions and objectives

This thesis is informed by two guiding research questions, which are reflected in the thesis objectives.

1.3.1 Research questions

1. How is the placebo effect conceived of in general practice?
2. How might the placebo effect be harnessed to improve patient care?

1.3.2 Research objectives

1. Understand how the placebo effect is conceived of by patients and clinicians in general practice.
2. Make explicit how the placebo effect is harnessed in general practice.
3. Develop a theoretical model of the placebo effect in general practice.

1.4 Approach

Given the ambiguity regarding the placebo effect in general practice and the resultant exploratory nature of my research question and objectives, I required a research approach that is exploratory in character. To this end, I adopted a theoretical framework of American pragmatism, grounded in the work of John Dewey and Charles Sanders Peirce, in which

inquiry is focused on the creation of concepts and theory. Within such a framework, inquiry is fallibilistic and anti-sceptical, and one's beliefs are understood through the effects of one's habits of action (Dewey, 1931/1982; Misak, 2013; Peirce, 1878/1982; Thayer, 1982). I operationalised this framework through an overarching methodology of constructivist grounded theory (Charmaz, 2014), which is an abductive (i.e. focussed on theory generation), comparative and flexible methodology for conducting inquiry. I adopted grounded theory as an *overarching* methodology as this allowed for latitude in the two empirical phases of this thesis: first, a meta-ethnographic systematic review, and second an ethnography. Although both meta-ethnography and ethnography can reasonably be considered as methodologies in their own right, by conceiving of them as both sitting under an overarching methodology of grounded theory, I provide a coherent theory-methodology package that grounds my entire thesis. This is outlined in more detail in Chapter 3.

1.5 Thesis structure

Chapter 1: Introduction

I introduce the placebo effect concept, briefly outline the existing evidence for and controversies surrounding the placebo effect, its relevance to general practice, and thus the initial mandate and rationale for this thesis. I then propose my guiding research question and objectives before summarising my approach to answering that question. Last, I present an outline thesis structure.

Chapter 2: Background

I provide more detail on the background of the placebo effect and its relevance to general practice. This includes a brief history of the placebo effect; the development of placebo concepts in research and clinical practice; explanations of the placebo effect; evidence for and against placebo effectiveness; and debates on the ethics of 'placebo treatment'. This leads to an assessment of current issues on the placebo effect in general practice, the problems with current research approaches, and thus a more detailed mandate for my research question and objectives.

Chapter 3: Theoretical framework and methodology

I outline my theoretical framework of American pragmatism and my overarching methodology of grounded theory. In so doing I establish the suitability of my theoretical framework and methodology for my research question and objectives, and how my

theoretical and methodological approaches complement each other in a coherent theory-methodology package.

Chapter 4: The placebo effect deconstructed

I outline the findings from a meta-ethnographic systematic review exploring how clinicians and patients conceive of the placebo effect in the wider context of primary care. Analysis of the studies under review suggests that placebo definitions used by clinicians and patients in primary care settings can be split broadly into two categories: the predominant category of material substances, and the less dominant category of processes. I propose that substance definitions, although predominant, are untenable, and that process definitions are more in line with the findings of modern placebo studies research. However, given the enduring ubiquity of substance definitions, for both clinicians and patients, I question the practical, clinical validity of stretching the term 'placebo' towards its modern iteration. I conclude that to produce 'placebo effects' clinicians may be better off abandoning placebo terminology altogether. I propose instead that the concept of the *therapeutic encounter* can be used more coherently to frame an exploration of phenomena the placebo effect purports to encompass.

Chapter 5: The placebo effect disregarded

Influenced by my findings in Chapter 4, this chapter is oriented towards exploring the therapeutic encounter in general practice. I outline the findings of a year-long ethnography of a general practice surgery in England, including participant observation, interviews, and focus groups with patients, clinicians, and support staff. I make explicit how clinicians produced and capitalised on the benefits of the therapeutic encounter when confronted by the limits of biomedicine and the structural constraints of general practice. I suggest that clinicians mitigated these constraints by getting into good habits, broadly conceived in two categories: using expert judgement, and taking patients seriously. I further propose that clinicians did not merely will themselves towards these good habits, but established and maintained them by intuitively developing a secondary meta habit of *enaction*, engendering authenticity, flexibility, and resilience. Developing this account, I tentatively propose a more general form of medical practice – *subjunctive medicine* – extolling the value of the co-created social order of the general practice consultation itself.

Chapter 6: The placebo effect reconsidered

I return more explicitly to the placebo effect, providing a rational account of how the findings from my meta-ethnography and ethnography inform an explication of the

ontological conditions for the placebo effect. Developing the process ontological framework outlined in my meta-ethnography alongside the concept of enaction underpinning subjunctive medicine, I propose that an alternative, expansive naturalist framework for general medical practice can accommodate phenomena the placebo effect purports to encompass. This, I suggest, in turn dissolves the placebo paradox. In so doing, however, I conclude that the placebo effect is, in-itself, an untenable contradistinction. My argument, therefore, supports the proposition from my meta-ethnography that placebo terminology remains, in practice, unnecessary and confusing.

Chapter 7: Beyond the placebo effect

Influenced by my rejection of the placebo effect as a useful concept, I first consider the motivations for and clinical consequences of placebo studies research. I propose that rather than being viable as a treatment in-itself, a 'placebo' functions as a marker for the limits of a mechanistic model of medicine. I then go beyond the placebo effect to further develop my proposed framework of *subjunctive medicine*, which I suggest can more usefully accommodate phenomena the placebo effect purports to encompass. In so doing I propose in more detail an expansive naturalist framework for *all* general practice.

Chapter 8: Conclusion

I reaffirm my thesis by synthesising my findings more explicitly in relation to my research questions and objectives. I then identify the relevant theoretical and clinical implications, before providing recommendations for the direction of future research in placebo studies, general practice, and medicine more broadly.

Chapter 2 Background

Following my brief introduction to the placebo effect in Chapter 1, in this chapter I set out the history of the placebo effect in more detail and trace its development towards current understandings in general practice. Through this I explore: the development of placebo concepts in research and clinical practice; explanations of the placebo effect; placebo effectiveness; and the ethics of 'placebo treatment'. This leads to an assessment of current issues on the placebo effect in general practice, the problems with current research approaches, and thus a more detailed mandate for my research question and objectives.

2.1 Concepts

2.1.1 Traditional concepts

It is common in placebo studies literature to refer to Shapiro & Shapiro's (1997, p. 2) notion – from their seminal history of the placebo effect – that "the history of medical treatment was essentially the history of the placebo effect". To substantiate this claim they outlined a variety of medications and procedures from pre-modern medicine – such as pouring burning cassia juice over a kneeling patient, or administering grated human skull – which through a contemporary lens seem incredible. However, as other researchers have suggested (e.g. Benedetti, 2014) this distinction only holds if a placebo is defined narrowly as an 'ineffective treatment' by modern biomedical standards. By projecting current interests back through history, the Shapiros' presentist history (Fischer, 1970) is arguably unhelpful. Rather than objectively outlining the lineage of placebo treatments, it implicitly influences a developing modern conception of the placebo effect by aligning all historically 'ineffective' medical treatments with placebos. Here I will start my brief history of the placebo effect from the first known use of the term and, perhaps more importantly, the first known description of medical placebo treatment.

2.1.1.1 Origins

Until the 18th century, the word 'placebo' was restricted to religious, rather than medical situations. An arguably inaccurate translation from the ninth verse of Psalm 116 from the Hebrew bible, *Placebo Domino in regione vivorum*, which approximately translates to 'I shall be pleasing to the Lord in the land of the living', was used as a supplement to a funeral rite, the Vespers for the Dead (Shapiro & Shapiro, 1997). The term

'placebo', therefore, came to mean 'I shall please' (Moerman, 2002). However, by the 13th century the term had developed a more unsympathetic meaning, reflecting sycophantic false flattery (Moerman, 2002).

The first direct use of the term 'placebo' in a medical context is thought to have occurred in the late 18th century, by which point its meaning had further developed. Although the term has been attributed to an English physician, Alexander Sutherland, writing in 1763 (Jütte, 2013), the most notable early use was in a series of lectures in 1772, where the distinguished Scottish physician William Cullen described giving patients very low doses of medicine that in higher doses might have some ostensible drug effect (Kerr, Milne, & Kaptchuk, 2008). The purpose of this was not to provide a cure necessarily but, as befits an empathic physician, to please the patient (Kerr et al., 2008). In this sense, the medical use of the term 'placebo' in the late 18th century was more sympathetic than the previous pejorative lay notion.

2.1.1.2 Development

Cullen's notion of a placebo as a diluted substance persisted through the 19th century and was accompanied by a further notion of a placebo as an 'inert' substance (Jütte, 2013; Kerr et al., 2008). Throughout this period and even into the mid-twentieth century, placebo treatment was largely deployed to manage patients rather than because it was thought to have any 'real' effect on the medical condition in question (Anon, 1954). However, this would change with the development of placebo controls in medical research, whereby the placebo concept would develop from mere 'humble humbug' (Anon, 1954) to potential active agent.

In early medical research, mainstream medics used placebo controlled experiments to debunk alternative treatments, such as mesmerism. But conversely, these unorthodox practitioners used the same process of controlled experiments to authenticate their own approaches (Kaptchuk, 1998). Although at this stage orthodox practitioners generally thought that effects in placebo control groups could be attributed to natural history or spontaneous remission, the idea that 'psychological' mechanisms could have a physiological effect increased, particularly in France and Germany (Kaptchuk, 1998). The notion that disease outcomes might be affected by something other than the direct effect of the drug or treatment tested in placebo controlled experiments, leads towards modern placebo concepts.

2.1.2 Modern concepts

2.1.2.1 A tale of two conferences

The modern idea that placebos might be more than merely something to placate a patient is influenced by a conference in 1946, on the use of placebos in therapy. At Cornell University Medical School, leading medical researchers stated that "it is high time that we devoted a therapeutic conference to placebos" and that "the study of placebos is the most important step to be taken in scientific therapy" (Wolff et al., 1946/2013, p. 10). The issues discussed at the conference still influence placebo research today; for good and ill it was there that the modern placebo research agenda was set.

Two important notions of the placebo were raised at the conference: first, the placebo as an active agent; and second, the additive concept of the placebo, whereby "there is placebo ingredient in practically every prescription" (Wolff et al., 1946/2013, p. 10). Moreover, a three-class classification of placebos, still influential today, was developed. First, pure placebos "that is, the bread pill or the lactose tablet". Second, impure placebos "adulterated with a drug which might have some pharmacologic action". And third, "the universal pleasing element which accompanies every prescription" (Wolff et al., 1946/2013, p. 11). The distinction between 'pure' and impure' placebos is still common in current research and practice, and offers a useful shorthand. However, the distinction is problematic. As other researchers have noted, nothing is actually inert and one can treat any substance, even a bread pill, in physico-chemical terms if one chooses to do so (Howick, 2017).

It is interesting to contrast findings from the Cornell conference with those from a similar conference held almost 50 years later at Harvard University. If the positive legacy of the Cornell conference is the potential for placebo medical treatment, then the negative is a confused understanding of the central object of inquiry – the placebo. At the 1994 Harvard conference, discussions were more circumspect and less confident. There was a clearer rejection of the dualisms that affect earlier definitions, inasmuch as "it is clear that even a so-called 'functional' event has to have a physical substrate… so this distinction we make between functional and organic seems pretty spurious" (Harrington et al., 1997, p.215). There was also notable discussion of the differences and interaction between 'disease' and 'illness'. However, there was still no agreement on a placebo definition, just unexplored notions of "symbolic processes" or "the seal on the contract between physician and patient", and a call for "people [to] consciously reflect on the phrases in which they are

thinking of placebo, and actually offer the vocabulary up to us" (Harrington et al., 1997, p.236). This definitional uncertainty still dominates placebo studies research today.

2.1.2.2 Placebo definitions

As the discussions from the 1994 Harvard conference demonstrate, confusion over a placebo definition is longstanding. Perhaps the most common lay definition is similar to that provided by Henry Beecher in his famous (1955, p. 1602) paper, where placebos are "pharmacologically inert substances… having a psychological effect". I have already raised objections to describing substances in this way and other researchers have also noted the logical falsehood inherent in such a definition (e.g., Howick, 2017). Developing the notion of a placebo from this untenable starting point, two broad categories dominate. A narrow definition where placebos are restricted to substances or procedures, and a wide one that includes the psychosocial context of treatment (Colloca & Miller, 2011a; Miller, 2018). In a narrow definition the paradigm is as follows:

> A patient or research participant is given an inert substance and led to believe that it has physical properties that produce particular effects. He or she reports experiencing the expected effects. Because the treatment does not in fact have the physical properties ascribed to it, it is generally assumed that the effects are due to the recipients' beliefs and expectations.
>
> (Kirsch, 1997, p. 166)

This definition is close to Beecher's and suffers from similar problems, including reference to an 'inert' substance. Moreover, in taking this approach one is left with a broadly psychological conception of placebos which leaves little room for wider socio-cultural factors. In response to this, others have attempted to widen the definition of placebos. Consider this popular definition proposed by Arthur and Elaine Shapiro:

> The placebo effect is the nonspecific psychological or psychophysiological therapeutic effect produced by a placebo.
>
> (Shapiro & Shapiro, 1997, p. 41)

They further defined a placebo as:

> Any therapy (or that component of any therapy) that is intentionally or knowingly used for its nonspecific, psychological, or psychophysiological, therapeutic effect, or that is used for a presumed specific therapeutic effect on a patient, symptom or illness but is without specific activity for the condition being treated.
>
> (Shapiro & Shapiro, 1997, p. 41)

One could certainly not accuse the Shapiros of narrowness. The definition encompasses much of modern healthcare including all psychotherapy, most complementary medicine and some general nursing and doctoring. Such a wide definition raises the question of its practical use and burdens substantial areas of medicine with what some may see as a pejorative label. Furthermore, other researchers have noted the inaccuracy of the specific/nonspecific distinction and the dualistic issues around aligning placebo effects with 'psychological' treatment (Howick, 2017).

More recent placebo definitions have broadly sought to replace the term 'placebo' or 'placebo effects' with a wider explanatory framework, including, *inter alia*, the context of treatment (Di Blasi, Harkness, Ernst, Georgiou, & Kleijnen, 2001), response to enculturated meaning (Brody, 1997; Moerman, 2002), or healing rituals and symbols (Brown, 2013; Kaptchuk & Miller, 2015; Miller & Colloca, 2010). Although this 'symbolic turn' in placebo research mitigates the issues of a narrow substance definition and the problems regarding the specific/nonspecific distinction, it arguably does not effectively delineate placebo from non-placebo treatment. This raises the issue of, once the symbolic turn has been taken, what is gained from retaining placebo terminology.

Perhaps the most useful placebo definition in the literature is not a recent one. In a paper exploring the placebo concept, Adolf Grünbaum (1986, p. 19) noted that "the standard technical vocabulary used to define placebo therapies… is both confusing and obscure". Grünbaum's most useful move was to delineate between a non-placebo and placebo therapy by aligning non-placebo therapy with 'characteristic' treatment factors, and placebo with 'incidental' treatment factors. The treatment factors are relative to the 'therapeutic theory' which states how a given therapy for a target disorder will provide clinical benefit. For example, the characteristic factor of a therapy involving giving amoxicillin for an infection would be the bacteriolytic properties of penicillin, whereas an incidental factor might be a patient's expectations about the potential effect of the drug. Howick (2017) extended this definition as relative to the patient as well as the condition and therapeutic theory as in Grünbaum's original version.

Despite the potential utility of Grünbaum's definition, some researchers suggest that it does not explain what placebos are in any detail. By this they often mean that the definition neither provides an explanation of *how* the placebo effect occurs, nor helps to distinguish the particular mechanisms by which placebo effects are produced. Despite some recent accounts to the contrary (e.g. Blease, 2018; Blease & Annoni, 2019), there is general consensus that an integrative theory of the placebo effect currently eludes

researchers (Miller, Colloca, & Kaptchuk, 2009) and that alternative explanatory paradigms such as enactivism (Ongaro & Ward, 2017) or embodiment (Thompson, Ritenbaugh, & Nichter, 2009) should be explored in more detail. Moreover, the uncertainty surrounding placebo definitions has shaped current trends in placebo studies research and led to a focus not on placebos themselves, but on broader explanations of how their effects might be produced.

2.2 Explanations

Given the uncertainty surrounding placebos, it has been common for researchers to abandon the attempt to coherently define the central object of inquiry in placebo studies research – the placebo – instead focussing on what mediates or explains the placebo effect. Reflecting the influence of cognitive science in placebo studies research, these are often conceived as 'mechanisms'. And as the leading placebo studies researcher Fabrizio Benedetti noted (2014, p. 43), "there is not a single mechanism of the placebo effect and not a single placebo effect – but many". He further noted that "different systems and apparatuses as well as different diseases and treatments are affected by placebos in different ways".

This complexity is compounded by the different ways in which one is able to conceive of placebo 'mechanisms'. Here I outline the three main ways in which these have been conceptualised: psychologically, neurobiologically, and socio-culturally. However, it should be noted that given the difficulties placebo researchers have had in agreeing on a coherent placebo definition, much research into placebo mechanisms is hindered by theoretical ambiguity. This necessarily affects the reliability of not just the findings but how the questions are even asked in the first place.

2.2.1 Psychological mechanisms

Much research on psychological placebo mechanisms has focussed on 'expectancy' and 'conditioning' (Benedetti, 2014; Kirsch, 2018). In a pioneering study, Stewart Wolf (1950) demonstrated that the nausea-inducing action of ipecac depended on verbal suggestion and that the effect may be more potent than the characteristic pharmacologic action. Other early studies reinforced the idea that beliefs and expectations, in some form, might influence patients' response to treatment (Gracely, Dubner, Deeter, & Wolskee, 1985; Lasagna, Mosteller, von Felsinger, & Beecher, 1954; Levine, Gordon, & Fields, 1978).

However, current understanding of expectancy and conditioning is not straightforward and this is manifest in the placebo studies literature. Although some studies have demonstrated conditioned placebo analgesia to be greater than that manipulated by verbal expectancy (Voudouris, Peck, & Coleman, 1990), this has been deconstructed. Grounded in the reinterpretation of conditioning as a cognitive and ecological phenomenon, whereby "conditioning is now described as the learning of relations among events so as to allow the organism to represent its environment" (Rescorla, 1988, p. 151), Montgomery & Kirsch (1997) showed that these conditioned responses were in fact completely mediated by expectation. This, and other studies (e.g., Price et al., 1999) undermine the classical stimulus substitution concept of conditioning in placebo research and raise the notion that *all* placebo effects might be mediated by responses to expectancy. But it is not quite as simple as that.

Although there have been numerous other studies investigating expectation and placebos (e.g., Colloca & Miller, 2011c; Kirsch, 1985; Tracey, 2010), there are rational and empirical arguments to suggest that expectancy alone cannot necessarily account for all placebo effects (De Houwer, 2018; Stewart-Williams & Podd, 2004). Despite the trend towards a cognitivist interpretation of conditioning, there is substantial evidence that some placebo effects are not only mediated by conscious cognition (Amanzio & Benedetti, 1999; Benedetti et al., 2003; Jensen et al., 2012). For example Jensen at al. (2012) showed that responses to pain stimuli could be triggered by both clearly visible and masked exposures to the same visual cues. It seems that broader explanations encompassing both propositional and non-propositional attitudes, the interrelation of cognition and emotion, embodiment, and socio-cultural influences are necessary to account for placebo effects. However, in both philosophy and cognitive science there is substantial debate over the interrelation of something like these phenomena (Block, 1995, 2011; Clark, 1997; Clark, 2016; Thompson, 2010; Varela, Thompson, & Rosch, 1991/2016); this debate is reflected in placebo studies research, despite the current hegemony of the response-expectancy explanation.

2.2.2 Neurobiological mechanisms

Although the investigation of psychological mechanisms dominates research, an increasingly influential approach is the investigation of neurobiological mechanisms. This trend – like neuroscience more widely – is in part driven by improvements in technology, although there are earlier influential studies in the placebo literature. In a landmark study,

Jon Levine and colleagues (1978) showed that placebo analgesia could be reversed by the administration of naloxone, an opiate antagonist. Although controversial, this was the first study that convincingly showed a 'placebo' treatment could stimulate the production of endogenous opioids in the brain. By using this pharmacological approach, several other studies have since confirmed and extended this observation (Amanzio & Benedetti, 1999; Eippert et al., 2009; Gracely et al., 1983).

Using modern neurobiological approaches, researchers have sought to further this investigation by determining the functional neuroanatomy of placebo effects. For example by identifying which neurotransmitters are associated with placebo analgesia, and producing models from the study of Parkinson's disease (Benedetti & Amanzio, 2011; Jubb & Bensing, 2013). Three main neurotransmitters have so far been associated with placebo mechanisms: opioids (thought to be related to expectancy and conditioning), dopamine (thought to be related to motivation and reward), and cannabinoids (Benedetti et al., 2011; Jubb & Bensing, 2013).

Using positron emission tomography (PET) and functional magnetic resonance imaging (fMRI), researchers have more recently aimed to identify the brain areas involved in expectancy mediated placebo effects – "particularly a network centered on the vmPFC [ventromedial prefrontal cortex] that is involved in appraising the significance of symptoms, treatment, and context for the self" (Geuter et al., 2017, p. 181) – highlighting in particular the link with the production of endogenous opioids (Bingel, Lorenz, Schoell, Weiller, & Büchel, 2006; Bingel et al., 2011; Pecina & Zubieta, 2018; Petrovic et al., 2002; Wager et al., 2004). Furthermore, the relationship between dopamine and motivation and reward is also well established (Kelley & Berridge, 2002; Tobler, Fiorillo, & Schultz, 2005). Recent placebo studies on Parkinson's have also now established that the dopaminergic pathway in the basal ganglia circuit – damaged in Parkinson's – is likely associated with the inducement of placebo effects (Benedetti et al., 2004; de la Fuente-Fernández et al., 2001).

However, despite the surge in neuroscientific brain scanning placebo research, it is questionable how far these recent advances take the field. Although we have undoubtedly gained knowledge, it is questionable whether this kind or research can "pass from representation to underlying explanation" (Smith, 2013, p. 259). Knowledge gained from scanning brains is only intelligible because the (networked) areas of brain activity identified in a particular study have been previously correlated with other measures, such as behavioural or self-report. In this sense – although useful in other ways, such as medical diagnostics – it is questionable what kind of explanation this methodology is able to

provide regarding the placebo effect. It is not that fMRI studies *explain* 'response-expectancy' or the production of endogenous opioids, they merely provide a basic representative map of which areas (or networks) of the brain are involved in these psychologically or biologically constructed processes. There are also more substantial concerns. The assumptions underpinning much neuroscientific research are, perhaps unintentionally, often dualistic, equating mind with brain (Hacker & Bennett, 2003). This can lead to the mereological fallacy, whereby processes are attributed to the brain that only make sense when attributed to a whole enculturated human in their environment (Dewey, 1925/2013; Fuchs, 2018; Thompson, 2010).

For example, in a well-conducted and respected fMRI study, Tor Wager and colleagues (2004) investigated potential psychological and neural mechanisms that might underlie placebo analgesia. Their positive results – essentially corroborating previous correlations between analgesia (established using behavioural or self-report measures in other studies) and brain area activity – led them to state that:

> Although the results do not provide definitive evidence for a causal role of PFC [pre-frontal cortex] in placebo, they were predicted by and are consistent with the hypothesis that PFC activation reflects a form of externally elicited topdown control that modulates the experience of pain.
>
> (Wager et al., 2004, p. 1166)

Implicit in this statement is that, although acknowledged as not *definitive*, PFC activation can be the immanent cause of placebo analgesia. This inaccurate use of language also occurs in other neuroscientifically orientated placebo research.

For example, in a recent paper outlining the 'cognitive neuroscience of placebo effects', the authors made statements such as "because placebos by definition do not contain any active medication, their effects are based on processes that occur inside the patient's brain" (Geuter et al., 2017, p. 168), and that "these effects likely originate in the brain's conception of the treatment context" (Geuter et al., 2017, p. 169). The notion of a brain conceiving of things itself is an example of the philosophical confusion inherent in much neuroscientific placebo research. Moreover, in the preface to his seminal book *Placebo Effects*, Fabrizio Benedetti (2014, p. xii) used terms such as "real neurobiological placebo effects" and made statements such as "the brain may anticipate a clinical benefit". Although a closer reading demonstrates that Benedetti has a much more nuanced and informed understanding of the placebo effect – gained from years of ground-breaking

research – these instances demonstrate that even the most thoughtful neuroscientist can fall foul of the dualistic tendencies implicit in the discipline.

Researchers investigating placebo mechanisms using neurobiological approaches have provided useful knowledge and will continue to do so, but there are limitations. In order to understand and explain the placebo effect, wider socio-cultural conceptions should also be an integral part of placebo studies research.

2.2.3 Socio-cultural explanations

Given the limitations of conceiving of the placebo effect either psychologically or neurobiologically, researchers have also focussed on socio-cultural explanations. Most prominent have been accounts of responses to meaning (Brody, 1997; Hutchinson & Moerman, 2018; Moerman, 2002; Moerman & Jonas, 2002). For example, Dan Moerman (2002, 2013), as part of his reconceptualization of the placebo effect as the *meaning response*, identified 10 key placebo studies which he posited could be better explained in socio-cultural terms. For Moerman it is the socio-cultural meaning a patient derives from the context of treatment, not a psychological or neurobiological account, that best explains the placebo effect. As he noted in a conclusion to one of his articles:

> It is long past time to give up on a flawed notion, the ‘‘placebo effect’’ or the ‘‘placebo response.’’ People don’t respond to placebos. They respond to what placebos, drugs, clinicians, and others mean and when there are no placebos in the study, they respond to the person who brings it to them.
>
> (Moerman, 2013, p. 130)

Although this is coherent, there are issues with the utility of such an explanation. For example, colleagues and I conducted a discursive exploration of public perspectives on placebos, suggesting that the dominant public discursive construct is that of ‘the placebo pill’ (Hardman et al., 2019). Despite the existence of a less prevalent counter-discursive construct of ‘the treatment process’ more amenable to meaning response explanations, we raised the issue that “if most patients think placebos are ‘inert’ pills having a ‘psychological’ effect, is it just too difficult to convince them otherwise?” (Hardman et al., 2019, p. 7).

The issue of public perspectives notwithstanding, the notion that it is not the ‘placebo’ itself that causes the placebo effect has been the focus of a number of studies. For example, in one study patients with Irritable Bowel Syndrome (IBS) receiving ‘open-label placebos’ – in this instance ‘non-deceptive’ administration of pills – showed

significant improvement, after both 11 and 21 days, against those patients who had no treatment (Kaptchuk et al., 2010). This study explicitly demonstrates that it was the action of receiving and taking the pills that caused the improvement, the pill itself merely being a symbolic aspect of the treatment process. And in another study, Mondaini and colleagues (2007) showed that patients undergoing treatment who were informed about the possible side effects of sexual dysfunction, reported greater side effects.

The idea that when we talk of the placebo effect we are actually talking about how humans respond to the meaning of treatment, whether or not a 'placebo pill' is involved – 'the placebo effect without a placebo' – illustrates a current issue in conceiving of the placebo effect socio-culturally. If, like Moerman, one's aim is to repudiate the placebo concept, one would have no issue with something like 'placebo effects' occurring, even if there is no 'placebo'. But for those seeking to retain the concept this idea would seem paradoxical. Despite this, leading placebo researchers seemingly promote (or have previously promoted) this view (e.g., Blease, Colloca, & Kaptchuk, 2016; Miller & Colloca, 2009). In part informed by my discursive research on public perspectives, I, with other researchers (e.g. Miller, 2018; Nunn, 2009c), would argue that, "we have to stop saying that placebo effects occur in the absence of placebos" (Nunn, 2009c, p. 50). We either need a better concept of the placebo, or we need to accept that the concept itself is untenable. Either way, it seems counterintuitive to keep talking of the placebo effect or 'placebo effects' without placebos.

A further aspect of framing the placebo effect socio-culturally is to highlight the difference between placebos in a research environment and placebos in the clinic[3]. This is grounded in the ideas of early social psychologists such as Kurt Lewin, who "accepted that the construction of an experiment is itself a social act which creates new psychological circumstances" (Smith, 2013, p.222). In this vein, Kirsch and Rosadino (1993) conducted a study exploring the information contained in the consent process. They noted that the experimental trial setting whereby participants *might* receive placebo, induces different cognitive states to a clinical environment whereby the patient is told what they *are* receiving. This indicates that more naturalistic modes of research, such as ethnography or ethnomethodology, might be well-suited to exploring the placebo effect in clinical practice.

[3] There are also wider issues about the placebo in RCTs, including its conceptual misunderstanding (e.g. Blease & Annoni, 2019; Turner, 2012) and the methodological validity of making placebo comparisons in the first place (Batra & Howick, 2017; Howick, 2009b; Nunn, 2009d). However, these methodological issues are beyond the scope of this thesis, which is focussed on the placebo effect in general practice.

There are complex philosophical issues with conceptualising the placebo effect socio-culturally. As shown above, the principal issue is perhaps how to delineate between placebo and non-placebo treatment. What is a placebo treatment and what is just empathic care or the effects of trusting one's clinician? If 'placebos' are to be clinically useful, then researchers must be able to make this distinction (Miller, 2018). In this direction, Kaptchuk and colleagues (2008) conducted a study showing that a placebo effect induced in IBS patients could be disaggregated into a 'placebo' component and a supportive provider-patient component: in the study, results in a group receiving sham acupuncture alongside supportive care were significantly superior to those in a group only receiving sham acupuncture, which in turn were superior to those in a wait-list control group. Although these results are tentative, and created in a particular situation, this type of experiment provides some evidence that placebo treatment might be meaningfully delineated from general supportive care.

2.3 Effectiveness

Providing a coherent and useful explanation of the placebo effect remains a central issue in placebo studies research. An equally important issue is demonstrating the clinical effectiveness of placebos. However, although there is substantial experimental evidence for something like the placebo effect, the existence of clinical effects is more controversial. Determining whether placebo treatment has significant clinical effectiveness is vital, but as I will show, our current understanding is still unclear.

2.3.1 The 'powerful' placebo

Henry Beecher's (1955) classic study, *The Powerful Placebo*, was the first instance of a systematic attempt to investigate placebo effectiveness. Beecher's analysis of results from 15 studies involving 1,082 patients showed that "placebos are found to have an average significant effectiveness of 35.2%" (Beecher, 1955, p. 1603). The included studies covered a wide range of conditions including, "wound pain, the pain of angina pectoris, headache, nausea, phenomena related to cough and to drug-induced mood changes, anxiety and tension, and… the common cold" (Beecher, 1955, p. 1606). Beecher concluded that, given the consistency of the placebo effect over such a wide range, an important and common fundamental mechanism must be operating and that placebos have "remarkable therapeutic power" (Beecher, 1955, p. 1606).

This positive interpretation of the potential for placebo treatment sustained a notion of 'the powerful placebo' over subsequent decades. However, researchers began to question this assumption. For example, McDonald and colleagues (1983) investigated whether the improvements associated with placebo therapy could be accounted for by statistical regression. In a study investigating a random sample of 30 placebo controlled trials, they posited that "a number of factors could account for the difference between the size of the improvement in our, and in Beecher's sample of papers" (McDonald et al., 1983, p. 420). As well as critiquing Beecher's methods, they also noted that older trials, such as those Beecher investigated, were more susceptible to regression and that this may have contributed to his findings. They further concluded that "conclusive proof of a causal role of placebo treatment requires a controlled trial comparing placebo treated with non-treated patients" (McDonald et al., 1983, p. 423) and that although Beecher's study did not include these, they were only able to find one such trial.

The study described above offered an initial critique of the 'powerful placebo', but a more direct critique of Beecher's analysis would follow. In *The Powerful Placebo Effect: Fact or Fiction?* Kienle & Kiene (1997, p. 1311) reanalysed the 15 trials included in Beecher's original study, concluding that "no evidence was found of any placebo effect in any of the studies cited by him". For the 14 out of 15 studies where detailed analysis was possible, they posited that the placebo effect could be better explained by a range of factors, including: spontaneous improvement, fluctuations of symptoms, additional treatment, conditional switching of treatment, scaling bias, irrelevant or questionable response variables, regression to the mean, experimental subordination, conditioned answers, neurotic or psychotic misjudgement, and the lack of a 'placebo'. They also critiqued Beecher for a raft of misquotations, methodological mistakes, and misinterpretations. In addition to this direct critique, they noted that "having analyzed a total of 800 articles on placebo, we have not found any reliable demonstration of the existence of placebo effects" (Kienle & Kiene, 1997, p. 1316). However, as with McDonald and colleagues, they noted that better methods are required for investigating placebos – including placebo vs no-treatment arms in trials, and balanced study designs – and that "undoubtedly psychosomatic effects exist… [and] clear differentiation between placebo and non-placebo components in therapeutical settings is essential" (Kienle & Kiene, 1997, p. 1317).

Despite these critiques of placebo effectiveness, it is arguable that neither of these two articles had significant influence on placebo studies research. However, following the advice to compare trials including placebo and no-treatment arms, Hróbjartsson &

Gøtzsche (2001) conducted a systematic review of 114 RCTs doing just this. They found that, "as compared with no treatment, placebo had no significant effect on binary outcomes, regardless of whether these outcomes were subjective or objective" and that "for the trials with continuous outcomes, placebo had a beneficial effect, but the effect decreased with increasing sample size, indicating a possible bias related to the effects of small trials" (2001, p. 1594). In essence they concluded that there was little evidence for clinical placebo effects. They updated and extended this review twice (Hróbjartsson & Gøtzsche, 2004, 2010), confirming the original result that placebo treatment does not have large effects, but added that placebo interventions may influence patient-reported outcomes, particularly related to pain; however, they noted that even this was difficult to distinguish from potential bias.

2.3.2 Current uncertainty

Hróbjartsson & Gøtzsche's meta-analyses has had significant impact on how researchers and clinicians view the placebo effect. However, although the findings were interesting, the analysis was heavily criticised (Spiegel, Kraemer, & Carlson, 2001; Vase, Riley, & Price, 2002; Wampold, Minami, Tierney, Baskin, & Bhati, 2005). First, 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 et al., 2001); by "aggregating without regard to the heterogeneity of disorders… we cannot discern whether a placebo really works" (Benedetti, 2014, p. 31). Moreover, other researchers re-analysed the original results, noting that "when disorders are amenable to placebos and the design is adequate to detect the effects, the placebo effect is robust and approaches the treatment effect" (Wampold et al., 2005, p. 835).

The lack of clarity emerging from these meta-analyses suggests that perhaps the clinical trial setting is not the most suitable one for investigating placebo effectiveness (Benedetti, 2014). Researchers have previously noted that the cognitive state of a patient is different in a trial than during treatment (Kirsch & Rosadino, 1993), and experimental placebo effects are generally known to be much higher than those in clinical trials (Vase et al., 2002). Given the contextual nature of placebo treatments, perhaps "it is not surprising that placebo effects in clinical trials are highly variable, and often small…[and therefore] the clinical trial setting is not a good model for understanding the placebo effect and is likely to lead to erroneous, or at least confusing, interpretations" (Benedetti, 2014, p. 33).

The suitability of a clinical trial setting for investigating the placebo effect notwithstanding, a more fundamental issue, highlighted previously, undermines

investigations into placebo effectiveness: the lack of a consensual placebo definition. For example, in their review Hróbjartsson & Gøtzsche (2001, p. 1595) defined a placebo practically as "an intervention labeled as such in the report of a clinical trial"; so really they did not define a placebo at all. Kienle & Kiene (1997, p. 1311) merely noted that "the criteria for acknowledging a placebo effect taken for this paper [includes that]… a placebo had to be given… the event had to be an effect of the placebo treatment… [and] the event had to be relevant for the disease or symptom"; so again no substantive placebo definition was included. And McDonald and colleagues (1983, p. 417) were even vaguer, merely noting that "we exclude from the scope of our discussion placebo therapy associated with intense conditioning or body invasion". With the central object of inquiry so poorly defined in all instances, it is questionable how much veracity one can assign to the results of the investigations, even ignoring the methodological critiques.

Given the issues described above, it is unsurprising that our understanding of clinical placebo effectiveness remains uncertain. This has direct implications for another central issue in placebo studies research – ethics. Because, for a placebo treatment to be ethical, we first must have a coherent understanding of its effectiveness in the clinic (Miller & Colloca, 2009). Given this interrelation of ethics and effectiveness, I now turn to the broader ethical implications of the placebo effect.

2.4 Ethics

The debate around the ethical implications of the placebo effect is applicable to both research and clinical practice. Although this project is focussed on the clinical placebo effect, I will first briefly outline the main ethical issues in two research settings – placebo controlled trials, and research on placebos and their effects – before concentrating on the ethics of placebo treatment in clinical practice. It is important to consider both research and clinical practice settings because the ethical issues are somewhat interrelated.

2.4.1 Research

2.4.1.1 Placebo controlled trials

As outlined previously, there are manifest concerns regarding the suitability of RCTs in placebo studies research. However, a randomised, double-blind, placebo controlled trial is still generally considered a vital approach for evaluating treatment within the scope of evidence-based medicine (EBM) (Deaton & Cartwright, 2018; Friedman et al., 2015;

Shapiro & Shapiro, 1997). A placebo comparison process in a trial is used to control for a variety of factors such as regression to the mean, bias, etc. as well as the factors this thesis is focussed on (Turner, 2012). Within this process, there are a number of ethical concerns, with two central issues: first, when there is a proven and effective treatment that could be used instead of placebo; and second, when the placebo intervention may be harmful (e.g. sham surgery) (Benedetti, 2014; Shapiro & Shapiro, 1997).

Some researchers have claimed placebo controlled trials are unethical in instances where proven effective treatment is withheld (Rothman & Michels, 1994), or even that they are both ethically and epistemologically unwarranted full stop (Nunn, 2009d); in a similar vein I have argued elsewhere that ethical and epistemological issues in placebo controlled trials are interrelated, and so wider critiques of the epistemic aim of and reverence given to trials within EBM must be considered in ethical deliberations (Hardman, 2019). However, others have argued that placebo controlled trials are necessary to further research, and the revised Declaration of Helsinki (2013) does allow for the use of placebo controls even if a proven treatment exists, for 'methodologically sound' reasons. But it is complex and a recent empirical study shows that, in practice, researchers are unwilling to break the principle of beneficence, perhaps highlighting a difference in what researchers feel is ethical, and what the Declaration of Helsinki currently allows (Batra & Howick, 2017).

Another ethical issue around placebo controlled trials is whether they contravene clinical equipoise, whereby a trial is only considered ethical when a state of genuine uncertainty about which treatment is better exists (Freedman, 1987); however, some researchers have criticised this argument, positing that the very idea of equipoise is based on an erroneous notion that the ethics of clinical trials can be subsumed into the wider traditional understanding of clinical medical ethics (Miller, 2006). Last, some researchers posit that it is common for participants in trials to misconceive the nature of the informed consent process and that disclosure information should be more specific to avoid unethical practices (Blease, Bishop, & Kaptchuk, 2017).

2.4.1.2 Research on the placebo effect

In laboratory based experiments where researchers investigate the placebo effect, the ethical issues seem less prevalent than in clinical trials, although there is still some controversy. It is often a requirement for participants in these kinds of experiment to be deceived, for instance about whether they have received placebo treatment or not; this arguably contravenes the notion of informed consent. However, this experimental

paradigm is not clinical and it can be argued that if participants know beforehand that they might be deceived for experimental purposes – and are also debriefed afterwards – then this is within ethical bounds. Researchers have termed this approach 'authorised deception' (Miller, Wendler, & Swartzman, 2005). Wider critiques can be made of the experimental paradigm, however, including the power dynamics between researcher and participant, the notion of neutrality in experiments involving humans, and the wider socio-cultural implications of conducting human research in this manner (Danziger, 1994; Fox, Prilleltensky, & Austin, 2009; Parker, 2007); these wider ethical concerns should also be considered in laboratory based experimental placebo research.

2.4.2 Clinical practice

Many of the ethical issues regarding placebo research also influence clinical practice; most notably critiques of the use of placebo-controlled trials in certain circumstances, as their results may directly influence clinical guidelines. These wider concerns notwithstanding, it is the notion of deception that dominates much current debate, informed by the emphasis on patient autonomy that emerged in the mid-twentieth century (Blease, 2011; Blease et al., 2016; Miller & Colloca, 2009) and which now "from a legal… and a moral point of view… trumps everything else" (Harrington et al., 1997, p. 237).

Some researchers and clinicians suggest that placebo treatment necessarily involves deception and that it should be restricted due to the effect it can have on the clinician-patient relationship, and the possibilities for abuse (Bok, 1974; Braillon, 2009). However, other researchers – grounded in the opposing ethical accounts, or suggesting that concerns about patient autonomy have been stretched beyond reasonable application – suggest that some limited deception may be warranted in some cases given the potential benefits in placebo treatment (Blease, 2011; Gold & Lichtenberg, 2014; Raz, Harris, de Jong, & Braude, 2009).

There is increasing debate over the dominance of patient autonomy in the ethics of clinical placebo treatment. The idea that other ethical principles such as beneficence (Pellegrino & Thomasma, 1981, 1988), or other ethical approaches such as virtue theory (Gold & Lichtenberg, 2014) might ground placebo treatment is developing. Moreover, some medical ethicists claim that the notion of patient autonomy is in-itself flawed, as patients cannot be truly autonomous actors within such a complex clinical setting (Tauber, 2002). And, moreover, that autonomy cannot be a guiding principle for treatment as it is autonomy itself that patients seek to recover when they visit their clinician (Tauber, 2002,

2005). These differing views can be situated in wider ethical debates between deontological and consequentialist approaches to ethics; however, given the longevity of such debates more generally, it is perhaps unlikely that agreement will be reached in the short term without a breakdown in the autonomy-beneficence binary (Blease et al., 2016) and the emergence of a different ethical framework for placebo treatment.

A recent trend in this debate is to sidestep these issues and promote non-deceptive placebo treatment (Blease et al., 2016; Brody, 1982; Brown, 2013; Kaptchuk & Miller, 2018). Grounded in an interpretation of the placebo effect in which a 'placebo' substance is required, some researchers argue that placebo treatment can occur without deception, through 'open-label' placebo treatment. Although this opposes our intuitive understanding of placebo treatment, there is some empirical evidence to support this idea. For example, in the RCTs investigating open label placebo treatment in IBS, outlined previously (Kaptchuk et al., 2010; Kaptchuk et al., 2013), and in a RCT investigating open label placebo treatment in chronic low back pain, where the open label placebo group performed significantly better than treatment as usual (Carvalho et al., 2016). Other small studies have further shown that open label placebo treatment may be useful in reducing doses of stimulant medication for ADHD (Sandler & Bodfish, 2008; Sandler, Glesne, & Bodfish, 2010). However, despite interesting early findings, more research is needed to support and contextualise the practice of open label placebo treatment in the clinic; as colleagues and I have argued elsewhere, "although the results of small-scale open-label placebo trials may reflect genuine therapeutic benefit, they may also just be an artefact of the experimental situation" (Ainsworth, Hardman, & Thomas, 2019, p. 2). Furthermore, open-label placebo treatment has the potential to cause unintended adverse effects, such as an increased reliance on medication and a decrease in self-management activity. These must be considered when assessing the viability of open-label placebo treatment.

2.5 General practice

Focussing now on the specific domain of relevance to this thesis, here I explore the placebo effect with regard to general practice, including: the potential relevance of placebos in general practice; the importance of the concept of the 'therapeutic encounter' in both traditions; and the issues with placebo studies research in general practice and how these might be overcome.

2.5.1 Relevance

Placebo treatment has particular relevance in general practice. In part because generalist clinicians face different tasks to specialists, inasmuch as they "bring together the amazing products of specialised analysis into clinical synthesis appropriate to the usually unique requirements of real people leading independent lives." (Tudor Hart, 2010, p.106). Underlying this challenge are issues such as multimorbidity, polypharmacy, and chronic illness management (Barnett et al., 2012; Bodenheimer, Wagner, & Grumbach, 2002; Duerden, Avery, & Payne, 2013; Huntley, Johnson, Purdy, Valderas, & Salisbury, 2012; Salisbury, Johnson, Purdy, Valderas, & Montgomery, 2011), which can make applying myriad single condition evidence-based guidelines more difficult (Greenhalgh et al., 2014; May, Rapley, Moreira, Finch, & Heaven, 2006; Montgomery, 2006; Rapley & May, 2009; Timmermans & Berg, 2003). These issues are compounded because the problems presented in general practice often require clinical and social judgements, and have clinical and social solutions (Elwyn et al., 2014; Tudor Hart, 2010). GPs and allied primary clinicians, of course, must be able to identify acute disease and prescribe the necessary pharmacological or procedural treatments. But they must also be able to harness that which a RCT intentionally obscures: the psychologically and socio-culturally mediated effects this thesis is focussed on (Lee, Wright, & Wolfe, 2016; Little et al., 2001; Ong, de Haes, Hoos, & Lammes, 1995; Stewart, 2005). The placebo effect, therefore, might offer a useful framework by which generalist clinicians can more directly harness multiple treatment approaches in a structured and person-centred way.

Moreover, although the placebo phenomenon is often investigated using a mechanism-based approach, a disease-based approach can also be taken (Benedetti, 2014). This perspective highlights that conditions commonly thought to be sensitive to placebo treatment are prevalent in general practice (NHS Digital, 2018), including pain (Benedetti, 1996; Benedetti et al., 2011; Bingel et al., 2006; Bingel et al., 2011; Gracely et al., 1983; Petrovic et al., 2002; Wager et al., 2004), depression (Kirsch et al., 2002; Kirsch & Sapirstein, 1998) and gastrointestinal disorders such as IBS (Kaptchuk et al., 2010; Kaptchuk et al., 2008). Furthermore, current evidence suggests that placebo treatments "primarily address subjective and self-appraised symptoms" (Kaptchuk & Miller, 2015, p.8) rather than affecting the pathophysiology of diseases. The effects of trial design on this finding notwithstanding, this has particular utility in general practice where patients often present conditions with no distinct pathophysiological correlate.

2.5.2 The therapeutic encounter

An important relationship between general practice and placebo studies research is an increasing focus on the *therapeutic encounter* in both fields. For example, in general practice there is a growing understanding that a modern, objective understanding of disease arguably sets it apart from patients. Advances in medical science have allowed us to perform this bifurcation, so that "diagnosis, prognosis, and treatment have been linked ever more tightly to specific, agreed-upon disease categories, in both concept and everyday practice." (Rosenberg, 2002, p. 237). This approach is informed by the success of biomedical technologies in combating disease, but by adopting this approach we risk minimising therapeutic benefits inherent in the clinical encounter itself (Miller & Brody, 2011). As the medical anthropologist Arthur Kleinman (1973/2010, p. 88) noted:

> Increasing technical control has been accompanied by the separation of efficacy from meaning, progressive dehumanization of the healing function, so much so that we are seeing traditional healing activities surface in the wider social structure just as they are disappearing from clinical practices… Ironically, medicine, one of the first human sciences and in some ways a paradigmatic one, is in the tragic process of emancipating itself, via technicalization of all of its problems, from this vital source.

It is clear that since this was written, medicine hasn't wholly forgotten its *Geisteswissenschaften* beginnings. But the warning is prescient nonetheless, especially for general practice where a patient-centred and positive approach can improve outcomes (Barry, Stevenson, Britten, Barber, & Bradley, 2001; Jensen & Kelley, 2016; Kelley, Kraft-Todd, Schapira, Riess, & Kossowsky, 2014; Little et al., 2001). This understanding in general practice aligns with modern placebo researchers, who as noted previously, increasingly conceptualise placebo effects not as the effects of a paradoxical 'inert substance', but as, for example: a response to enculturated meaning (Hutchinson & Moerman, 2018); a response to learning (Colloca & Miller, 2011b); or more broadly as "improvements in patients' symptoms that are attributable to their participation in the therapeutic encounter, with its rituals, symbols, and interactions." (Kaptchuk & Miller, 2015, p. 8).

It can be argued that medicine has mitigated the tension between efficacy and meaning by adopting the biopsychosocial model (Engel, 1981). However, despite good intentions, it is questionable whether this model has been successful, especially in a general practice environment where a patient's personal link with a doctor is being eroded (Levene et al., 2018) and clinician workload continues to rise (Hobbs et al., 2016; Paddison, Abel, & Campbell, 2018). Commonly critiqued problems of the model include

dichotomizing the bio-psycho-social elements, a masking of a bio-bio-bio approach, the lack of cultural factors, and the difficulty in explaining linkages and hierarchies within the model (Benning, 2015; Ghaemi, 2010; Hatala, 2012; McLaren, 1998; Suls & Rothman, 2004).

More directly linked to the placebo phenomenon is the critique of the biopsychosocial model regarding medically unexplained symptoms. Particularly how the model forces clinicians to reify disease, rather than focussing on the "interpenetration of the physical and the moral", allowing patients to make sense of their symptoms (Butler, Evans, Greaves, & Simpson, 2004, p. 220). This critique can be linked to the rise of complementary and alternative medicine in primary care, where patients seek healing rituals with a performative power they don't experience in general practice (Hardman, 2019; Kaptchuk, 2002). A better understanding of the placebo effect, therefore, might allow generalist clinicians to better exploit the performative power of treatment in mainstream medicine (Dixon, Sweeney, & Pereira Gray, 1999; Hyland, 2003; Kaptchuk, 2011; Kirmayer, 2011; Myers, 2010).

2.6 The problems with current research

As noted, placebo studies research is afflicted by a number of issues, most notably the lack of a consensual definition and general conceptual confusion. The contextual character of the placebo phenomenon has also made establishing clinical effectiveness difficult. This is particularly important for general practice, where the potential of placebo treatment is arguably greatest. In addition to conceptual issues, placebo studies research has methodological failings which affect its application to general practice. Experimental methods have dominated investigations of the placebo effect, and when investigating prevalence of use or broader views of clinicians and patients in primary care settings, most researchers have relied on surveys (e.g., Babel, 2012; Babel, 2013; De Gobbi, Brocadello, Bonato, Gharapetian, & Fassina, 2016; Fässler, Gnadinger, Rosemann, & Biller-Andorno, 2011; Howick et al., 2013; Linde et al., 2014).

For a phenomenon so entangled with context and meaning, such a narrow approach is problematic. In response, some researchers have increasingly begun to utilise broader research approaches, collecting richer data through interviews, focus groups and more open-ended surveys (e.g., Bishop, Aizlewood, & Adams, 2014; Bishop, Howick, et al., 2014; Ortiz, Hull, & Colloca, 2016; Tandjung et al., 2014). Although this change is welcome and necessary, it remains limited because even in interview and focus group

research, placebo concepts are generally introduced and defined by the researchers themselves. Given the conceptual confusion surrounding the placebo effect, this is likely to significantly affect results. However, studies involving in-depth naturalistic methods that can more effectively bypass this conceptual issue, such as ethnography (e.g., Comaroff, 1976), are rare, particularly in UK settings; this is reflected in recent calls for more ethnographic and ethnomethodological research (e.g. Hutchinson & Moerman, 2018).

To gain a deep and clinically relevant understanding of the placebo effect in general practice, therefore, more contextual interdisciplinary research is needed. As I noted in Chapter 1, to meet this need I conducted an exploration of the placebo effect in general practice aiming to provide a rich interpretation of how the placebo effect might be harnessed to improve care.

Chapter 3 Theoretical framework and methodology

Following the outline of my research question and objectives in Chapter 1, and the detailed background to this thesis in Chapter 2, here I explain my theoretical framework and methodology. My aim in this chapter is twofold. First, to establish the suitability of my theoretical framework and methodology for my research questions and objectives. And second to establish how my theoretical and methodological approaches complement each other in a coherent theory-methodology package. To foresee, I adopt a theoretical framework of pragmatism and a methodology of grounded theory.

3.1 Pragmatism

As I noted in Chapter 2, the current situation in placebo studies research is ambiguous: there is no clear definition of placebos, considerable ethical uncertainty, and no clear approach for utilising 'placebo treatment' in general practice. However, there are indications that placebo treatment may be particularly useful in a general practice environment. Therefore, exploring the placebo effect in general practice seems worthwhile but there are currently no specific, credible concepts to test. Rather, I need to generate credible concepts and develop theories for the placebo effect in general practice. To meet this end I adopt a theoretical framework of American pragmatism (from here on 'pragmatism').

Pragmatism is often misrepresented as a focus on 'what works', but its influence is more extensive. There are different accounts of pragmatism, but central to a pragmatist perspective is the continuity of thought and action, inasmuch as our beliefs are understood through the effects of our habits of action (Dewey, 1931/1982; Misak, 2013; Thayer, 1982). For my purposes I adopt a form of pragmatism grounded in the work of Charles Sanders Peirce and John Dewey. My framework focusses on three elements: how concepts are clarified; a theory of inquiry; and the logical system that underpins inquiry.

3.1.1 Clarifying concepts

The first key element of my pragmatist framework is how concepts are clarified. By equating a belief with a rule of action or habit, Peirce and Dewey suggested we clarify a concept by showing what practical effects it produces. This is stated in what would become known as the 'pragmatic maxim' (Peirce, 1878/1982, p. 88):

> Consider what effects which might conceivably have practical bearings we conceive the object of our conception to have. Then our conception of these effects is the whole of our conception of the object.

This early version of the maxim is the basis for subsequent forms of pragmatism. At the start of his 1903 Harvard lectures on pragmatism, Peirce (1903/1998b, p. 135) reiterated it in less causal and more normative terms, insofar as:

> Every theoretical judgement expressible in a sentence in the indicative mood is a confused form of thought whose only meaning, if it has any, lies in its tendency to enforce a corresponding practical maxim expressible as a conditional sentence having its apodosis [main clause] in the imperative mood.

Thus for later Peirce, and my framework, a concept is clarified by the effect, command, or request it engenders within a community of inquirers, rather than any supposed meaning it contains in-itself.

3.1.2 Inquiry

The second key element of my framework is a theory of inquiry. A Deweyan definition of inquiry is "the controlled or directed transformation of an indeterminate situation into one that is so determinate in its constituent distinctions and relations as to convert the elements of the original situation into a unified whole" (Dewey, 1938/1982, pp. 319-320). Dewey's (1938/1982, p. 323) holistic pattern of inquiry is explicitly problematising, inasmuch as "the way in which the problem is conceived decides what specific suggestions are entertained and which are dismissed; what data are selected and which rejected: it is the criterion for relevancy and irrelevancy of hypotheses and conceptual structures".

The pragmatist notion of moving from indeterminacy to determinacy is also found in Peirce who arguably offered a more complete approach (Apel, 1981; Hookway, 2000). Peirce proposed that inquiry is where "the irritation of doubt causes a struggle to attain a state of belief" and that "the most that can be maintained is, that we seek belief that we *think* to be true" (Peirce, 1877/1992, pp. 114-115). Peirce endorsed the method of 'science' as opposed to tenacity, authority or anything *a priori*, noting that it is only the former that can genuinely unsettle belief, because it is the only method that is self-correcting (Kappner, 2000). However, it should be noted that his conception of science is much wider than a narrow scientist notion popular today, which better fits the notion of a broader *Wissenschaft* I adopt for this thesis.

In providing his notion of inquiry, Peirce outlined two epistemological features that taken together are perhaps the unique marker of pragmatism: anti-scepticism and fallibilism (Misak, 2004; Misak, 2013; Putnam, 1994). As Christopher Hookway (1985, p.73) noted, Peirce's fallibilism "escapes scepticism only by a crucial hair's breadth… only because he claims to be able to prove the theorem that, if we were to inquire sufficiently enough, and for long enough, then we are guaranteed, eventually, to arrive at the truth". Moreover, fallibilism and anti-scepticism make up two of the four characteristics of pragmatism identified by Hilary Putnam (1994, p.152) – the remaining two being "the rejection of sharp dichotomies, particularly fact and value" and "the primacy of practice". All four characteristics influence my framework.

3.1.3 A logical system

The third key element of my pragmatist framework is the distinction between modes of logical inference, which underpins the theory of inquiry outlined previously. This distinction is important as it explicitly links my theoretical framework to my methodology. It is grounded in a familiar predictive or forecasting theory of science, inasmuch as we create concepts, hypotheses, and theories, and test them against experience. However, it is important for my framework to identify a more specific tripartite distinction:

1. A reliable source of creating hypotheses (abduction)
2. A way of explicating the consequences of those hypotheses (deduction)
3. Efficient means for testing those consequences (induction).

Following Peirce, my framework relies on an equal focus on *all* elements of inquiry, and an understanding that "the very first stage of scientific inquiry requires human creativity." (Rosenthal, 2004, p.193). This necessitates a rejection of both a narrow empiricism and a reliance on rationalism, and expands the concept of logic to include the contextual and normative, upending much epistemological discussion in qualitative research and philosophy of science more generally (Misak, 2016).

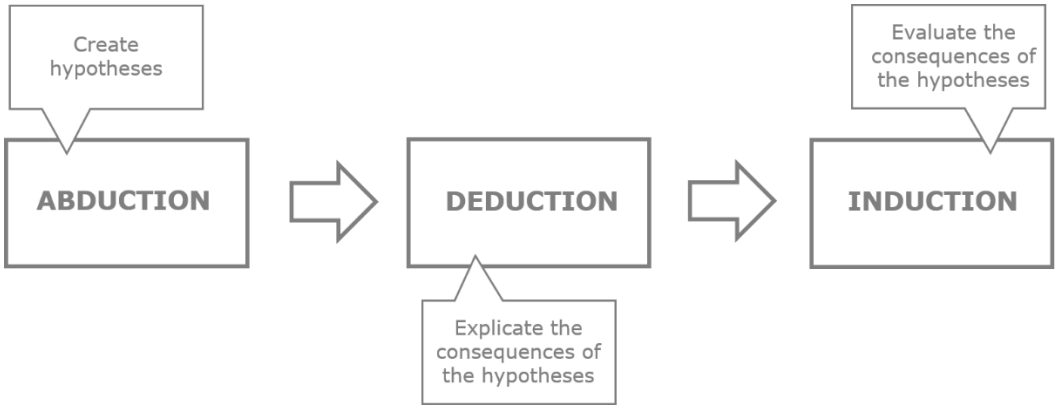
It is the function of all three forms of inference, and how they relate, that provides the potential for synthesis. This becomes clearer when we conceptualise the process methodologically (Peirce, 1903/1998c, p. 216):

> Induction consists in starting from a theory, deducing from it predictions of phenomena, and observing those phenomena in order to see how nearly they agree with the theory… Abduction is the process of forming an explanatory hypothesis. It is the only logical operation which

> introduces any new idea; for induction does nothing but determine a value and deduction merely evolves the necessary consequences of a pure hypothesis.

Peirce's model of the scientific method (which I conceive more broadly as the method of systematic inquiry) situates the three modes of inference in a specific order: abduction-deduction-induction (see Figure 1). It is the *ampliative* nature of induction and abduction – set against the explicative nature of deduction – which is important (Wiggins, 2004).

Figure 1: Peirce's model of systematic inquiry



Some social scientists may baulk at the vocabulary of 'hypothesis testing'. However, with Peirce, I do not mean to suggest that all inquiry should follow an experimental model. I merely mean that (for this thesis) my account of a systematic mode of inquiry is "a continuation of common sense" (Quine, 1953, p. 45), necessitating first creating concepts, which we can then articulate in meaningful statements. And that from these general statements, particular consequences can be deduced, which can then be tested in a variety of ways. This critical common-sense model is not widely articulated in the social sciences; in order to promote clarity I will now consider each mode of inference in more detail.

3.1.3.1 Abduction

To start this process of systematic inquiry we need to first generate concepts, theories, and ultimately hypotheses. Logically, we must do this through abduction[4], which can be described thus (Peirce, 1903/1998d, p. 231):

> The surprising fact C, is observed;
>
> But if A were true, C would be a matter of course.

[4] Abduction is often equated with 'inference to best explanation' (IBE). However, my position is that it is only through the whole process – abduction, deduction, and induction – by which one can achieve this (see McAuliffe, 2015). Abduction merely provides the best *conceived* explanation – the hypothesis – which we need to derive the consequences from (deductively), to then test (inductively).

Hence, there is reason to suspect that A is true.

It is questionable whether such a syllogistic form is useful to describe abduction. However, it serves the purpose of highlighting the direction of inference, which is important. At the start of inquiry we are presented with an indeterminate situation – the world into which we are thrown. We necessarily have to first work *from* the phenomena *back* to an explanation for it. If we accept, as I do, that we cannot somehow stand outside nature, there is no other way in which one can first make sense of anything. In an early paper, where Peirce referred to this mode of inference as 'hypothesis', he defined it as "where we find some very curious circumstance, which would be explained by the supposition that it was a case of a certain general rule, and thereupon adopt the supposition" (1878/1992, p. 189).

Abduction is often not identified as such in social scientific inquiry. It is also common to present the abductive phase of systematic inquiry as 'inductive' – as something like generating theory 'from the data'. This not inherently wrong (philosophers of science as far back as William Whewell (1858/1989) have done so) but it is quite confusing. Stretching the term induction to cover such different modes of inquiry (generating and evaluating) can lead to a fuzzy understanding of systematic inquiry.

3.1.3.2 Deduction

Abduction and induction both start with observed phenomena and are both modes of non-necessary inference – insofar as we cannot say for certain that the inference is true. On the other hand "in deduction, or necessary reasoning, we set out from a hypothetical state of things which we define in certain abstracted respects… Our inference is valid if and only if there really is a relation between the state of things supposed in the premisses [sic] and the state of things stated in the conclusion." (Peirce, 1903/1998c, p. 212). For example as demonstrated in the form of a basic syllogism:

All M are P

All S are M

All S are P

This has some corollaries. First, in deduction if the information contained in the premises is true, then the conclusion is necessarily true. This is useful, but the other side of this is that deduction is really just a case of moving information around; although the deduced conclusion might *seem* novel, all the information is already contained in the premises. In Peirce's model, deduction is the way in which the *consequences* of the

abductively derived hypotheses are explicated. This is necessary as it enables the pure hypotheses to be represented by a particular statement, which can be tested.

3.1.3.3 Induction

Once hypotheses have been generated abductively and their consequences deduced, we must test those consequences; I follow Peirce in using the term induction to refer only to the process of *testing* hypotheses. In an early work, Peirce (1878/1992, p. 189) defined induction as:

> Where we generalize from a number of cases of which something is true, and infer that the same thing is true of a whole class. Or where we find a certain thing to be true of a certain proportion of cases and infer that it is true of the same proportion of the whole class.

This is a narrow view of induction, but it establishes the basic notion that in induction we infer forwards to more facts of a similar kind, for example by generalising from a sample to a population. It is useful to further develop the notion of induction through Peirce's later distinctions between different types of induction.

Peirce promoted two forms of induction – qualitative and quantitative – as he thought they are self-correcting and thus scientific. Quantitative induction will seem most familiar to social scientists and perhaps more accurately consists of making "inferences about a totality from the quantitative properties of a sample" (Reichertz, 2007, p. 219) – either through Bayesianism, focussed on an algorithmic depiction of belief revision, or through frequentism in which the focus is on identifying and reducing errors. Qualitative induction is more controversial, consisting of "assembling certain qualitative features of the investigated sample in such a way that this combination of features resemble another… in essential points." (Reichertz, 2007, p. 219). It can be argued that qualitative induction seems quite close to abduction. However, we must keep in mind the basic distinction between abduction and induction: abduction creates and "induction evaluates: that is all." (Peirce, 1908/1998, p. 443). Moreover, although an experimental approach may be best suited for the inductive phase of particular research projects, induction for Peirce, and for my framework, is a much broader mode of examining (fallibilistically) whether the consequences of hypotheses are borne out.

3.1.4 Implications for this thesis

As previously outlined, the ambiguity in placebo studies research in general practice orientates my thesis towards exploratory theory generation and the explication of the consequences of such theory. Within the scope of my pragmatist theoretical framework,

therefore, my modes of inquiry for this thesis are abduction and deduction; the inductive phase from Peirce's system being outside the practical scope of this thesis. Deduction as I define it is a rational mode of inquiry that, for my purposes, requires no further methodological explication. Abduction, however, does need such explication. The remainder of this chapter is focussed on methodologically operationalising my abductive phase of inquiry; this process is guided by three meta-methodological requirements:

- A mode of analysis capable of incorporating diverse findings. Given the current state of placebo studies research as outlined in Chapter 2, this is important to help mitigate the manifest conceptual paradoxes related to the placebo effect.
- Methodological space to include social, historical and cultural context, which I consider important to inform theory generation.
- A mode of synthesis with capacity for generating concepts and theory.

Given these requirements I adopt a version of grounded theory, of which later iterations have been explicitly identified as having an abductive logic (Reichertz, 2007).

3.2 Grounded theory

Grounded theory emerged from an ethnographic study of death and dying in the San Francisco area (Glaser & Strauss, 1965/2017). The systematic methodology used in the study was explicated in the book, *The Discovery of Grounded Theory* (Glaser & Strauss, 1967/2009). The link between ethnography and grounded theory has subsequently softened and grounded theory is now used as a wider systematic approach to data generation and analysis (Timmermans & Tavory, 2007). There are different iterations of grounded theory but all explicitly focus on the purpose of theory generation (Bryant & Charmaz, 2007; Charmaz, 2014; Glaser & Strauss, 1967/2009). For example Bryant and Charmaz (2007, p. 1) suggest grounded theory "comprises a systematic, inductive, and comparative approach for conducting inquiry for the purposes of constructing theory". As one can note from the above quotation – the first sentence in the *Handbook of Grounded Theory* – in grounded theory it is still common for researchers to use the term induction less precisely than in my pragmatist framework. Nevertheless, within my framework grounded theory is explicitly *abductive*; this view is increasingly prevalent in the grounded theory literature (Bruscaglioni, 2016; Rahmani & Leifels, 2018; Reichertz, 2007; Reichertz, 2010).

3.2.1 Abduction as the logic of grounded theory

Later in the same introductory article quoted above, the authors tentatively introduce the notion of abduction, noting that "a strong case can be made that *The Discovery of Grounded Theory*… [has] abductive stands and implications." (Bryant & Charmaz, 2007, p. 16). Implicit in this presentation of the logic of grounded theory is that it has both inductive and abductive elements. This uncertainty in the literature is, I suggest, indicative of the wider use of induction (and the under-use of abduction) in the social sciences. With other researchers (e.g., Bruscaglioni, 2016; Reichertz, 2007) I make the stronger assertion that grounded theory is necessarily abductive. Within my framework it is tautological to present grounded theory as abductive and orientated towards theory generation, but illogical to present it as inductive and orientated thus. Therefore, for my purposes I promote the following, simpler definition of grounded theory, which underpins my approach: grounded theory is an abductive, comparative and flexible methodology for conducting inquiry.

3.2.2 Qualitative and quantitative data in grounded theory

Although my thesis is broadly in the 'qualitative' tradition (e.g. Denzin & Lincoln, 2017; Flick, 2009; Silverman, 2009), I do not set 'qualitative' research against 'quantitative' research. Following a recent trend in the philosophy of science emphasising systematicity and practice (e.g. Haack, 2003; Hoyningen-Huene, 2013), I instead situate qualitative research alongside and complementing quantitative research within a wider *Wissenschaft*. In this regard, I view qualitative and quantitative data as compatible inasmuch as there is no epistemological reason as to why they cannot be combined in inquiry; this is especially notable in the abductive phase of my Peircean framework for systematic inquiry.

However, grounded theory is often presented as a methodology for producing and analysing solely qualitative data. For example, one leading researcher defined grounded theory as consisting of "systematic, yet flexible guidelines for collecting and analysing qualitative data to construct theories from the data themselves" (Charmaz, 2014, p. 1). This definition is not in line with my use of grounded theory, insofar as I do not exclude the use of quantitative data in contributing towards theory generation. Despite recent methodological literature to the contrary, this reflects the original aims of grounded theory:

> Although the emphasis on qualitative data is strong in our book, most chapters also can be used by those wishing to generate theory with quantitative data, since the process of generating theory is independent of the kind of data used.
>
> (Glaser & Strauss, 1967/2009, p. 18)

Echoing the views of Peirce, Glaser and Strauss (1967/2009, pp. 17-18) explicitly noted that quantitative *and* qualitative data can be used for both the generation and testing of theory:

> There is no fundamental clash between the purposes and capacities of qualitative and quantitative methods or data. What clash there is concerns the primacy of emphasis on verification or generation of theory – to which heated discussions on qualitative *versus* quantitative data have been linked historically. We believe that *each form of data is useful for both verification and generation of theory*, whatever the primacy of emphasis. Primacy depends only on the circumstances of research, on the interests and training of the researcher, and on the kinds of material he needs for his theory.

3.2.3 Constructivist grounded theory

Despite some inconsistencies, grounded theory is arguably the most developed abductive methodology in the social sciences, with a number of iterations and different epistemological standpoints (Bryant & Charmaz, 2007; Charmaz, 2014). A further common feature of grounded theory is the focus of inquiry on "analysing actions and processes rather than themes and structure" (Charmaz, 2014, p. 15). In this way, one is able to more easily avoid reifying concepts. With the two central features of grounded theory in mind – theory generation and a focus on action and processes – I adopt Charmaz's (2014) constructivist approach to grounded theory. This approach allows data production, analysis and synthesis to be conducted with more orientation to historical and socio-cultural context – something I view as integral to effective theory generation – and allows diverse findings to be incorporated.

3.2.3.1 Intuition as method

In outlining abduction in my theoretical framework section, I focussed on how Peirce conceived of it in a broader logical system. This is necessary in situating abduction in the broader scope of systematic inquiry I adopt for this thesis. However, I also noted that abduction, as the first stage of systematic inquiry, is necessarily creative and contextual. In operationalising abduction through constructivist grounded theory, here I develop the latter proposition, particularly to highlight how my interpretation of grounded theory is not based

explicitly on the empirico-deductive tradition that dominates the social sciences, but also on the exploration of the *felt dynamic content of experience*. In this way I set the conditions to make explicit my interpretation of the process of data analysis and synthesis in my interpretation of constructivist grounded theory.

Much social scientific inquiry is framed as some combination of empiricism and rationalism: "rationalism tends to emphasize universals and to make wholes prior to parts in the order of logic as well as that of being. Empiricism, on the contrary, lays the explanatory stress upon the part, the element, the individual, and treats the whole as a collection and the universal as an abstraction." (James, 1904/2000, p.315). In this regard rationalism is knowledge *about* things rather than a *sympathetic acquaintance* with them (James, 1909/1977); by dealing, as rationalism does, only in symbols and concepts, we are unable to penetrate the depth of reality. However, empiricism also has its limitations, inasmuch as it fails to explicate underlying, hidden causes and thus cannot account for reality in its entirety. As Bruno Latour (2008, p.24) noted, traditional empiricism misses too much to be a worthwhile account of experience in its entirety: instead of giving us more, it has "been kidnapped into the rather dirty business of giving us *less*".

The dominant empirico-deductive approach aims to mitigate the inadequacies of empiricism by introducing concepts and symbols. In this sense we understand what a thing *really* is by its definition: "first we identify the thing with a concept and then we identify the concept with a definition, and only then, inasmuch as the thing is whatever the definition expresses, are we sure of apprehending the real essence of it or the full truth about it." (James, 1909/1977, p.219). The introduction of rationalistic concepts to empirical inquiry has the effect of moving us *away* from experience through abstraction. This can be useful in grasping something like what's going on. But there are pitfalls, especially when we start to use concepts unreflexively (James, 1909/1977). This can occur when a useful practice turns first into a method and then eventually into something that defeats its original perceived end: "concepts, first employed to make things intelligible, are clung to even when they make them unintelligible." (James, 1909/1977, p.219). This act of reification (what Alfred North Whitehead (2010) called *the fallacy of misplaced concreteness*) can – as Dewey made explicit in his theory of inquiry – lead inquiry astray. Given the substantial conceptual disagreements in placebo studies research, avoiding clinging to unintelligible concepts is a central concern in this thesis.

In adopting a constructivist grounded theory approach for the abductive phase of my thesis, I suggest that rather than abstracting from experience, "the flux of sensible experience itself contains a rationality that has been overlooked, so that the real remedy

would consist in harking back to it more intelligently, and not in advancing in the opposite direction away from it." (James, 1909/1977, p.73). This approach involves:

> not a transcendence *away* from us beyond the empirical realm, but a transcendence *toward* us, to this side, a return to a more direct realm of experience. It is a transcendence or better, trans-descendence toward direct or pure experience.
>
> (Abe, 1990, p.xvii)

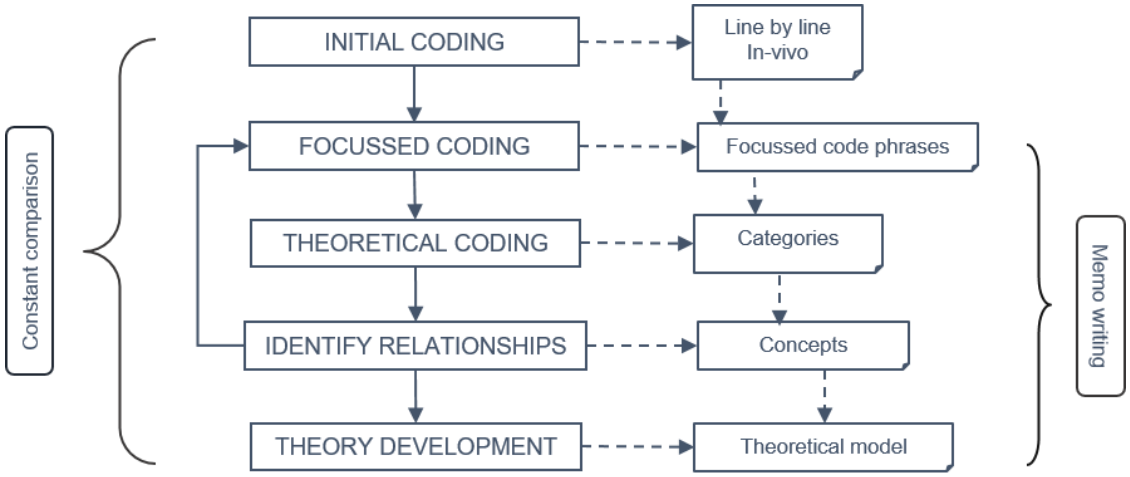
The object of abductive inquiry is understood by moving towards our experience of it (trans-descending[5]), from which a creative, intuited understanding will emerge. In this way, the initial qualitative coding practices for analysis in my interpretation of grounded theory can be conceived of at the level of *praxis*. The aim is to immerse oneself in the data until ideas flow naturally and intuitively. In this sense the method of intuition can be thought of as a kind of *experience* that one gives in to, rather than an attempt, as in the empirico-deductive tradition, to consciously produce interesting concepts. In this way, I conceive of the initial process of analysis in grounded theory (outlined in more detail below) as moving inquiry above common divisions in thought – such as rationalism and empiricism – to allow one to enter *into* the object of inquiry rather than go around it. By this I mean that abductive inquiry is an explicitly *experiential* process because – with respect to my Peircean framework – new information cannot be created through deduction or induction (going around the object of inquiry), it must be intuited (entering into the object of inquiry). This, however does not mean that abduction cannot be systematic. A constructivist grounded theory approach provides a systematic way of setting the conditions for such intuitive, experiential understanding to emerge.

3.2.3.2 Data analysis and synthesis

Following my interpretation of constructivist grounded theory as an intuitively conceived method of abduction, here I outline the formal process of how I conducted data analysis and synthesis (see Figure 2).

[5] In Western philosophy it is more common to contrast transcendence with 'immanence' rather than 'trans-descendence'. In terms of my approach, this is perhaps most apparent in the Spinoza-Bergson-Deleuze line of thought, through which one can also extract a practice of 'intuition as method' (Deleuze, 1966/2011). However, although the sentiment is similar, as I ground my inquiry in American pragmatism I have avoided this explicit comparison in this chapter.

Figure 2: Grounded theory analysis and synthesis



In line with other grounded theory approaches, initial analysis occurs through detailed initial coding, before more focussed coding is conducted and categories developed (categories can be defined as significant focussed codes or patterns interpreted from several codes). Through my notion of 'intuition as method', the initial coding phases are primarily considered as processes of allowing a researcher to *experience*, or perhaps more accurately *re-experience*, the data. Practically, this includes a mix of fast coding sessions (for which I used NVivo in order to improve data management and security, although the process itself could equally have been conducted without such assistance), and longer, less formal periods of 'living with the data'. From this intuitive process of experiencing, concepts are created; these inform the theory generation process. The method of constant comparison – whereby new codes and concepts are considered with respect to existing ones – ensures the analysis process is iterative. Memo writing is used, throughout the analysis and synthesis process, as a tool to develop and explore the data within research teams, and to aid theory generation. Given my intuitive interpretation of the coding process in constructivist grounded theory, any further attempt to explicate this process (as occurs in other versions of grounded theory) is likely to be counter-productive.

3.3 Summary

At the start of this chapter I outlined two aims: establish the suitability of my theoretical framework and methodology for my research questions and objectives; and establish how my theoretical and methodological approaches complement each other in a coherent theory-methodology package.

Regarding the first aim, in this chapter I outlined how, given the current uncertain state of placebo studies research and my resultant research questions and objectives (see

Chapter 1), adopting a framework of American pragmatism allows for an anti-sceptical and fallibilistic process of inquiry orientated towards theory generation. I framed this within a Peircean model of systematic inquiry in which my thesis has abductive and deductive phases. The abductive phase is operationalised through my chosen methodology of grounded theory.

Regarding the second aim, I outlined how grounded theory is, in my opinion, the most developed abductive methodology in the social sciences. As such, it coheres with my theoretical framework of pragmatism inasmuch as it provides the methodological explication for my abductive phase of inquiry. Thus my thesis has a coherent theory-methodology package

Chapter 4 The placebo effect deconstructed: a meta-ethnography

4.1 Introduction

As I outlined in 0, research suggests that placebo treatment might improve conditions common in general practice, but there is considerable disagreement over the definition, efficacy, and ethics of clinical 'placebo treatment'. Furthermore, two reviews suggest that the that the frequency and circumstances of such treatment in clinical practice vary substantially, that attitudes among clinicians and patients differ considerably, and that there is no clear definition of placebos in clinical practice, particularly in primary care (Fässler et al., 2010; Linde et al., 2018). In this uncertain environment, both the American Medical Association (Bostick, Sade, Levine, & Stewart, 2008) and the British Medical Association (Brannan et al., 2012) currently prohibit the practice of 'placebo prescribing' or 'placebo use' without patient consent.

Given the as yet unproven potential for improving patient outcomes through placebo treatment in general practice, I – with colleagues from the University of Southampton – conducted a systematic review of how clinicians and patients conceive of placebos and their effects in the wider context of primary care. My aims for this review correspond to the overall thesis objectives – primarily objective 1 (see Chapter 1) – and were to:

1. Conceptualise how clinicians and patients conceive of placebos, placebo treatment, and the placebo effect in primary care;
2. Explore the consequences of how clinicians and patients conceive of placebos, placebo treatment, and the placebo effect in primary care; and
3. Generate new insights into how researchers, clinicians and patients might conceive of placebos and their effects in primary care.

4.2 Methods

Given the conceptual ambiguity in the literature and the orientation of this thesis, I conducted an abductive mixed-research synthesis in which diverse findings from different studies are arranged into a coherent theoretical interpretation (Pluye & Hong, 2014; Sandelowski, Voils, Leeman, & Crandell, 2012). I operationalised this using a meta-

ethnographic approach (Noblit & Hare, 1988) situated within my project's theoretical framework of American pragmatism, whereby a concept is clarified by equating its meaning with the practical implications of its conceived effects (Peirce, 1878/1982).

4.2.1 Methodology

Meta-ethnography is a flexible approach to synthesis, in which both inductive and abductive modes of inference are possible. Although initially used for synthesising a small number of conceptually rich studies, meta-ethnography is now widely used in healthcare to synthesise larger literatures (Atkins et al., 2008; France et al., 2014). Although initially intended to only synthesise qualitative studies, there is no epistemological reason why it cannot be used in a mixed research synthesis, as in this review (Dixon-Woods, Agarwal, Young, Jones, & Sutton, 2004; Sandelowski et al., 2012); its widespread confinement to qualitative syntheses is likely informed by a conflation of the orientation of a research synthesis with the orientation of the included primary studies.

As originally conceived, in a meta-ethnography one adopts the notion that "all explanation is essentially comparative and takes the form of translation". (Noblit & Hare, 1988, p. 25). Translations are "especially unique syntheses, because they protect the particular, respect holism, and enable comparison." (Noblit & Hare, 1988, p. 28). In this way studies are not just combed for themes that might be similar or different, but analysis and synthesis is focussed on actions and processes. Inasmuch as this is true, a meta-ethnographic approach can be directly linked with grounded theory. Indeed, Noblit and Hare (1988, p.63) make this link in the initial monograph, noting that "this is the same as basic theorizing in qualitative research and is conceptualized… as… grounded theory". This explicitly grounds my choice of meta-ethnography in my overarching thesis methodology of grounded theory. Moreover, because grounded theory "comprises a systematic… and comparative approach for conducting inquiry for the purposes of constructing theory" (Bryant & Charmaz, 2007p.1) and focuses on "analysing actions and processes rather than themes and structure" (Charmaz, 2014, p.15), conceiving of meta-ethnography through the prism of grounded theory could make the approach more accessible.

Meta-ethnography contains seven broad phases (Noblit & Hare, 1988), which can somewhat "overlap and be carried out simultaneously" (France et al., 2014, p.2): 1. getting started; 2. deciding what is relevant to the initial interest; 3. reading the studies; 4. determining how studies are related; 5. translating the studies into one another; 6. synthesising translations; 7. expressing the synthesis.

As originally conceived, more emphasis was placed on data analysis and synthesis than sampling and quality assessment. However, there has been significant methodological development merging meta-ethnography with modern systematic review strategies, mitigating these concerns (Atkins et al., 2008; Campbell et al., 2011; Campbell et al., 2003; France et al., 2014; Malpass et al., 2009). In have been filled, and where meta-ethnography adds detail to analysis and synthesis stage in a systematic review.

Table 1 I compare the meta-ethnography phases with more common systematic review stages to highlight where the gaps in the original methodological explication of meta-ethnography have been filled, and where meta-ethnography adds detail to analysis and synthesis stage in a systematic review.

Table 1: Meta-ethnography phases and systematic review stages

Systematic review stages	**Meta-ethnography phases**
1. Formulating the review question	1. Getting started
2. Inclusion and exclusion criteria 3. Search strategy 4. Screening and selection 5. Quality assessment	2. Deciding what is relevant to the initial interest
6. Data extraction	3. Reading the studies
7.Data analysis and synthesis	4. Determining how studies are related 5. Translating the studies into one another 6. Synthesising the translations
8. Writing the review.	7. Expressing the synthesis

4.2.2 Inclusion and exclusion criteria

Table 2 shows inclusion and exclusion criteria. I focussed on the views of clinicians and patients in the context of primary care, in line with my research aims. I excluded clinical trials and laboratory-based placebo studies because they do not directly capture the views of clinicians and patients. I excluded qualitative studies nested in clinical trials because such studies focus on views of placebos in trials, not clinical practice (e.g., Bishop, Jacobson, Shaw, & Kaptchuk, 2012). I excluded studies based in hospitals and other secondary or tertiary care settings to restrict findings to primary care. Articles not written in English were not excluded.

Table 2: Inclusion and exclusion criteria

	Inclusion criteria	Exclusion criteria
Population	Clinicians, patients, or potential patients	
Phenomena of interest	Views on the placebo effect, placebo response, placebo use	
Context	Primary care	Placebo controls in clinical trials Laboratory based placebo studies
Study design	Empirical studies	Non-published studies RCTs

4.2.3 Search strategy

I conducted systematic literature searches, with no date limits, in January 2017. The overall strategy reflects guidance on literature searching for meta-ethnographies (Atkins et al., 2008; Campbell et al., 2011; Malpass et al., 2009) and mixed method syntheses (Dixon-Woods, Bonas, et al., 2006; Dixon-Woods, Cavers, et al., 2006; Pope, Popay, & Mays, 2007). I searched five electronic databases (CINAHL, MEDLINE, Embase, PsychINFO, and Web of Science – see Appendix A for specific strategies), conducted reference chaining and key author searches of first authors, and sought expert opinion by emailing members of the Society for Interdisciplinary Placebo Studies.

4.2.4 Screening and selection

First, I screened studies by title and abstract; this was also conducted by a second reviewer. I then screened suitable studies by full text. Discrepancies were resolved by discussion among three members of the review team. Examples of discrepancies included disagreement on whether studies were in the context of primary care, and whether the phenomenon of interest was placebos or other closely related phenomena such as complementary and alternative medicine.

4.2.5 Quality assessment

Systematic reviews typically include a number of methods to determine quality, including a hierarchy of study design and a structured quality checklist (Cherry, Perkins, Dickson, & Boland, 2014; Pope et al., 2007). However, adopting this approach for a mixed

research synthesis is difficult – there is no hierarchy of design in qualitative research and the diffuse nature of the body of literature makes applying strict criteria difficult. To counter these limitations I appraised studies using the Mixed Methods Appraisal Tool (MMAT) (Pluye et al., 2011), designed for appraising and describing the methodological quality of quantitative, qualitative and mixed methods studies for systematic reviews. Early testing suggests it is a reliable tool (Pace et al., 2012). I appraised all studies, and three other members of the review team each appraised a proportion of studies; we reached agreement through discussion.

However, in practice many researchers have found that when including qualitative studies, the use of rigorous checklists can be counterproductive, with intuitively good papers often receiving a negative appraisal (Atkins et al., 2008). In some meta-ethnographies researchers have either trialled a checklist but not used one (Atkins et al., 2008), used one but only to 'test' contributions at a later stage (Malpass et al., 2009), or not used a checklist at all (Toye, Seers, & Barker, 2014). In line with these approaches, I did not exclude studies based on the appraisal, but instead integrated potential limitations into the synthesis.

4.2.6 Data extraction

I formally extracted the following data from all included papers: author, year of publication, country, setting, aims, participants, data collection methods, and main findings. This was checked by another member of the review team. One aspect to consider is the order in which studies are read. Some researchers suggest identifying a conceptually-rich 'index paper' as a starting point (Campbell et al., 2011; Campbell et al., 2003). An alternative approach is to read the studies chronologically (Atkins et al., 2008; France et al., 2014). It is important to be clear on the method and order of reading, as "it is reasonable to suppose that the concepts presented in the paper with which a reviewer starts a meta-ethnography might have a disproportionate influence on the final conceptual output" (France et al., 2014, p.10). I read the studies chronologically as the concept of 'placebo effects' has developed significantly over time (Benedetti, 2014; Shapiro & Shapiro, 1997).

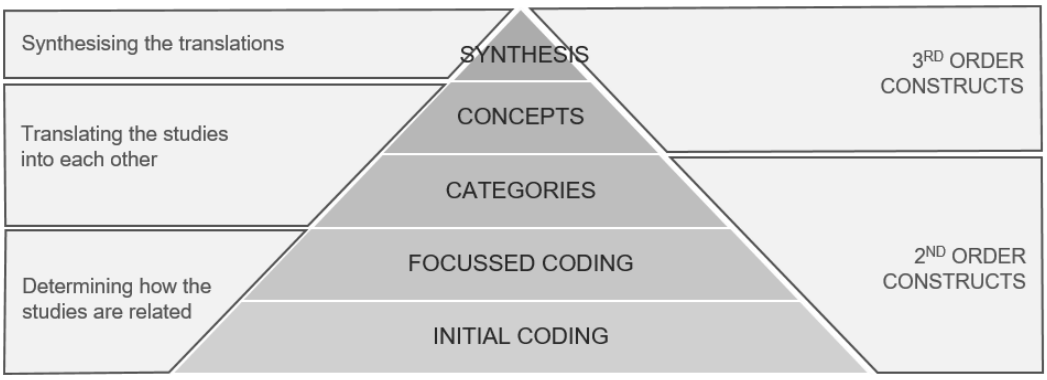
4.2.7 Data analysis and synthesis

I oriented analysis and synthesis in the three phases outlined in meta-ethnography (Noblit & Hare, 1988): determining how the studies are related; translating the studies into

each other; and synthesising the translations. On commencing the analysis there was potential for one of the following syntheses (Noblit & Hare, 1988): *reciprocal*, when findings from studies are similar and can be directly translated into one another; *refutational*, when findings from studies are dissimilar or contradictory, and *lines-of-argument*, when findings from studies have similarities and differences and a new context is produced.

As other researchers have noted, meta-ethnography literature often does not explicitly provide much procedural detail regarding the actual analytical work required in a review (Lee, Hart, Watson, & Rapley, 2014). Given the association of meta-ethnography with grounded theory, to mitigate this limitation I operationalised the analysis and synthesis process by adapting my overarching methodology of constructivist grounded theory (Charmaz, 2014). I relate this to meta-ethnography in Figure 3.

Figure 3: Meta-ethnography analysis and synthesis



I conducted all initial coding. I used the method of constant comparison (Glaser & Strauss, 1967/2009) to create focussed codes, which included the most frequent or significant initial codes. These informed the creation of categories, which are, as outlined in Chapter 3, significant focussed codes or patterns interpreted from several codes. I discussed these categories in data meetings with the research team, and from these discussions and subsequent analysis created theoretical concepts (analytic ideas that offer an explanation for the data) which informed the synthesis. The synthesis was expressed in the process of writing this chapter.

To overcome the incommensurable primary data in a mixed research synthesis, and in line with a meta-ethnographic approach, I focussed analysis at Schutz's (1973) level of second-order constructs – the original study authors' interpretations of their data. Interpretations emerging from the review were deemed third order constructs, or "interpretations of interpretations of interpretations" (Noblit & Hare, 1988, p.35). In practice, this meant that all articles – qualitative or quantitative – were analysed textually

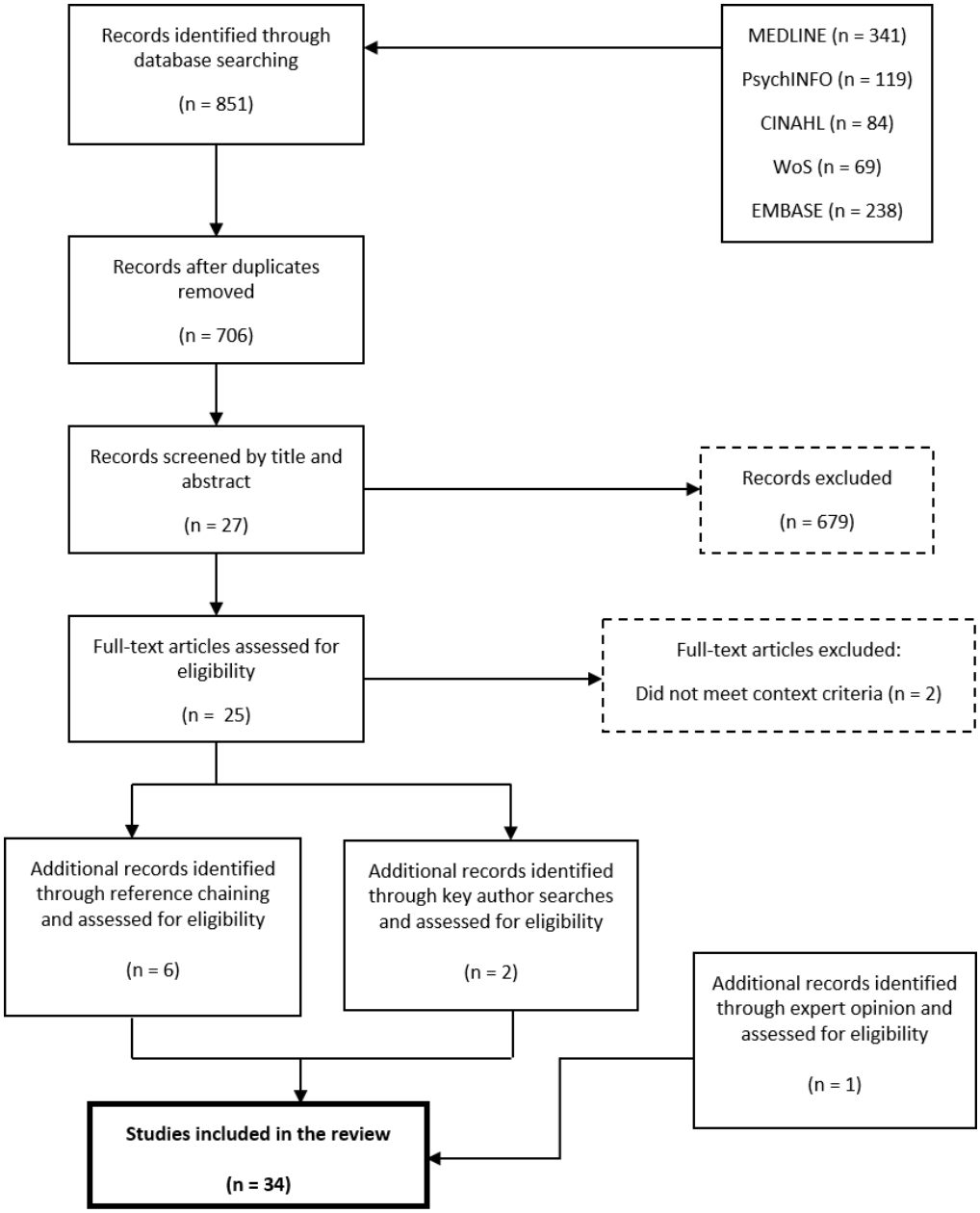
in the same way as previously described. Moreover, unlike some meta-ethnographies that would consider direct participant quotes as first order constructs, I considered direct participant quotes presented in the studies to be second order constructs; by the time these data are presented in a paper they have already been selected by researchers and removed from their original context, which necessarily involves interpretation.

4.3 Results

4.3.1 Searches

Search results are presented in an adapted PRISMA flow-chart (Moher, Liberati, Tetzlaff, & Altman, 2009), in Figure 4.

Figure 4: PRISMA flowchart



4.3.2 Study characteristics

The characteristics of included studies are shown in Table 3. From 34 eligible articles reporting findings from 28 studies, 21 were related to clinicians' views, 11 were related to patients' views, and two were related to both clinicians' and patients' views. Twenty-seven were broadly quantitative, six qualitative, and one mixed methods. Methods of data collection included surveys (n = 30), interviews (n = 4), focus groups (n = 1), and ethnographic observation (n = 1).

4.3.3 Quality assessment

The results of the quality assessment were variable (see Appendix B). Some studies were well designed and conducted, but I assessed some as being of low quality. Most of the survey-based studies I assessed to be of low quality had a combination of unrepresentative samples and low response rates. And some qualitative studies I assessed to be of low quality generally lacked contextual and reflective considerations. However, some studies that were intuitively interesting, and which contributed rich data to the review, scored badly on the assessment. For example, one ethnographic study (Comaroff, 1976) did not meet the initial screening criteria yet was influential. This highlighted one limitation of the MMAT: the strict requirement for clear research questions and objectives necessarily precludes more exploratory modes of inquiry, such as ethnography. This emphasises the limitations of conducting a quality assessment in a meta-ethnography and supports recent practice not to exclude studies based on formal quality assessment results (Atkins et al., 2008; Malpass et al., 2009).

4.3.4 Review findings

Early in the analytic process I divided the analysis into two sub-groups: clinicians' views and patients' views. This allowed for better analysis of the relationship between the views of the two groups. In the clinicians subgroup I identified three categories and 10 sub-categories. In the patients subgroup I identified three categories, seven sub-categories and four secondary sub-categories. These categories, their descriptions, and the studies that contributed data are shown in (Table 4) and (Table 5). Initial findings were diverse, necessitating a lines-of-argument synthesis (Noblit & Hare, 1988).

Table 3: Characteristics of eligible articles (n=34)

	Source article	Country	Setting	Participants (n)	Methods of data collection	Aims	Main findings related to primary care
1	(Shapiro & Struening, 1973a)	USA	General practice Hospitals Research	Psychiatrists (119) Internists (50) GPs (14) Surgeons (16)	Quantitative survey	To investigate differences in the definition and conception of placebos among physicians.	Physicians tended to align placebo use with other physicians and with specialties other than their own. Physicians tended to define placebos so their speciality would be excluded from the definition. GPs included active drugs in the definition of placebos more frequently than other specialties.
2	(Shapiro & Struening, 1973b)	USA	General practice Hospitals Research	Psychiatrists (117) Internists (50) GPs (14) Surgeons (14)	Quantitative survey	To assess ethical attitudes towards the use of placebos in treatment and research.	Older physicians and those who spent more time in private practice were more critical of placebo use. Physicians who were more research active were less critical of placebo use. GPs were generally critical towards placebo use.
3	(Shapiro & Struening, 1974)	USA	General practice Hospitals Research	Psychiatrists (114) Internists (48) GPs (15) Surgeons (14)	Quantitative survey	To assess the tendency of physicians to attribute the use of placebos or nonspecific treatment to other physicians.	Physicians generally attributed the use of placebos or nonspecific treatment to other physicians and specialties more than themselves. However, GPs were less likely to do this. Physicians tended to exclude their own specialty from their definition of placebos.
4	(Comaroff, 1976)	UK	General practice	GPs (51)	Qualitative observation Interviews	To investigate how doctors, as placebo prescribers, perceive and employ the placebo concept.	Placebo use was primarily identified as a process by which physicians managed patients, maintained their social role or coped with medical uncertainty.
5	(Thomson & Buchanan, 1982)	New Zealand	General practice	GPs (44)	Quantitative survey	To determine GPs' basic understanding of the placebo effect and their views on the use of placebo treatments.	Most GPs would deliberately use a placebo treatment in some circumstances. However, GPs tended to downplay their use of placebos compared with that of colleagues.

	Source article	Country	Setting	Participants (n)	Methods of data collection	Aims	Main findings related to primary care
6	(Lynoe, Mattsson, & Sandlund, 1993)	Sweden	Primary healthcare centre University	Physicians associated with a university (47) GPs (47) Patients (83)	Mainly quantitative survey with some open ended questions	To investigate the attitudes of patients and physicians toward placebo treatment.	Regarding placebo treatment, patients were generally more paternalistic than physicians. For GPs, the use of 'impure placebos' was more acceptable than 'pure placebos'.
7	(Hróbjartsson & Norup, 2003)	Denmark	General practice Private practice Hospitals	GPs (182) Hospital physicians (185) Private specialists (136)	Quantitative survey	To investigate the proportion and types of placebo intervention, conditions of use, and attitudes towards use.	86% of GPs used placebo interventions at least once, and 48% used placebo interventions more than ten times in the last year. 46% of GPs found placebos ethically acceptable. 30% of GPs believe placebos affect 'objective outcomes'. The main reason for using placebos was to avoid a confrontation with a patient.
8	(Nitzan & Lichtenberg, 2004)	Israel	Hospitals Community clinics	Hospital physicians (31) Head nurses (31) Family physicians (27)	Quantitative survey	To gauge the frequency and circumstances of, and attitude towards, placebo use in clinical practice.	60% of participants used placebos. 94% found placebos 'generally or occasionally effective'. Family physicians' most common reason for use was to manage patients.
9	(Chen & Johnson, 2009)	New Zealand	Primary Care Clinics	Patients (211)	Quantitative survey	To examine patients beliefs about the placebo effect, views on the use of placebos in clinical practice, and their willingness to participate in a placebo-controlled RCT.	Patients thought placebo use appropriate when it is for therapeutic benefit, requested by the patient, or when no other treatments are available. Patients thought placebo use inappropriate when it is for the benefit of the physician or when it 'seemed dangerous'.

	Source article	Country	Setting	Participants (n)	Methods of data collection	Aims	Main findings related to primary care
10	(Fässler, Gnädinger, Rosemann, & Biller-Andorno, 2009)	Switzerland	General practice Private practice	Paediatricians (67) Urban GPs (41) Suburban GPs (55) Rural GPs (70)	Quantitative survey	To investigate to what extent and in which way Swiss primary care providers use placebo interventions.	More participants used impure placebos (57%) than pure placebos (17%). Paediatricians used pure placebos and deception more than GPs. The most common premise for placebo use was that they can be used in partnership with patients. Impure placebos were deemed more ethically acceptable than pure placebos, although participants were uncertain about the ethical legitimacy of placebo use.
11	(Ferentzi, Köteles, & Bárdos, 2010)	Hungary	General practice	GPs (94)	Quantitative survey	To investigate how GPs in Hungary perceived some important aspects of their own placebo use.	(Preliminary report) Over 80% of GPs used placebos, most commonly for symptoms such as 'anxiety, fatigue, sleep disorders and functional problems'. Most GPs (84%) considered placebo use ethical when conducted for therapeutic benefit. Physicians called for official guidance on placebo use.
12	(Kermen, Hickner, Brody, & Hasham, 2010)	USA	Family practice	Family physicians (412)	Mainly quantitative survey with some open ended questions	To gain a better understanding of the role of placebos in clinical practice on a national level.	56% had used a placebo in clinical practice. 40% had used an antibiotic as a placebo and 11% had used 'inert substances'. 85% believed placebos have both 'psychological and physical benefits'. 61% recommended a placebo rather than no treatment. 97% believed that doctors' rituals and/or behaviours contribute to placebo effects. The most common reason for placebo use was 'after unjustified demand for medication'.

	Source article	Country	Setting	Participants (n)	Methods of data collection	Aims	Main findings related to primary care
13	(Fässler et al., 2011)	Switzerland	Primary care	GPs (232) Patients (414)	Quantitative survey with one open-ended question	To compare the proportions of patients and physicians who would accept therapies that work by enhancing self-healing capacities and by exploiting contextual factors.	87% of patients and 97% of GPs thought that belief in a therapy can improve 'physical complaints'. Patients supported placebo treatment more than GPs. 90% of GPs admitted to using treatments that take advantage of 'non-specific effects'. 70% of patients wanted to be informed about non-specific treatments, yet GPs thought this figure would only be 33%.
14	(Fent, Rosemann, Fässler, Senn, & Huber, 2011)	Switzerland	Primary care	GPs (8) Internists (2) Paediatrician (1) Psychiatrist (1)	Semi-structured interviews	To explore physicians' views on the use of placebos in daily practice.	Most participants described placebos as 'pure placebos'; most 'impure placebos' were not regarded as placebos. Participants used placebos mostly when there was 'no satisfactory somatic explanation'. Participants generally were unclear on the ethical status of placebo treatment, were uncertain how to communicate such treatment to patients, and would welcome more guidance.
15	(Ferentzi, Köteles, & Bárdos, 2011)	Hungary	General practice	GPs (169)	Quantitative survey	To provide a detailed description of physicians' attitudes toward, and knowledge of, clinical placebo use.	(Full report of no.11) 83% of participants had used placebos. Most participants regarded placebos as both ethical and effective.
16	(Kisaalita, Roditi, & Robinson, 2011)	USA	University	Members of the public (103)	Quantitative survey with experimental component	To examine the acceptability and ethics of placebo treatment for pain.	Placebos described as 'medication shown to be a powerful analgesic in some people' were perceived to be as deceptive as those described as 'standard drug treatment'. Participants 'tolerated moderate effectiveness and considerable negative consequences in an acceptable placebo'.

	Source article	Country	Setting	Participants (n)	Methods of data collection	Aims	Main findings related to primary care
17	(Babel, 2012)	Poland	Primary care	Primary care physicians (190)	Quantitative survey with experimental component	To identify factors that contribute to the high variability of the rates of use of placebo interventions reported in questionnaire surveys.	Participants asked about 'placebo interventions' said the never used them significantly more than participants asked about 'nonspecific treatment methods'.
18	(Kisaalita & Robinson, 2012)	USA	University	Members of the public (100)	Quantitative survey with open-ended question	To examine the acceptability, efficacy and knowledge of analgesic placebo treatments.	Participants mostly thought of placebos as inert and had differing views regarding the effectiveness of placebo treatment.
19	(Koteles & Ferentzi, 2012)	Hungary	Online news site	Members of the public (6104)	Quantitative survey	To assess the attitudes of laypeople toward deceptive clinical placebo use.	Participants thought 'helping patients is more important than avoiding deception' illustrating a pragmatic view towards placebo treatment.
20	(Meissner, Höfner, Fässler, & Linde, 2012)	Germany	General practice	GPs (208)	Quantitative survey	To collect data on the use of placebo interventions by GPs in Germany.	88% of GPs had used a placebo at least once. The use of 'impure placebo's was more common than 'pure placebos'. The main reason for placebo treatment was 'a possible psychological effect', although patient expectation was also a common reason. Most GPs thought placebo treatment ethical if used to elicit a psychological effect.
21	(Babel, 2013)	Poland	Primary care	Primary care physicians (169)	Quantitative survey	To investigate the behaviour beliefs and attitudes of Polish primary care physicians concerning the use of placebo interventions.	80% of participants used placebo interventions. The most common placebos were vitamins and homeopathy. 84% thought placebos effective, but 54% thought them only effective for patients with 'subjective symptoms'. 73% thought individual traits were important for effectiveness. 65% thought patients' expectations important.

	Source article	Country	Setting	Participants (n)	Methods of data collection	Aims	Main findings related to primary care
22	(Howick et al., 2013)	UK	Primary care	GPs (783)	Quantitative survey	To investigate the prevalence of placebo use in UK primary care.	12% of GPs had used pure placebos and 97% had used impure placebos, at least once. 1% used pure placebos and 77% used impure placebos at least once a week. Most (66% for pure, 84% for impure) GPs thought placebos ethical in 'some circumstances'.
23	(Hull et al., 2013)	USA	Primary Care	Patients with chronic illness (853)	Quantitative survey	To examine the attitudes of US patients about the use of placebo treatments in medical care.	50-84% of participants thought placebo treatment acceptable depending on 'doctors' level of certainty about the benefits and safety of the treatment, the purpose of the treatment, and the transparency with which the treatment was described to patients'. 22% of participants thought placebo treatment unacceptable.
24	(Linde et al., 2013)	Germany	General practice	GPs (84) Internists (3) Orthopaedists (1)	Quantitative survey (n=80) Cognitive interviews (N=7)	To develop a questionnaire.	The questions on 'typical placebos and complementary treatments' were understandable and 'easy to answer'. However, interviews suggest that these issues are 'difficult to grasp in a quantitative survey'. The concept 'non-specific treatment' was thought vague. Study authors suggest direct observation would be a useful data collection method.
25	(Nitzan et al., 2013)	Israel	Academic centres	Students (344)	Quantitative survey	To investigate the opinions of healthy students regarding the acceptability of placebo treatment if they were to experience depression.	70% of participants would agree to placebo treatment as 'a first-line treatment'. 88% of participants did not think placebo treatment deceitful.

	Source article	Country	Setting	Participants (n)	Methods of data collection	Aims	Main findings related to primary care
26	(Bishop, Aizlewood, et al., 2014)	UK	Community	General public (58)	Focus groups	To identify when and why placebo-prescribing in primary care might be acceptable and unacceptable to patients	Participants had two broad perspectives: 'consequentialist', whereby they focussed on the potential benefits of placebo treatment; and 'respecting autonomy', whereby they focussed on the negative effects of deception in treatment. 'Placebo' was generally thought to mean 'ineffective'. Some participants thought the careful use of language may enable ethical placebo treatment.
27	(Bishop, Howick, et al., 2014)	UK	General practice	GPs (783)	Qualitative survey	To explore GPs' perspectives on clinical uses of placebos.	GPs generally defined placebos negatively, as in 'lacking something'. GPs described myriad possible' harms and benefits of placebo prescribing'. Some GPs thought placebos beneficial, although some thought they should not be used for ethical reasons.
28	(Linde et al., 2014)	Germany	Private practice	GPs (319) Internists (311) Orthopaedists (305)	Quantitative survey	To investigate the use of placebos and non-specific treatments among physicians working in private practices in Germany, and how such use is associated with the belief in and the use of complementary and alternative treatments.	30% of GPs had used non-specific therapies; 35%, had used placebos or 'non-specific therapies'. Use of pure and/or impure placebos was associated with 'being a GP, being an internist, and having unorthodox professional views'.
29	(Tandjung et al., 2014)	Switzerland	Community	Patients (12)	Semi-structured interviews	To explore patients' conceptualisation, experiences and attitudes regarding the use of placebos in daily clinical practice.	Participants mostly defined placebos as something matching the definition of 'pure placebos'. Most participants believed placebos' mainly worked via psychological effects'. The acceptability of placebo use was generally related to treatment success.

	Source article	Country	Setting	Participants (n)	Methods of data collection	Aims	Main findings related to primary care
30	(Linde et al., 2015)	Germany	Private practice	Family physicians (319) Internists (311) Orthopaedists (305)	Quantitative survey	To investigate to what extent family physicians, internists and orthopaedists working in private practice in Germany believe in the efficacy of, and use, CAM therapies.	Family physicians' agreed more with statements on the need of more time and the patient–doctor relationship'. Family physicians were more positive about utilising placebos than internists or orthopaedists.
31	(De Gobbi et al., 2016)	Italy	General practice	GPs (62)	Quantitative survey	To investigate placebo use by general practitioners throughout their everyday practice: in particular the frequency of use, placebo features, instructions, and conditions of use.	84% of GPs had used a placebo in the last 6 months. Placebo were mainly used for 'problems of low clinical significance' (85%). 13% of GPs had given 'pure placebos'. Reasons for giving placebos included for 'frequent attenders' and for patients with 'unexplained symptoms'. None of the GPs used placebo treatment openly.
32	(Feffer et al., 2016)	Israel	Outpatient clinic	Patients with depression (96) Healthy members of the public (114)	Quantitative survey	To assess the acceptability of placebo usage among depressed patients	57% of patients with depression and 71% of healthy members of the public would give consent for placebo treatment for future depression 72% of patients with depression and 78% of healthy members of the public would give consent for placebo treatment for general medical conditions.
33	(Ortiz et al., 2016)	USA	Primary care	Patients (853)	Qualitative survey	To examine qualitative responses regarding the use of placebo treatments in medical care in a sample of US patients.	'Lack of harm' and 'potential benefit' were the most common acceptable justifications for placebo use. Participants who did not think placebo use acceptable most commonly thought that doctors are obliged to 'do more'. The following other themes emerged: 'the issue of whether a doctor was transparent about placebo use, including honesty'; patients' 'right to know'; and the 'power of the mind'.

	Source article	Country	Setting	Participants (n)	Methods of data collection	Aims	Main findings related to primary care
34	(Faria et al., 2017)	USA	Community	Parents (1000)	Quantitative survey	To assess parental attitudes regarding placebo use in paediatric randomized controlled trials and clinical care.	86% of parents considered placebo use acceptable in some paediatric care situations. 6% of parents found the use of placebos in children 'always unacceptable'. The acceptability of placebo treatment was influenced by factors including: doctors' opinions on the therapeutic benefit of the treatment; the conditions of use; transparency; safety; and the 'purity of placebos'.

NB: The following groups of articles each derived from one study: [1 - 3] [11, 15] [22, 27] [23, 33] [28, 30].

Table 4: Categories (clinicians' views)

Categories	Sub-categories	Definition	Contributing articles (numbers correspond to those allocated in Table 3)
Metaphysics	Placebos as substances	Clinicians define placebos as material substances	7, 8, 10-12, 14, 21, 24, 27
	Placebos as processes	Clinicians define placebos as processes	4, 7, 8, 10-12, 14, 21, 24, 27, 28
	Placebos as substances and processes	Clinicians define placebos as both material substances and processes	10, 20, 27, 31
Rationale	To induce therapeutic benefit	Placebos used with the intention to induce therapeutic benefit for the patient	4, 10-12, 14, 20, 22
	To manage patients	Placebos used with the intention to manage patients	4, 7, 10, 12, 14, 20-22
	To cope with uncertainty	Placebos used with the intention to cope with situations in which the clinician has no obvious treatment available	4, 12, 20, 28
	To avoid error	Placebos used as a safety net	4, 7
Context	Setting	The situation in which placebos are used, or placebo use is considered	4, 12, 14, 15, 21, 31
	Patient	The type of patient considered in relation to placebos and their effects	7, 12, 14, 15, 21, 31
	Condition	The specific medical condition considered in relation to placebos and their effects	12, 14, 31

Table 5: Categories (patients' views)

Categories	Sub-categories	Secondary sub-categories	Definition	Contributing articles (numbers correspond to those allocated in Table 3)
Metaphysics	Placebos as inert		Defining placebos negatively – as not containing an active agent	13, 18, 23, 29
	Bifurcating nature		The tendency to divide nature into two systems and assign them different degrees of reality	9, 19, 23, 26, 29
Rationale	Acceptable	To induce therapeutic benefit	Believing that for a placebo to be acceptable, the clinician must use it with the intention of inducing therapeutic benefit for the patient	6, 9, 25, 26, 33
		To give hope	Believing that it is acceptable to use a placebo to give a patient hope that they will get better	6, 26
	Unacceptable	To manage patients	Believing that it is unacceptable to use a placebo to manage patients	9, 23
		To save money	Believing that it is unacceptable to use a placebo to save money	26
Efficacy	Patient characteristics		Believing that placebo efficacy is related to patient characteristics	9, 26, 29
	Doubt		Doubting that placebos can be effective in treating patients	26, 29, 33
	Wanting to disprove the power of placebos		Linking placebos with a negative image of self and wanting to show one cannot be fooled by a 'placebo'	26, 29

4.3.4.1 Heterogeneous findings

In the studies under review, it was especially notable that clinicians reported using placebos at markedly different frequencies. For example, in one study 86% of clinicians reported using placebos in the last year (Hróbjartsson & Norup, 2003); in another 56% reported using them at least once (Kermen et al., 2010); and in another only 17% reported using them at least once (Fässler et al., 2009). This heterogeneity was partly dependent on how placebos were defined in each study; for example, one study recorded differences in use of between 97% and 12% (Howick et al., 2013) depending on the definition. This suggests that understanding how placebos are *defined* in primary care is essential to understand how they are used and what effects they might have. Before investigating the prevalence or effects of placebos, therefore, it is critical to better understand how placebos themselves are defined. This is the focus of my review findings.

4.3.4.2 Placebo definitions

4.3.4.2.1 Placebos as substances

Clinicians and patients predominantly defined placebos as material substances (Babel, 2013; Bishop, Howick, et al., 2014; Fässler et al., 2011; Fässler et al., 2009; Fent et al., 2011; Ferentzi et al., 2010; Hróbjartsson & Norup, 2003; Hull et al., 2013; Kermen et al., 2010; Kisaalita & Robinson, 2012; Linde et al., 2013; Nitzan & Lichtenberg, 2004; Tandjung et al., 2014). Clinicians indicatively defined a placebo as a "pharmacological intervention, for example vitamin tablets, thus reflecting the narrow meaning of the term." (Hróbjartsson & Norup, 2003, p.162), or as "an inert substance that when taken by a person can have an effect on that person - either good or bad" (Bishop, Howick, et al., 2014, p.359). Moreover, although in many surveys the definitions were fixed by the researchers, when given an opportunity to define placebos themselves, clinicians often focussed explicitly on placebos as inert substances: in one study "the majority of PCPs [primary care providers] stated that a placebo is a dummy drug without substance." (Fent et al., 2011, p.3), and another stated that "physicians intuitively equate placebo or typical placebo with pure placebo [inert substance]… [and] the cognitive interviews clearly confirmed that the concept of impure placebos [substances known to be effective for other conditions] is unfamiliar and confusing to physicians." (Linde et al., 2013, p.364).

Patients also typically defined placebos as inert material substances (Fässler et al., 2011; Hull et al., 2013; Kisaalita & Robinson, 2012; Tandjung et al., 2014). One indicative

study stated that, “contrary to how placebo effects are frequently characterized in the scientific community (i.e., psychosocial context and its contribution to treatment efficacy), participants in our sample conceptualized placebo effects as predominately inert.” (Kisaalita & Robinson, 2012, p.897). Another found that “the definition of placebo given by the participants mostly matched the common understanding of a pure placebo.” (Tandjung et al., 2014, p.1).

4.3.4.2.2 The problems with substance definitions

The definition of placebos as material substances dominated the studies. The dominance of a singular definition is beneficial as it may lead to better mutual understanding between clinicians and patients. However, such a substance definition does not dominate modern placebo studies research, because many researchers think it untenable and ultimately nonsensical.

A substance definition is somewhat analogous with the classic definition given by Henry Beecher (1955, p.1602), whereby placebos are “pharmacologically inert substances… having a psychological effect”. My findings suggest that this is still the dominant lay definition. However, even if we disregard the untenable mind/body dualism in the definition, we quickly run into problems. First, as I mention in 0Chapter 2 and as other researchers have noted, it is conceptually misleading to define any substance as inert, as all substances can be treated in physico-chemical terms if one chooses to do so (Grünbaum, 1986; Howick, 2017); for example, even the classic sugar pill is not inert to a diabetic. In this sense, the distinction between ‘pure’ and ‘impure’ placebos is not just, as my findings suggest, confusing (e.g. Linde et al., 2013), but untenable.

If we accept, therefore, that nothing is inert, the only credible substance definition we are left with is that of ‘impure’ placebos: substances which are known to be effective for treating other conditions. However, if we interrogate this version of the substance definition, it too breaks down. A classic, and contentious, example of an ‘impure’ placebo is an antibiotic given for a viral, rather than a bacterial infection. In the first instance the substance (the antibiotic pill) is a placebo, in the latter instance it is not. Yet in both cases it is the same substance. In another example, a sugar pill given for a headache is a placebo, but is not when put in one’s tea. In both cases it cannot be that the substance *itself* is the placebo, that is paradoxical as the same substance is placebo and non-placebo in different situations. ‘Impure’ placebos, therefore, are as untenable as ‘pure’ ones. However, in the studies under review, clinicians also conceived of placebos in a less paradoxical way.

4.3.4.2.3 Placebos as processes

Although clinicians commonly defined placebos as material substances, they also, although much less commonly, defined placebos in a different way: as processes (Babel, 2013; Bishop, Howick, et al., 2014; Comaroff, 1976; Fässler et al., 2009; Fent et al., 2011; Ferentzi et al., 2010; Hróbjartsson & Norup, 2003; Kermen et al., 2010; Linde et al., 2013; Linde et al., 2014; Nitzan & Lichtenberg, 2004). For example, in one study "some [clinicians] commented that a placebo does not necessarily need to be a pill, but can also be a… treatment." (Fent et al., 2011, p.3). This process definition can also include the belief, promoted by some researchers, that "certain physician rituals and behaviors… promote the placebo effect. This effect, which we refer to as the process-of-treatment effect, has also been referred to as the context effect." (Kermen et al., 2010, p.639). Other process definitions of placebos included interventions (Bishop, Howick, et al., 2014; Fässler et al., 2009; Hróbjartsson & Norup, 2003), healing procedures (Ferentzi et al., 2010), the consultation itself (Fent et al., 2011), and empathic treatment (De Gobbi et al., 2016).

By conceiving of placebos as processes, a minority of clinicians are more in agreement with modern scientific placebo theoretical paradigms, including the context of treatment (Di Blasi et al., 2001), meaning responses (Brody, 1997; Moerman, 2002), healing rituals and symbols (Brown, 2013; Kaptchuk & Miller, 2015; Miller & Colloca, 2010), and enactivism (Ongaro & Ward, 2017). By avoiding reference to material substances and untenable distinctions between specific and non-specific treatment, these theories focus on the interaction between clinicians, patients, and their environment – on processes – and how harnessing these elements might improve symptoms.

4.3.4.2.4 Placebos as substances and processes

Despite examples in the studies under review of process definitions that better accord with modern conceptions of placebos, some clinicians defined placebos as both substances *and* processes (Bishop, Howick, et al., 2014; De Gobbi et al., 2016; Fässler et al., 2009; Meissner et al., 2012). For example, one clinician defined a placebo as "a treatment or medication" (Bishop, Howick, et al., 2014, p. 359), and another noted that "everything I do or prescribe has some placebo quality" (Bishop, Howick, et al., 2014, p. 361). This highlights that even when clinicians advocate a more viable process orientated definition, they may still also conceive of placebos as substances that can be prescribed to a patient.

4.3.4.3 Rationales

Although substance and process definitions emerged in the studies under review, as previously outlined, clinicians and patients both broadly favoured a substance placebo definition. However, there was less agreement over another review finding: the acceptable rationales for 'placebo treatment'.

Only two rationales of placebo treatment were acceptable to patients: inducing therapeutic benefit (Bishop, Aizlewood, et al., 2014; Chen & Johnson, 2009; Lynoe et al., 1993; Nitzan et al., 2013; Ortiz et al., 2016) and giving hope (Bishop, Aizlewood, et al., 2014; Lynoe et al., 1993). Although inducing therapeutic benefit was also a common rationale given by clinicians (Comaroff, 1976; Fässler et al., 2009; Fent et al., 2011; Ferentzi et al., 2010; Howick et al., 2013; Kermen et al., 2010; Meissner et al., 2012), they also gave other rationales including managing patients (Babel, 2013; Comaroff, 1976; Fässler et al., 2009; Fent et al., 2011; Howick et al., 2013; Hróbjartsson & Norup, 2003; Kermen et al., 2010; Meissner et al., 2012), coping with uncertainty (Comaroff, 1976; Kermen et al., 2010; Linde et al., 2014; Meissner et al., 2012), and avoiding error (Comaroff, 1976; Hróbjartsson & Norup, 2003). This suggests that some clinicians, but not patients, view placebos as viable clinical management tools as well as potential therapeutic treatments.

4.3.4.4 Context

The last major category I identified was context. In many studies, clinicians and patients defined placebos contextually, related to the setting (Bishop, Aizlewood, et al., 2014; Comaroff, 1976; Fent et al., 2011; Kermen et al., 2010; Linde et al., 2014), patient characteristics (Babel, 2013; Bishop, Howick, et al., 2014; Chen & Johnson, 2009; De Gobbi et al., 2016; Fent et al., 2011; Ferentzi et al., 2011; Hróbjartsson & Norup, 2003; Kermen et al., 2010; Tandjung et al., 2014), and condition (De Gobbi et al., 2016; Fent et al., 2011; Kermen et al., 2010). The author of one study noted that "what is considered to be 'placebo therapy' in one situation may not be described as such in another." (Comaroff, 1976, p.83). This explicitly relative notion of placebos was prevalent in a number of studies including one where "more than 90% of physicians expressed a strong belief that the potential benefit of placebos depends on the type of disease and the personality characteristics of the patient treated." (Kermen et al., 2010, p.639), and another where ten of the 12 patient participants thought that patient characteristics influenced the placebo effect (Tandjung et al., 2014).

A contextual understanding of placebos has implications for placebo definitions and rationales for placebo treatment. It supports process orientated definitions by identifying placebos as a relative concept, suggesting clinicians should tailor placebo treatment to the specific patient, setting and condition in front of them.

4.4 Discussion

Findings from my review suggest that placebo definitions used by clinicians and patients in primary care settings can be split broadly into two categories: material substances, and processes. Older, untenable placebo definitions are generally substance orientated, whereas more modern definitions are broadly process orientated. However, despite advances in conceptual placebo studies research, clinicians and patients in primary care still primarily define placebos as 'inert' substances. I now explore the implications of these findings.

4.4.1 Modern placebo definitions are process oriented

As I have noted, there is common consensus in the scientific literature that definitions characterising placebos as substances are incoherent. I posit that the move towards more coherent, modern definitions is characterised by an, often unsaid, metaphysical move from understanding placebos as material substances, to understanding them as processes.

This move occurs when understanding placebos through a meaning paradigm (Brody, 1997; Moerman, 2002), whereby placebo effects are replaced with "the psychological and physiological effects of *meaning* in the treatment of illness" (Moerman, 2002, p. 14). Through a ritual paradigm, whereby "in a broad sense, placebo effects are improvements in patients' symptoms that are attributable to their participation in the therapeutic encounter, with its rituals, symbols, and interactions." (Kaptchuk & Miller, 2015, p. 8). Or through an embodied (Thompson et al., 2009) or enactive paradigm, whereby placebo effects are situated within a system where "the parts of our bodies, our overall bodily relationship to the environment, and the practically and culturally meaningful structures within that environment, are all co-emergent and co-dependent aspects of a single web of dynamic relations." (Ongaro & Ward, 2017, p. 528). However, although meaning, ritual, or enactive accounts of healing processes seem useful, they struggle to effectively delineate placebo from non-placebo, as any kind of treatment can be

conceived of in these terms. There is one process-orientated placebo theory in which the distinction is better addressed.

4.4.2 Delineating placebo from non-placebo

As I mentioned in Chapter 2, noting that the technical vocabulary used to define placebos was confusing and obscure, Adolf Grünbaum (1986) defined placebos as treatment processes that are remedial for a target disorder. He then delineated non-placebo from placebo therapy by aligning non-placebo therapy with *characteristic* treatment factors, and placebo therapy with *incidental* treatment factors. The treatment factors are relative to the condition in question, and the therapeutic theory which states how a given therapy for a target disorder will provide clinical benefit. For example, the characteristic factor of a therapy involving giving amoxicillin for an infection would be the bacteriolytic properties of penicillin, whereas an incidental factor might be a patient's expectations about the potential effect of the drug.

Howick (2017) modified Grünbaum's definition, presenting placebos as relative to the particular patient in question as well as the condition and therapeutic theory as in Grünbaum's original version. This is reflected in my finding that clinicians and patients conceive of placebos in the context of patient characteristics, as well as the setting and condition. I posit that the minority view of placebos as contextual treatment processes, emerging from this review, could be aligned with Howick's (2017) version of Grünbaum's definition, but there are practical issues around such a definition.

4.4.2.1 The problems of persistent placebo substances

Howick's (2017) definition is credible, and aligns with some of my findings; however, I must note that considerable theoretical manoeuvring is required to achieve such a definition. We are left with placebos as contextual treatment processes relative to a therapeutic theory, the condition in question, and the patient. This is in stark contrast to my finding that most clinicians and patients conceive of placebos as inert material substances.

In the face of critique that we should drop the placebo concept completely (e.g., Moerman, 2013; Nunn, 2009a, 2009c; Turner, 2012), Howick (2017, p. 1369) noted that "it seems that the correct strategy for the philosopher is… to try again: to try to produce an acceptable account of placebos that does not fall prey to linguistic confusions". He may have achieved this, but in the face of my findings it is questionable how much clinical utility such a definition has in practice. As Howard Brody (1997, p. 79) noted, "it is hard to define 'placebo effect' without engaging in a small-scale project to reform modern medical

thinking, making the definition useless for the unconverted". My review findings suggest that such reform has not yet occurred.

4.4.3 Implications

My findings suggest that much research into placebos and their effects in primary care is undermined by incoherent definitions. There is a disconnect between modern placebo theories and lay definitions, but there are also differences in how researchers frame placebos for participants in their studies; this undermines the results of some of the studies under review as it is questionable what exactly they are investigating. I suggest that further theoretical research is required to complement empirical placebo studies. Moreover, given the contextual nature of the placebo phenomenon, supported by my review findings, I promote more naturalistic and contextual research approaches – such as the ethnography that forms the next chapter of this thesis – which are currently underrepresented in placebo studies research.

My findings also suggest there is a considerable disconnect between modern scientific definitions of placebos, and how clinicians and patients define them; this has consequences. By misunderstanding a placebo as a substance, clinicians and patients unnecessarily frame ethical debates in terms of deception, insofar as a 'placebo' is something that is or is not given to a patient, and the patient is or is not informed as to its 'inert' contents; and frame debates on treatment in terms of the efficacy of 'inert' pills. This undermines the potential to harness the physiological or psychological treatment effects attributable to the meaning a patient gives to their treatment in the context of the therapeutic encounter. Moreover, if to achieve a credible definition we have to stretch the grammar of 'placebo' so far that only placebo studies researchers understand the term, it has questionable clinical utility. To produce 'placebo effects', therefore, clinicians may be better off abandoning placebo terminology altogether.

4.4.4 Strengths and limitations of the review

A strength of this review is that both qualitative and quantitative studies were included, ensuring a broad range of findings was synthesised. However, post-hoc analysis showed that, although both quantitative and qualitative studies contributed to the findings, qualitative articles dominated. In the clinicians subgroup there were four key articles (Bishop, Howick, et al., 2014; Comaroff, 1976; Fent et al., 2011; Kermen et al., 2010), and in the patients subgroup there were three (Bishop, Aizlewood, et al., 2014; Ortiz et al.,

2016; Tandjung et al., 2014). It has to be considered that findings from this review may be shaped by the findings from these seven key articles, although findings from other studies were, nevertheless, broadly consistent with the main line-of-argument.

Furthermore, although the abductive logic of a meta-ethnographic lines-of-argument synthesis allows one to create new theory from complex data by inferring the best conceived explanation for observed phenomena, this necessarily means that the findings are tentative; further inquiry is required to test the recommendations from this review.

4.5 Conclusion

Based on a systematic meta-ethnographic review of 34 articles, I suggest that a central problem for the placebo effect in primary care – and general practice more specifically – is the disconnect between potentially viable modern placebo definitions and how clinicians and patients define them. This has led to confusion and uncertainty in placebo studies research and clinical practice, which has undermined prevalence of use data and misinformed debate on clinical placebo treatment. In defining a placebo as a substance, clinicians (and patients) engage in confusing and unnecessary considerations of the efficacy of 'inert' pills, and ethical debates focussed on deception, instead of focussing on how they might maximise the beneficial effects of the therapeutic encounter. More terminally, even once the term 'placebo' is stretched to its modern iteration, I suggest it may have limited clinical value. These findings have consequences for the next phase of my thesis – an ethnography in general practice.

Given the disconnect between how researchers, clinicians, and patients conceive of the placebo effect (notwithstanding the ambiguity even within placebo studies research), framing an ethnography explicitly as exploring the 'placebo effect' may at best be confusing, and at worst be undermined by basal conceptual ambiguity. Therefore, by instead orientating my ethnography towards phenomena the placebo effect purports to encompass, I frame it in less contentious terms as an ethnography exploring the *therapeutic encounter* in general practice. As I noted in Chapter 1 and Chapter 2, placebo studies researchers increasingly conceive of the 'placebo effect' as the effects of the therapeutic or clinical encounter; in the terms of this meta-ethnographic systematic review, as the effects of the whole treatment process involved in visiting one's clinician. Furthermore, as colleagues and I noted in a recent discourse analysis study exploring patients' views on the placebo effect, "if we merely want to talk about the potential benefits of the therapeutic encounter, why invoke the confusing and often paradoxical placebo in the first place?"

(Hardman et al., 2019, pp. 6-7). In the next chapter I follow this suggestion and purposively disregard the (potentially) paradoxical placebo.

Chapter 5 The placebo effect disregarded: an ethnography

5.1 Introduction

In Chapter 4 I argued that a placebo cannot coherently be conceived as a substance given to a patient, but as a contextual treatment process. I further concluded that, given the disconnect between how researchers, clinicians, and patients conceive of the placebo effect, the concept may have limited clinical value. Therefore, in order to avoid the conceptual confusion that afflicts placebo studies research, for this phase of my thesis I adopt the notion, developed in Chapter 2 and Chapter 4, that "in a broad sense, placebo effects are improvements in patients' symptoms that are attributable to their participation in the therapeutic encounter, with its rituals, symbols, and interactions." (Kaptchuk & Miller, 2015, p. 8). I note at this stage that this move neither provides a definitive answer to the question of the potential utility of direct 'placebo treatment', nor attempts to dissolve the paradox of the placebo effect phenomenon; I return to these questions more explicitly in 6.1Chapter 6 and Chapter 7.

In taking *the therapeutic encounter* as the object of inquiry for this phase of my thesis, I intentionally take a broader view of phenomena the placebo effect purports to encompass. I do this for two reasons. First, it enables my inquiry to be more grounded in existing and coherent general practice research constructs. And second, it avoids the misunderstanding and confusion that is likely to occur with a more explicit investigation of the placebo effect. With regard to the overall aim of this thesis, my intention is that in disregarding the placebo effect at this stage, I can produce coherent and useful concepts which will inform later discussion. Furthermore, given the conclusion from my meta-ethnography regarding the questionable practical usefulness of the placebo effect concept, I further aim to produce theory that may be more useful for general practice.

5.1.1 The therapeutic encounter in general practice

As I noted in Chapter 2, the encounter between clinicians and patients is increasingly understood as important in the delivery of effective treatment in general practice. This is grounded in evidence that an improved patient-clinician relationship improves treatment outcomes (Barry et al., 2001; Jensen & Kelley, 2016; Kelley et al., 2014; Little et al., 2001; Ong et al., 1995; Stewart, 1995). However, the therapeutic encounter cannot be considered

in dyadic isolation. General practice is complex and uncertain (Procter et al., 2014; Salisbury et al., 2013), increasingly dominated by issues such as multimorbidity, polypharmacy, and chronic illness management (Barnett et al., 2012; Bodenheimer et al., 2002; Duerden et al., 2013; Huntley et al., 2012; Salisbury et al., 2011). Therefore, when exploring the therapeutic encounter in general practice, it is useful to take a contextual view, insofar as other factors, such as access (Campbell & Salisbury, 2015) and continuity (Aboulghate et al., 2012; Haggerty et al., 2003; Worrall & Knight, 2011) interact with the direct therapeutic encounter in influencing treatment outcomes.

This contextual view is increasingly conceptualised through the framework of person-centred care, which in the UK reflects guidance from the Royal College of General Practitioners (2018) and the Royal College of Physicians (2018). Person-centred care is a complex concept with numerous definitions (Scholl, Zill, Härter, & Dirmaier, 2014). Recent studies and guidelines suggest that it includes a range of factors – including continuity, coordination, teamwork, access, and empowerment – but that it is, nevertheless, explicitly grounded in the interpersonal relationship between patient and clinician; in the therapeutic encounter itself (Britten et al., 2017; Ekman, Hedman, Swedberg, & Wallengren, 2015; Ekman et al., 2011; Hardman & Howick, 2019; Scholl et al., 2014; The Health Foundation, 2016). Inasmuch as this is true, in taking the therapeutic encounter as the object of inquiry for this phase of my thesis, I adopt an approach – grounded in the wider framework of person-centred care – that considers the encounter in the wider socio-cultural context in which it is situated. Considering the contextual and situational nature of the therapeutic encounter, to explore it in general practice I conducted an ethnography of a general practice surgery in southern England.

5.1.2 Research objectives

My research objectives for this phase of the thesis are to:

1. Explore the relevant processes and practices of clinicians in general practice regarding the therapeutic encounter;
2. Explore relevant views and experiences of patients and clinicians; and
3. Generate theory on how the benefits of the therapeutic encounter are produced and capitalised on in general practice.

As outlined in the introduction to this chapter, these objectives are related to my overall thesis research questions and objectives (see Chapter 1) insofar as they are related to

broader phenomena the placebo effect purports to encompass. As such, these findings will indirectly inform my exploration of the placebo effect.

5.2 Methods

5.2.1 Methodology

Reflecting the overall approach to the thesis, my methodology for this phase was a grounded theory influenced ethnography. An ethnography involves "recording the life of a particular group and thus entails sustained participation and observation in their milieu, community, or social world" (Charmaz, 2014, p.35). This typically involves lengthy participation in an attempt to become part of everyday life (Pope, 2005): the researcher "ought to stay in the field long enough for his or her presence to be considered more or less 'natural' by the permanent residents… although he or she will always to some extent remain a stranger." (Eriksen, 2010, p.27).

Ethnography can be defined in different ways. For this thesis I define it by the features of ethnographic work, whereby data collection is conducted in natural settings, uses a range of sources, and is in-depth and relatively unstructured; and data analysis is focussed on interpreting human actions and practices in their socio-cultural context (Hammersley & Atkinson, 2007). In line with the theoretical orientation of the thesis, the ethnography is situated in a theoretical framework of American pragmatism whereby inquiry is fallibilistic and anti-sceptical, and one's beliefs are understood through the conceived practical effects of one's habits of action (Dewey, 1925/2013; Misak, 2013; Peirce, 1878/1982). My adoption of a grounded-theory influenced ethnography also reflects my interpretation of constructivist grounded theory as an intuitive method of theory generation. The in-depth and contextual nature of ethnography aligns well with my overarching approach to grounded theory, which I conceive as a 'trans-descendence' toward experience.

5.2.2 Study setting

This study was conducted over the course of a year, from February 2018 to March 2019, at one general practice surgery in a small market town in southern England. The surgery has approximately 8000 patients, and serves the town and surrounding area with a range of general medical services and specialist disease management clinics. The surgery has eight General Practitioners (GPs), three nurses, two Health Care Assistants (HCAs),

and a team of administrative support staff. Due to part time working the GP FTE at the time of the study was five. The site was approached to take part in the study through the local Clinical Research Network (CRN), and selected because it was large enough and provided enough services to constitute a sizeable community for investigation.

Negotiating access to the practice and identifying gatekeepers that could enable access was a crucial phase in the study. Moreover, both the point of entry and alliances with gatekeepers can shape how the research is viewed by group members (Pope, 2005) – this was considered from the outset. In negotiating access I made explicit that I am not a clinician, and that the study was not orientated towards evaluating specific practice performance, but to explore the therapeutic encounter. Before the practice agreed to take part in the study, I negotiated a credible solution to working practices to ensure that operational capability was not adversely affected. NHS support costs were provided by the local CRN.

5.2.3 Data collection

In line with my guiding methodology of grounded theory influenced ethnography, my data collection methods flow from the research objectives (Charmaz, 2014). Given my focus on the encounter between clinicians and patients, data collection was primarily conducted through participant observation. I also conducted interviews and focus groups with clinicians and patients.

5.2.3.1 Participant observation

Participant observation was the central data collection method. In simple terms participant observation is "the residual category that includes anything that is not some kind of interviewing" (Wolcott, 2005, p. 95). In an ethnography, observation is generally termed 'participant' observation to acknowledge that the presence of the observer changes the situation and thus the data one generates. An observer can be conceived as, for example: on a participation-observation continuum from 'complete observer' through 'observer as participant' and 'participant as observer' to 'complete participant' (Gold, 1958); or in relation to membership roles in the community of interest (DeWalt & DeWalt, 2002). For the purpose of this study, I initially adopted the stance of 'observer as participant'. As the fieldwork developed I maintained this stance in clinical situations, but in more general areas of observation my stance became closer to that of 'participant as observer'. This reflected my changing relationship with practice staff and my changing role, which by the end of my fieldwork sometimes included conducting basic

administrative or logistical tasks to assist practice staff. I conducted observations at the surgery ranging from one to three days a week. Throughout the year's fieldwork I conducted observations on all days of the week. After an initial period of 5 months (March to July 2018) I took a two-month break from observation to consider the data before conducting a second period of observation (October to December 2018).

Participant observation included 100 consultations between clinicians and patients, and over 300 hours of observation in the wider surgery, including in administration areas, the staff room, and the patient waiting room. Observations were recorded in hand-written notebooks.

5.2.3.2 Interviews

I conducted six audio-recorded semi-structured interviews with clinicians at the practice, including three GPs, two nurses, and one HCA. Each interview lasted approximately one hour and was held at the surgery in the clinician's respective consultation room. The interviews were conducted using a topic guide (see Appendix C), although in most interviews this was only used as a framework and many of the discussions did not explicitly follow this format. Interviews were conducted between 6 and 10 months into the fieldwork. By this stage I had built relationships with the participants and conducted substantial participant observation. This allowed the interviews to be more in-depth and natural than if I had conducted them at the start of the data collection period.

Given these conditions and the iterative genesis of the proposed interview questions, I did not test the topic guide or revise it (as might occur in interviews that occur without prior fieldwork). The questions in the topic guide did not directly address either the placebo effect or the therapeutic encounter. In the first instance this is due to the conceptual problems with the placebo effect concept I highlighted in Chapter 4. In the second instance this is because the questions reflect the findings developed during the fieldwork and so are not necessarily oriented towards the exact wording of the broad topic that frames the ethnography.

5.2.3.3 Focus groups

I conducted three audio-recorded focus groups with practice patients, which lasted from between 1 hour 9 minutes and 1 hour 17 minutes. Focus groups allow a researcher to gain multiple perspectives on a topic or issue and, unlike interviews, allow a researcher to explore dialogical exchanges (Willig, 2013). The focus groups were conducted in an accessible meeting room at the surgery, and comprised 9, 2, and 5 participants

respectively[6]. The first focus group was conducted using a topic guide (see Appendix D). In the latter two focus groups participants were asked to discuss four vignettes based on emerging study findings (see **Error! Reference source not found.**). In the latter focus groups, patients were simply asked for their views on the vignettes, which in turn would foster debate and discussion between the participants. The vignettes were created through discussion with my supervisory team.

In the wider context of the ethnography the focus groups were conducted to provide specific patient context to the findings. This may reflect why the groups were slightly shorter in length than the average of between 1.5 and 2 hours. My decision to change from using a topic guide to vignettes was informed by one main reason: following the first focus group I felt that better results may be achieved through using vignettes because the topics being explored were quite abstract and potentially difficult to explore through direct questioning.

5.2.4 Sampling and recruitment

5.2.4.1 Eligibility criteria

Given the emergent nature of ethnographic research, minimal a priori eligibility criteria were applied to individual study participants; the only explicit exclusion criteria were adults without the capacity to consent and children: therefore, adult patients in general practice and with capacity to consent were included in the study. In addition, the surgery identified a group of vulnerable or otherwise ineligible patients who were excluded from the study. This group included patients with dementia, and patients who had previously declined all research at the practice. Due to ethical requirements to provide patients with enough time to consider whether to take part in the study or not, patients presenting to the surgery on the same day (i.e. acute patients) were excluded.

5.2.4.2 Sampling

I used a combination of sampling techniques, including convenience, purposive, maximum variation, and snowball. I used convenience and maximum variation sampling in the general practice environment. I used purposive and snowball sampling to identify potential interview and focus group participants. The purpose of the sampling approaches was, as per ethnographic best-practice, to create the conditions for interesting cases to be

[6] The middle focus group contained 2 participants due to 4 invited participants not showing up.

encountered. Ethnography is, by definition, opportunistic and unstructured (although still systematic). As such, formal sampling techniques – as promoted in both qualitative and quantitative social science – are useful but can be misleading, especially in abductive research such as this study. The entire study setting was, as outlined in the study setting section, purposively sampled so as to provide a suitable community for investigation. Within that framework, social scientific categories of sampling are less useful, insofar as the researcher should remain open to chance encounters and experiences.

5.2.4.3 Recruitment and consent

A major challenge for conducting ethnographic research, especially in the NHS, is balancing the need for informed consent with the emergent and opportunistic nature of the research (Eriksen, 2010; Hammersley & Atkinson, 2007; Murphy & Dingwall, 2001, 2007). Furthermore, current ethical review practices are largely orientated to other forms of research such as clinical research or biomedical experimentation (Murphy & Dingwall, 2007). It is not that different ethical standards are applied, but that they may be operationalised differently (Murphy & Dingwall, 2001). In light of these issues, the study recruitment and consent plan was split into two sections: staff and patients. This allowed for suitable plans for each participant group, reflecting their likely roles in the study. Moreover, given the long duration of the study, consent was not be considered a one-off agreement, but an ongoing process that had to be negotiated throughout the study. Regarding those who gave written consent, in the findings section of this chapter patient participants are numbered (P1, P2, etc.) and staff participants are numbered (S1, S2, etc.).

5.2.4.3.1 Staff

All staff – including clinicians and administrators – at the practice who could be involved in the study were given an initial verbal briefing by me, including a chance to ask questions, before data collection occurred. They were each given a participant information sheet (PIS) and consent form to take home and consider (see Appendix F). I returned one week later to collect the consent forms. Staff who took part in an interview were given a separate PIS (see Appendix F) and time to ask questions and consider the information, before giving written consent for the interview, including specific consent for the interview to be digitally recorded.

5.2.4.3.2 Patients

For patients being observed in public areas of the general practice, there was an opt-out method of consent in place. Patients were informed of the study through posters displayed in prominent locations in the waiting room (see Appendix G), and were given the option to opt-out of contributing to the study without giving a reason. Patients being observed in consultations were given a PIS and consent form (see Appendix F) in the post, at least 7 days prior to the consultation; this process was conducted by the surgery staff ensuring I did not access confidential patient records. Patients provided written consent before being observed. Patients taking part in interviews or focus groups were also sent a PIS and consent form (see Appendix F) prior, and give written consent for the interview, as per the staff procedure.

5.2.5 Data analysis

In line with my overarching thesis methodology I conducted abductive analysis informed by constructivist grounded theory (see Figure 2); I used grounded theory to focus the analysis of the ethnography towards theory generation (Charmaz, 2014; Timmermans & Tavory, 2007). Fieldnotes and audio-recordings were transcribed for textual analysis. I then conducted initial coding, followed by focussed coding and the creation of categories (significant focussed codes or further interpretations of those codes). Data were compared with emergent categories using the method of constant comparison in an iterative process throughout the ethnography (Glaser & Strauss, 1967/2009). I conducted data discussion sessions with my supervisors, to clarify and develop theoretical concepts and the study line-of-argument.

5.2.6 Patient and public involvement

A consultation model of Patient and Public Involvement (PPI) was adopted for this study, as defined by the National Institute for Health Research's INVOLVE advisory group: www.invo.org.uk/benefits-and-challenges-of-consultation. Within this model, patients and members of the public are asked for their views on specific aspects of the study and these views inform decision making. PPI was targeted at two specific points in the research cycle:

- Designing and managing
- Disseminating

PPI personnel were, and will be, provided where appropriate with travel expenses and payment for their time and work undertaken. Members of the public and GPs were involved in the development of study PIS and consent forms, to ensure they were user-friendly, accessible and appropriate. This process was conducted remotely and resulted in changes to the language and tone of the study PIS and consent forms. Staff and patients will also be consulted in developing the study dissemination plan. This process will consist of consultation meetings in February 2020.

I adopted a consultation model of PPI for two main reasons. First, I felt that given the localised and naturalistic character of ethnographic research, the designing, managing, and disseminating phases were where the most benefit could be gained from PPI. Second, pragmatically, the resources I had available for PPI would allow for worthwhile activity if focussed on these phases specifically.

5.2.7 Ethical and regulatory compliance

General ethical guidance was taken from the Association of Social Anthropologists' (2011) Ethical Guidelines, and the British Psychological Society's (2009) Code of Ethics and Conduct and (2011) Code of Human Research Ethics. The principles of maximising benefits and minimising harm guided the approach to ethics, focussed on the following principles:

- Respect for the autonomy and dignity of persons;
- Scientific value; and
- Social responsibility.

5.2.7.1 Risk assessment

The following risk areas were considered:

- Risks to researchers;
- Risks to participants; and
- Wider risks.

Risk scores were developed based on the likelihood and severity of the risk, based on the University of Southampton Risk Estimation Matrix (see Appendix H).

5.2.7.2 Research ethics committee review and HRA approval

The study was given a favourable opinion by the University of Southampton, Faculty of Medicine Research Ethics Committee (ERGO number 27837), and by the Proportionate Review Sub-committee of the NHS Yorkshire & The Humber - Bradford Leeds Research Ethics Committee (REC reference 17/YH/0427, IRAS project ID 230742). Health Research Authority (HRA) approval to conduct the study was given on 05/12/17.

5.2.7.3 Data protection and confidentiality

All investigators and researchers involved in the study complied with the requirements of the Data Protection Act ("Data Protection Act," 1998) with regards to the collection, storage, processing and disclosure of personal information, and upheld the Act's core principles[7].

- All data was anonymised to ensure confidentiality for participants by the creation of coded, depersonalised data, whereby the participant's identifying information was replaced by an unrelated sequence of characters. Where one participant contributed to multiple data sources the same identifier was used repeatedly. Data was anonymised at the earliest practicable stage.
- The anonymous data and the person identifiable linking code was maintained in separate locations using encrypted digital files within password protected folders, stored securely on the University of Southampton server, which is within the EU. Data will be stored for 15 years from the end of the study and the custodian will be the University of Southampton. Any personal data required for study logistics was destroyed on study completion.
- Hand-written data is stored securely at the University of Southampton.
- Interviews and focus groups were digitally recorded and transcribed. Audio-recordings were transferred as soon as practicable onto secure storage on the University of Southampton server and deleted from digital recording devices. Transcriptions are stored securely on a University of Southampton computer.

[7] Due to changes to the UK Data Protection Legislation (Data Protection Act 2018 and General Data Protection Regulations (GDPR 2018) which occurred during the study, I was required to update my PIS and consent forms for future participants. However, I did not have to re-consent existing participants, nor submit the new forms as a substantial HRA amendment. As this only covered participants towards the end of my study, for clarity I have not included these documents in this thesis, nor outlined the minimal changes the GDPR legislation caused.

- Access to data was limited initially to researchers involved in the study or for audit purposes, if required. However, where participants have consented to data being used for future research, it is securely archived.

5.3 Findings

5.3.1 Introduction

The surgery sits on the edge of the small market town it serves. To get there you can weave through the inner pavement-less streets or take the long way round; down the high street; through the pay and display car park that's never full. The building itself is prefabricated and was meant to have been knocked down years ago, if only someone would pay for it. But it's not in disrepair. The waiting room is large and light; rows of seats face the TV that informs patients when it's their turn. The treatment rooms that dot the long horseshoe shaped corridor are clean and welcoming. One complaint may be that the doors are too thin. If you walk down the corridor and listen, you can hear snippets of conversations floating out. In the one-story section of the building, skylights bring the sun into small rooms where you least expect it. The kitchen behind reception is the hub of the surgery. It has two doors that allow for a constant flow of receptionists, nurses, HCAs and doctors. The drip of the coffee machine in the morning; the rattle of the old red kettle that needs replacing; lunch heated up in the microwave (not that they have much time for lunch anymore). Some of the staff have been here for a long time. Others have just arrived. Either way the surgery feels lived in.

In the year I spent at the surgery I developed from a complete outsider to something else. Not staff of course, but something in between. I made a lot of cups of tea. I filled and emptied the dishwasher countless times. I took charge of the DHL deliveries if no-one else could. As my time progressed, I talked more in the margins: with the doctors as they hustled out to a home visit; to the receptionists as they attempted to complete the unending administrative tasks of the day; to the patients as they waited; to the nurses as they readied themselves for the morning surgery. I also sat in consultations with old and young patients, with a range of conditions, including hypertension, diabetes, chronic pain, infected wounds, depression, chronic obstructive pulmonary disease (COPD), athlete's foot, Parkinson's, and many more. The official count for those required by my protocol to give written consent reads 116. In addition, no members of staff at the surgery declined to take part, and no patients in public settings opted out of the study. But that does not tell the full

story. To understand the surgery is to understand the community it sits in. This is reflected in my choice to conduct data collection only at one general practice surgery.

As I outlined in the methods section, my interpretation of the unit of analysis in an ethnography is a community. One surgery thus represents the centre of one community of patients and clinicians and is thus a suitable sample size. Although including more than one surgery may lead to different findings, the unit of analysis would be extended beyond one community and thus outside my proposed methodological scope. By restricting data collection to one surgery I explicitly focus the analysis on one community. Moreover, in practical terms, ethnographic fieldwork requires deep involvement from the researcher (and participants) in terms of relationship building; within the timeframe of this project, including more than one surgery (in my terms essentially doing more than one ethnography and then synthesising the findings from them) was impractical and would have likely led to the scenario whereby insufficient time in each location was available to build the relationships necessary for a successful ethnography. This is not to say that such 'multisite' ethnographies are not increasingly common and successful, but there are notable pitfalls.

For example, in a well-regarded study exploring how primary care clinicians derive their healthcare decisions, Gabbay and le May (2004) conducted research at two sites (reflecting two separate healthcare communities). They developed their model about the use of 'mindlines' at one site and then checked this for 'transferability' at another. Epistemologically and ethically speaking, it is questionable whether the exact same researchers should use the exact same methods (in the exact same study) for both the discovery and justification phases of inquiry. It is unlikely that, having spent so much time in one location developing a useful model, a shorter time spent in another location would lead the very same researchers to immediately refute it. Furthermore, ethnography is not well suited (although not, epistemologically speaking, useless) to the justificatory phase of inquiry, because of the open-ended nature of it. The original findings may well be useful (as proved with Gabbay and le May), but the researchers who generate those findings are not best placed to then justify them (even minimally as Gabbay and le May do) – and certainly not in the same study. In conducting research in more than one community the ethnographer is tempted to imply they are justifying their own findings (in terms of their findings being in some, non-quantifiable way, generalizable). This may be possible in some minimal way but my position is that this can be misleading and should be avoided. Of course, such a predictive way of knowing is, despite dominating the social sciences, not the only systematic way of knowing. Knowledge can also be therapeutic, emancipatory,

critical, etc., yet no less systematic. But this must be stated at the outset of inquiry in order to frame the terms by which the research can be assessed.

In these findings I present an account of how patients and clinicians produce and capitalise on the benefits of the therapeutic encounter in general practice. In this regard, my findings suggest that clinicians are confronted with considerable constraints in general practice, which I broadly categorise as the limits of biomedicine and the structural constraints of general practice. I outline how these manifested before describing how clinicians mitigated them. To anticipate, I frame this account as how clinicians developed good habits, conceived in the two broad categories of using expert judgement and taking patients seriously. I further suggest that clinicians developed those habits through the intuitive use of a second-order 'meta' habit of *enaction*, insofar as they conceived of the consultation as collaboratively brought into being with the patient. This, I further propose, suggests the general practice consultation is conducted as much in the subjunctive as the indicative mood. I develop this proposition into a form of medical practice I term *subjunctive medicine*, which may help clinicians capitalise on the benefits of the therapeutic encounter in general practice.

I present the findings in the three broad categories of: confronting constraints, getting into good habits, and enacting efficacy. These three categories provide the basis for my development of the importance of subjunctivity in general practice, which I develop into the framework of subjunctive medicine. In the initial two categories, I first present a longer extract from my fieldnotes – the intention being for the reader to experience the data prior to my analysis. I then select illustrative quotes in each category and sub-category to develop the line of argument. Illustrative quotes are selected on the basis of how effectively they represent the analytic point being made. In line with my constructivist grounded theory analysis processes as outlined in Chapter 3, the findings as presented in this section develop from descriptive categories towards concepts and eventually the development of a theoretical framework. As such, the argument becomes more interpretive (and necessarily less obviously grounded in particular data) as I develop it in this section. This is, epistemologically, a feature of abduction insofar as it is a process of new information – new theory – being created and developed (see Chapter 3).

5.3.2 Confronting constraints

Extract from fieldnotes of a patient and GP consultation:

The patient (P16), leaning heavily on his stick, entered the consultation room and sat in the chair adjacent to the GP's (S13) desk. Each of the patient's black shoes was fastened with a thick Velcro strap. He had come primarily to discuss his blood pressure.

"It was a while back" said the patient, "you said it was dodgy, I said it was alright! Same conversation!"

"You're on fairly substantial drugs to treat your blood pressure" replied the GP, before discussing the potential options available. "Do we add in more? Do we hope for the best?". They talked about previous readings and how one was fine with another GP at the practice.

"Which I was surprised about" said the patient, "as everyone is scared of her!".

"It's too high [now]" said the GP, "in the context of your diabetes." They continued the discussion about what to do, including the potential side effects of some proposed changes to medication and dose.

"Worse of two evils!" said the patient. After further discussion they alighted on an agreeable plan. "We add one on, if I have any problems I come back to you?"

"Ok" agreed the GP as he turned to the computer to check the exact situation regarding the patient's medication. He stopped. "We're stuck!" he exclaimed, "You're [already] on maximum treatment." There was a pause as both the patient and GP thought it over. "You're going to have to exercise a bit more instead!"

"I'm knackered with the knees" replied the patient.

"There's no more drug treatment we can do" said the GP. With this impasse the focus turned to the blood pressure readings themselves.

"If it was like my mother" said the patient, "200 or something, I'd be panicking."

The GP tried again to turn the discussion towards potential lifestyle measures while ensuring he didn't alienate the patient, noting that "changing habits is difficult". But the patient's focus remained on the blood pressure readings themselves.

As this consultation extract demonstrates, clinicians and patients in my study were confronted by considerable constraints in general practice. I group these in two broad categories: the limits of biomedicine, and the structural constraints of general practice.

5.3.2.1 The limits of biomedicine

It is uncontentious to state that general medical practice extends beyond our understanding of biomedical mechanisms and single disease aetiologies (Howick et al., 2018; Kingma, 2015; Little et al., 2001; Tudor Hart & Dieppe, 1996; Van den Bergh, Witthöft, Petersen, & Brown, 2017). This manifested in my study in various ways. First, through the need to consider the irreducible interconnection between a patient's health and their broader life. For example, when a GP assessed a patient with Parkinson's regarding his Heavy Goods Vehicle driving license: "so, history of neurological disorders. That's a

yes unfortunately." (S13). Or an indicative case of a diabetic patient (P44) discussing why his blood sugars have risen, noting that "I accept responsibility for that, I've been eating too many sweets!". A patient's health was also not just interconnected with their own life, but that of their social network, for example when a GP (S9) delivered a difficult diagnosis of a rare, genetic condition:

> "It probably is polycystic kidneys, I'm afraid it does look like that… I'm sure all sorts of things are going through your mind."
>
> "I know it can't skip a generation, I'm sad for my boys", replied the patient (P23), who initially bracketed the physiological effects of the disease, thinking first of the consequences for her children.

Second, complex problems such as chronic illness management, multimorbidity and polypharmacy were major challenges for clinicians and patients in my study. For example, a patient (P12) with diabetes who indicatively noted in a consultation with his GP that "at the moment I'm really struggling", and that "at certain points it does get me down, feeling I have to be good all the time". In coping with multiple conditions over long periods, patients often ended up taking many different medications, which as a nurse (S7) noted in an interview "is difficult" because "if you read the side effects of medications, quite often they cause what you're actually giving them for". These problems are unsurprising given research in primary care shows that patients with two or more chronic morbidities are now the norm not the exception (Barnett et al., 2012; Huntley et al., 2012; Salisbury, 2012; Salisbury et al., 2011).

5.3.2.2 The structural constraints of general practice

The limits of biomedicine are well acknowledged in general practice. Similarly well acknowledged are inherent structural constraints, notably clinician workload. In this regard, a recent retrospective analysis of 100 million general practice consultations in England showed a substantial increase in consultation rates, consultation duration, and total clinical workload (Hobbs et al., 2016). As one of the receptionists (S20) noted, "I never see [the GPs] stop, they're here in the morning and after I leave. They are constantly on, they never get any time to themselves".

One GP (S8), in an interview, explicitly emphasised the incompatibility of full-time work with modern life, insofar as "if you've got a family, the way the hours are structured you're in before they've gone to school and you're back after they've gone to bed". A more experienced GP (S11), again in an interview, noted that "there's a lot more being done [nowadays]… the pace of work is higher… So less of the tweed-wearing, golf-

playing GPs with long periods of time in the middle of the day not doing very much". This increased workload can be linked to the challenges of multimorbidity and chronic illness management, outlined above: "Two problems" said the GP (S13) as he typed up the first consultation of a fully booked morning surgery, "I could have referred the second one as well, but there was no time. I'm already 5 minutes late!".

Increased workload informs a central tension that general practice surgeries contend with: balancing patient access with relational continuity of care (Aboulghate et al., 2012; Pereira Gray, Sidaway-Lee, White, Thorne, & Evans, 2016; Pereira Gray, Sidaway-Lee, White, Thorne, & Evans, 2018). At the practice this balance was weighted towards access, with much of each surgery limited to book-on-the-day appointments. Through this system, patients called in the morning or the afternoon for each respective surgery and, if they called at the right time (and said the right thing) they almost always got an appointment: "If you want to be seen this afternoon, you will need to call back at 2 o'clock this afternoon" said one receptionist (S18). This undoubtedly provided good access for patients, but there was a trade-off in the availability of routine appointments with one's own GP: "We do routine appointments" said one of the receptionists (S16) on the phone to a patient, "but they are 3 to 4 weeks in advance". In practice (albeit not necessarily to explicitly improve continuity) receptionists would sometimes transgress, providing flex in the system: "I've done something naughty" said one (S14), booking in a patient for tomorrow's surgery. "She's 93! She needs to organise transport. I'll fall on my sword for this one".

Minor transgressions notwithstanding, prioritising access did affect continuity, which was valued by both patients and clinicians.

Patient focus group quotes:

P69: We are more comfortable and feel we gain more if we see a doctor who's familiar with us.

P93: I've been seeing the same doctor now but I wouldn't want to see another one, because when I go in he doesn't say 'what are you here for?'. I mean the last time he didn't even ask me how I was. He got on his screen and we sorted out what we were doing, the medication and everything, and we were fine… If I walked into another one, we'd have to start all over again.

Clinician interview quotes:

S13:The continuity of seeing people for many years is rewarding.

S6: [With continuity] I think you can anticipate how people are going to respond.

This supports the considerable evidence that continuity of care (particularly relational continuity) improves treatment outcomes, leads to better patient satisfaction and is more cost-effective (Cabana & Jee, 2004; Hofer & McDonald, 2019; Jeffers & Baker, 2016; Pereira Gray et al., 2016; Pereira Gray et al., 2018).

Reflecting recent research in general practice, clinicians and patients in my study faced considerable constraints, which made capitalising on the therapeutic encounter more difficult. These included chronic illness management, multimorbidity, clinician workload, and the tension between patient access and relational continuity of care. However, clinicians in my study also regularly mitigated these constraints. I suggest they did so by developing and adapting useful socially-shaped dispositions to act: by getting into good habits.

5.3.3 Getting into good habits

Extract from fieldnotes of a patient and GP consultation:

> I knocked on the consultation room door, entered, and perched on the end of the treatment bed, ready to observe. I usually sat in the spare chair, but the next patient would be accompanied.
>
> "How late am I running?" asked the GP (S21), while furiously typing up the notes from his previous consultation.
>
> "About 45 minutes" I replied, glancing up at the clock on the wall.
>
> "I'm asking patients about stuff they didn't even come in for" he replied, "that's why I'm running so late I think. I've been handing out statins all day!". He finished typing and called the next patient (P60), who came with his wife. In the context of the summer-long heatwave, the patient was smartly dressed in a white polo shirt, trousers and sandals.
>
> "Did I ask to see you or did you ask to see me?" said the GP.
>
> "You asked us to come in and go through some blood tests" said the patient's wife. The GP looked briefly at the patient's records.
>
> "As a set of blood tests you are all good" said the GP, "[but] that's not the full story?"
>
> "Yes, I don't feel that good." said the patient.
>
> "Did you have a specific question?" replied the GP.
>
> "You are getting tired a bit lately" interjected the patient's wife. The GP took the patient's blood pressure.
>
> "Ok, that's alright, very good. The only other thing is that I've been asking everyone [today, about] statins. Before I go on, let me check if you are already on statins?"
>
> "He is yes" said his wife, "he was on them, then we went off them, then back on."

"Right, ignore what I just said!" said the GP. "Ok, the tiredness thing. It's very rare to pick something up on a blood test. [It could be to do with your] thyroid, [or it could be] anaemia. In your case it could be the Parkinson's disease."

"… stuttering…" said the patient, trying to respond.

"It'll come, don't worry" replied the GP.

"I can't get my words out" said the patient.

"It's ok, it's difficult" said the GP, before allowing time and space for the patient to speak. They continued to discuss the issue before the GP suggested that there were "other conditions to consider. Working too hard, not sleeping enough. The other conditions come in two groups. Mental health, and people who snore.. sleep apnea. [Those people] don't have a refreshing sleep. They usually have a history of waking up in the night. There are also others such as chronic fatigue syndrome. I don't think that any of these things are relevant though."

"You do 10 minutes in the garden" said the patient's wife, "then you are knackered."

"If I was to take all the pills you are on I'd be knackered too!" said the GP to the patient.

"I was wondering if it is a combination of any of the tablets?" asked the patient's wife.

"You're probably right" said the GP, "for example the beta-blocker, that could make you tired."

"Is that the one that makes the heart go slower?" asked the patient's wife.

"Yes," said the GP "perhaps we'll keep that one." Together the GP, the patient and his wife discussed the list of medications the patient was on and the potential for reducing or removing some of them.

The consultation extract above demonstrates some good[8] habits through which clinicians in my study overcame the constraints outlined previously. I conceive of these good habits in two broad categories: using expert judgement, and taking patients seriously.

5.3.3.1 Using expert judgement

Modern interpretations of Evidence Based Medicine (EBM) – the dominant paradigm for teaching and practising clinical medicine – have highlighted the need for expert judgement over abstract rule following (Chin-Yee & Fuller, 2018; Greenhalgh et al., 2014; Kelly, Heath, Howick, & Greenhalgh, 2015; Lown & Peters, 2018; Montgomery, 2006). This partly informs the increased focus on the benefits of the therapeutic encounter

[8] By 'good' I mean 'of a high standard', rather than any traditionally normative moral interpretations of the word. As is apparent later in this thesis, I would, in any case, reject such a distinction between the two interpretations.

in general practice. For example, GPs would sometimes overrule the stated guidance when conducting certain tests for patients.

> "So your chest X-Ray was normal," said the HCA (S4). "I wasn't aware at the time we booked the appointment that you had antibiotics. The advice is to do spirometry about 6 weeks after the antibiotics… It won't be a fake result, but it might be below your best performance. I'm sorry – if you still have an infection your results will be low."
>
> "This is the only symptom I get" replied the patient (P76), "… they found swollen blood vessels…"
>
> "That suggests more like asthma symptoms, but I'm not a doctor so…" The HCA looked at the computer and the patient. "We should really look at the results on Monday… was it a big lump?"
>
> "No, not this one… sometimes it smells awful!"
>
> "If you don't mind leaving it for the time being – we will wait for the results of the respiratory sample to come back… So, do you feel like this infection has gone?"
>
> "I only get the symptoms – a plug. They call it a plug… and I draw it up… it takes about 3 days… I don't get a cough but I've had it for years. The plug used to be that big [makes small circle with hands]. Now it's that big [makes bigger circle]. It was every two weeks now it's every week."
>
> They chatted a bit more and the HCA decided to go to see one of the GPs. She came back.
>
> "In this case" she said, "we are going to avoid the guidance."

Reflecting the acknowledgement of the limitations of official guidance in every situation, clinicians in my study used expert judgement in a number of ways.

As highlighted in a number of previous studies (Becker, 1976; Dauphin et al., 2019; Fox, 1980; Mishel, 1988), clinicians in my study explicitly acknowledged the uncertainty inherent in general practice and the consequences of this both for themselves and patients. For example, one GP (S8) indicatively noted in an interview that general practice is:

> About managing uncertainty and dealing with uncertainty and living with uncertainty… A lot of the time symptoms are either very vague or the history is very contradictory… even if there's certainty over the diagnosis there's often a lot of uncertainty over what's the right treatment to do or what the prognosis is.

Another GP (S11) noted, in a similar vein, that "although you may not resolve anything" it is important to ensure there is not "such a fog of uncertainty" for patients as there might be when they arrive. Such a focus on managing and dealing with uncertainty is in part reflected in the findings of previous ethnographic studies; including an account of the training and lives of young surgeons, in which the importance of local expertise was

acknowledged as often overriding more general 'scientific' knowledge (Bosk, 2003); and an ethnographic study exploring knowledge management in general practice, in which clinicians relied on collective, socially constructed knowledge in practice as much as explicit evidence from research (Gabbay & le May, 2004). These findings reflect the importance of the role of expert judgement in medical practice, insofar as the guidance available to clinicians (especially generalists) is too vast to be assimilated in its entirety. In practice, more heuristic, realistic approaches are employed.

The focus on uncertainty was also reflected in some patient perspectives, for example one patient (P63) noted that GPs "have got a difficult job, which is a bit like sculpting fog. You know, you've got, maybe non-specific symptoms… and they've got to make sense out of all this". The broad nature of general practice was also raised by patients in a focus group as a reason for accepting some uncertainty in a consultation:

> P69: Because they're 'general' practitioners, they're not experts in every, in every area.
>
> P72: I think it's vital.
>
> P73: I think so, you can't expect them to have all the information.
>
> P72: Precisely

A patient (P63) further noted that such uncertainty is in part dependent on how engaged the patient is in the consultation, "you know, have I been observant enough?... perhaps we need guidelines for patients as well?", implying that patients may themselves feel responsible for the (often inevitable) uncertainty that exists in general practice. This was partially represented in the views of clinicians, for example as one GP (S8) noted in an interview:

> A lot of the time, symptoms are either very vague or the history is very contradictory – they'll say one thing and then actually you'll ask about them again they'll say something which doesn't tally with the first thing they told you. Yeah, so something very vague or non-specific symptoms that are in and of themselves worrying, say weight loss, but there could be any number of reasons why they're losing weight and it's not clear from talking to them why, so that sort of vagueness.

Despite the broad focus on uncertainty as something to be overcome, a third GP (S13) suggested that, from a clinician's perspective, the uncertainty in general practice can also have a positive impact on practice, insofar as "there's so much variety and permutations and I think just having to be on your toes all the time… is very stimulating". In accepting the contingency of official medical guidance, clinicians can in part retain expert agency, which perhaps contributes to retaining an interest in medical practice in the long term: "there's a constant variation so I find it quite interesting [even after 20 years]"

(S13). Some research further suggests that uncertainty can also be positive from a patient perspective. Focussing on the liminal nature of medical consultations, uncertainty can be conceived as a process of meaning making, allowing space for multiple possibilities to be considered (Dauphin et al., 2019; Good, 1994). Such an account contradicts dominant accounts of uncertainty in illness, wherein uncertainty arises when patients are unable to make sense of a situation and this needs to be overcome through intervention (Mishel, 1988; Shaha, Cox, Talman, & Kelly, 2008; Trusson, Pilnick, & Roy, 2016).

Debate on the positive or negative influence of uncertainty in the medical consultation notwithstanding, clinicians in my study did attempt to deal with uncertainty, notably through the process of managing expectations:

> "Right, ok, I had hoped it might be a bit more positive" said the patient (P40) towards the end of the consultation.
>
> "It is positive!" replied the GP (S13).
>
> "I'm still on crutches."
>
> "No, no. The pain will get better. You can expect it to get better. The tablets are not for the pain but to reduce the risk of future fractures."

As a nurse (S6) noted, "if there are expectations that I can't meet, you can explain it in a way. I much rather have that conversation than [the patient] walk out disgruntled… acknowledge what it is, whatever their needs are". A common strategy within this scope was to manage expectations about the potential benefits of drug treatment:

> "I was thinking about an antibiotic!" said the patient (P47), "what do you think?".
>
> "Good news is that the symptoms are getting better" replied the GP (S9) after a brief examination, "antibiotics can help, but generally [only] when it's quite bad… I think I'd probably start on a nasal spray, perhaps hold the antibiotic in reserve?".

Beyond managing expectations, clinicians made a notable effort to communicate not just a particular diagnosis and treatment plan, but the underlying concept, often through the use of analogy:

> S13: Nowadays, your heart beats a little off. [It] jumps like a clock, which is impossible to show by taking your pulse. The ECG shows that its normal. It's a bit like having a car misfiring.
>
> S11: What you've got is echo. Your heart has to reset – a little bit like going to your fuse box. Then your next beat is bigger than you feel it. [It's] very normal. Very common.

One GP (S13), in an interview, felt that not providing a workable conceptual understanding "encourages paternalism and disenfranchises [patients] from decision

making". Another (S11), again in an interview, noted that "if people understand the concepts and understand where you're coming from, then they're more likely to self-manage next time".

> "I've been doing yoga and meditation" said the patient (P47) in response to her blood pressure coming down.
>
> "I'm quite happy with that!" replied the GP (S9)
>
> "You turn to the alternative treatments."
>
> "I'd much rather patients adopt lifestyle measures than take tablets!"

In some instances clinicians would directly compare the benefits of lifestyle measures with those of drug treatments, in an attempt to promote the former:

> "The other thing you can do, if you start exercising it does the same as statins! Takes 4 percent [of risk] away" said the GP (S13).
>
> "What do you mean by exercise? Walking?" replied the patient (P59).
>
> "The rule of thumb is sustained exercise for 20 minutes a day, [whereby you feel] slightly out of breath. Do a bit more, a bit more, and it's as good as taking a statin."
>
> "I did try to walk here from… stop, go… stop, go."
>
> "Really good! Keep doing that and it'll get easier. A lot of your problems are related to being inactive. Changing that will help you a lot."

One GP (S12) further suggested that the context and timing of advice is as important as its content: "She wasn't quite ready [for an exercise prescription]. We need to get the tests done first. She was thinking it's a medical problem".

Clinical judgement is a broad field of inquiry. Extant research is grounded in diverse perspectives, including mathematical decision-making models, judgement and decision-making in cognitive science, tacit knowledge and intuition, applied ethics, and medical humanities, among others (Chin-Yee & Fuller, 2018; Kelly et al., 2015; Kienle & Kiene, 2011; Montgomery, 2006). Such varying perspectives notwithstanding, findings from my study support the more descriptive account of expert judgement as "the ability to work out how general rules – scientific principles, clinical guidelines – apply to one particular patient." (Montgomery, 2006, p.5). Moreover, my findings suggest ambiguity on the effect uncertainty has on the consultation (i.e. positive or negative), reflecting recent research that undermines dominant accounts of the management of uncertainty in clinical practice.

5.3.3.2 Taking patients seriously

Beyond debates on clinical judgement, there are longstanding concerns about the potential dehumanising effects of increasingly technical medicine (e.g. Busfield, 2017; Kleinman, 1973/2010; Tomes, 2007). These concerns cannot be dismissed, but clinicians in my study – at a personal level in any case – were acutely aware of the risks of dehumanising patients: "You need to show a bit of sympathy and actually acknowledge why they might be feeling sad, what's going on, before you then start coming up with solutions" (S11). In addition to using expert judgement, therefore, clinicians in my study explicitly sought to take patients seriously. For example, as shown in part of the longer consultation extract presented previously:

> "Right, ignore what I just said!" said the GP (S21). "Ok, the tiredness thing. It's very rare to pick something up on a blood test. [It could be to do with your] thyroid, [or it could be] anaemia. In your case it could be the Parkinson's disease."
>
> "… stuttering…" said the patient (P60), trying to respond.
>
> "It'll come, don't worry" replied the GP.
>
> "I can't get my words out" said the patient.
>
> "It's ok, it's difficult" said the GP, before allowing time and space for the patient to speak.

This reflected the views of patients, expressed in focus groups:

> P70: If it's a long term thing… it's that sort of connection of 'take me seriously, this is, this is not doing well.
>
> P73: There is that guilt of like 'hello, yes, it's just me again, and yes, I know I'm saying the same thing again', but it's that thing about, 'but it's serious for me, it's having a big impact on my life and I want it to be taken seriously'.
>
> P63: I did have a not very good encounter here when someone said, 'ooh, it's been ages since we took you're blood pressure, but I suppose we'd better do it, it's a tick box exercise'. Actually, when I got out of the door I felt quite angry. I thought, no, it's not a bloody tick box exercise. Nobody has taken my blood pressure, I'm 70, maybe it's a good idea.

Central to the approach of taking patients seriously was respecting patients' intelligence:

> "I saw the respiratory nurse in the hospital" said the patient (P50), "she was going to write to you about prescribing antibiotics?"
>
> "Just in case?" replied the GP (S11)
>
> "No, no, she wanted me to take antibiotics as soon as I got a chest infection."
>
> They talked a bit more about this, before the patient said, "and they say you shouldn't self-medicate!".

> "There's self-medicating" replied the GP, "and there's someone experienced [like you] who understands their symptoms".

In this regard, clinicians attempted to give patients time to get across their problems, uninterrupted, in their own words: "watch carefully, listen carefully, and don't say anything" advised one (S11), reflecting recent research and guidelines (Kreijkamp-Kaspers & Glasziou, 2012; Phillips & Ospina, 2017). One GP (S13) noted that "I don't like to use nursery language [when talking to patients]". Although he does make a choice about how he talks to different patients, in all cases he tries not to talk down to anyone, sometimes using both medical and non-medical terminology together.

> "This hand has begun to go numb… I find doing my tie up very difficult… tingling…" said the patient (P40).
>
> "Could be important." Said the GP (S13) examining the patient's hand. "If I flick there does it send a shooting sensation into your hand?" He then explained to the patient what could be happening. "…numbness continuing down to your fingers… Carpal Tunnel Syndrome [CTS]." The GP explained CTS using medical terminology, such as explaining what the median nerve is and its role in the condition, before translating, "…the nerve gets a bit 'pressed up'… you can sometimes get some benefit from wearing a splint at night… The other cause is related to your neck… very hard to distinguish, more down to wear and tear".
>
> "Ok," replied the patient.
>
> "We can arrange a test called nerve conduction studies… it could get worse as time goes on… a deficit in sensation… pain… worth finding out what's going on."
>
> "So what do you recommend?" asked the patient with his hands held open to the GP.
>
> "I recommend to refer you for nerve conduction studies."
>
> "Ok. I thought it might be related to the leg or back… that's why I thought I'd better report."

Reflecting on the consultation above, the GP (S13) further noted that he tried to bring the patient along with him by "giving him a visual clue" insofar as during the consultation he used his wrist as a prop, pointing to where the median nerve is located.

Beyond respecting patients' intelligence, a crucial factor in taking patients seriously was the establishment and maintenance of trust, expressed here in a clinician interview and a patient focus group:

> S13: Oh [trust is] crucial. I think the danger is you take for granted how much people trust you. And the danger is that the information you've been given, that you're so used to hearing, kind of loses its significance.
>
> P73: It's kind of, you've come up and you've come out of that door, and you know that you've seen somebody that has more experience than you, that has more knowledge than you, that you put your trust in… That they are in it because they really, genuinely want your life to be better.

Such trust was vital in allowing clinicians to be frank with patients about the solutions they could or could not provide:

> "[Some nights] I just can't get to sleep until 4 of 5 in the morning" said the patient (P32).
>
> The GP (S13) paused. "You won't" he said, "you have to resign yourself". This was a consequence of the drugs the patient was on. "The downside is that you've got two days a week when you, say, have to get the DVDs in. You have to accept that, be pragmatic".

Trust also allowed clinicians to admit when they had made a mistake without undermining their relationship with the patient: "I've got a bit of humble pie to eat here today" said the GP (S11), "I didn't tick all the right boxes… I cocked up. It's going to need to be another blood test". Or one GP (S13) who, after a consultation, noted that the patient previously had melanoma, but he had not really diagnosed it properly initially as he had been "faffing around". Reflecting on this he noted that, "I'm humbled that he still comes back to me and trusts me to look at him".

In taking patients seriously, clinicians set the conditions for making decisions with, instead of for, patients. Such a model of shared-decision making has been promoted as a way to make medical practice more person-centred (Charles, Gafni, & Whelan, 1997, 1999):

> "I'm not anxious about getting anything done" said the patient (P40).
>
> "You don't have to get it done, [but if you don't] you run the risk of a strangulated hernia. When the hernia gets bigger the nature of the surgery becomes more difficult. [It's a case of balancing] putting up with your symptoms against running the risk of surgery." said the GP (S13).
>
> "What happens after the operation? I don't want to give [my wife] more to do?"
>
> "You wouldn't be out of action for long, [just] a bit sore for a week."
>
> "Right, ok, fair enough."

One area of treatment that was particularly focussed on shared decision making was the management of chronic wounds. Given the subjective nature of dressing choices and the importance of self-management in treatment outcomes for such conditions, nurses and HCAs at the practice made a conscious effort to explicitly involve and give agency to patients in the decision-making process.

> "It's getting less floppy" said the patient (P21) about his chronic leg wound.
>
> "Oh, your leg does look better" said the nurse (S19).
>
> "Is this going to hurt?" asked the patient about getting the dressing changed.
>
> "Nooo…" replied the nurse with a smile.

They discussed the merits of open vs closed toed stockings to treat the wound. “Can I try open toed on both legs?” asked the patient.

“Yep” replied the nurse. They continued to discuss the wound.

“Do you think it’s getting smaller?” asked the patient.

“Yes, definitely.”

“I need to be encouraged!” the patient said to me, smiling.

They discussed moving to Class 2 bandages (which are tighter). “If Class 2 is going to stop me having plasma leaks then let’s do it!” sad the patient.

“It might do,” replied the nurse.

“Let’s go for Class 2”.

As the nurse typed up some of the details, one of the HCAs (S5) knocked and entered.

“She reckons I’m getting better!” said the patient to the HCA.

“And you don’t!” interjected the nurse, still with her back to the patient.

“Too far down to look!” replied the patient, smiling.

Reflecting the importance of both integrating patient perspectives and promoting patient agency, one GP (S11) indicatively noted in an interview that it’s “not about compliance so much anymore, but concordance – the patient and doctor being on the same path”. The GP further noted the difference between primary and secondary care, inasmuch as “you’ve got that opportunity to have a second bite at it rather than having to do it all in one outpatient clinic”; and the difference between present and previous general practice, inasmuch as “it used to be the GP for everything, [but] now we’ve got diabetic nurses and COPD nurses, and other nursing staff who are very expert and very good at doing these different things”. This reflects sociological research highlighting the distributed and collective nature of modern clinical decision making, particularly in general practice (Clinch & Benson, 2013; Elwyn et al., 2014; Entwistle, Cribb, & Watt, 2012; Rapley, 2008; Rapley & May, 2009).

In promoting the category of ‘taking patients seriously’ I argue that a number of approaches employed by clinicians in my study – respecting patients’ intelligence, establishing trust, and conducting shared decision making – can be usefully grouped together as contributing to improving patient experience and patient care. It should be noted that such approaches can and have been explored in notable detail in medical sociological research in particular – as highlighted in this section. However, for my purposes it is beyond the scope of this thesis (insofar as the overall topic is the placebo effect) to develop these ideas in such a manner. For my purposes, such categorisation

(including the categorisation I employ in the section 'using expert judgement') serves as support for subsequent theory building, which I eventually employ to answer my overall research questions regarding the placebo effect in general practice.

5.3.3.3 Beyond willing

I have illustrated how clinicians in my study mitigated the considerable constraints in general practice by getting into good habits, conceived in two categories: using expert judgement (including managing expectations, communicating concepts, and encouraging self-management); and taking patients seriously (including respecting patients' intelligence, establishing trust, and conducting shared decision making). However, getting into good habits is not easy, and clinicians in my study did not merely will themselves towards these good habits, "that notion is magic" (Dewey, 1922/2002, p.20). Moreover, different habits are useful in different situations, with different patients, at different times. For example, in some instances it is worthwhile for clinicians to be very direct with patients:

> "That looks a lot better" said the nurse (S19) looking at the patients swollen red leg, "[but] you need to keep resting…Say it with a straight face, how many hours up? And how many down the farm?".
>
> "Down the farm more than not" the patient (P27) replied.

But in others, the clinician has to be more comforting:

> "I'm just conscious that I'm awake so many times in the night" said the patient (P82), "I don't want to get a 'bad' neck."
>
> "Have a bath before bed, good pillows, treat yourself!... Memory foam pillows, electric massage – if your partner's fingers are getting tired!... If it doesn't work we'll keep going and find out what's going on" replied the GP (S9).

The good habits outlined previously, therefore, should not be viewed as principles by which to conduct general practice consultations.

If habits are taken to be the vehicles for carrying past experiences into the present – "acquired dispositions to act that we develop as we become adept at recognizing and consistently resolving recurring types of problems" (Welchman, 2010, p.170) – then they must be reviewed and adapted as situations change. This means developing multiple, flexible habits that can be used in particular situations; so that, if required, an unhelpful habit can be replaced with a better one. In this sense, what is important is an "increased power of forming habits [which] means increased susceptibility, sensitiveness, [and] responsiveness." (Dewey, 1925/2013, p.280). Such a dispositional account in which habits

are *flexible* not fixed, accords with Ronald Epstein's (2017, p. 84) suggestion that "you build the mental muscles to prepare for the moments when you feel the least prepared".

One way for clinicians to support the development of multiple, flexible habits is the development of a second-order 'meta' habit that "will make us more reflective about our [first-order] habits" (LaFollette, 2000, p.409). Through interpreting how clinicians in my study made sense of and accounted for their own practice, I suggest they intuitively developed a meta habit of *enaction*, which informs and guides their approach to the therapeutic encounter.

5.3.4 Enacting efficacy

In her ethnography of the diagnosis and treatment of atherosclerosis in a Dutch university hospital, Annemarie Mol (2002, p.vii) explored how "medicine attunes to, interacts with, and shapes its objects in its various and varied practices". She conceptualised this as "the way medicine *enacts* the objects of its concern and treatment". This captures a sense of clinicians and patients actively bringing the consultation into being together, which informs my proposed meta habit of enaction. For example, consider the effects of two different consultations on changing anti-depressants.

Consultation one

> "So you recommend Amitriptyline?" said the patient (P41). "What anti-depressant do you recommend?"
>
> "Fluoxetine… you've had that a long time ago…" replied the GP (S8)
>
> "When I came off it I felt so good… as I had been on it for 20 years."
>
> "… I can't say… I don't know I'm afraid…" said the GP. They talk a bit about tolerance of anti-depressants. "Don't know… has a longer half-life… too quick acting? I don't know."
>
> "I'm confused, completely" said the patient "about what's the right thing to do."

Consultation two

> "[My occupational therapist] said my depression score was 21. She recommended changing anti-depressants… she recommended that I didn't work through that transition" said the patient (P89).
>
> "It will probably take 6 to 8 weeks to get you settled on a new one" replied the GP (S10)
>
> "I think you suggested Venlafaxine? She suggested [some different drugs]."
>
> "How's your sleep?"
>
> "Not good."
>
> "Mirtazapine is a good one for the sleep as it's a sedative."

> "I would prefer not to have one that encourages me to put on any weight…"

> "I would suggest let's go with the Mirtazapine. [That will] get you into a better sleeping pattern. Ok, what we would have to do is drop off the Sertraline and get you on the Mirtazapine."

Uncertainty is unavoidable. But even when the aetiology is not fully understood and the potential treatment only partially effective, the way in which the diagnosis and treatment plan are brought into being is important. For example, in the first extract the GP reflected the patient's confusion: "I can't say… I don't know I'm afraid". This continued through the consultation:

> "Have you got a personal feeling about this?" asked the patient.

> "Difficult, it does seem counter-intuitive to put you back on the same thing. [But] I'm wary of trying something new. It depends on whether I'm feeling conservative or radical."

Although by the end of the consultation a treatment plan was agreed upon, the process left the patient unsure of how long she would be on antidepressants – "will I ever be off them?' – and struggling for hope: "I've got a good life, nothing to complain about. I find it strange that I can't get out of it. Why can't my body lift itself out of this depression?".

In the second extract, despite being faced with similar uncertainty, the GP gave a clear rationale for the choice of treatment: "Mirtazapine is a good one for the sleep as it's a sedative". The GP further focussed on elements of the treatment process they could control: for example the timescale of changing medication, "you can leave it a couple of weeks if you want? Sertraline works over weeks not days so you may feel some withdrawal symptoms"; and cultivating the patient-doctor relationship, "ok, I'll see you in 4 weeks' time. Obviously it's an open door before then if you're struggling". This highlights the importance of not just the diagnosis and treatment plan, but how they are brought into being and how this process is influenced by both clinician and patient.

The importance of how consultations are brought into being also reflects my interview findings that clinicians broadly viewed success in two ways, as reported by clinicians in interviews. First, in terms of biomedical treatment outcomes:

> S8: I think [success is based] first and foremost on the outcomes of the consultation. So, the correct diagnosis is made, [and] the correct treatment or investigations are planned

> S7: Well obviously getting somebody better, getting somebody's blood sugar down, the actual treatment point of view obviously, that's a successful thing.

And second, in terms of developing shared understanding:

> S8: When it feels like you've reached a shared sort of place and you're both singing from the same hymn sheet. When it feels like there was agreement.
>
> S7: I think a successful [consultation], for me, is when somebody is happy to open up and talk, and feels comfortable coming in.

Moreover, as one GP (S8) noted, again in an interview, although "the two elements to a successful consultation don't always tally together… the ideal successful consultation would be the one where [they do]".

Mol (2002, p.32) suggested 'enact' is "a word with not too much of an academic history" and that she chose it for that reason. I, instead, ground my choice of enaction more explicitly in the embodied and enactive turn in cognitive science, which conceives of the living body as "a self-producing and self-maintaining system that enacts or brings forth relevance, and that cognitive processes belong to the relational domain of the living body coupled to its environment." (Varela et al., 1991/2016, p. xxv). In this regard, sense making in the consultation (and cognition more generally) is an enculturated, creative, and participatory process (De Jaegher & Di Paolo, 2007; Thompson, 2010). In her study of clinical judgement and the practice of medicine, Katheryn Montgomery (2006, p.199) noted that clinicians' "acts of attending [go] a long way toward creating a therapeutic relationship". This explicitly creative and participatory nature of the general practice consultation was reflected in the views of GPs in my study, presented in interviews.

> S13: I may be wrong, completely wrong there, but it's an observation I think [it's like] if you're kind of doing it like you're acting.
>
> S8: I felt entirely during medical school, and ever since, that I was learning to act, that I was learning a role. Definitely. A clinical role. I often find I put on my stethoscope around my neck and it's like a priest putting on his robes or something. There's something about it that's like transferring to a different role.
>
> S11: A lady came in last Friday, I knew what she had as soon as she had opened her mouth. But I didn't go 'that's what you've got, here's your information sheet, go and read that and goodbye'. I listened to her, I examined her, although I didn't need to… It's listening to their symptoms, and sometimes playing a part. You know, you act like a doctor.

This suggests an important feature of the general practice consultation: it is not, as might traditionally be assumed, only conducted in the indicative mood (things 'as they are'). It is also conducted in the *subjunctive* mood (things 'as if they are'). This, I propose, has implications for general practice medicine.

5.3.5 Subjunctivity

The subjunctive mood is important linguistically as it allows us to meaningfully discuss a situation for which the required antecedents are not necessarily true (if they had done X, then Y would have happened). This is most commonly understood through discussion of counterfactuals. But the subjunctive is not merely constrained to counterfactuals. The inherent layer of past tense morphology (if they had done…) can also be interpreted modally as an "exclusion feature" (Iatridou, 2000, p. 246), which "marks the worlds talked about as distinct from the actual world of the speaker" (von Fintel, 2012, p. 475). This is vital for thinking beyond what is directly in front of us as it allows the consequent of a conditional to be seriously considered even if the antecedent does not hold outside a particular situation, through what is termed *subjunctive conditionality*. The anthropologist Terrence Deacon (1997) goes so far as implying that this marks humans out as a symbolic species, allowing us to think imaginatively.

Such broad anthropological interpretations notwithstanding, in the context of general practice, subjunctive conditionality means that good interpersonal understanding between patient and clinician (the consequent of a conditional) can be seriously considered even if the clinician being genuinely engaged (the antecedent) does not hold outside the consultation (the particular situation). In the subjunctive mood, it does not matter if the clinician is still genuinely engaged out of the practising context; it only matters that they are genuinely engaged during the consultation. To reiterate the words of a GP (S13) in my study it is ok "if you're kind of doing it like you're acting". This echoes Byron Good's (1994, p. 153) critical account of medical knowledge and practice, in which a "subjunctive world" is important because it is one in which "healing is an open possibility".

In the introduction to this chapter, I acknowledged the numerous socio-cultural factors that influence the therapeutic encounter by situating it contextually (as opposed to in dyadic isolation) within the wider framework of person-centred care. The turn towards person-centred care explicitly acknowledges both the patient-as-person and the clinician-as-person. In moving away from a situation in which a patient is "acted on", person-centred care "highlights the importance of knowing the person behind the patient... in order to engage with the person as an active partner" (Ekman et al., 2011, p. 249). Such an approach suggests that there is a 'real' person hiding somewhere behind the mask of the patient, which if the clinician can discover will lead to connection, opening up myriad possibilities for healing. Although I agree with proponents of person-centred care that the paternalistic model of acting on patients is misguided, my subjunctive interpretation of the

therapeutic encounter suggests that the person-centred approach has moved too far towards transcendent sincerity – towards searching for unity in a person – which may be restricting clinical opportunities.

Through my modal interpretation "the subjunctive creates an order that is self-consciously distinct from other possible social worlds" (Seligman, Weller, Puett, & Simon, 2008, p. 20). This allows the clinician to act differently in the consultation than they would elsewhere, which may be beneficial for the patient. As nurse in my study (S7) noted, "I'm not a different person… I'm [just] perhaps a more confident, knowledgeable version of myself than I am at home". And as a GP (S13) suggested, "you can never sort of get into a rut and do the same thing every day. You've got to be imaginative with how you approach people". In his account of the human seriousness of play Victor Turner (1982, p. 93) conceived of this 'acting differently' – of the importance of our imagination – as "*poiesis*, rather than *mimesis*: making, not faking". This meets my Deweyan notion that habits, being flexible not fixed, are creative and transformative. Mol (2002, p.32) acknowledged something like Turner's distinction by rejecting the 'performance' metaphor prevalent in, for example Goffman, noting pejoratively that a performance "may be taken to suggest that there is a backstage, where the real reality is hiding". I echo this rejection of a 'real' reality separated from clinical practice.

Furthermore, if we accept the proposition that consultations are collaboratively enacted, then we also don't want the *patient* to be as they are outside the consultation either. It is beneficial if, in some way, they play their role too. Not the Parsonian role of the docile patient to be 'acted on', but the engaged patient to 'enact with'. I suggest that by practising subjunctively, clinicians can create the conditions to help patients become what Epstein (2017, p. 289) termed a "mindful patient", improving potential for a good treatment outcome. This suggests an interpretation of medical practice in which the patient-person distinction is not seen pejoratively. By both clinician and patient 'acting differently' in a consultation they create a social world which is "temporary, fragile to be sure, but not false – a world where differences can be accommodated, tolerance enacted (if not fully understood) and openness to others maintained." (Seligman, 2010, p. 15). In the words of a nurse (S7) in my study:

> Because, sitting in here, in my uniform, I'm not somebody just wandering down the street or meeting them in the shop or having a cup of coffee. It's like a closed area, and they can sit and talk to me about things they know won't go beyond the door.

In framing interpersonal relationship building as an imaginative and generative process, subjunctivity may also allow clinicians to be more resilient. As one GP (S13)

noted, “GPs who perhaps struggle with projecting something, maybe find the job more stressful… you have to have a persona which you portray, and if you can’t do that I think that it would be exhausting and I think it would finish you”. The importance of a ‘clinical role’ is reflected in the views of other GPs who noted the difficulty in offering medical advice outside the clinical setting:

> S11: I find it difficult if people tackle me for ad hoc consultations outside of work. I change from being my usual ‘self’ in society to being my ‘doctoring self’. But without being in the consulting room they don’t always take it in the same way.
>
> S8: It becomes hard when things overlap, when there’s not a clear defining line. So, for example, if a family member asks you a medical problem, that’s a difficult one, because then I can’t adopt the clinical role at home, and then I’m a bit floundering at times, depending on the issue.

Moreover, clinicians did not take ethical issue with the adoption of different clinical roles insofar as they did not see it as a form of deception. As an HCA (S4) noted, “I don’t think I’m consciously trying to play out, you know, like some sort of role. But I think, just by putting the uniform on, you are in a different role”. As a GP (S13) reflected, “I’m not consciously doing anything. I think it just happens, I do it automatically”, and that “there’s an argument that you lose some sort of social integrity in a way [by acting differently in different situations], but then I think actually that’s who you are, your ability to do that makes you who you are so it doesn’t really matter in that sense”.

5.3.6 Subjunctive medicine

By conducting consultations as much in the subjunctive as the indicative mood, clinicians in my study did not imitate their role but constantly re-made it through collaboratively enacting each consultation anew. I term this mode of clinical practice *subjunctive medicine* and suggest it may be a useful way to sustainably develop the multiple, flexible habits necessary to improve the contextually conceived therapeutic encounter in general practice. To summarise, I propose three principal actions that comprise subjunctive medicine.

1. Conceive of each consultation as collaboratively enacted anew.
2. Exploit the importance of the imagination in developing interpersonal relationships.
3. Explicitly adopt a clinical role to improve resilience.

The co-construction of the therapeutic encounter is a well-worn research area in sociology, anthropology and beyond. What I propose beyond these accounts is that such

co-creation is best achieved not through the narrow 'sincerity' of the indicative, but through the open imagination of the subjunctive.

5.3.7 Strengths and limitations of the study

My in-depth fieldwork in this phase of my thesis permitted a deep understanding of the specific general practice environment, which aided and informed theory generation. The familiarity gained from spending a long period of time with one surgery provided insights I am unlikely to have gained through interviews or focus groups alone. Moreover, I conducted interviews with clinicians in the latter half of my fieldwork period, by which time I had built relationships. This likely improved the data collected in the interviews themselves. By conducting data collection mainly through participant observation, I was able to explore the processes and practices that actually occur in the natural setting of a general practice surgery. This was instrumental in informing my theory generation process.

However, despite the strengths of my study, there were also limitations. First, the general practice surgery in this study is in a small market town with low deprivation and a relatively socio-culturally homogenous population. Second, due to ethical concerns urgent consultations booked on the same day were not included in the study. And third, by focussing on one surgery (for the reasons already stated) the results are localised to one particular community. These three issues must be considered when interpreting my findings more widely.

5.4 Reflexivity

Given the nature of the grounded theory-influenced ethnographic methodology of this phase of the thesis, it is important to be sensitive to and reflect on the ways in which I, as the researcher, have influenced the findings (Engward & Davis, 2015). I do so in four main categories: prior assumptions and experience; distance between researcher and participants; perspective; and knowledge production.

5.4.1 Prior assumptions and experience

Prior to conducting the fieldwork, I had spent little time in a general practice surgery and none in the specific context of research in general practice. My background as an academic health psychologist working across interdisciplinary boundaries certainly affected what I looked for and chose to see in the field. This, coupled with my lack of clinical training, undoubtedly affected the relationships I built with my participants, as I

outline below in the next section. At the outset, I had in mind, I suppose, a reasonably traditional understanding of a general practice surgery as somewhat hierarchical. Furthermore, the fieldwork was conducted at a surgery in a semi-rural setting which, on reflection, may have influenced my findings, insofar as the town itself is outwardly a bucolic, traditional place, which, evoked in me a pastoral feeling. This may, inadvertently, have affected the findings in ways that are difficult to pinpoint.

5.4.2 Distance between researcher and participants

As I outlined in the methods section in this chapter, my ethnography is focused on a community (as a unit of analysis) and success is reliant on building good relationships with members of that community. Such an objective, one could argue, is in conflict with the critical sensibilities of an effective researcher. In spending a year in one general practice surgery I inevitably built relationships with my participants. On the one hand, I think this enabled me to gain interesting data I would not otherwise, because participants were more willing to share information and opinions or felt relaxed in my presence and thus practised in a way not too dissimilar to how they might if I was absent. On the other, such close relationships may have dulled my critical edge. Maybe I drunk the general practice Kool Aid? Maybe I gave the clinicians in my study a free ride? In a way, I think there is truth in both sides of the argument. I explore in more detail the consequences of this below, when discussing knowledge production.

Consequences for knowledge production notwithstanding, one strategy I adopted to artificially insert some distance between myself and the participants, was to take a two-month break (August and September) in the middle of my fieldwork. This allowed me to reflect on and analyse the data away from the surgery, before returning to the field with a renewed perspective.

5.4.3 Perspective

Social scientific accounts of reflexivity often include reflection on the benefits of gaining multiple perspectives on a particular situation, in order to provide a comprehensive account. In some instances – such as when research is explicitly from one perspective for a reason – this is ill-founded. In my case, I attempted to explore the perspectives of both clinicians and patients. This was facilitated by the design of my study, which included observations and interviews/focus groups with both groups. Reflecting on my findings, I think that I have, in part, integrated both perspectives. However, the clinician perspective

is foregrounded and the theory I have produced has most consequences for clinicians not patients. Why is this the case? A simple answer is this: I just spent much more time with clinicians than patients. It was their world. Patients (just as I) were visitors in that world. It is perhaps inevitable then that a clinician perspective should dominate. If one wanted to pursue a more patient-focussed ethnography in a general practice surgery, I think this would have to be explicitly designed from the outset; more explicitly than I did in any case. Otherwise, as in my study, the default perspectives of clinicians are likely to dominate. I do not make a judgement as to whether one perspective is better than another – both are undoubtedly useful. However, given much research in general practice is from a clinician perspective, it may be useful for more patient-focussed ethnographic work to be explicitly planned and conducted with the knowledge that without such explicit planning, a clinician perspective may well dominate.

5.4.4 Knowledge production

Considering how knowledge is produced is a key aspect of reflexivity in research. In these meta-epistemological terms, reflexivity is related to the epistemic consequences of social scientific research practices. Social scientific meta-epistemological accounts of reflexivity are thus focussed on notions of (methodological, epistemological, ontological) transparency and quality. If, following the 'reflexive turn' in social science, we acknowledge the veracity of multiple interpretations, what does it matter what another researcher thinks? What makes my interpretation worthwhile? How do I show that my account was achieved systematically?

On aspect of this is to be open as to the theoretical (i.e. epistemological and perhaps ontological) and methodological assumptions that underpin one's research; I account for these in Chapter 3 and will not repeat those here. Another way of framing the question of knowledge production is similar to that proposed by John McDowell (1996) in his seminal book *Mind and World*: what functions as a tribunal for my findings? In arguing that modern inquiry finds it difficult to give a satisfactory picture of the place of minds in the world (insofar as a belief or judgement has to be, in some way, answerable to the world – it has to be a belief or judgement that things are thus and so), McDowell suggested that common accounts leave us stranded between two illusions. On the one hand the idea that pre-conceptual experience (within a scheme-content dualism) can function as a tribunal (what Wilfrid Sellars called the 'myth of the given'). On the other, a Davidsonian coherentism or Sellarsian retreat to the logical space of reasons.

Some qualitative researchers propose notions such as reliability of coding, 'member-checking' or suchlike. This does, on the face of it, suggest a more systematic process. However, I would argue that doing so smuggles in Sellars' myth of the given, insofar as these notions of 'reliability' suggest there is a pre-interpreted experience out there to be gathered, identified and described. I just don't think that's the case. I did conduct many similar processes – including team data discussion meetings, memo writing, etc – but not with the intention of discarding findings if the team did not agree. Some may propose notions of 'originality'. I agree that novel research is likely to be more interesting, but I think this is a very high bar to set – by this standard much research would fail. And, in any case, originality itself is a slippery concept unlikely to hold up when cross-examined. What, then, was my tribunal function? What makes my findings worthwhile? If, as I think, a scheme-content dualism is untenable, the tribunal function cannot be conducted by 'data' on its own. In fact, it would not make sense to talk of data this way in the first place. But if, as I also think, the logical space of reasons does not float free of experience, the tribunal function cannot be conducted by logical argument alone either. As befits my theoretical framework, my answer is a pragmatist one. The tribunal function is the *conceived* effect: the usefulness of a concept. Do I conceive that my framework of subjunctive medicine will be useful? Will clinicians find it therapeutic? Will it improve the lives of patients? These questions are what drove my process of knowledge production.

More explicitly with respect to my research practice, I return to the issue of the distance between my participants and me and the consequences for knowledge production. I undoubtedly built up close relationships with some of my participants; relationships that persist. This inevitably had a bearing on my attitude towards them. Was I less 'critical' because of this? Yes, probably. However, within the context of my project I do not view that as a terminal problem. Within my pragmatist framework, my orientation was explicitly *anti*-sceptical. Fallibilistic, yes. But nevertheless anti-sceptical. (As I noted previously, these two outlooks side-by-side are arguably the defining feature of pragmatism.) A real risk for all critical social scientists is that such a critical stance descends into scepticism. If the price of avoiding that descent was a partially dulled critical sensibility, I argue that is a price worth paying.

5.5 Conclusion

In this year-long ethnographic study of a general practice surgery in southern England, I had three objectives at the outset: explore the relevant processes and practices

of clinicians in general practice regarding the therapeutic encounter; explore relevant views and experiences of patients and clinicians; and generate theory on how the benefits of the therapeutic encounter are produced and capitalised on in general practice.

Through my findings I propose how clinicians produced and capitalised on the benefits of the therapeutic encounter when confronted by the limits of biomedicine and the structural constraints of general practice. I suggest that clinicians mitigated these constraints by getting into good habits, broadly conceived in two categories: using expert judgement, and taking patients seriously. I further propose that clinicians did not merely will themselves towards these good habits but established and maintained them by intuitively developing a secondary meta habit of enaction. This suggests that the general practice consultation is conducted as much in the subjunctive as the indicative mood. Developing this proposition, I further propose a more general form of medical practice – subjunctive medicine – extolling the value of the co-created social order of the general practice consultation itself. Given the conditions and constraints I outlined in the introduction to this chapter and in Chapter 2, I suggest that conceiving of general medical practice in terms of subjunctive medicine may improve interpersonal understanding, clinician resilience, and treatment outcomes.

At the end of this chapter of largely disregarding the placebo effect, I have generated theory I propose will be useful for general practice – I further develop this theory in Chapter 7. Furthermore, as I noted at the start of this chapter, I propose that such investigation can be useful in informing a more coherent discussion of the central phenomenon of this thesis – the placebo effect. In the next chapter I turn back towards the placebo effect, armed with the findings from both this ethnography and my meta-ethnography from Chapter 4.

Chapter 6 The placebo effect reconsidered

6.1 Introduction

In my meta-ethnography in Chapter 4 I proposed that a placebo is coherently conceived as a process, and further deconstructed the placebo effect towards the healing power of the therapeutic encounter. In my ethnography in Chapter 5 I proposed that general practice clinicians harness this power, in the face of substantial constraints, through a general form of medical practice – subjunctive medicine – whereby consultations are collaboratively enacted. In following this line-of-argument I am some distance from the starting point of "pharmacologically inert substances… having a psychological effect" (Beecher, 1955, p. 1602). In this chapter I return more explicitly to the placebo effect.

Commenting on the title of a famous (2011) *New Yorker* article on the placebo effect – *The Power of Nothing* – Miller (2018, p. 338) noted that "this title may have been tongue-in-cheek, but literally, it is absurd. It flies in the face of the ancient philosophical maxim *ex nihilo nihil fit* – out of nothing, nothing comes". However, the notion of 'the power of nothing' is, in fact, exactly what the placebo effect encapsulates. In dismissing 'the power of nothing' – and dismissing honest attempts to make sense of it – we are left with conceptual confusion. In this chapter I aim to show that the findings from my meta-ethnography and ethnography can inform an explication of the ontological conditions for the placebo effect (the conditions for its very existence). And that through such an explication, 'the power of nothing' can be re-interpreted logically: that the 'absurdity' Miller highlighted (and the framework of medical practice it is predicated on) can be overcome.

To anticipate, in developing the process ontological framework outlined in my meta-ethnography, and the framework of subjunctive medicine outlined in my ethnography, I propose that an alternative, expansive naturalist framework for general medical practice can accommodate phenomena the placebo effect purports to encompass. In so doing, I conclude that the placebo effect is, in-itself, an unnecessary contradistinction. My argument in this chapter, therefore, supports the tentative proposition from my meta-ethnography that placebo terminology remains, in practice, unnecessary and confusing. To wit, my account is ultimately in the eliminativist tradition with regard to the coherence and usefulness of direct 'placebo' treatment (e.g. Gøtzsche, 1994; Nunn, 2009a; Nunn, 2009c; Turner, 2012), but suggests wider consequences for general practice.

Before continuing I briefly note that ontology is rarely mentioned in placebo studies research. This is likely because in the disciplines that dominate placebo studies research – e.g. psychology, neuroscience, clinical medicine – it is often deemed superfluous to scientific investigation. Aware of these kinds of argument, the philosopher of science Ian Hacking (2004, p. 1) noted that "and yet, and yet: suppose we want to talk in a quite general way about all types of objects, and what makes it possible for them to come into being. It is convenient to group them together by talking about 'what there is' or ontology". Here I use Hacking's notion of ontology as a convenient way of talking about 'objects coming into being' to inform and frame my account of the placebo effect. With Hacking (2004, p. 11) – and in line with the pragmatist theoretical framework for this thesis – my use of ontology is contextual and applied, inasmuch as it "is concerned with objects or their effects which do not exist in any recognisable form until they are objects of scientific study"[9].

6.2 The placebo process

The findings from my meta-ethnography highlighted the conceptual confusion that exists in placebo studies research, most notably on the definition of a placebo. Through interpreting and synthesising my findings, I suggested that modern conceptions of the placebo effect phenomenon – grounded in, for example, meaning responses (Brody, 1997; Hutchinson & Moerman, 2018; Moerman, 2002; Moerman & Jonas, 2002), ritual theory (Kaptchuk, 2002; Ostenfeld-Rosenthal, 2012), motor intentionality (Frenkel, 2008), embodiment (Thompson et al., 2009), enactivism (Ongaro & Ward, 2017), or more specifically the relativised incidental features of a treatment (Grünbaum, 1986; Howick, 2017) – rely on an often implicit ontological move from substance to process. To reiterate the argument from my meta-ethnography in simple terms, when we talk of a placebo we are not talking of *something* being given or taken, but *some-process* being conducted, performed or enacted by and between clinicians and patients. For example, as colleagues and I have argued elsewhere, even in the classic case of a sugar pill being given for a headache, the placebo (in the sense of a vehicle for the 'placebo effect') is not the pill itself but the whole treatment process of the giving of the pill, including the people involved and the environment and history in which the giving is situated (Ainsworth et al., 2019).

[9] Informed by recent conceptions of science focussed on systematicity and practice as outlined in my theoretical framework (e.g. Haack, 2003; Hoyningen-Huene, 2008), by 'scientific study' I reiterate that I mean a broad notion of *Wissenschaft* in its entirety, not just a narrow scientism.

The concept of a placebo breaks down when we try to move past the level of a whole treatment process to isolated substances or procedures; it may in fact be this particular issue that has led some researchers to abandon attempts to define the placebo in-itself. After all, if there is no placebo 'thing', what exactly is the object of inquiry at the centre of all of this? To address this issue, and remain coherent with my process ontological framework, I adopt the definition of an object proposed by John Dewey.

6.2.1 The object of inquiry: an event with meanings

In his seminal work *Experience and Nature*, Dewey (1925/2013) explored the relationships between thought, action, and the environment, seeking to overcome the traditional separation of experience and nature with a notion of continuity. As part of this project he proposed that "objects are events with meanings… all the infinitely multifarious subject-matter of discourse designable by common nouns, verbs and their qualifiers." (Dewey, 1925/2013, p. 318). Extrapolating this broad notion of the object of inquiry to placebo studies research fits the process nature of the phenomenon I am proposing. Moreover, Dewey (1925/2013, p. 324) suggested that because "events are present and operative *anyway*; what concerns us is their meanings expressed in expectations, beliefs, inferences, regarding their potentialities". Grounded in this Deweyan definition of the object of inquiry, I start here by conceiving of the placebo broadly as a treatment process (event) with meanings (expressed variously) regarding its 'potentiality'

In adopting such a Deweyan definition I propose a central object of inquiry coherent with my meta-ethnographic findings. Beyond this I introduce the notion of 'potentiality'. However, at this stage I must state that the first move neither defines a placebo (inasmuch as it does not delineate placebo from other treatment processes), nor explains the 'power of nothing' I suggest is central to the placebo effect. It is, though, a necessary first step in my account of (accommodating) the placebo effect. The later notion of 'potentiality' will be a central foil for the development of this account.

6.2.2 The move from substance to process reiterated

The philosopher Robin Nunn (2009c, p. 50) derided the notion of the placebo effect without a placebo as "an Alice-in-Wonderland thing", suggesting that "paradoxes are what come out when you talk in terms of placebo". In a similar vein, in a recent article revising his previous views, Miller (2018, p. 345) argued that "the placebo concept is inherently confusing [and] it would be desirable to abandon it entirely". However, unlike Nunn,

Miller thinks that we can't just eliminate the placebo effect because "it is entrenched in biomedical discourse: it taps deep roots that underlie the design and interpretation of randomized controlled trials". Miller agrees with the eliminativist position on the paradox of the placebo effect, but seeks a solution in limiting it "to situations in which deliberate placebo interventions are deployed". This 'reining in' of the placebo effect – in stark contrast to Miller's previous views (e.g., Colloca & Miller, 2011a; Kaptchuk & Miller, 2015; Miller & Brody, 2011; Miller & Colloca, 2009, 2010; Miller et al., 2013) – excludes wider contexts in which the placebo effect is often considered, such as benefits derived from good communication in the clinician-patient relationship, or beneficial 'psychosomatic' treatment effects that are not deemed efficacious by mainstream medical theories. On the one hand this approach seems reasonable; as I noted in my meta-ethnography and elsewhere (Hardman et al., 2019), we do not need the placebo effect to explain what's going on in the wider contexts Miller describes above. On the other, however, we are left with the difficult task of defining "deliberate placebo interventions" in themselves.

The difficult task of defining deliberate placebo interventions notwithstanding, taking a narrow approach to the placebo phenomenon can be helpful in eliminating some conceptual confusion. Nevertheless, even when adopting such a narrow approach we are still left with the problem of explaining the 'power of nothing'. Miller (2018, p. 338) suggests that the 'powerful placebo' (the title of Beecher's (1955) seminal article) "misattributes power to the placebo intervention, which has no inherent therapeutic power". Instead, Miller suggests that "while there is nothing *in* the placebo that generates a placebo effect, there must be something *about* the placebo that is psychologically and somatically effective when a placebo effect is generated". Miller's choice of preposition (*about* rather than *in*) in a sense reflects my ontological move from substance to process.

If we define a placebo as a substance then we are saying that it differs in kind from other things and thus there must be something *in* it that makes it a placebo. But as Miller notes, this is paradoxical. However, if we define a placebo as a process we are saying that it differs in kind not from other things but from *itself* and thus there must be something *about* it that makes it a placebo. Using an example I presented in Chapter 4, a sugar pill is not a placebo when put in a cup of tea (it's merely a sweetener) but it is when given for a headache. It is a placebo in one instance and not in another. We cannot, therefore, say that the sugar pill is itself the placebo, we must instead say that the process of the giving or taking of the pill in context is the placebo. The substance/process distinction can be further explained through its implications for how placebo effects are caused.

6.2.3 Cause and effect

When understood as a substance (or procedure) with efficacy in-itself, a placebo can be considered in terms amenable to a common understanding of medicine: a clinician conceives of the possible effect a placebo will have, they then give the placebo, which causes the real placebo effect. In these terms the cause of the placebo effect is logically understood as inherent to the substance or procedure itself. Within this model, in the paradigm case of placebo analgesia whereby "a substance known to be nonanalgesic (e.g., saline solution) is administered, and the subject is told that it is a powerful painkiller." (Amanzio & Benedetti, 1999, p. 484), the cause would be in the substance itself. However, unlike traditional analgesia whereby the causal mechanism (such as an opioid binding to a opioid receptor) can reasonably be considered inherent to the substance (such as Fentanyl), in placebo analgesia the causal 'mechanism' (usually conceived as expectancy or learning/conditioning) is situated in the context of the therapeutic act (Benedetti, 2014; Klinger, Colloca, Bingel, & Flor, 2014; Pollo & Benedetti, 2012).

As I have argued, and much placebo studies research suggests, a placebo substance "has no inherent therapeutic power" Miller (2018, p. 338). Therefore, the mechanistic model of cause and effect, outlined above, violates "a fundamental principle of causality… that an effect cannot have more reality than its cause" (Hardt, 1993, p. 17). We cannot have the placebo effect without a placebo, on that I agree with Miller's recent 'reining in' of the placebo effect. But we cannot have the placebo effect with a placebo substance either. An effect having more reality than its cause is, in essence, the placebo paradox. Placebo substances violate this principle and thus must be discarded from meaningful discussion.

This proposition does not seem contentious as almost no placebo studies researcher would claim that it is the 'inert pill' itself causing the 'placebo effect'. Despite this, as I outlined in Chapter 2 and findings from my meta-ethnography suggest, both placebo studies researchers and clinicians still talk about placebos in substance terms. This issue notwithstanding, to avoid the placebo paradox of an effect having more reality than its cause, we still need a positive (process) account in which the causes of the placebo effect are as real as the effect itself. I provide the basis of this account in the next section.

6.3 Naturalising the 'power of nothing'

To reiterate, my process framework means that, in ontological terms, a placebo is not a thing that exists (being) but a process that is always coming into being (becoming). This

ontological move is not made explicit in placebo studies research, but I suggest it is vital to demystify and explain the placebo effect. Furthermore, I propose that re-conceptualising the ontological *conditions* for the placebo effect can dissolve the placebo paradox by accounting for the reality of both the placebo effect and its causes. I do so through a synthesis of Charles Sanders Peirce's concept of virtuality, and Gilles Deleuze's actual-virtual modal distinction; both accounts can be situated in the broad tradition of process ontology (Rescher, 1996).

6.3.1 Virtuality

Peirce had a longstanding interest in the concept of virtuality, which he considered a vital part of his philosophical system. In an entry for the Dictionary of Philosophy and Psychology, he defined what he conceived as the proper meaning of the virtual:

> (1) A virtual X (where X is a common noun) is something, not an X, which has the efficiency (virtus) of an X. This is the proper meaning of the word; but (2) it has been seriously confounded with 'potential,' which is almost its contrary. For the potential X is of the nature of X, but is without actual efficiency.
>
> (Peirce, 1902, p. 763)

For Peirce, in contradistinction to the possible, the virtual is not defined as some limited, unrealised version of the 'real'. Affirming the 'efficiency' of the virtual is another way for Peirce to say that thoughts and general principles are operative in nature. Or, in simpler, more practical terms, that "words produce physical effects" (Peirce, 1903/1998e, p. 184). Peirce made this point in his 1903 Harvard lectures by referring to Patrick Henry's famous revolutionary call-to-arms[10], noting that "Words then do produce physical effects. It is madness to deny it… That thoughts act on the physical world and *conversely*, is one of the most familiar facts. Those who deny it are persons with whom theories are stronger than facts" (Peirce, 1903/1998e, p. 184). Here we can see a parallel with the placebo effect. The words a clinician uses *can* have an effect on the pain a patient feels or their level of anxiety, even if this is difficult to prove in an RCT.

The concept of the reality of the virtual was developed by the French philosopher Gilles Deleuze, who explicitly contrasted the virtual-actual distinction with the possible-real. In *Difference and Repetition*, Deleuze (1968/2014, p. 272) said:

[10] Henry's famous 1775 speech to the to the Second Virginia Convention – including the line "Give me liberty, or give me death!" – purportedly persuaded the convention to commit troops to the American revolutionary war.

> The virtual is opposed not to the real but to the actual. The virtual is fully real in so far as it is virtual. Exactly what Proust said of states of resonance[11] must be said of the virtual: 'Real without being actual, ideal without being abstract'; and symbolic without being fictional. Indeed, the virtual must be defined as strictly a part of the real object – as though the object had one part of itself in the virtual into which it plunged as though into an objective dimension.

More explicitly than Peirce, Deleuze sought to distinguish the virtual from the possible and ground a process account of nature – amenable to my process placebo definition – in the *movement* of how the virtual becomes actual: which he termed the process of actualisation.

6.3.2 The actualisation of the virtual

Following Peirce's notion that the virtual is real (inasmuch as it is operative in nature), Deleuze explicated how the virtual is actualised in comparison to how the possible is realised:

> The possible is opposed to the real; the process undergone by the possible is therefore a 'realisation'. By contrast, the virtual is not opposed to the real; it possesses a full reality by itself. The process that it undergoes is that of actualisation. It would be wrong to see only a verbal dispute here: it is a question of existence itself. Every time we pose the question in terms of possible and real, we are forced to conceive of existence as a brute eruption, a pure act or leap which always occurs behind our backs and is subject to a law of all or nothing.
>
> (Deleuze, 1968/2014, p. 275)

As Deleuze noted, replacing the possible-real distinction with the virtual-actual one is more than mere 'verbal dispute'. Realisation is a process of the same thing becoming real, it is mimetic; however, because actualisation involves a movement of one real thing to another, it is creative and generative (Deleuze, 1968/2014; Smith, 2012). In another sense we can say that "the virtual is the becoming specific to open systems in contrast to the realm of possibility which is always specific to matter and to closed systems." (Ansell Pearson, 1999, p. 70). Considered at a biological level, although an organism is demarcated from its surroundings:

> at the same time, by transgressing its limits, the organism gains an active relationship with its environment. Peripheral organs and outer surfaces serve the purpose of continual exchange and communication with the environment, whether this occurs through the metabolism or the functional cycle of perception and motion.
>
> (Fuchs, 2018, p. 93)

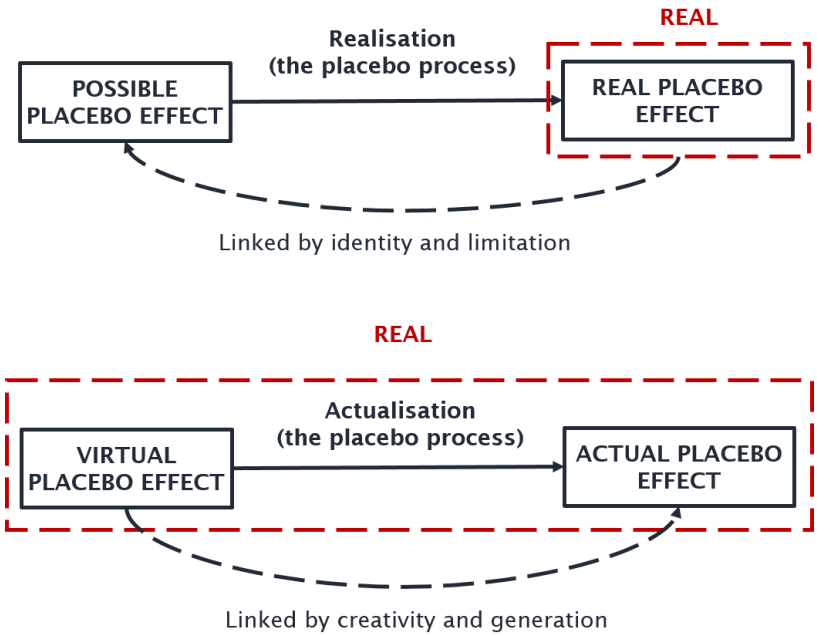
[11] Peirce also used resonance as an example of virtuality.

Consider this with regard to the dominant theoretical explanation of the placebo effect – response-expectancy. For Kirsch (2018, p. 82), response-expectancies are "predictions of one's own nonvolitional responses (i.e., automatic reactions) to events", as opposed to stimulus expectancies, which are "anticipations of external events". In this model, an expectancy is generally held to mean "a consciously accessible representation of a physiological outcome, which the expectancy is supposed to trigger" (Ongaro & Ward, 2017, p. 511). In the case of a possible expectation being realised in placebo analgesia, therefore, the possible feeling of pain relief (represented in consciousness) is realised (i.e. manifest in measurable changes, measured howsoever we choose – physiologically, behaviourally, etc.) by these representations in consciousness standing "in inferential relations to the contents of other beliefs" (Ongaro & Ward, 2017, p. 512). The response to the expectancy is then in this model, the movement of the realisation of the possible.

However, even as Kirsch himself says, "the magnitude of placebo effects has been shown to be affected by verbal information, conditioning procedures, observational learning, response-expectancies, and the therapeutic relationship." (Kirsch, 2018, p. 88). Within this 'integrative model', it seems misleading to say that the placebo effect is a process of a possible expectancy being realised. An expectancy is merely one aspect of a dynamic system of interacting effects: as other researchers have noted, there are many instances of the placebo effect which the propositional nature of expectancy theory cannot account for (Frenkel, 2008; Haug, 2011; Hutchinson & Moerman, 2018; Ongaro & Ward, 2017). For example, in one study where an injection of saline solution elicited respiratory depression effects (a typical side effect of narcotics) despite the experimental procedure not producing any expectations (Benedetti, Amanzio, Baldi, Casadio, & Maggi, 1999); and in another where responses to thermal pain were mediated by both explicit and non-conscious cues of high and low pain (Jensen et al., 2012).

Can we say, then, that response to expectancy is instead the creative and generative process of actualisation? We could, but it seems more accurate to say that response to expectancy is *one aspect* of actualisation. In the actualisation model, expectancy does not have to account for *all* the placebo effect, because the process of actualisation is a process of bringing something new into being. Unlike the relationship between the possible and the real, the virtual placebo effect is not identical to (or, more accurately, limited by) the actual one (see Figure 5). Given the process, contextual and interactional character of the placebo effect, and the distributed nature of its causes, the actualisation model of the placebo effect (representing an open dynamic system) is more coherent than the realisation model (representing a closed mechanistic system).

Figure 5: Actualising the placebo effect



Within a model whereby the placebo effect is actualised, something new is created from something else in an emerging dynamic system; this dissolves the placebo paradox of an effect having more reality than its cause. The 'power of nothing' is paradoxical only in the model of the possible being realised, not the virtual being actualised. Adopting this model may help dissolve the theoretical debates between competing accounts of the placebo effect and provide the ontological framework for an integrative model. Moreover, these ontological conditions underpin a recent enactive account of the placebo effect, insofar as "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." (Ongaro & Ward, 2017, p. 528). The ontological movement of actualisation, therefore, can be considered analogous with saying that the placebo effect is *enacted.* This in turn directly links the ontological movement I suggest underpins the placebo effect, with the framework of subjunctive medicine I proposed in my ethnography.

Before pursuing this link between the placebo effect and subjunctive medicine, I expand on the central ontological consequence from my account: that culturally and cognitively conceived objects are as real as those conceived materially. This expanded naturalism is a version of scholastic realism, which underpins Deleuze's, and most directly Peirce's framework. Through an explication of a Peircean version of scholastic realism, I explicitly connect two recent theoretical models of the placebo effect – predictive

processing and semiotics – with the enactive ontological movement of actualisation. In so doing I strengthen the case for actualisation as the ontological movement underpinning the placebo effect.

6.3.3 The reality of symbols and predictions

The ontological movement of actualisation underpinning the placebo effect is predicated on a (scholastic) expansion of reality uncommon in medicine. In a similar vein, Miller (2018, p. 336) theorised that "distinguishing the specific efficacy of treatments based on their inherent properties from the placebo effect can be traced to a key element in the metaphysics of modern science: the distinction between primary and secondary properties". In this way "primary properties are those that really belong to an object, such as its size and shape. Secondary properties, such as color and smell, appear to belong to an object, but are not in the object as understood by physical science". Noting that the placebo effect can be broadly located in the interaction between clinicians and patients, or at least involving the thoughts of patients, Miller suggested that placebo effects are analogous to secondary properties. Here I suggest that a more precise Peircean expansion of reality, related to Miller's argument, can strengthen the case for actualisation as the ontological movement underpinning the placebo effect.

6.3.3.1 Peirce's categories

Peirce and Deleuze both held that the virtual is as real as the actual. I suggest this view informs a coherent reconceptualization of the ontological conditions for the placebo effect. Central to Peirce's concept of the virtual is an expanded (scholastic) realism involving "the three categories of Firstness, Secondness, and Thirdness, or Quality, Reaction, and Representation" (Peirce, 1903/1998e, p. 179). Peirce's doctrine of categories is complex, but the essential point for my argument is that all three categories are irreducible: "While Firstness, Secondness, and Thirdness are never found apart from one another, they each have an independent status so that they are prior to and not brought together in or supported by a subject that is metaphysically prior." (Boler, 2004, p. 73). This irreducibility is important for both the concept of virtuality and thus the placebo effect.

Firstness is "the Idea of that which is such as it is regardless of anything else. That is to say, it is a *Quality* of a feeling" (Peirce, 1903/1998a, p. 160); something like, for example, a sense of struggle we cannot precisely articulate. We can equate Firstness with the virtual, inasmuch as it is real without being actual. Secondness is a "*Reaction* as an

element of the Phenomenon" (Peirce, 1903/1998a, p. 160); "it is brute existence and hence is the modality of actuality" (Misak, 2004, p. 21). Thirdness is a "Medium, between a Second and its First. That is to say a Representation as an element of the Phenomenon." (Peirce, 1903/1998a, p. 160). In another sense, Thirdness corresponds to laws, dispositions, or general principles. And as Peirce noted, "that general principles are really operative in nature… is the doctrine of scholastic realism." (Peirce, 1903/1998e, p. 183).

Peirce famously argued that Thirdness is really operative in nature in his fourth 1903 Harvard Lecture, *The Seven Systems of Metaphysics*, by predicting that in letting go of a stone it would drop to the floor: "I will prove that I can make a correct prediction by actual trial if you like. But I see by your faces that you all think it will be a very silly experiment." (Peirce, 1903/1998e, p. 181). Peirce accepted that the proposition that all solid bodies will fall to the floor without upward force is a representation, and thus is not *ipso facto* real. But against the nominalist view, he claimed we cannot say it is a *mere* representation.

> With overwhelming uniformity, in our past experience, direct and indirect, stones left free to fall have fallen. Thereupon two hypotheses only are open to us. Either: first, the uniformity with which those stones have fallen has been due to mere chance and affords no ground whatever, not the slightest, for any expectation that the next stone that shall be let go will fall; or, second, the uniformity with which stones have fallen has been due to *some active principle*, in which case it would be a strange coincidence that I should cease to act at the moment my prediction was based upon it.
>
> (Peirce, 1903/1998e, p. 183)

Developing the future-orientation of Thirdness, in later work Peirce would equate it with a broad pragmatist notion of cognition, insofar as "Thirdness consists in the formation of a habit" (Peirce, 1903/1998f, p. 269). Furthermore, foreshadowing recent predictive accounts of the mind in cognitive science (e.g., Hohwy, 2013), Peirce thought that cognition is a process of constant prediction making, and that in most instances these predictions are fulfilled. Given the central role such a mediating process has in our existence, Peirce felt the '*mere*' a nominalist would give to a representation (or prediction, or cognition more generally) to be misplaced. Without Thirdness, there is no mediation process and we are left with possibilities being realised in a direct mechanistic relationship. With Thirdness, we are able to say that virtualities are actualised in a creative and generative way. Peirce's ontological categories, therefore, provide an explication of the model of the actualisation of the virtual. Thirdness (laws, dispositions, principles) mediates between Firstness (virtuality) and Secondness (actuality) (Misak, 2004). In defending the

reality of Thirdness, Pierce in turn defends the reality of the movement of the actualisation of the virtual, and thus provides the ontological conditions for naturalising the 'power of nothing'.

Peirce's doctrine of categories supports the notion that the movement of the actualisation of the virtual is real (inasmuch as it is operative in nature) and predictive in character. Moreover, Peirce explicitly linked his doctrine of categories with his theory of signs, or 'semiotics'. To further explicate my model of actualisation, I now explore two accounts of the placebo effect grounded in semiotics (Miller & Colloca, 2010) and prediction (Ongaro & Kaptchuk, 2019).

6.3.3.2 Semiotics

In attempting to bridge meaning, psychological and neurobiological accounts of the placebo effect, Miller and Colloca (2010) developed a semiotic approach grounded in Peirce's theory of signs. Peirce held that signs function in a triadic relationship, involving the sign itself, the object the sign signifies, and an interpreter of the sign. Peirce classified the sign itself in three types (Misak, 2004): *icons*, which signify their objects by similarity; *indices*, which signify their objects by connection or causality; and *symbols*, which signify their object by convention, principle, or habitual rule. From these descriptions it is easy to see how Peirce related sign type to his categories: icons reflect the quality of Firstness, indices the reaction of Secondness, and symbols the mediation of Thirdness.

In Miller and Colloca's account, the different sign types can be used to encompass the different explanations of the placebo effect:

> The semiotic approach can incorporate and replace the meaning model. It enhances the meaning model by explaining meaning in terms of the functioning of signs and by connecting interpretations of signs with psychological mechanisms of learning, such as conditioning and expectancy, that can promote placebo effects.
>
> (Miller & Colloca, 2010, p. 515)

Within this account, icons reflect non-propositional meaning, indices reflect conditioning, and symbols reflect expectancy. Miller and Colloca suggested that the language of signs can help us dispense with the confusing and paradoxical language of the placebo effect, such as 'inert', 'inactive' and 'non-specific'. This is reasonable at first glance, but it also begs the question that, once we have started talking in terms of signs, what work is the placebo effect concept actually doing? Moreover, although it seems reasonable to note that sign types are independent inasmuch as they are irreducible, in line with Peirce's doctrine of categories they are not unconnected. Icons, indexes and symbols interact in a dynamic

system, and so it seems unlikely that we can credibly account for the placebo effect by taking each sign type as an explanation by itself, as placebo research often currently does with conditioning, expectation, etc. The interaction of sign types is likely to be as important as the sign types themselves.

6.3.3.3 Predictive processing

Given the predictive character of the actualisation of the virtual, perhaps a more promising account that coheres with the actualisation model is a recent predictive processing account of the placebo effect (Ongaro & Kaptchuk, 2019). Predictive processing is a theory in cognitive science that takes the increasingly influential neuroscientific theory that the brain is a Bayesian hypothesis testing machine constantly minimising prediction errors about sensory input (Friston, 2005; Hohwy, 2013), and situates it in an action-oriented, embodied account of the mind affecting and being affected by its environment (Clark, 2013; Clark, 2016).

This account of the interaction of descending predictions and ascending signals suggests that, for example, we don't sense pain "directly from the peripheral body…[but] feel pain because we predict that we are in pain, based on an integration of sensory inputs, prior experience, and contextual cues." (Ongaro & Kaptchuk, 2019, p. 2). Conversely with respect to the placebo effect, "the experience of recovery is not the direct consequence of the restoration of bodily function, but is itself the process of inferring that certain interoceptive changes are signs that this improvement is taking place." (Ongaro & Kaptchuk, 2019, p. 2).

The movement of the actualisation of the virtual – Peirce's category of Thirdness – provides the ontological conditions for a predictive processing account of the placebo effect within an expanded naturalism whereby predictions, representations, and dispositions are afforded as much reality as the neuronal pathways by which they could be characterised. However, much like other promising (and related) accounts of the placebo effect, such as enactivism and semiotics, a predictive processing account does not delineate placebo from non-placebo. Rather, it provides a credible framework in which all treatment can be accommodated in the same inferential process. As I will argue in the next section, this implies that the placebo is only definable in contradistinction to 'characteristic' treatment; yet because credible modern accounts of the placebo effect – ontologically underpinned by the actualisation of the virtual – seek to break down this distinction, a credible definition of the placebo effect is in jeopardy.

6.4 The placebo as an untenable contradistinction

In exploring recent accounts of the placebo effect and their grounding in scholastic realism (an expanded naturalism), I propose that the movement of the actualisation of the virtual provides the ontological conditions for the placebo effect. At this stage I return to two key questions Miller outlined with regard to the placebo phenomenon: "(1) is there a coherent and useful concept of the placebo effect? And (2) what is the legitimate scope (and limits) of the placebo effect?" (Miller, 2018, p. 336).

The two questions are interrelated. As I noted in Chapter 4, a central issue with regard to a useful concept of the placebo effect is how to delineate placebo from non-placebo. The only promising approach has been negative – to define the placebo as the incidental features of a treatment in contradistinction to its characteristic feature (Grünbaum, 1986; Howick, 2017). First, this does not account for a narrow definition of the placebo effect focussed on direct placebo treatment, so it is questionable in the first place whether the placebo concept in the wider context of treatment is useful. Second, as I have noted, in the context of my actualisation model the account is in-itself problematic.

Within the actualisation model, the 'incidental' features of a treatment (the placebo) would be accounted for in the process of actualisation. But in defining them in contradistinction to a 'characteristic' feature, we also have to account for that. This is problematic because the characteristic feature can only be conceived within a model of realisation, insofar as the characteristic feature of a treatment (say the bacteriolytic properties of penicillin) is only meaningfully characteristic if the possible effect is connected by identity to the real effect. But this is not how treatment effects work. The 'characteristic' and 'incidental' features of treatment are dynamically interconnected in generating treatment effects, and thus we cannot have two different sets of ontological conditions underpinning them.

For simple treatments the realisation model is perfectly adequate as a heuristic. However, for complex treatments, multi-morbid patients, patients with chronic conditions, or just conditions whereby medicine has not found a reliable cure, such a linear, mechanistic model is found wanting (Ongaro & Kaptchuk, 2019). Given the propensity of all these factors in general practice, as shown in Chapter 5, the realisation model is particularly flawed in that setting. The only useful solution, therefore, is to have one coherent set of ontological conditions that can account for both characteristic and incidental features. As I have argued, the realisation model does not provide the

ontological conditions for the placebo effect and thus must be discarded, but the actualisation model does and so can be considered.

What, therefore, does this mean for the placebo effect? 'Placebo' treatment can only be coherently individuated negatively in contradistinction with 'characteristic' treatment. But a coherent framework that accounts for the placebo effect does not allow the ontological conditions for this negative individuation. Therefore, although the actualisation model (expounded in placebo studies research through enactivism, predictive processing, and semiotics) does provide the ontological conditions for phenomena the placebo effect purports to encompass, these conditions reaffirm the placebo effect as paradoxical. We cannot have an account of the placebo effect in-itself, because the placebo effect only makes sense within an interacting dynamic system; as others have claimed (albeit in defence of the placebo effect) the placebo effect is a relative and relational concept (Grünbaum, 1986; Howick, 2017). Instead we need an expansive (naturalist) framework for *all* general medical practice (or more broadly beyond the scope of this thesis, 'healing'), in which the 'placebo effect' can be accommodated. In other words, we need a framework that can account for all forms of symbolic, predictive, and enactively conceived healing processes, including those not currently explained by the mechanistic realisation model of modern medicine. Extant accounts such as semiotics and predictive processing may provide this. However, I argue that a broader framework can be found in the *subjunctive medicine* of my ethnography.

6.5 Conclusion

Before further explicating subjunctive medicine as an expansive naturalist framework for general practice in Chapter 7, I note that I have reached a conclusion on the coherence and usefulness of the placebo effect. Despite my original intention to investigate how the placebo effect might be harnessed to improve patient care, findings from my thesis suggest that the concept is paradoxical (inasmuch as a placebo is an untenable contradistinction) and thus should be avoided. This, as I foresaw, places my account in the eliminativist tradition of placebo studies research (e.g., Gøtzsche, 1994; Nunn, 2009a; Nunn, 2009c; Turner, 2012). Some researchers disagree directly with my position and claim that there is now a stable and useful 'paradigm' in placebo studies research (e.g. Blease, 2018; Blease & Annoni, 2019). Others agree with my position but think the concept of the placebo effect is too entrenched in biomedical discourse to abandon (e.g. Miller, 2018).

In response to the first disagreement, I initially note that this is a contentious position given the state of placebo studies research as outlined in this thesis and elsewhere. In their recent *Roadmap for Placebo Studies*, Blease & Annoni (2019, p. 22) conclude that (having purportedly already philosophically accounted for extant competing conceptual accounts of the placebo effect) placebo studies researchers have achieved relative conceptual stability and propose that "proponents of revision to placebo concepts have two choices. Either they can argue that basic scientific research in placebo studies is lacking; or that serious empirical problems arise with current conceptualizations of placebo effects". I suggest this is a bad argument in four ways.

First, they do not discuss the issue highlighted in this thesis that a placebo can only be defined in contradistinction to 'characteristic' treatment, despite the difficulty in disaggregating treatment in this way. Second, I suggest that they haven't philosophically accounted for competing conceptual accounts of the placebo phenomenon. They neither interrogate the most compelling recent conceptual accounts of the placebo phenomenon – enactivism (Ongaro & Ward, 2017), semiotics (Miller & Colloca, 2010), or predictive processing (Ongaro & Kaptchuk, 2019) – nor provide a meaningful rebuttal to the manifest critiques of the limits of the propositional character of expectancy theory (e.g., Frenkel, 2008; Haug, 2011; Hutchinson & Moerman, 2018; Ongaro & Ward, 2017). Instead they merely offer some comment on relativity (Grünbaum, 1986; Howick, 2017), meaning models (Brody, 1997; Hutchinson & Moerman, 2018; Moerman & Jonas, 2002), and conceptual eliminativism (Nunn, 2009a, 2009c; Turner, 2012). Third, their insular focus on placebo studies *researchers* excludes research highlighting the conceptual confusion about placebos that exists for members of the public (e.g. Bishop, Aizlewood, et al., 2014; Hardman et al., 2019); this presents substantial problems given the importance of patient interaction for the placebo effect. Last, their account is in conflict with my meta-ethnography[12] and another recent systematic review highlighting how confused the placebo concept is in clinical practice (Linde et al., 2018). These arguably represent "serious empirical problems… with current conceptualizations of placebo effects" (Blease & Annoni, 2019, p. 22) which, on the authors' own terms, threaten to undermine the notion of conceptual stability in placebo studies research.

In response to the second disagreement that the placebo effect concept is entrenched in biomedical discourse, I respond in two ways. First, if a detrimental paradox *is*

[12] The relevant part of my meta-ethnography from this thesis was published in 2018 – the reference is quoted in the 'Research Thesis: Declaration of Authorship' section of this thesis.

entrenched the focus should be on overcoming not accepting it (Nunn, 2009a, 2009c). Second, as findings from my ethnography imply, the placebo effect concept is arguably only entrenched in clinical research, not clinical practice. In a year's fieldwork investigating phenomena the placebo effect purports to encompass, placebo terminology was not widely used by either clinicians or patients. If the placebo effect is purposely brought up then, as I and other researchers have shown (e.g., Bishop, Aizlewood, et al., 2014; Feffer et al., 2016; Hardman et al., 2019), paradox and confusion abounds. But in clinical practice the language of the placebo effect seems uncommon. From the perspective of placebo studies research this is problematic. But from the perspective of clinicians and patients it merely unmasks the placebo effect as a pseudo-problem that should be discarded. Clinicians and patients have more meaningful and coherent ways of talking about phenomena the placebo effect purports to encompass, which in my ethnography I suggest occur in the subjunctive mood. In Chapter 7 I return to explicating the consequences of subjunctivity for general practice.

Chapter 7 Beyond the placebo effect

7.1 Introduction

In Chapter 6 I concluded that the placebo effect is an untenable concept, inasmuch as a 'placebo' represents a contradistinction with the 'characteristic' feature of a treatment. In particular I noted that such a contradistinction belies the fact that 'characteristic' and 'incidental' features of treatment are interconnected in an emergent, dynamic system. Although I accept that, in simple cases, it is reasonable to focus merely on the characteristic feature of treatment (ontologically grounded in the movement of realisation), I suggest that a more complete account of medical practice – one that can accommodate phenomena the placebo effect purports to encompass – can be found in my proposed framework of *subjunctive medicine* (ontologically grounded in the movement of actualisation).

Despite the paradoxical character of the placebo effect and my practical rejection of the concept, here I suggest that briefly exploring the motivations for promoting placebo treatment, and the consequences of doing so, strengthen the argument for adopting an expansive naturalist framework for general practice. Therefore, in this chapter I first explore these motivations and consequences, before going beyond the placebo effect and explicating in more detail the framework of subjunctive medicine. To anticipate, I propose that rather than being viable as a treatment in-itself (which I have already rejected as a proposition in Chapter 6), a 'placebo' functions as a marker for the limits of a mechanistic model of medicine. The inherent paradox of the placebo effect is a warning that such a mechanistic approach (which I accept as a reasonable heuristic in simple cases) can overreach itself. In response to this warning, I propose that the answer is not a bifurcated approach to general medical practice (traditionally captured in the notion that general practice is part 'science' and part 'art'), but an expansive naturalist framework in which all general practice can be accommodated.

7.2 Thinking in terms of the placebo effect

In exploring the motivations for and consequences of promoting the placebo effect, I consider two issues. First, why placebo studies research is such a compelling field for researchers. And second, considering the paradoxical nature of the placebo effect, why the notion of 'placebo treatment' pervades.

7.2.1 The placebo effect and the limits of medicine

I suggest the germ of an answer to the first issue lies in a discussion from the famous 1994 Harvard conference on the placebo effect:

> *Prof Gordon Kaufmann:* Placebo is the place where modern medical knowledge confronts its limits… [it] directs us towards some of the very large questions about human life: the limitations of our knowledge and what kind of meaning life can have in the face of that.
>
> *Prof Allan Brandt:* Well, in a somewhat less exalted sense, I agree that placebo does function as a definition about limits. Defining the placebo effect is a question at the core of how medicine works, or what it means to say medicine works in the first place.
>
> (Harrington et al., 1997, p. 243)

Thinking about the placebo effect forces us to confront the fact that – despite unquestionable success – mechanistically conceived medical practice does have limits, and that these limits are interwoven with our culture, politics and society. As George Canguilhem noted, this can result in tension between a patient's hope and what a clinician can provide.

> There is a discrepancy between the patient's hope regarding the power that he attributes to the doctor on the grounds of the latter's knowledge and the doctor's recognition of the limits of his own efficacy. There, without doubt, lies the main reason why, of all the objects specific to medical thought, healing is the one that doctors have considered the least.
>
> (Canguilhem, 2012, p.53)

My ethnographic findings suggest that the discrepancy Canguilhem highlighted exists in modern general practice, but my interpretation is more positive. As my ethnographic findings also suggest, general practice clinicians do consider, often at length, how to overcome the limits of their own efficacy and the efficacy of medical science. The problem for placebo studies research is that clinicians just don't need (or use) the conceptual scaffolding of the placebo effect to do so.

The placebo effect is an interesting avenue through which researchers can investigate the limits of medicine. As colleagues and I have noted elsewhere, "the placebo phenomenon raises important questions about modern evidence-based medicine; about healing; and about the limits of narrow biomedical approaches to healthcare" (Hardman et al., 2019, p. 7). However, in practical terms the problem for much placebo studies research is that 'harnessing the placebo effect' does not coherently equate to delivering direct 'placebo treatment'. Inasmuch as this is true, the aim of developing placebo studies

research findings into direct clinical treatment seems misguided. This takes us to the second issue, regarding the promotion of direct 'placebo treatment' in placebo studies research. On this issue my conclusion is bleaker.

7.2.2 The placebo effect as a form of crypto-nihilism

In promoting mechanistic explanations of the phenomenon – such as thin accounts of expectancy or conditioning – and retaining the placebo as a substance or procedure that can be utilised as a direct treatment, researchers are "motivated by an unrefined naturalism, in which explanations are accepted as meeting the naturalistic demand only inasmuch as they ape explanations found in currently well-established natural science disciplines." (Hutchinson & Moerman, 2018, p. 377). There is, as yet, no compelling evidence for *clinically* significant effects of direct placebo treatment, and enough conceptual confusion that even famous, longstanding advocates of the placebo effect have recently changed their mind on the coherence of the concept (e.g., Miller, 2018). Furthermore, as other researchers have noted, there is a terminal problem at the centre of mechanistic, unrefined naturalistic accounts of the placebo effect:

> Unrefined naturalism leads to a loss of the phenomenon, and in the present context, it leads one to mistake a token instance of the phenomenon (the human capacity to respond in medically significant ways when pharmacologically inert pills and sham surgery are administered) with the phenomenon itself (the human capacity to respond in medically significant ways to the meaning certain social practices have for them).
>
> (Hutchinson & Moerman, 2018, p. 377)

In replacing the phenomenon with a token instance of it, many placebo studies researchers close down inquiry in such a way that they state, for example, that "references to symbolism and semiotics [are] outside the remit of normal scientific research." (Blease & Annoni, 2019, p. 17). Such a closing down of inquiry does help to avoid the inherent paradox of the placebo effect, but at a heavy price. Such an over-instrumentalisation is in effect a turning away from life. An account whereby "symbolism and semiotics are not scientifically testable and therefore unsuitable for scientific paradigm-driven research" (Blease & Annoni, 2019, p. 17) untethers objective knowledge from intersubjective understanding, rendering it meaningless. Objective knowledge cannot exist untethered because:

> The familiar world of everyday experience in which we coexist with others remains our primary and actual reality. It is neither merely the product of a different reality, which only

> science can comprehend, nor the illusionary figment or construct of the brain, but the foundation of all scientific knowledge.
>
> (Fuchs, 2018, p. xix)

It is ironic that in investigating the placebo effect – a phenomenon so entangled with intersubjectivity – such a narrow scientistic approach should be adopted and promoted. In a more pejorative sense it unmasks mechanistic placebo studies research as a form of crypto-nihilism, inasmuch as its inherent meaningless "float[s] about in the atmosphere of life without coming to awareness." (Nishitani, 1982, p. 86).

Peirce called something like the familiar world of everyday experience the *commens*, and in reference to his theory of signs noted its importance for a sign fulfilling its function (for someone being understood by someone else): "no object can be denoted unless it be put into relation to the object of the *commens*" because "the minds of utterer and interpreter have to be fused in order that any communication should take place." (Peirce, 1906/1998, p. 478). A more enduring conception of the importance of the familiar world of everyday experience is that of the *lebenswelt*, or lifeworld, proposed by Edmund Husserl (1936/1981). In exploring the relationship between the placebo effect and the lifeworld, I make the last step from an unrefined naturalism characterising traditional accounts of the placebo effect, towards an expansive naturalism characterising the framework of general medical practice its exploration has produced.

7.2.3 The placebo effect and the lifeworld

Husserl thought of the lifeworld in a similar way to how Peirce thought of the *commens*, as "our natural world, the world we live in and are absorbed by in our everyday activities." (Føllesdal, 2014, p. 39). For the purpose of my inquiry, I consider how this was developed by Jürgen Habermas as a way to link his concept of communicative action to society. Focussing, in a similar way to Peirce, on how humans are even able to communicate with one another in the first place, Habermas (1987, p. 124) thought of the lifeworld "as represented by a culturally transmitted and linguistically organized stock of interpretive patterns", a stock of knowledge, and that its structure is that of "interconnections of meaning holding between a given communicative utterance, the immediate context, and its conative horizon of meanings". For Habermas (1987, p. 125), it is this stock of knowledge that "supplies members with unproblematic, common, background convictions that are assumed to be guaranteed; it is from these that contexts for processes of reaching understanding get shaped".

Habermas contrasted this notion of the lifeworld with that of the *system*, conceived as the structures and modes of mechanistic action in society; it is the mechanistic rationality of the system that sets it apart from the lifeworld (Habermas, 1987; Scambler, 2015). However, as I have already intimated, such mechanistic knowledge is not set apart in the sense of being set *outside* the lifeworld. Rather, as *all* meaning and understanding is ultimately mediated through the lifeworld (perhaps more acutely defined by Karl Jaspers (1971) as *the encompassing*), our (often very useful) mechanistic knowledge cannot stand on its own.

More directly related to this thesis, we can set up an experiment in the laboratory to shown how the 'placebo effect' can be explained by expectancy or the learning of relations of events. But the problem is that these expectancies or learning processes are reliant in the first place on an active stock of co-produced common knowledge, taken for granted assumptions, norms, rules, and regulations. They are essentially reliant on something like culture, or the evolving co-produced order of social settings. The problem for placebo researchers is that, as the meaning of *all* treatment is mediated by the evolving co-produced order of social settings, the distinction between placebo and non-placebo is untenable: as Graham Scambler (2015, p.367) noted, "it is easier to distinguish the voice of the lifeworld from the voice of medicine *analytically* than it is during actual instances of interaction in the day-to-day worlds we inhabit".

7.2.3.1 Healing at the limits of mechanistic medical knowledge

It must be noted that the mechanistic rationality integral to medicine has led to much success. And that through this success (achieved either by research or good clinical practice) such knowledge can usefully expand into, and alter, the lifeworld. Sometimes this expansion is extensive, for example through the discovery of penicillin or the development of successful kidney transplants. Sometimes less so, through the adoption of better working practices. Such mechanistic knowledge can also contract, for example through the discovery that certain drugs are ineffective for particular conditions. However, this expansion or contraction of mechanistic knowledge can also be unwarranted. This is a particular problem in general practice, where patients often present with co-morbid and chronic conditions with complex aetiologies, for which there is no simple, mechanistic solution. In these terms, it can be argued the promotion of direct placebo treatment grounded in an unrefined naturalism represents an unwarranted expansion, or *colonization* (Habermas, 1984, 1987), of mechanistic knowledge into the lifeworld. Instead of providing a viable solution for complex conditions such as pain or depression, promoting 'placebo

treatment' extends mechanistic medical knowledge beyond its own effective limit, in turn supressing other more useful solutions or ways of coping.

General practice is, perhaps more so than any other form of medical practice, the place where mechanistic medical knowledge meets its effective limit. In working across this boundary, general practice clinicians are faced with the difficult task of healing at the limits of such medical knowledge. As Kathryn Montgomery (2006, p. 5) suggested when exploring 'how doctors think', "medicine's success relies on the physicians' capacity for clinical judgment. It is neither a science nor a technical skill (although it puts both to use)". Promoting direct placebo treatment is, I argue, a turning away from clinical judgement and a denial of the limits of mechanistic medical knowledge; a denial made more explicit by the inherent paradox of the placebo effect, which acts as an in-built warning. In ignoring this warning "a profound perversion takes place" (Nishitani, 1982, p. 85), whereby the positive influence on life from successful expansion of mechanistic medical knowledge is reversed: "this situation is usually referred to as the tendency toward the *mechanization* of man, toward the loss of the human." (Nishitani, 1982, p. 85). In rejecting the idea of placebo treatment and promoting, instead, an expansive naturalist framework for general medical practice that can accommodate phenomena the placebo effect purports to encompass, I attempt to avoid the 'loss of the human' and dissolve the paradox of the 'placebo effect'.

7.3 Subjunctive medicine

In Chapter 5 I proposed that clinicians usefully conceive of each consultation as collaboratively enacted. I then tentatively developed this proposition into a more general form of medical practice, which I termed *subjunctive medicine*. Here I more fully explicate this concept and discuss the implications for general practice. Existing research on subjunctivity in Western medicine has focussed minimally on the implications of uncertainty in illness experience, inasmuch as such uncertainty can, in a subjunctive mode, be productive (Dauphin et al., 2019; Frumer, 2017; Good & Del Vecchio Good, 1994; Whyte, 2005). Extending this claim, I make the more maximal claim that general practice is, and should be acknowledged as, subjunctive in character.

As I outlined in Chapter 5, the broader notion of 'subjunctivity' can be interpreted both linguistically (in terms of conditional sentences) and socio-culturally (in terms of creating temporary shared social worlds); for the purpose of explicating subjunctive medicine, I primarily rely on a socio-cultural interpretation. However, as both

interpretations are related it is useful to first explore a linguistic interpretation of conditional sentences, promoting the under-employed subjunctive (things 'as if they are') over the dominant indicative (things 'as they are'). This, I suggest, offers a useful introduction to subjunctivity from which my socio-cultural interpretation can be developed.

7.3.1 Subjunctive conditionality

Linguistically, a conditional sentence provides a scenario described by an antecedent, and then makes a claim about it in its consequent. There are broadly two kinds of such conditionals: indicative and subjunctive (Iatridou, 2000; Lewis, 1973; von Fintel, 2012). The indicative is the simplest of these conditional sentences. For example:

> If the doctor didn't make the patient better someone else did.

In this sentence it is an open possibility as to whether the doctor made the patient better, but we can accept that even if the doctor didn't, the patient got better anyway. This is in contrast to a subjunctive conditional:

> If the doctor hadn't made the patient better, someone else would have.

In this instance we take for granted that the doctor made the patient better, but suggest that even if they hadn't, the patient would have got better in any case. This explicitly counter-factual example of the subjunctive suggests that the antecedent was false (the doctor did, in fact, make the patient better, it's just that someone else could also have, if they'd wanted to). However, this does not have to be the case; for example:

> If the patient had taken a heroin overdose, he would have exhibited the symptoms he actually does.

In this instance of a subjunctive conditional, a doctor "might be prepared to use it as part of an argument that the antecedent is in fact true" (von Fintel, 2012, p.467). So, although in one sense this sentence is counterfactual (*if* the patient had taken…), one could equally interpret it otherwise (these symptoms suggest the patient *did actually* take a heroin overdose). The debates on counterfactuals and subjunctive conditionals in linguistics and philosophy are manifest and well beyond the scope of this thesis. For my purposes it is enough to say, first, that a conditional – whether indicative or subjunctive – provides a scenario in which the antecedent holds. And second, that in a subjunctive conditional the scope of such holding is particular.

So, in the indicative mood, the consequent of a conditional (e.g. good interpersonal understanding between patient and clinician) can only seriously be accepted if the antecedent (a genuinely engaged clinician) holds outside the particular environment (the consultation, or distributed series of consultations); in other words, in the indicative mood we take the antecedent to hold across *all possible* social worlds (particular environments). However, in the subjunctive the consequent of a conditional can be seriously considered even if the antecedent does not hold outside a particular environment (*if* he had done X, Y *would* have happened). As I outlined in Chapter 5, this can be understood linguistically as when a layer of past tense morphology is used modally rather than temporally as an exclusion feature, which distinguishes the discussed social worlds from the speaker's actual one (Iatridou, 2000; von Fintel, 2012).

This notion of 'subjunctive conditionality' highlights that, through our use of language, we can usefully create temporary shared social worlds for a particular purpose. As I noted in Chapter 5, this has been identified by some as what separates humans out as a symbolic species (Deacon, 1997); it is certainly intuitive that in different situations, with different actors, we accept (perhaps subtly) different antecedents. Or, we could say that in different situations we find different antecedents more *relevant* (more of this later). More pragmatically, in terms of subjunctive medicine, we can say that it doesn't matter to the patient if the clinician is 'genuinely engaged' once they are, for example, at home on the sofa relaxing after a hard day; it matters that they are genuinely engaged during the consultation (or distributed series of consultations) and the subsequent administrative follow-up period, if required. Another way of saying this (which will lead into my socio-cultural interpretation) is that 'subjunctive conditionality' privileges action over intent, emphasising the importance and relevance of the particular *situation* (more of this later also) (Dewey, 1922/2002, 1925/2013; Seligman et al., 2008).

7.3.2 Action over intent

In the framework of subjunctive medicine, the focus is on the temporary shared social world of each particular collaboratively enacted consultation. Therefore, as I noted in Chapter 5, general medical practice is not just a case of clinicians applying the principles of good evidence-based clinical practice to their presenting patient. Rather, "it is always an inclusive affair involving connection" (Dewey, 1925/2013, p.282). Reflecting my ethnographic findings centred on 'enacting efficacy', the subjunctive consultation carries its own mode of directed intentionality that minimises the internal state of the clinician:

"what you *are* is what you *are in the doing*, which is of course an external act" (Seligman et al., 2008, p.24). In framing general medical practice as subjunctive, I emphasise the importance of the temporary shared social world created by the enactment of each consultation.

However, despite the focus from my ethnographic findings, through subjunctive medicine I do not advocate a thin behaviourist notion of action *set against* 'sincere' intent. As others have noted more generally, "such a move is impossible, and as misguided as current attempts to totalize sincerity claims" (Seligman et al., 2008, p. 181). Rather, in promoting subjunctive medicine I promote a re-balancing of the subjunctive and indicative in general practice, acknowledging the uniqueness of each enacted and embodied consultation, and the tension between its connection with and separation from everyday life (Deacon, 1997; Good, 1994; Turner, 1982). It may, in fact, be in this tension, this blurring of boundaries, that the tangible benefits of subjunctive medicine are located. As I noted in Chapter 4Chapter 5, interpersonal understanding is central to achieving good treatment outcomes in general practice. If one accepts that this "rests on a decentred self, on an ability to generalize beyond one's own experience" then this "implies a very particular attitude towards boundaries." (Seligman et al., 2008, p. 87). Through subjunctive medicine, clinicians and patients co-create a shared social world beyond the boundaries of everyday life. It may be the very construction and passing through of the consultation boundary that supports resilient, empathic, and effective healthcare in general practice.

Having grounded subjunctive medicine in an action-oriented model of practice, I am well placed to return to the central theoretical thread of this thesis – American pragmatism – to further explicate the subjunctive consultation (and its boundary). I do so through Dewey's notion of the *situation*. This, I suggest, focusses the framework of subjunctive medicine on the notion of *relevance* I previously (but briefly) introduced. Moreover, it loops back more explicitly towards the enactive mode of cognition that underpinned the development of subjunctive medicine in the first place.

7.3.3 The relevance of the situation

In outlining the theoretical framework of this thesis in Chapter 3, I noted that Dewey's theory of inquiry is one in which an indeterminate situation is transformed into a determinate one. Inasmuch as this contextual mode of inquiry can be applied to conducting a PhD thesis, it can equally be applied to consulting in general practice. What subjunctive medicine emphasises explicitly is the importance of the situation itself. In *Logic: The*

Theory of Inquiry, Dewey introduced his notion of the situation by means of a negative statement, before positively defining it:

> What is designated by the word 'situation' is *not* a single object or event or set of objects and events. For we never experience nor form judgments about objects and events in isolation, but only in connection with a contextual whole. This latter is what is called a 'situation'… In actual experience, there is never any such isolated singular object or event; *an* object or event is always a special part, phase, or aspect, of an environing experienced world – a situation.
>
> (Dewey, 1938/1998, pp.383-4)

For Dewey, the unit of inquiry is the 'environing experienced world', which includes the coupled organism-environment "always found together in a dynamical transactional relation" (Gallagher, 2017, p.54). Moreover, by the term 'organism' Dewey did not mean merely the biological, but the *lived* body. In this sense the situation is not something one finds oneself *in*, because the situation already includes the environment and experiencing subject (or subjects) which cannot be uncoupled: such a 'pragmatist-enactivist' view denotes cognition as an "action-oriented coupling of organism-environment" (Gallagher, 2017, p.64), which is in line with the character of my ethnographic findings.

More explicitly with regard to general practice, an interpretation of subjunctive medicine in terms of the Deweyan situation (as the unit of inquiry) has one particularly useful corollary: it answers the problem of deciding what is relevant to the consultation. For "by drawing a distinction between something called a 'situation' and something termed an 'object'", we can accept that the situation "is dominated and characterized throughout by a… pervasive and internally integrating quality" (Dewey, 1931, p.97). The general practice consultation as situation thus includes everything relevant that can aid in transforming the particular situation from indeterminacy to determinacy. It "includes not just our notebooks, computers, and other cognitive technologies, and not just the social and cultural practices and institutions that help us solve a variety of cognitive problems, it also includes *us*." (Gallagher, 2017, p.59). The framework of subjunctive medicine emphasises that what is relevant to the general practice clinician is not just the evidence-based medical guidelines (and the tools and practices by which to implement them) or *a priori* ethical principles or values, but also the person in front of them, their (potentially shared) history, and myriad other interrelated factors. What subjunctive medicine also emphasises is that from these myriad factors, what is relevant can only be grasped intuitively in terms of the situation of which the clinician is an integral part; the particular situation that is collaboratively enacted by patient and clinician.

7.3.4 A comparison of subjunctive medicine with other frameworks

Before concluding this section I briefly compare subjunctive medicine with two other frameworks, which were produced from a similar diagnosis of the problems of mechanistic medical practice: narrative medicine (Charon, 2001, 2006, 2012; Charon et al., 2017; Charon & Wyer, 2008); and values-based practice (VBP) (Fulford, Peile, & Carroll, 2012; Fulford, 2008; Petrova, Dale, & Fulford, 2006). I outline similarities between subjunctive medicine and both accounts, but also highlight key differences. Most notably that subjunctive medicine is not a framework that should be adopted in addition to 'scientific' or 'evidence-based' medicine, but (influenced by its genesis in attempting to account for phenomena the placebo effect purports to encompass) is more explicitly a framework that attempts to account for *all* clinical practice.

7.3.4.1 Narrative medicine

Narrative medicine emerged as a discipline promoting 'narrative competence' in medicine, in order to equip clinicians with the ability to acknowledge, absorb, interpret and act on the accounts persons give of themselves in the clinic (Charon, 2001; Charon et al., 2017). Those promoting narrative medicine refer to a host of varied intellectual foundations including "literary theory, narratology, continental philosophies, aesthetic theory, and cultural studies" (Charon et al., 2017, p. 1). From such a theoretical smorgasbord many directions are possible. Narrative medicine takes an initial path not dissimilar to this thesis, noting that medicine, as a practice, is ultimately grounded in life's intersubjective domain. It then suggests that in order for clinicians to achieve empathic and effective care, they require 'narrative knowledge' – "stories that have a teller, a listener, a time course, a plot, and a point" (Charon, 2006, p. 9). In another sense – again not dissimilar to my account – narrative medicine refocuses clinicians' attention away from the general towards the particular. In order to achieve this, narrative medicine promotes developing 'narrative skills' through practical activities such as the close reading of texts and creative writing.

Narrative medicine has developed into an international movement with associated publications, prizes, and postgraduate courses. It has undoubtedly contributed to re-grounding medicine in its *Geisteswissenschaften* roots, and to honouring patient experiences. However (in the UK in any case) it is not yet a dominant framework in general practice. I suggest this may be for a number of reasons. First, although the

practices narrative medicine promotes – close reading and creative writing – are likely to lead to more reflexive clinicians, they are specifically intellectual and time-consuming. Given the current state of general practice, it is difficult for overstretched nurses, HCAs, GPs, and associated staff to find time to add such activities to their already busy professional schedule; further, narrative medicine presupposes a literary interest that many clinicians just may not have. Second, narrative medicine asks a lot of its clinicians emotionally, insofar as "practitioners… must be prepared to offer the self as a therapeutic instrument… [they] must enter the clinical situation, willing to suffer in the process" (Charon, 2006, p. 215). Again given the demands of modern general practice, promoting suffering is a hard sell. Last, in contradistinction to subjunctive medicine, narrative medicine is focussed explicitly on a representational account: "we are finding in our narrative medicine practice that clinicians must *represent* what he or she has witnessed" (Charon, 2006, p. 136). The originator of narrative medicine, Rita Charon, suggests that by representing what is perceived, a clinician becomes attentive in consultations. Charon grounds this proposition in a Ricoeurian interpretation of Aristotle's notion of *mimesis* as an activity that teaches us something. It is by the virtue of reading and writing that experiences "can be examined from all sides… [and] the writer can see him or herself from afar or from the point of view of another actor" (Charon, 2006, p. 139). This abstracted, representational account of intersubjective understanding is at odds with subjunctive medicine, which is grounded in the actions and processes of a particular (Deweyan) situation.

As my findings in Chapter 4 suggest, it is not through *mimesis* but *poiesis* by which consultations were enacted for clinicians in my ethnography. The important point is not that in subjunctive medicine a consultation is constructed narratively (one could perhaps say that this is merely a more general feature of how humans interact with one another). The important point is that it is constructed temporarily in terms of a *situation*; and that within the temporary, constructed situation, the rules are different. Interestingly, Charon herself implicitly alludes to subjunctivity when describing the effect of acting with narrative knowledge: "with such knowledge, we enter others' narrative worlds and accept them – at least provisionally – as true" (Charon, 2006, p. 10). Such an account of the effects of *narrative* medicine sounds more like the effects of *subjunctive* medicine. And as findings from my ethnography suggest, we don't need skills in close reading or creative writing for this, we just need to acknowledge that each consultation is collaboratively enacted anew by patient and clinician.

Increased literary and critical interests are likely to engender better habits in clinicians – for that there is much to admire in narrative medicine. But this seems like a more general point about intersubjectivity rather than one specifically useful for clinicians. Given the demands of narrative medicine and the challenges of modern general practice, it is hard to see how such an approach would be widely accepted beyond the scope of clinicians already inclined towards (and with the time to consider) the benefits of a reflexive approach to literature for human flourishing.

7.3.4.2 Values-based practice (VBP)

Values-based practice (VBP) – initially developed in the field of mental health (Fulford & Woodbridge, 2004; Fulford, 2008) but since explicitly extended into primary care (Petrova et al., 2006) – is "a process that supports balanced decision-making within a framework of shared values, where complex and conflicting values are in play" (Fulford et al., 2012, p. 24). In the complex world of general practice, this seems like a useful approach. Framed as complementary to 'evidence-based practice' (EBP), VBP is built on a premise of mutual respect for differences in values. Through a number of processes encompassing clinical skills, relationships, and partnerships in decision-making, the aim is to support balanced decisions within a framework of shared values. Grounded in the clinical skills of awareness, knowledge, reasoning, and communication, VBP then applies a number of principles which are intended to help a clinician elicit and negotiate individual patient values, including: the 'two feet principle' (all decisions are based on both values and evidence); the 'squeaky wheel principle' (we notice values when they cause problems); and the 'science-driven principle' (VBP is driven by the advances in science, insofar as that opens up choices). The practical ways in which clinicians are encouraged to develop VBP largely include workshop directed reflections and activities on the pervasiveness of values in everyday life, intended to raise awareness of values and increase clinician communication skills.

However, although there is, as with narrative medicine, much to commend in VBP, it too is not yet prevalent in general practice. One problem is the conflict between VBP's purported focus on the particular, and the scope and status of the values in question (Brecher, 2014). VBP offers no coherent way to adjudicate between which values are acceptable and which are not, save noting that "there are clear limits, or 'framework values', derived partly from shared values, partly from the democratic premise itself" (Fulford & Woodbridge, 2004, p. 30). As others have noted (e.g., Brecher, 2014), this nods vaguely in the direction of liberalism, but such an approach is not uncontroversial and

undermines VBP's claim to particularity. A second problem is the sheer scope of the framework. It ranges across medical ethics, communication skills, reasoning skills, and more. There is much to assimilate for the already overstretched clinician. Last, VBP in the first instance seems based on a premise (perhaps derived from its genesis in mental health) that clinicians in my ethnography would reject; namely that clinicians tend to think that diagnosis is value free (Fulford, 2008). VBP, as with narrative medicine, is a potentially useful tool in ensuring that general practice medicine does not become overly mechanistic. However, I question the utility of invoking a process of achieving shared values to improve clinical decision-making. Rather than appealing to (critical and reflexive) discussion of external values, with subjunctive medicine I turn the other way, towards particular situations.

7.4 Conclusion

With subjunctive medicine I propose an enactive framework for general practice that is grounded in an expansive naturalism. I use the term *expansive* naturalism to highlight that all *relevant* factors should be considered in a general practice consultation; and that what is or is not relevant is accounted for by the *situation*. The situation is collaboratively enacted by both patient and clinician and it is only by being part of (not *in*) the situation, that a clinician can decide on what factors are relevant and thus make good clinical judgements. In his seminal work on consulting skills, *The Inner Consultation*, Roger Neighbour (2005, pp.258-9) concluded that "in the consultation there is a time for analysis and a time for awareness; intellect and intuition alternate". By cultivating both, Neighbour suggested, good generalist clinicians "allow a balanced state of trained intuition to emerge". I suggest that subjunctive medicine provides the conditions for the emergence of such 'trained intuition', through which the uncertainty in general practice can be accepted and (at least partially) overcome: "the self-assertive tendency to cling on to control of the consultation begins to slip away, to be replaced by a trusting sense of coming alongside the patient" (Neighbour, 2005, p.260). By promoting subjunctive medicine, I suggest that the sanctity of the (collaboratively enacted) general practice consultation should be explicitly valued and protected by clinicians, patients and, perhaps most pertinently, healthcare managers and policy makers. In another sense, we can think of subjunctive medicine as a framework by which to achieve person-centred care, which as I outlined in Chapter 5 is the currently dominant ideal in general practice (Royal College of General Practitioners, 2018, 2019).

Chapter 8 Conclusion

8.1 Introduction

In this thesis I set out to explore how the placebo effect is conceived of in general practice and how it might be harnessed to improve patient care. I started my process of inquiry with a broad understanding of the placebo effect as "consisting of individuals' responses to the psychosocial context of medical treatments, 'inert' interventions, or clinical encounters, as distinct from the inherent or characteristic physiological effects of medical interventions" (Miller et al., 2013, p. ix). I also noted the considerable ambiguity in placebo studies research concerning the conceptual coherence of the placebo effect, and the practical viability and potential ethical consequences of harnessing it in clinical practice. Overcoming this ambiguity is particularly important in general practice because in such an environment – where the psychosocial context of treatment is considered particularly relevant (Greenhalgh et al., 2014; Royal College of General Practitioners, 2018) – there is considerable potential for harnessing the placebo effect (Fässler et al., 2010; Linde et al., 2018).

Central to the ambiguity in placebo studies research is debate on the legitimate scope of the placebo effect concept. This is manifest in the conflict between wide and narrow definitions of the placebo effect. In a wide definition – as outlined above – the focus is on the psychosocial context of treatment as it applies to all medical interactions, whether they involve the traditional notion of a 'placebo' or not. In a narrow definition the placebo effect is restricted to interactions that explicitly involve a 'placebo', whereby a 'placebo' refers to "an intervention, such as a pill with no medical ingredients or an injection of saline, known or believed to lack specific efficacy in treating a medical condition" (Miller, 2018, p. 377). The conflict between narrow and wide definitions of the placebo effect reflects different strategies for dealing with the paradox that characterises the phenomenon: how can something which is 'inert' have an effect? Most narrow definitions simply ignore the paradox. Wide definitions seek to dissolve it by doing away with the placebo in-itself, in effect introducing another paradox: how can we have the placebo effect without a placebo? Given the literature on the placebo effect is inconclusive regarding both the conceptual coherence of the placebo effect and the practical viability of harnessing it in general practice, in this thesis I sought to answer two questions:

1. How is the placebo effect conceived of in general practice?

2. How might the placebo effect be harnessed to improve patient care?

Reflecting these questions, I adopted three research objectives:

1. Understand how the placebo effect is conceived of by patients and clinicians in general practice.
2. Make explicit how the placebo effect is harnessed in general practice.
3. Develop a theoretical model of the placebo effect in general practice.

In this chapter I explicitly answer my two research questions. The questions are interrelated, most notably because how the placebo effect is conceived of in general practice influences how it might be harnessed.

Regarding the first question, my findings suggest that the placebo effect is predominantly conceived of in general practice (by both patients and clinicians) as the effects of 'inert' substances, reflecting a narrow definition in which the placebo paradox remains effectively unexamined. However, my findings also suggest that a less prevalent wider definition exists equating the placebo effect with the psychosocial context of all treatment. Given the current state of understanding in general practice, I conclude that to induce the 'placebo effect', general practice clinicians should abandon placebo terminology altogether. In further examining the placebo effect I suggest that (whether defined widely or narrowly) it represents an untenable contradistinction between the 'characteristic' and 'incidental' features of treatment; features which cannot be conceptualised in isolation. Therefore, rather than being viable either as the direct effect of a 'placebo' treatment in-itself, or as a way to conceive of the psychosocial effects of all medical interactions, I posit that the placebo effect functions as a marker for the limits of a mechanistic model of medicine. In promoting it I suggest that placebo studies researchers unwittingly support the overreach of mechanistic medical knowledge.

In light of the answer to my first question, the answer to my second question is in one sense short: the placebo effect cannot be harnessed to improve patient care. However, this is not to say that phenomena the placebo effect purports to encompass – such as the meaning certain practices have for patients, the effects of trust on healing, the benefits of the therapeutic encounter, etc. – are not important in general practice. My findings suggest they are vital. Instead of promoting the placebo effect, I suggest that my proposed framework of *subjunctive medicine* can more usefully accommodate such phenomena.

Developing this summary, in this chapter I reaffirm my thesis by synthesising my findings in relation to my research questions and objectives. I then identify the relevant

theoretical and clinical implications, before providing recommendations for the direction of future research in placebo studies, general practice, and medicine more broadly. It is clear by this stage that, with regard to my research questions and objectives, my thesis findings are broadly negative. I do not think the placebo effect is a useful concept and in turn do not think it can be harnessed to improve patient care. Following this assessment, however, I do not conclude that placebo studies research cannot be useful *per se*. As I will suggest in this chapter, some findings from placebo studies research are still useful if reconceptualised. This concession notwithstanding, my findings imply that the current dominant clinical placebo studies research program, focussed on the open administration of substances ('open-label' placebos), is degenerative. As I noted in Chapter 6, this places my account broadly in the eliminativist tradition of placebo studies research (e.g., Gøtzsche, 1994; Nunn, 2009a; Nunn, 2009c; Turner, 2012).

8.2 Findings

The main findings in this thesis were presented in Chapter 4, Chapter 5, Chapter 6, and Chapter 7. In this section I synthesise these findings in order to answer my two research questions with respect to my research objectives (as outlined in Chapter 1 and reiterated in the introduction to this chapter). As I previously noted, my research questions are interrelated. Most obviously they are interrelated because how the placebo effect is conceived of influences how it might be harnessed. However, this interrelation is not just unilinear. In exploring how phenomena the placebo effect purports to encompass might be better accounted for in general practice, I developed concepts that looped back into my exploration of the placebo effect. With this in mind, in this section I aim to show more explicitly how my findings, when reconstructed, converge to answer my research questions.

8.2.1 How is the placebo effect conceived of in general practice?

The findings from my meta-ethnography in Chapter 4 suggest that clinicians and patients broadly conceive of a 'placebo' in two ways: predominantly as material substances such as 'inert' pills; and much less commonly as whole treatment processes that may include, for example, healing procedures, empathic treatment, or even the consultation itself. This reflects my findings from a discourse analysis study of public perspectives of the placebo effect, in which the predominant construct was the 'placebo pill', and the counter discursive construct the 'treatment process' (Hardman et al., 2019). As I noted in

Chapter 2 and Chapter 4, however, although predominant, conceiving of a placebo as an inert substance is at odds with modern placebo studies research. First, because it is misleading to define a pill as 'inert' – all substances can be treated in physico-chemical terms if we choose to do so (Grünbaum, 1986; Howick, 2017). And second, because it is not the material substance itself that causes the placebo effect. In the classic example of the 'placebo pill', the effect is caused by the whole process of the taking of the pill, including the environment and history in which it is taken. Harnessing the placebo effect in general practice thus becomes more complicated than merely giving a pill (Ainsworth et al., 2019). It becomes about constructing and exploiting a particular clinical situation.

The predominant conception of the placebo in general practice is, therefore, in my view untenable. My next move was to interrogate the less dominant conception of a placebo, whereby a placebo is conceived of as a whole treatment process. If this was credible then harnessing the placebo effect would perhaps merely require an effort to educate patients and clinicians on the benefits of the 'powerful placebo'. In Chapter 4 I was initially hopeful, suggesting that such a conception accords with modern accounts of the placebo effect, including, *inter alia*, ritual theory (Kaptchuk, 2002; Ostenfeld-Rosenthal, 2012), motor intentionality (Frenkel, 2008), embodiment (Thompson et al., 2009), and enactivism (Ongaro & Ward, 2017). Within such a view, the 'placebo' substance as traditionally conceived is relegated to the role of a symbolic object that may or may not be involved in the wider treatment process. In this way the placebo itself becomes unnecessary for the inducement of the placebo effect.

The problem with such a move, however, is that we replace one paradox (an 'inert' substance' causing an effect) with another (a placebo effect without a placebo). As other researchers have noted, a placebo effect without a placebo is (if we are really honest about it) nonsensical (Nunn, 2009c). In explaining away the initial placebo paradox, we have in turn seemingly explained away any useful conception of the placebo effect. The (now very broad) concept just isn't doing any work in addition to the concepts used to explain it. In fact, it just introduces confusion insofar as it evokes paradoxes that the explanatory concepts (such as ritual, embodiment, motor-intentionality, enactivism, etc.) don't have. The placebo effect – conceived as the effects of the psychosocial context of all treatment – now merely "obscures what can be better explained in more precise terms" (Turner, 2012, p. 419).

In Chapter 6 I noted that the problem of introducing a second paradox – inherent to a wide definition of the placebo effect – was acknowledged by Miller (2018, p. 345) who, in

revising his previous wide account of the placebo effect, argued that the concept should be limited "to situations in which deliberate placebo interventions are deployed". This can be considered as a hybrid account of the placebo effect in which it is accepted that the substance or procedure itself does not cause the placebo effect, but that, nevertheless, the placebo effect is only operative in nature when a deliberate 'placebo' intervention occurs. As Miller (2018, p. 345) himself noted, however, this is not really a coherent account but a defensive move that "obviates spreading the confusion associated with this concept". In stark contrast to his previous views, Miller acknowledged that the placebo effect does not make sense. His only argument in favour of retaining a narrow account of it is because it is unavoidably entrenched in biomedical discourse. Although this may be true in research (that is beyond the scope of this thesis) I suggest this is not true in general practice.

As I noted in Chapter 5, influenced by my findings in Chapter 4 my ethnography was not orientated directly towards exploring the placebo effect but towards the therapeutic encounter. Nevertheless, although my ethnography was not *explicitly* about the placebo effect, it was about phenomena the placebo effect purports to encompass. Yet despite such close association, in a year's fieldwork placebo terminology was not widely used by either clinicians or patients. This implies that, contra Miller, the placebo effect concept is not entrenched in the 'biomedical' discourse of general practice. Therefore, his argument to retain it does not hold; clinicians and patients have more meaningful and coherent ways of talking about phenomena the placebo effect purports to encompass. Ways that do not come with the paradoxical baggage of the placebo effect.

When the placebo effect is purposively introduced, patients and clinicians in general practice predominantly conceive of it as the psychological effects of inert pills or procedures; a minority conceive of it as a catch-all for the effects of the psychosocial context of treatment. In this thesis I argue that both conceptions are problematic and not useful. However, when not purposively introduced, the placebo effect is generally not referred to in general practice. Therefore, there is no argument to retain the concept in general practice. These findings regarding how the placebo effect is conceived of in general practice inform the answer to my second research question.

8.2.2 How might the placebo effect be harnessed to improve patient care?

Following the answer to my first research question, the short answer to my second is clear: the placebo effect cannot be harnessed to improve patient care. There is a more

interesting longer answer though, and this largely reflects the findings from my ethnography, outlined in Chapter 5 and developed in Chapter 7. In rejecting the placebo effect as a coherent or useful concept in general practice, I merely reject what Hutchinson and Moerman (2018, p. 377) term "a token instance of… the phenomenon itself". The phenomenon itself – what Hutchinson and Moerman (2018, p. 377) term "the human capacity to respond in medically significant ways to the meaning certain social practices have for them" – remains in play. By expanding my second research question from the placebo effect *per se* to phenomena the placebo effect purports to encompass, my findings become more constructive.

As I noted previously in response to my meta-ethnography findings, in my ethnography of a general practice surgery (Chapter 5), I 'disregarded' the placebo effect, and took the therapeutic encounter as the central object of inquiry. By intentionally taking a broader view of phenomena the placebo effect purports to encompass, I sought to avoid the conceptual problems that afflict placebo studies research. Given the evidence that an improved patient-clinician relationship improves treatment outcomes (Barry et al., 2001; Jensen & Kelley, 2016; Kelley et al., 2014; Little et al., 2001; Ong et al., 1995; Stewart, 1995), my ethnography was orientated towards making explicit how clinicians produce and capitalise on the benefits of the therapeutic encounter. Moreover, I did not consider the therapeutic encounter in dyadic isolation, but acknowledged the influence of the socio-cultural environment, particularly the issues of access and relational continuity of care (Aboulghate et al., 2012; Campbell & Salisbury, 2015; Haggerty et al., 2003; Worrall & Knight, 2011).

In so doing I identified considerable constraints to capitalising on the benefits of the therapeutic encounter in general practice, broadly conceived as the limits of biomedicine (including multimorbidity and chronic illness management) and the structural constraints of general practice (including clinician workload, and the tension between patient access and relational continuity of care). My ethnographic findings broadly consisted of making explicit how clinicians in my study overcame these constraints. I suggested they did so by developing and adapting useful socially-shaped dispositions to act. In other words, by getting into good habits. I conceived of these good habits in two categories: using expert judgement (including managing expectations, communicating concepts, and encouraging self-management); and taking patients seriously (including respecting patients' intelligence, establishing trust, and conducting shared decision making). It is through these good habits, therefore, that I find the longer answer to my second research question. It is

through these good habits that clinicians in my study were able to effectively harness phenomena the placebo effect purports to encompass.

The notion of 'getting into good habits' does not pervade placebo studies discourse. In a way this is not surprising. Placebo studies research has become largely wedded to a view of itself as a cutting-edge scientific discipline, reliant as much on advances in neuroscientific technology as on philosophical reflection or first-hand patient accounts. A habit is, in one sense, the antithesis of such technological advancement. It is a quotidian concept more comfortable in the community than the laboratory. The problem for placebo studies researcher, I argue, is that exploring good habits in contextual clinical situations might just be a better way to investigate the 'placebo effect' than scanning selected participants' brains.

Although I promoted habit as a useful concept for exploring phenomena the placebo effect purports to encompass, my findings support the commonly held notion that getting into good habits is not easy. Moreover, my findings suggest that a good habit in one situation is not necessarily a good habit in another; habits must be reviewed and adapted as situations change. In this sense, I suggested that what is important for clinicians is the ability to develop multiple, flexible habits. Supporting this ability is a way for clinicians to form new habits by responding to and learning from their environment (Dewey, 1925/2013). I suggested that clinicians in my ethnography did this by intuitively developing a secondary 'meta' habit that allowed them to reflect on their primary habits. I suggested this meta-habit was one of *enaction*, insofar as clinicians conceive of each consultation as collaboratively brought into being with their patient. This informs and guides their approach to the contextual therapeutic encounter.

In conceiving of clinicians and patients collaboratively enacting consultations, in Chapter 4Chapter 5 I explicitly grounded the notion of enaction as a meta-habit in in the embodied and enactive turn in cognitive science. As leading enactivist researchers have noted:

> Rather than being a set of all radically novel ideas, the enactive approach is better construed as a synthesis of some new but also some old themes. Overall, the enactive perspective is a kind of non-reductive naturalism. It sees the properties of living and cognitive systems as part of a continuum.
>
> (De Jaegher & Di Paolo, 2007, p. 487)

In this way, clinicians and patients make sense of their situation (the consultation) through an emergent process of active interaction with one another (as autonomous beings) and the

environment in which they are in. In Chapter 5 I conceived of this as a process of *poiesis*, or as others have called it, "world-making" (Fuchs, 2018, p. 108). I suggested that clinicians conceive of the general practice consultation as creatively and collaboratively brought into being, which supports the development of multiple, flexible habits which in turn produce and capitalise on the benefits of the therapeutic encounter. Specifically, I suggested this engenders authenticity, flexibility, and resilience in clinicians.

Developing the proposition that consultations are collaboratively enacted, I further developed a framework for general practice, which I termed *subjunctive medicine*. Considering the view of enactivism as 'a synthesis of new and old themes', my framework of subjunctive medicine is grounded in both modern embodied cognition and the older philosophical ideas of American pragmatism. Through subjunctive medicine I highlighted that through language and social practices we create temporary shared social worlds for a particular purpose. In this process of 'world-making', clinicians and patients can exploit the consultation as a shared social world beyond the boundaries of everyday life. I conceptualised this as privileging *action* over intent. In accepting the consultation as a world created and set aside from (although still fuzzily connected to) everyday life, I argued that the subjunctive consultation carries its own mode of directed intentionality that minimises the internal state of the clinician. I further argued that through subjunctive medicine the general practice consultation can be conceived as a holistic *situation* of which both clinician and patient are integral parts. It is exactly by being part of such a situation that a clinician is able to decide what is relevant to the process of collaborative clinical judgement and decision making in general practice. This, I argued, provides an expansive naturalist framework for usefully harnessing phenomena the placebo effect purports to encompass.

8.2.3 Developing a theoretical model of the placebo effect

At the outset of this thesis, I intended to use the answers to my research questions to potentially inform the development of a theoretical model of the placebo effect in general practice; this is reflected in my third research objective. However, given the broadly negative answers to both research questions, this proved difficult. Nevertheless, in Chapter 6 I returned more explicitly to the placebo effect in an attempt to reconsider the concept in more detail. Developing the process ontological framework outlined in my meta-ethnography alongside the concept of enaction underpinning subjunctive medicine, I

attempted to more specifically dissolve the placebo paradox by explicating the ontological conditions that might make sense of the 'power of nothing'.

Through a synthesis of Charles Sanders Peirce's concept of virtuality and Gilles Deleuze's actual-virtual modal distinction, I proposed that the placebo effect can be accommodated through the explication of a particular ontological movement (within a version of scholastic realism) in which the 'virtual' is actualised rather than the 'possible' realised. I suggested this accords with recent accounts of the placebo effect in terms of semiotics (Miller & Colloca, 2010) and predictive processing (Ongaro & Kaptchuk, 2019). In so doing I suggested that the placebo effect only makes sense when considered within an emergent dynamic system. This has problematic consequences for the coherence of the placebo effect concept: the only credible way to delineate a 'placebo' is to separate 'characteristic' from 'incidental' features of treatment; but in an emergent dynamic system such a delineation is not possible; therefore, the placebo effect represents an untenable contradistinction. A useful and coherent theoretical model of the placebo effect is thus not achievable.

8.3 Implications

In this section I reiterate and expand on the theoretical implications of my thesis for placebo studies, general practice, medicine more broadly, and cognitive science. I also consider the relevant clinical implications, in terms of both clinical practice and training.

8.3.1 Theoretical implications

8.3.1.1 Placebo studies

The theoretical implications of this thesis for placebo studies research are manifest. In a broad sense, I argue that both the narrow definition (in terms of the effects of direct placebo interventions) and the wide definition (in terms of the effects of the psychosocial context of all treatment) of the placebo effect are untenable. I suggest that no matter what scope is adopted, there is no coherent definition of the placebo effect. In terms of the dominant theoretical explanations of the placebo effect, my conclusion is also inherently critical. Both expectancy and the learning of relations no doubt contribute towards treatment effects. But they contribute within an emergent dynamic system. It therefore makes no sense to isolate them as 'placebo effects', nor seek ways to induce them individually. Of course, as much laboratory based placebo studies research has shown, one

can construct a situation and selectively measure variables so as to provide evidence for these mechanisms individually. But in the real world, where such control is impossible, the models break down. A further corollary of conceiving of treatment effects in an emergent dynamic system is that the placebo effect cannot be considered additive to the characteristic treatment effect. Instead, effects interact and influence each other dynamically (Ongaro & Ward, 2017). The process of measuring specific treatment effects in an RCT does not, unfortunately, necessarily transfer to real life.

Credible explanatory models of the placebo effect are ones that can be accommodated in the framework of an emergent dynamic system. In this regard, meaning models (Brody, 1997; Hutchinson & Moerman, 2018; Moerman, 2002; Moerman & Jonas, 2002), semiotics (Miller & Colloca, 2010), ritual theory (Kaptchuk, 2002; Ostenfeld-Rosenthal, 2012), motor intentionality (Frenkel, 2008), embodiment (Thompson et al., 2009), predictive processing (Ongaro & Kaptchuk, 2019), and enactivism (Ongaro & Ward, 2017) all provide insight. The problem is that these are not really explanations of the placebo effect, but better explanations of certain phenomena the placebo effect purports to encompass.

8.3.1.2 General practice and wider medicine

The theoretical implications for general practice and wider medicine are more positive. In general practice, the framework of subjunctive medicine has the potential to bring together the technical medical knowledge and intersubjective understanding that GPs require to practise person-centred care in modern general practice. Such a 'pragmatist-enactive' framework for general practice – in which the situation of the consultation is foregrounded – may offer a middle way between the conceptions of general practice as both science and art. In line with some accounts of clinical judgement (e.g., Montgomery, 2006), in subjunctive medicine general medical practice can thus be conceived as a pragmatist form of *phronesis*, or practical reasoning, within an emergent dynamic system. In wider medicine, subjunctive medicine may offer an alternative framework to approaches such as values-based practice (Fulford et al., 2012; Petrova et al., 2006), and potentially provide a more precise explication of the popular approach of narrative medicine (Charon, 2006; Charon et al., 2017), insofar as the effects of narrative medicine are in fact the effects of subjunctivity. Furthermore, the model of subjunctive medicine, although developed in this thesis in the domain of general practice, may also be applicable in other settings in primary, secondary and tertiary care.

8.3.1.3 Cognitive science

The theoretical implications for cognitive science are more circumspect and tentative, but still potentially useful. In relating my central pragmatist notion of habit with embodied and enactivist cognition (in order to develop my framework of subjunctive medicine) I join an increasing minority of researchers who consider pragmatism to potentially offer the most coherent theoretical grounding for embodied cognition (Barandiaran & Di Paolo, 2014; Gallagher, 2017; Heras-Escribano, 2019; Matthew, 2016; Williams, 2018). In this view habits are "ecological, self-organizing structures that relate to a web of predispositions and plastic dependencies both in the agent and in the environment" (Barandiaran & Di Paolo, 2014, p. 522). With the onset of cognitivism in psychology, habit was largely abandoned as a useful academic concept. My findings add to the growing evidence that "make habit a particularly attractive idea for embodied, enactive perspectives, which can now re-evaluate it in light of dynamical systems theory and complexity research" (Barandiaran & Di Paolo, 2014, p. 522).

8.3.2 Clinical implications

There are a number of potential clinical implications of this thesis, mostly stemming from my ethnographic findings in Chapter 5. Here I consider these with regard to the broad categories of clinical practice and training.

8.3.2.1 Clinical practice

First, and most directly related to my research questions and objectives, an implication from this thesis is that clinicians should discard the potential for harnessing the placebo effect in the clinic. The psychosocial context of treatment is of course vital, but the placebo effect is not the most productive way of conceiving of how to harness it. Clinicians should instead conceive of the placebo effect as an interesting paradox with an intriguing history, but one whose incoherence outweighs its clinical usefulness.

Second, my ethnographic findings have more substantive and positive clinical implications. Through subjunctive medicine, I propose a framework promoting the importance of the enacted clinical situation. I argue that by thinking of the general practice consultation 'subjunctively', clinicians can focus effectively on the patient in front of them, including their context and (potentially shared) history. This, I suggest, may engender flexibility, authenticity and resilience in general practice, in turn helping clinicians to provide genuine and sustainable person-centred care. Such a framework does not entail

clinicians learning new processes, or conducting specific training; in the pressurised world of modern general practice it is difficult for clinicians to find time for anything beyond their core business. Instead, subjunctive medicine provides guidance for clinicians to reflect on what they already do, at their best, in the clinic. It provides a subtly different way for clinicians to think about and conceive of the consultation, rather than a formal set of processes or training programme. This, I suggest, may make it more useful for the modern overworked general practice clinician.

8.3.2.2 Training

As I noted above, subjunctive medicine as I present it does not lead to a formal training programme. However, there are training implications of subjunctive medicine for general practice. The Royal College of General Practitioners (RCGP) training curriculum is oriented towards a person-centred approach (Royal College of General Practitioners, 2018). As subjunctive medicine provides a framework to help achieve sustainable, person-centred care, it could be incorporated into the RCGP training programme as a resource by which trainee GPs can conceive of and reflect on their inchoate practice.

8.4 Recommendations for future research

The findings in this thesis lead to a number of recommendations for future research. In this section I consider these in the three categories of placebo studies, general practice, and medicine.

8.4.1 Placebo studies

The critical character of my findings notwithstanding, I do not suggest that all placebo studies research is incoherent or not useful. For example, well-conducted experimental studies have provided useful insight into the complexity of treatment responses, and how these complex responses can be represented in neuronal pathways. The problem for these studies is largely related to how they are framed and the conclusions derived from them. These laboratory studies are, by design, processes of selectively isolating and attending to particular mechanisms. Even if we accept that this process of selective attention was, in a particular study, effective (thus lending the results veracity), the results must then be translated into the messy world of emerging dynamic systems in which their clinical application would be based. Future research in this vein should therefore perhaps be considered with three caveats. First, given the conceptual problems

with the placebo effect concept, whether the placebo effect should even be alluded to in the first place over and above the particular mechanisms under test. Second, whether it is even possible to isolate the particular mechanism under test and if not, whether such an experimental approach needs to be rethought or abandoned. And third, in attempting to translate the findings into the clinic, what value such an experimental approach can add.

If my recommendations for experimental 'placebo studies' research are circumspect, my recommendations for conceptual and applied placebo studies research are less so. First, I suggest that further conceptual placebo studies research is unwarranted. The placebo effect concept is untenable and should be abandoned. Second, in part linked to the conceptual issues, my recommendations for applied placebo studies research are equally negative. There are better ways to frame explorations of the psychosocial context of treatment than the placebo effect. The costs in conducting expensive applied research on the placebo effect, such as clinical trials, are not worthwhile given the shaky conceptual foundations on which they are based. More specifically, the expanding research programme of 'open-label' placebos (e.g., Carvalho et al., 2016; Kaptchuk et al., 2010; Kaptchuk et al., 2013; Kaptchuk & Miller, 2018; Sandler & Bodfish, 2008; Sandler et al., 2010) is, in my view, degenerative. Although some small trials have produced positive results, as I and other researchers have previously noted, while these may reflect genuine therapeutic benefit, they may equally represent experimental artefacts (Ainsworth et al., 2019; Miller, 2018). Furthermore, in promoting such an approach to 'placebo treatment', the open-label placebo research programme risks promoting the overreach of mechanistic medicine. Most terminally, even if small treatment effects can be induced through open-label placebo treatment, my ethnographic findings suggest this is not something that is practically viable in the context of a general practice consultation.

8.4.2 General practice

With regard to general practice, my recommendations for future research are focussed on developing and testing the framework of subjunctive medicine. Given the exploratory orientation of this thesis – aimed at creating concepts – the practical usefulness of subjunctive medicine remains untested. As such, further research, initially focussed on the views of clinicians, is required. This could then potentially lead to further observational work to attempt to test the consequences of adopting subjunctive medicine in general practice.

8.4.3 Medicine

With regard to medicine more widely, although subjunctive medicine was developed in the domain of general practice, its general character suggests that the framework may be applicable more widely. Therefore, further exploratory work could be conducted in wider primary, secondary, and tertiary settings in order to establish the usefulness of the framework in wider medicine. Subjunctive medicine may be of particular usefulness in mental health settings, in which the value of the therapeutic relationship between clinician and patient is particularly influential. Therefore, it may be worthwhile to concentrate initial expansionary research in this domain.

8.5 Conclusion

In exploring the placebo effect in general practice I conclude that the concept is an untenable contradistinction that serves no practical clinical use. However, from such deconstruction I develop an expansive naturalist framework for general practice – subjunctive medicine – which I propose can accommodate phenomena the placebo effect purports to encompass. This framework is in stark contrast to the unrefined naturalism that characterises much placebo studies research.

Drawing on insights from ethnographic studies of healing, Lawrence Kirmayer noted that the dominant biomedical construction of the placebo effect leads us into a "disenchanted world of scientific medicine… [where] the therapeutic effectiveness of words, symbols and rituals… requires special pleading" (Kirmayer, 2011, p.121). Although placebo studies research has indirectly highlighted the manifest ways in which treatment outcomes are mediated by our meaningful responses to the lifeworld, it is ironic to then deduce that we can harness these findings by means of mechanistic 'placebo treatment'. As I noted in Chapter 1, Kirmayer (2011, p.121) conceived of a placebo as "a social situation not a substance". As is evidently clear from my findings, I agree with this conceptualisation. The problem is that by this stage we just don't need the placebo effect anymore. Worse, by hanging on to it we risk being dragged into the 'disenchanted world' of an unreflexive and unrefined scientific medicine. A world the patients and clinicians in my ethnography work hard to actively avoid.

There is no 'special pleading' required for the power of symbolic interventions in my proposed framework of subjunctive medicine. Neither is there a need to denigrate the manifest success of scientific medical advances. In this way I argue that subjunctive

medicine offers a way beyond the myriad issues that afflict placebo studies research. A way grounded in making explicit what, at their best, general practice clinicians actually do. They enact their consultations collaboratively with their patients and they do so most effectively in the subjunctive mood. That is enough, it seems, to develop and maintain the flexible good habits necessary to induce the ‘placebo effect’ in general practice.

Appendix A Systematic review database search strategies

MEDLINE

1	(MH "Placebo Effect+")
2	(MH "Placebos")
3	1 OR 2
4	(MH "Health Personnel+")
5	doctor* OR clinician* OR nurse* OR GP* OR physician* OR "medical practitioner*"
6	(MH "Patients+")
7	patient*
8	4 OR 5 OR 6 OR 7
9	3 AND 8
10	(MH "Health Facilities+")
11	(MH "General Practice+")
12	primary care OR primary health care OR primary healthcare OR family practice OR general practice OR clinical practice OR clinical setting
13	10 OR 11 OR 12
14	9 AND 13
15	(MH "Randomized Controlled Trials as Topic+")
16	"randomi?ed controlled trial*" OR RCT OR trial OR double-blind
17	15 OR 16
18	14 NOT 17

PsychINFO

1	DE "Placebo"
2	DE "Health Personnel" OR DE "Allied Health Personnel" OR DE "Medical Personnel" OR DE "Mental Health Personnel"
3	doctor* OR clinician* OR nurse* OR GP* OR physician* OR "medical practitioner*"
4	patient*
5	2 OR 3 OR 4
6	1 AND 5
7	DE "Treatment Facilities" OR DE "Clinics" OR DE "Community Mental Health Centers" OR DE "Halfway Houses" OR DE "Hospitals" OR DE "Nursing Homes" OR DE "Therapeutic Camps"
8	DE "Clinical Practice"
9	DE "Primary Health Care"
10	primary care OR primary health care OR primary healthcare OR family practice OR general practice OR clinical practice OR clinical setting
11	7 OR 8 OR 9 OR 10
12	6 AND 11
13	"randomi?ed controlled trial*" OR RCT OR trial OR double-blind
14	12 NOT 13

Embase Classic + Embase

1	placebo effect/
2	exp health care personnel/
3	(doctor* or clinician* or nurse* OR GP* or physician* or "medical practitioner*").mp.
4	patient*.mp.
5	2 OR 3 OR 4
6	1 AND 5
7	exp health care facility/
8	general practice/
9	(primary care or primary health care or primary healthcare or family practice or general practice or clinical practice or clinical setting).mp.
10	7 OR 8 OR 9
11	6 AND 10
12	randomized controlled trial/
13	("randomi?ed controlled trial" or RCT or trial OR double-blind).mp.
14	12 OR 13
15	11 NOT 14

CINAHL Plus with full text

1	(MH "Placebo Effect")
2	(MH "Placebos")
3	1 OR 2
4	(MH "Health Personnel+")
5	doctor* OR clinician* OR nurse* OR GP* OR physician* OR "medical practitioner*"
6	(MH "Patients+")
7	patient*
8	4 OR 5 OR 6 OR 7
9	3 AND 8
10	(MH "Health Facilities+")
11	(MH "Primary Health Care")
12	(MH "Family Practice")
13	primary care OR primary health care OR primary healthcare OR family practice OR general practice OR clinical practice OR clinical setting
14	10 OR 11 OR 12 OR 13
15	9 AND 14
16	(MH "Randomized Controlled Trials")
17	"randomi?ed controlled trial*" OR RCT OR trial OR double-blind
18	16 OR 17
19	15 NOT 18

Web of Science

1	TS="placebo effect*"
2	TS=(doctor* OR clinician* OR nurse* OR GP OR physician* OR "medical practitioner*")
3	TS=patient*
4	2 OR 3
5	1 AND 4
6	TS=(primary care OR primary health care OR primary healthcare OR family practice OR general practice OR clinical practice OR clinical setting)
7	5 AND 6
8	TS=(“randomi?ed controlled trial*” OR RCT OR trial OR double-blind)
9	7 NOT 8

Appendix B Systematic review quality assessment

MMAT Methodological Criteria Assessment

http://mixedmethodsappraisaltoolpublic.pbworks.com/w/file/fetch/84371689/MMAT%202011%20criteria%20and%20tutorial%202011-06-29updated2014.08.21.pdf

Initial screening questions for inclusion in MMAT assessment

Are there clear qualitative and quantitative research questions (or objectives*), or a clear mixed methods question (or objective*)?	**Yes**	**No**	**Can't tell**
Do the collected data address the research question (objective)? E.g., consider whether the follow-up period is long enough for the outcome to occur (for longitudinal studies or study components).	Yes	No	Can't tell

Overall score

No of studies	Percent	Rating
33	97	Yes
0	0	No
1	3	Can't tell

Total number of included studies

Number	**33**
Percent	**97**

MMAT criteria

Types of mixed methods study components or primary studies	Methodological quality criteria (Yes/No/Can't tell)
1. Qualitative	1.1. Are the sources of qualitative data (archives, documents, informants, observations) relevant to address the research question (objective)?
	1.2. Is the process for analyzing qualitative data relevant to address the research question (objective)?
	1.3. Is appropriate consideration given to how findings relate to the context, e.g., the setting, in which the data were collected?
	1.4. Is appropriate consideration given to how findings relate to researchers' influence, e.g., through their interactions with participants?
2. Quantitative randomized controlled (trials)	2.1. Is there a clear description of the randomization (or an appropriate sequence generation)?
	2.2. Is there a clear description of the allocation concealment (or blinding when applicable)?
	2.3. Are there complete outcome data (80% or above)?
	2.4. Is there low withdrawal/drop-out (below 20%)?
3. Quantitative nonrandomized	3.1. Are participants (organizations) recruited in a way that minimizes selection bias?
	3.2. Are measurements appropriate (clear origin, or validity known, or standard instrument; and absence of contamination between groups when appropriate) regarding the exposure/intervention and outcomes?
	3.3. In the groups being compared (exposed vs. non-exposed; with intervention vs. without; cases vs. controls), are the participants comparable, or do researchers take into account (control for) the difference between these groups?
	3.4. Are there complete outcome data (80% or above), and, when applicable, an acceptable response rate (60% or above), or an acceptable follow-up rate for cohort studies (depending on the duration of follow-up)?
4. Quantitative descriptive	4.1. Is the sampling strategy relevant to address the quantitative research question (quantitative aspect of the mixed methods question)?
	4.2. Is the sample representative of the population understudy?

	4.3. Are measurements appropriate (clear origin, or validity known, or standard instrument)?
	4.4. Is there an acceptable response rate (60% or above)?
5. Mixed methods	5.1. Is the mixed methods research design relevant to address the qualitative and quantitative research questions (or objectives), or the qualitative and quantitative aspects of the mixed methods question (or objective)?
	5.2. Is the integration of qualitative and quantitative data (or results*) relevant to address the research question (objective)?
	5.3. Is appropriate consideration given to the limitations associated with this integration, e.g., the divergence of qualitative and quantitative data (or results*) in a triangulation design?
	Criteria for the qualitative component (1.1 to 1.4), and appropriate criteria for the quantitative component (2.1 to 2.4, or 3.1 to 3.4, or 4.1 to 4.4), must be also applied

Key

Criteria met (%)	Rating
100	****
75	***
50	**
25	*
0	

NB: ‘Can’t tell’ (C) is scored as ‘No’ (N).

Overall Score

No of studies	Percent	Rating
6	18	****
15	46	***
12	36	**
0	0	*
0	0	

Assessment

No	Study title	Lead author	Year	Comments	Criteria score (Y/N/C)				Overall score
1	Defensiveness in the definition of placebo	Shapiro	1973	Risk of selection bias.	3.1	3.2	3.3	3.4	***
					N	Y	Y	Y	
2	The use of placebos: A study of ethics and physicians' attitudes	Shapiro	1973	Risk of selection bias.	3.1	3.2	3.3	3.4	***
					N	Y	Y	Y	
3	A comparison of the attitudes of a sample of physicians about the effectiveness of their treatment and the treatment of other physicians	Shapiro	1974	Risk of selection bias.	3.1	3.2	3.3	3.4	***
					N	Y	Y	Y	
4	A bitter pill to swallow: placebo therapy in general practice	Comaroff	1976	Study is appropriate for the research question. The researcher reflects on how the findings relate to the context and her disciplinary assumptions. The analytic process is not clear.					Did not meet screening criteria
5	Placebos and general practice: attitudes to, and the use of, the placebo effect	Thomson	1982	Participant recruitment methods do not minimise bias. Small sample size.	4.1	4.2	4.3	4.4	**
					N	Y	N	Y	
6	The attitudes of patients and physicians toward placebo treatment - A comparative study	Lynoe	1993	The patient group is more heterogeneous than the groups of physicians. Patients sampled consecutively.	3.1	3.2	3.3	3.4	***
					N	Y	Y	Y	
7	The use of placebo interventions in medical practice - A national questionnaire survey of Danish clinicians	Hrobjartsson	2003	Study is appropriate, well designed and well conducted.	3.1	3.2	3.3	3.4	****
					Y	Y	Y	Y	
8	Questionnaire survey on use of placebo	Nitzan	2004	Sample not representative.	3.1	3.2	3.3	3.4	**

No	Study title	Lead author	Year	Comments	Criteria score (Y/N/C)				Overall score
					N	Y	N	Y	
9	Patients' attitudes to the use of placebos: results from a New Zealand survey	Chen	2009	Low response rate.	4.1	4.2	4.3	4.4	***
					Y	Y	Y	N	
10	Use of placebo interventions among Swiss primary care providers	Fassler	2009	Low response rate. Demographic information is only available for the whole sample, not each group.	3.1	3.2	3.3	3.4	**
					Y	Y	C	N	
11	The Therapeutic use of placebos among Hungarian GPs: A preliminary research report	Ferentzi	2010	Very low response rate. Not enough information to determine if the sample is representative	4.1	4.2	4.3	4.4	**
					Y	C	Y	N	
12	Family physicians believe the placebo effect is therapeutic but often use real drugs as placebos	Kermen	2010	Low response rate.	4.1	4.2	4.3	4.4	***
					Y	Y	Y	N	
13	Placebo interventions in practice: A questionnaire survey on the attitudes of patients and physicians	Fassler	2011	Well conducted study. High response rate.	3.1	3.2	3.3	3.4	****
					Y	Y	Y	Y	
14	The use of pure and impure placebo interventions in primary care - a qualitative approach	Fent	2011	Researchers do not reflect in any detail on how their influence may have affected results. Little contextual exploration.	1.1	1.2	1.3	1.4	**
					Y	Y	N	N	
15	The use of placebos in medical practice. A questionnaire survey among GPs of Hungary	Ferentzi	2011	Very low response rate.	4.1	4.2	4.3	4.4	**
					Y	C	Y	N	
16	Factors affecting placebo acceptability: deception, outcome, and disease severity	Kisaalita	2011	Sample likely not representative of the population. No response rate recorded.	3.1	3.2	3.3	3.4	**
					N	Y	Y	C	
17		Babel	2012	No record of response rate.	3.1	3.2	3.3	3.4	***

No	Study title	Lead author	Year	Comments	Criteria score (Y/N/C)				Overall score
	The Effect of Question Wording in Questionnaire Surveys on Placebo Use in Clinical Practice				Y	Y	Y	C	
18	Analgesic Placebo Treatment Perceptions: Acceptability, Efficacy, and Knowledge	Kisaalita	2012	Sample likely not representative of the population. No response rate recorded.	3.1 N	3.2 Y	3.3 Y	3.4 C	**
19	Ethical aspects of clinical placebo use: what do laypeople think?	Koteles	2012	Sample not representative.	3.1 N	3.2 Y	3.3 Y	3.4 Y	***
20	Widespread use of pure and impure placebo interventions by GPs in Germany	Meissner	2012	Low response rate	4.1 Y	4.2 Y	4.3 Y	4.4 N	***
21	Use of Placebo Interventions in Primary Care in Poland	Babel	2013	Results might not be representative of the population.	4.1 Y	4.2 N	4.3 Y	4.4 Y	***
22	Placebo use in the United kingdom: results from a national survey of primary care practitioners	Howick	2013	Low response rate.	4.1 Y	4.2 Y	4.3 Y	4.4 N	***
23	Patients' attitudes about the use of placebo treatments: telephone survey	Hull	2013	Low response rate. Demographic data only available for whole sample. Inferential statistical results not recorded.	4.1 Y	4.2 Y	4.3 N	4.4 N	**
24	Use of Placebos and Nonspecific and Complementary Treatments by German Physicians - Rationale and Development of a Questionnaire for a Nationwide Survey	Linde	2013	Method of analysis is quite vague. Very little primary data reported.	1.1 Y	1.2 N	1.3 Y	1.4 N	**
25		Nitzan	2013	Sample not representative.	4.1	4.2	4.3	4.4	***

No	Study title	Lead author	Year	Comments	Criteria score (Y/N/C)				Overall score
	Consenting not to be informed: a survey on the acceptability of placebo use in the treatment of depression				N	Y	Y	Y	
26	When and why placebo-prescribing is acceptable and unacceptable: a focus group study of patients' views	Bishop	2014	Well designed and conducted.	1.1 Y	1.2 Y	1.3 Y	1.4 Y	****
27	Placebo use in the UK: a qualitative study exploring GPs' views on placebo effects in clinical practice	Bishop	2014	Well designed and conducted.	1.1 Y	1.2 Y	1.3 Y	1.4 Y	****
28	The use of placebo and non-specific therapies and their relation to basic professional attitudes and the use of complementary therapies among German physicians--a cross-sectional survey	Linde	2014	Low response rate.	3.1 Y	3.2 Y	3.3 Y	3.4 N	***
29	The patient's perspective of placebo use in daily practice: a qualitative study	Tandjung	2014	Appropriate consideration to reflexivity not given.	1.1 Y	1.2 Y	1.3 Y	1.4 N	***
30	Belief in and use of complementary therapies among family physicians, internists and orthopaedists in Germany -cross-sectional survey	Linde	2015	Low response rate.	3.1 Y	3.2 Y	3.3 Y	3.4 N	***
31	Placebo in general practice	De Gobbi	2016	Sample not representative.	4.1 Y	4.2 N	4.3 C	4.4 Y	**
32	A comparative study with depressed patients on the acceptability of placebo use	Feffer	2016	Well designed and conducted.	3.1 Y	3.2 Y	3.3 Y	3.4 Y	****

No	Study title	Lead author	Year	Comments	Criteria score (Y/N/C)				Overall score
					5.1	5.2		5.3	
					Y	Y		N	
33	Patient attitudes about the clinical use of placebo: qualitative perspectives from a telephone survey	Ortiz	2016	Low response rate. No contextual or reflexive consideration for qualitative component.	1.1	1.2	1.3	1.4	**
					Y	Y	N	N	
					4.1	4.2	4.3	4.4	
					Y	C	Y	N	
34	Parental Attitudes About Placebo Use in Children	Faria	2017	Well designed and conducted.	4.1	4.2	4.3	4.4	****
					Y	Y	Y	Y	

Appendix C Interview topic guide

1. Can you tell me what it's like working at the surgery?
    a. What do you like most about working here?
    b. What do you like least about working here?

2. How do you approach your consultations with patients?
    a. Do you enjoy some consultations more than others. If so why?
    b. What do you think makes a successful consultation?
    c. What makes an unsuccessful consultation?
    d. How do your patients make you feel?
    e. What distracts you in consultations, if anything?
        i. How do you deal with that?
    f. What sort of expectations do patients have?

3. What sources of information do you use in consultations?
    a. How do you integrate this in consultations?
        i. Do you think about it explicitly during a consultation?
    b. How do you communicate clinical information to patients?
        i. Do you use your body. If so, how?
    c. What sort of information do patients bring in to consultations?
    d. How much uncertainty is there in your consultations?
        i. Do you always feel you have the answers patients want?

4. How important do you think trust is in your relationship with patients?
    a. What makes this easier?
    b. What makes this more difficult?
    c. Do you generally know most of your patients personally?

5. How do you see general practice in the future?

6. What do you think could be done to make working at the surgery easier

Appendix D Focus group topic guide

1. Can you tell me what it's like to go to the GP?

2. What makes a good GP or nurse?
    a. What do you expect?
    b. How do you want them to act?

3. What makes a successful consultation?

4. What do you expect from a consultation?

5. How do you think GPs or nurses should start and end a consultation?

6. How important is it to see the same GP?

7. What could this practice do to improve?

Appendix E Focus group vignettes

Vignette 1: Being direct about the limits of biomedicine

Anne is a generally healthy young woman who goes to see her doctor, Dr Jones, because she has a very sore throat and a runny nose. She really does not feel well. At the start of the consultation she asks Dr Jones if she can have some antibiotics to make her feel better. Dr Jones asks Anne how long she has been feeling unwell and how it started. Dr Jones examines Anne and decides that, although she is unwell, she has a cold that is likely to get better by itself. Dr Jones tells Anne that she doesn't need antibiotics and that she should go home to rest, before wishing her well and finishing the consultation.

Vignette 2: Taking time in a consultation

Steve is a recently retired man who lives on his own. He goes to see his doctor, Dr Smith, because he has had a sore knee for a couple of weeks. Dr Smith asks Steve to describe the pain, how long he has had it for, and how he thought it started. Dr Smith then does a physical examination but does not find anything particularly wrong with the knee. To make sure, he tells Steve that he will order some blood tests and that when the results are back Steve should come in to discuss them. He gives Steve a prescription for some painkillers in the meantime. Steve then starts talking about the problems this is causing him as he is finding it difficult to walk into town like he used to. Despite already running late, Dr Smith listens to Steve and suggests some ways he may be able to cope with this. By the time Dr Smith is finished he is running very late and has a number of patients waiting to see him.

Vignette 3: Being firm

Phil is a middle-aged man who has diabetes. He has come to see his doctor, Dr Wallace, for his regular check-up. They discuss recent test results and Dr Wallace tells Phil that he is struggling to control his diabetes at the moment, which is not normally the case. Dr Wallace asks Phil why he is finding it difficult. Phil says that he has been busy at work, is not exercising much and is eating snacks in the evening. Dr Wallace is normally quite laid-back but in this consultation she is quite firm with Phil. She gives him clear instructions on what to do for the next few weeks and tells Phil to take his head out of the sand and go back to doing regular readings every day. Phil agrees to the plan. Dr Wallace arranges for a follow up consultation in a few weeks.

Vignette 4: Looking things up

Laura has high blood pressure and is visiting her doctor, Dr Adams, for a review. Dr Adams takes a blood pressure reading, which is quite high. Laura tells Dr Adams that she has been having problems with her blood pressure medication, which has been making her legs swell. Because of this she has not been taking it regularly. Dr Adams suggests that they try a different medication to bring down her blood pressure. Laura asks Dr Adams which medication she recommends. Dr Adams says that she is not sure. She pulls down a large book from her shelves and starts looking through it. After a little while, Dr Adams suggests a different medication, which Laura agrees to. Dr Adams explains how the new medication works and gives Laura a prescription to take with her.

Appendix F Indicative participant information sheet and consent form

A study of the therapeutic encounter in general practice

PARTICIPANT INFORMATION SHEET

Invitation to take part

We are a research team at the University of Southampton investigating how treatment can be improved through interactions between clinicians and patients. This study will form part of a PhD.

Before you decide whether to participate, it is important for you to understand why the study is being conducted and what is involved.

Why is the study needed?

The focus of medical practice is often on treating individual diseases and although this has been helpful, this approach does not always provide for personal, comprehensive care.

This can cause problems in general practice, where patients may have more than one condition, some of which have no cure and can last for a long time.

The therapeutic encounter involves consultations, or interactions between clinicians (e.g. doctors. nurses) and patients. The therapeutic encounter is a central factor in patient treatment and needs to be studied in detail to investigate a more comprehensive approach to care in general practice.

In this study we are investigating how clinicians might improve treatment through the therapeutic encounter.

What does taking part in the study involve?

With your consent, a researcher from the University of Southampton will be present in and observe your consultation. The researcher will listen and observe your consultation and take hand-written notes. The treatment you will receive will not change due to the study.

Why have I been invited to take part?

We are inviting some patients at this practice to participate in the study.

Do I have to take part?

No, it is completely up to you. If you choose not to take part then you will not be included in any part of the study.

What do I do if I want to take part?

If you would like to take part in the study, please fill in the short consent form attached with this sheet on the day of your consultation, and return it to the practice receptionist prior to your consultation.

If you have any questions you can speak to one of the research team using the contact details in this information sheet. Alternatively you can speak to your GP who will speak with the research team.

What are the possible benefits of taking part?

You will likely not benefit directly from the study, but our findings may help other clinicians and patients in the future. Some people enjoy taking part in studies and helping to generate new knowledge.

What are the possible risks of taking part?

There are minimal risks to taking part. However, if you do encounter any distress due to the study you can speak either with a member of the research team or with your GP who will be able to provide support.

Will my information be kept confidential?

Yes. All personal information will be anonymised to ensure confidentiality.

All researchers involved in the study will comply with the requirements of the Data Protection Act with regards to the collection, storage, processing and disclosure of personal information and will uphold the Act's core principles:

- All data will be anonymised by the creation of coded, depersonalised data where the participant's identifying information is replaced by an unrelated sequence of characters. This digital data will be maintained in separate locations using encrypted digital files within password protected folders, stored securely on the University of Southampton server, which is within the EU. Hand written data will be kept in a locked secure location at the University of Southampton. Data will be stored for 15 years from the end of the study and the custodian will be the University of Southampton. Any personal data required for study logistics will be destroyed on study completion.

- If you agree then anonymised information collected about you may be used to support future ethically approved research.

How do I withdraw from the study if I want to?

You can withdraw from the study at any time without giving a reason by speaking with one of the research team or your GP. If you have any concerns during the study that may lead you to think about withdrawing, you can discuss these issues confidentially with the research team or your GP.

You have the right for all data collected up to the point of withdrawal to be destroyed and one of the research team will give you this option if you withdraw.

Who is organising and funding the research?

The research is organised by the University of Southampton and funded by the National Institute for Health Research (NIHR) School for Primary Care Research (SPCR).

Who has approved this study?

All research in the NHS is reviewed by a Research Ethics Committee – an independent group of people who protect your safety, rights, wellbeing and dignity. This project has been approved by the Yorkshire & The Humber - Bradford Leeds Research Ethics Committee.

Version 3 – 01/12/17 – IRAS Number: 230742 – ERGO Number: 27837

CONTACT DETAILS

Who do I contact if I want to ask questions?

If you have any questions you can speak with the Chief Investigator or another member of the research team. In case of concern or complaint you can contact the University of Southampton Research Integrity and Governance (RIG) team (see below). Alternatively you can speak with your GP.

CHIEF INVESTIGATOR

Doug Hardman

ADDRESS

School of Primary Care and Population Sciences

Faculty of Medicine

University of Southampton

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Aldermoor Close

Southampton

SO16 5ST

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02380 591864

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ALTERNATIVE CONTACT

If you do not wish to speak to the Chief Investigator you can contact the University of Southampton Research Integrity and Governance (RIG) team – contact details below.

University of Southampton Research Integrity and Governance (RIG) team

Tel: 02380 596846

Email: researchintegrity@soton.ac.uk

CONSENT FORM

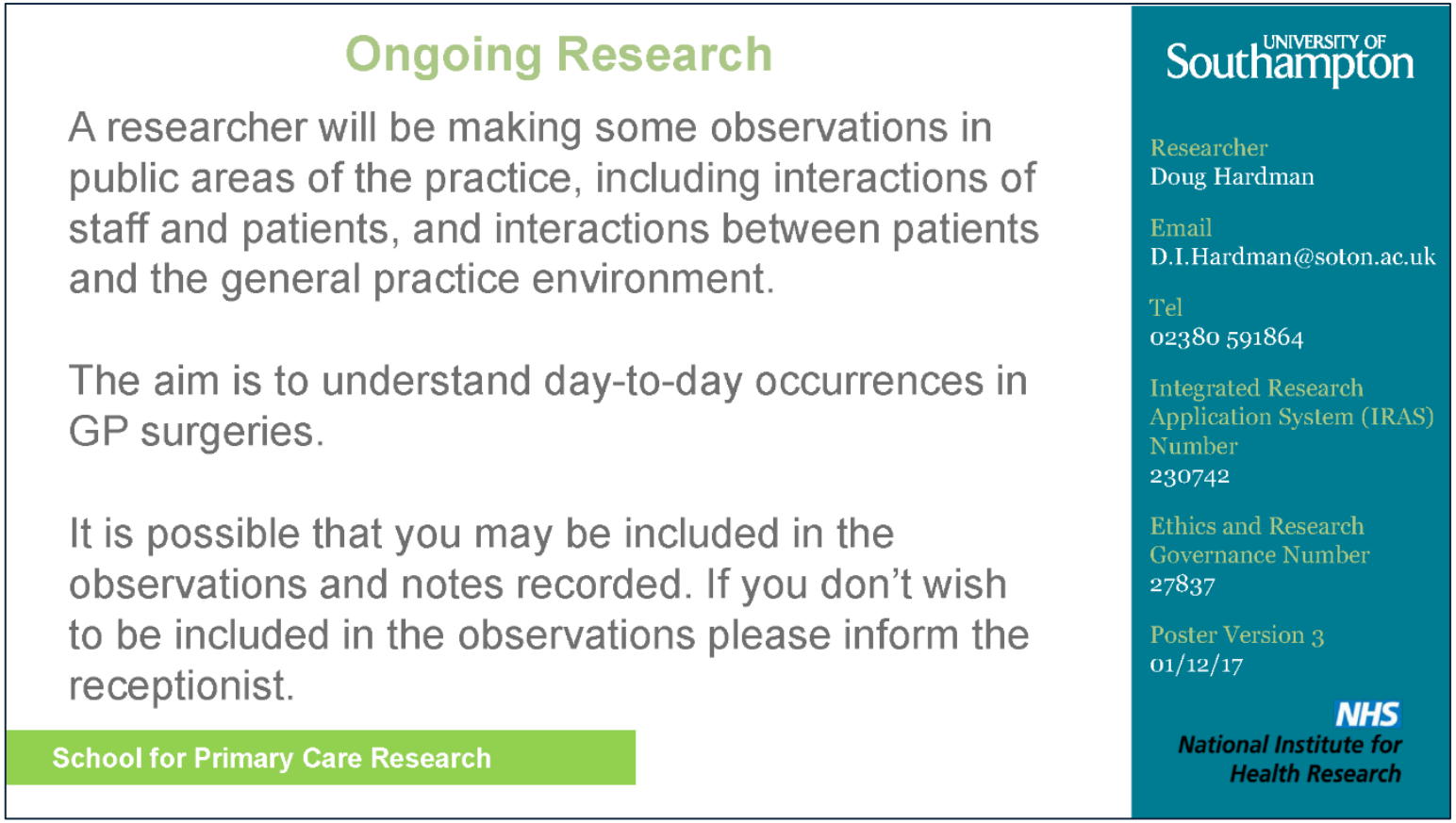
A study of the therapeutic encounter in general practice

1	I confirm that I have read the information leaflet dated 01/12/17 (Version 3) for the above study. I have had the opportunity to ask questions and have had any questions answered satisfactorily.	☐
2	I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason, without my medical care or legal rights being affected.	☐
3	I agree to the direct observation of my consultation.	☐
4	I agree for anonymised quotes to be used in the study report.	☐
5	(If appropriate) I understand that relevant sections of my medical notes and data collected during the study, may be looked at by individuals from the University of Southampton, from regulatory authorities or from the NHS Trust, where it is relevant to my taking part in this research. I give permission for these individuals to have access to my records.	☐
6	I give permission for anonymised information collected about me to be used to support other ethically approved research in the future. (OPTIONAL)	☐
7	I agree to take part in the above study.	☐

Name	Signature	Date

Version 3 – 01/12/17 – IRAS Number: 230742 – ERGO Number: 27837

Appendix G Research poster



Appendix H Ethnography risk matrix

Reasonably foreseeable hazard	Risk	Mitigation measures	Residual risk
Risks to researchers			
Lone working	HIGH	Implementation of department lone working procedures, including adherence to communication schedule.	LOW
Risky locations – both in terms of Health & Safety and security risks	LOW	Ensure all study locations are safe by conducting a risk assessment of each location prior to use	LOW
Travel hazards	LOW	Ensure there is adequate travel options to locations, including for both public and private transport options, with parking and disabled access if necessary	LOW
Distress to researchers caused by participant disclosure	MEDIUM	Debrief with nominated and vetted co-researchers – Dr Adam Geraghty, Dr Mark Lown and Dr Felicity Bishop	LOW
Participant disclosure of illegal material such as intent to commit a crime	LOW	Make a judgement based on the nature of the disclosure and manage through specific general practice procedures and policy	LOW
Risks to participants (clinicians and patients)			
Risky locations – both in terms of Health & Safety and security risks	LOW	Ensure all activities involving participants are at safe locations.	LOW
Travel hazards	LOW	Ensure there is adequate travel options to locations, including for both public and private transport options, with parking and disabled access if necessary	LOW
Strain of participation in study for participants	MEDIUM	Ensure participants understand they can withdraw at any time without giving a reason. Ensure participants have adequate breaks during participation if required	LOW
Emotional distress for participants	MEDIUM	Ensure support is available for participants through their general practice to discuss any issues that may arise. Also ensure participants have the research team contact details if they wish to discuss any issues	LOW
Unmet expectations for participants	MEDIUM	Comprehensive and relevant participant information available before they consent to take part in the study.	LOW

Unintentional disclosure of participant identity	LOW	All personal data will be anonymised to ensure confidentiality for participants by the creation of coded, depersonalised data where the participant's identifying information is replaced by an unrelated sequence of characters. Data will be anonymised at the earliest practicable stage – either when field notes are taken or when interview and focus group data are transcribed	LOW
Wider risks			
Participant disclosure of intent to harm others	MEDIUM	Managed through specific general practice procedures and policy.	LOW
Impact on relationship between research department and general practices	LOW	Ensure research is conducted collaboratively, ethically and with regard for extant working practices.	LOW
Impact on relationship between research department and participants	LOW	Ensure research is conducted ethically and respectfully.	LOW
Potential misuse of findings for illegal, discriminatory or harmful purposes	LOW	Ensure protocol is adhered to and best practice research ethical standards applied	LOW

Appendix I A discursive exploration of public perspectives on placebos and their effects

Abstract

There is increasing evidence that placebos could be effective in clinical practice. However, knowledge of public perspectives on placebos is underdeveloped. We conducted a discourse analysis of internet comments on news articles related to placebos, aiming to improve this knowledge for clinicians and researchers. We developed two discursive constructs of the placebo. The dominant construct of *the placebo pill* informs a paradoxical understanding of placebos that closes down treatment. The less prevalent counter-discursive construct of *the treatment process* frames placebos as potentially viable within modern evidence-based medicine. We discuss the opportunities and challenges of this alternative understanding of placebos.

Key words

Placebo; communication; illness perception; internet; critical health psychology

Background

Within medical research a 'placebo' is commonly understood as an object used in randomised controlled trials to control for, among other factors, the psychological, social and cultural effects of treatment. Our focus is on the clinical use of placebo treatment, understood broadly as when something like these factors are deliberately exploited by healthcare professionals during treatment, outside the context of a trial. The clinical placebo has a long history (Shapiro & Shapiro, 1997), but current understanding has developed from the early notion of an 'ineffective' treatment used to please patients, to one of an active agent in its own right (Kaptchuk, 1998; Kaptchuk & Miller, 2015; Kerr et al., 2008; Wolff et al., 1946/2013). In this study we discursively explore public perspectives on clinical placebos and their effects.

There is increasing evidence that placebo treatment may have clinical utility (Benedetti, 2014; Evers et al., 2018; Vase et al., 2002; Wampold et al., 2005). For example, treating pain through inducing the production of endogenous opiates (Benedetti, 1996; Levine et al., 1978), and treating Parkinson's disease through inducing the release of endogenous dopamine (de la Fuente-Fernández et al., 2001). Moreover, healthcare professionals are known to use placebo treatment in clinical practice for different reasons including to improve care, manage patients' expectations, and cope with uncertainty (Bishop, Howick, et al., 2014; Comaroff, 1976; Tilburt, Emanuel, Kaptchuk, Curlin, & Miller, 2008).

However, although placebo treatment is common, its frequency of use and healthcare professionals' attitudes toward placebo treatment vary significantly (Fässler et al., 2010; Linde et al., 2018). Furthermore, despite potential clinical utility, there are considerable definitional and ethical disagreements surrounding placebos and their effects (Alfano, 2015; Blease, 2011; Miller & Brody, 2011; Miller & Colloca, 2009). For example, placebo effects have been conceived as: the psychological effects of 'inert' substances (Beecher, 1955); the psychosocial context of treatment (Colloca & Miller, 2011a); the effects of healing rituals and symbols (Brown, 2013; Kaptchuk & Miller, 2015; Miller & Colloca, 2010); and the response to enculturated meaning (Moerman, 2002). Presently, some promising attempts at a synthesis notwithstanding (e.g., Howick, 2017; Ongaro & Ward, 2017), an integrative theory of placebos does not yet exist (Miller et al., 2009).

Compounding this lack of consensus, the increasingly nuanced understanding of placebos and their effects in the research community is becoming progressively detached from public perspectives. This is especially significant for a process that, as noted above, is

increasingly understood as entangled with meaning and social interaction (Moerman, 2002; Moerman & Jonas, 2002). If, as seems reasonable, placebo effects cannot be explained by the effects of an 'inert' substance, then the focus should shift towards understanding how patients interpret something like this phenomenon (Moerman, 2013).

The definitional and ethical disagreements around placebos and their effects is evident in public perspectives. For example, some patients take a consequentialist view, stating that placebos are acceptable as long as it helps. Others state that placebos are unethical because they, supposedly, require deception, violating a deontological commitment to patient autonomy (Bishop, Aizlewood, et al., 2014; Feffer et al., 2016). And although there is an increasing focus on patients' perspectives (e.g. Hull et al., 2013; Lynoe et al., 1993; Tandjung et al., 2014), research in this area is underdeveloped.

Given the ambiguity in placebo studies research, particularly regarding the views of healthcare professionals, researchers conducted a study exploring placebo use by General Practitioners (GPs) in the United Kingdom (UK) (Howick et al., 2013). This included findings that 77 percent of surveyed GPs used placebos – defined very widely – at least once a week, and that most respondents believed placebos – again defined very widely – to be ethical in some circumstances. These findings attracted significant media attention from major online news organisations.

Perhaps due to the contentious nature of the debate, the news articles resulted in many readers commenting on the respective websites. These comments give an indication of public perspectives on placebos and their effects; commentators were largely responding to the findings of the study, interpreted by journalists, or to the placebo phenomenon more generally. We conducted a discursive exploration of these comments, aiming to understand: how members of the public conceptualise placebos and their effects; how the ethical status of placebo use is publically negotiated; and how these conceptualisations and ethical negotiations might open up and close down potential modes of clinical practice.

Method

The data

Data were collected from internet comments on six UK news articles responding to the Howick et al. (2013) study on placebo use by UK GPs. The included news organisations reflect a political cross-section of the mainstream UK media. The Howick et al. (2013) study was published in March 2013, as were the news articles. Data collection was restricted to UK organisations to set the conditions for deeper socio-cultural analysis.

The data consists of 930 comments, over six sources, covering 55,410 words. The typical length of each comment is between 40 and 70 words. One data source dominated, with 445 comments. The other five sources have 202, 176, 63, 43, and 1 comments respectively.

The data are located on popular, open access online news sites; therefore it is reasonable to assume that the data are already public. However, in the context of internet mediated research the distinction between private and public space is complex (British Psychological Society, 2013). Although the data can reasonably be considered public, commentators did not contribute their opinions with the explicit understanding that they would be used for research or disseminated in a different context. Therefore, the specific news articles are not named in this study, and all pseudonyms used by online commentators are anonymised to better protect their confidentiality: this is also stipulated in the ethical clearance given for this study by the University of Southampton Faculty of Medicine Ethics Committee. In the analysis, each data source is identified by a letter (A, B, C, D, E, F). Within each data source, commentators are then sequentially numbered (A1, A2, A3…etc.).

Mode of analysis

Discourse analysis can be understood broadly as a method of analysing the content, structure and performance of language. In psychology it is broadly split into two approaches: 'discursive psychology' is concerned with discourse practices, what people *do* with language; 'critical discourse analysis' (CDA) concentrates on the discursive resources supporting language, what sort of being-in-the-world is available to people (Willig, 2013). Given the contention surrounding placebos and their effects, and the importance of socio-cultural factors in their comprehension, we used CDA as it allowed us to analyse the structures of meaning behind the placebo phenomenon, and how people utilise the phenomenon in practice.

There are a range of methodological approaches termed CDA (e.g., Fairclough, 2015; Parker, 2015; Wodak, 2007). Our approach was orientated towards exploring social structures and systems of meaning (Parker, 2015); our analysis was grounded in the principles of "an attention to history, theory and subjectivity" (Parker, 2015, p. 18). However, unlike more prevalent forms of CDA, our approach was mediated by a pragmatist approach to inquiry and a more neutral interpretation of power relations (Dewey, 1925/2013; Rorty, 1982; West, 1999).

We adopted a two-phase, abductive analytic approach outlined by Potter and Wetherell (2010): identify patterns in the data; and then identify functions and consequences. We first identified the predominant constructs of the discursive object in question (the placebo) through a close reading of all comments. We then identified the controlling metaphors, notions, categories and norms that support or supress these constructions – the discursive resources – again through a close reading of the comments. Next, we explored the variations, relationships and tensions between discursive resources, including how they are produced and promoted. We did this by comparing and contrasting comments across the data sources, but also by analysing interactions between commentators within each data source. We then situated the discursive resources, and relationships between resources, within wider ways of being-in-the-world: discourses.

After identifying patterns in the data, we focussed on the functions of commentators using certain discursive resources, and identified the subject positions they took within discourses. Last, we identified the consequences of commentators taking various subject positions within discourses and how this influences the intelligibility, availability and legitimacy of the discursive constructs. Throughout the analytic process the integration of theory was not an explicit phase, but incorporated throughout the analysis (Wodak, 2007).

Analysis

We developed two discursive constructs of the 'placebo': the dominant discursive construct of *the placebo pill*; and the less prevalent counter discursive construct of *the treatment process*. We use these two constructs to frame the analysis.

The placebo pill

In his interpretation of the consequences of modernity, Anthony Giddens (1990, p. 21) identified the *disembedding* of social systems, whereby social relations are "[removed] from local contexts of interaction" and restructured. One of the mechanisms he identified as intrinsic to this process is the creation of *symbolic tokens*, used "without regard to the specific characteristics of individuals or groups that handle them at any particular juncture." (Giddens, 1990, p. 22). A common example is money, but our dominant discursive construct is a narrower example of such a symbolic token: the placebo pill.

Commentators in our study commonly conceived of a placebo as an 'inert' substance that is given to a patient. This common lay definition is similar to that provided by Henry Beecher in his famous (1955, p. 1602) paper, where placebos are "pharmacologically inert substances… having a psychological effect". However, as other researchers have noted,

this definition is problematic as a ‘placebo’ cannot be understood coherently without reference to the patient, condition, and therapeutic theory in question (Grünbaum, 1986; Howick, 2017). Moreover, nothing is actually inert – one can treat any substance in physico-chemical terms if one chooses to do so – and describing a placebo in this way is, therefore, paradoxical. For example, “even the proverbial sugar or bread pill will prove far from inert in patients with insulin dependent diabetes or with gluten intolerance, respectively.” (Howick, 2017, p. 1365). Despite these issues, the reification of the placebo pill as a disembedded symbolic token dominated discussion. We identified three discursive resources supporting this construct: market exchange, individual decision making, and biomedicine.

Market exchange

Market exchange emerged as a central resource that was used to support the dominant construct of the placebo pill. By conceiving of a placebo as an object that is given by a healthcare professional to a patient, the norm of market exchange is made available to guide human action. This was common across the data sources:

> Data Source A, Commentator 4 (A4): This is fraud. The patient is told that he/she is getting a certain drug and then goes and buys this at the chemists. But the patient is in fact paying good money for what is effectively water. It is considered fraud even to sell something that poses even as any illegal drugs! Why should the law be any different for legal drugs especially. Unbelievable, there is no hope in this country!
>
> F2: Are you really saying that some doctors give patients prescriptions that the patients then take to Boots to hand over some of their hard-earned cash for a packet containing nothing but little lumps of sugar? If that is so, and it is done on a large scale, this practice should be exposed and the perpetrators prosecuted.
>
> E5: So let me get this right. Supermarkets are vilified and a national crisis created when suppliers are found to have included horsemeat, which is harmless, in what are sold as beef products. But if some crew of "doctors", who are too greedy to tell people that they don't need treatment/pills and too lazy to explain why give out placebos ie fake treatments that deceive the public, that's fine.

Drawing on an individualist discourse, commentators focussed on themselves as consumers within a market, whereby the aim was to ensure they were seen to get a fair deal from their healthcare professional. A common refrain was that, “I'll pay for my prescription with placebo money then.” (E4), or that “placebos are fine, as long as the chemist will accept a dud cheque for the prescription charge.” (E1). To this end, commentators promoted the primacy of contractual relations:

> A5: If I found out I'd been given a 'placebo' I would be furious at the waste of my money on the prescription.

> F1: Hang on a minute! Prescribing placebos is surely a conspiracy to commit fraud? After all we pay chemists £7.65, £7.85 from April, per prescription. Bloody expensive Smarties!

Given the existence of prescription charges in England, if a placebo is understood as a pill, some commentators may reasonably feel they are involved in a market exchange, rather than in the promoted institutional framework of free-at-the-point-of-use healthcare. Moreover, if as the geographer David Harvey (2005, p. 42) posited, society is dominated by a ”market-based populist culture of differentiated consumerism and individual libertarianism”, it is not surprising that this appeared to inform commentators' understanding of placebo treatment. However, a common criticism is that such an individualist society negatively affects social relations, promoting division (Giddens, 1990; Habermas, 1984). One consequence of this is the second discursive resource supporting the placebo pill construct: individual decision making.

Individual decision making

Commentators often promoted a pejorative notion of the placebo, setting placebo treatment against that used for patients with 'genuine' illnesses.

> A12: Probably this article refers to those who insist on being given something instead of sucking it up for a couple of days. Instead they can suck on a placebo.

> A15: All that this report does is confirm my deeply held suspicions that many of the people who sit in the doctors' waiting room have absolutely nothing wrong with them other than anxiety or a need for attention.

Within such an individualist discourse, healthcare was presented as a scarce resource by which productive work can be maintained: **“**We all know someone who goes to their GP/ hospital at every given chance. What annoys me is that these time wasters waste a huge amount of resources” (A16). Informed by this, some commentators resisted control by the healthcare system, taking the position of self-reliant patients making individual medical decisions.

> E9: I have rarely ever taken something prescribed by my GP. On the occassions [sic] that I have, I have googled the drug and checked the dosage before taking it.

> A30: I haven't taken a medicine I didn't research since I was 12. If you're being given a treatment that is mis-labelled chemically, that's a crime, if you're not researching what treatment you're taking, thats your fault.

If the placebo pill, as a symbolic token, can be conceived of as a disembedding mechanism, then this self-reliance can be understood as resistance to another such mechanism – expert systems. For Giddens (1990, p. 28) “expert systems are disembedding mechanisms because, in common with symbolic tokens, they remove social relations from the immediacies of context.”. Some commentators undermined the expert system of

healthcare and the social position of doctors, noting that "in any case, most GPs remain clueless about the finer details of pharmacology." (D2), and that "doctors are all too ready to give out antibiotics like sweeties… I always refuse them and the doctor gets quite confused basically says go home and get over it." (E11). There is tension between, on the one hand, embracing the symbolic token of the placebo pill, and on the other, the lack of faith in systems beyond one's full comprehension.

However, although some commentators took self-reliant positions, others took positions as *passive* patients, reinforcing faith in expert systems:

> A29: Even with the aid of the internet it is highly arrogant to believe you know better than a doctor who spent years training to be what they are.
>
> E1: I don't care what I'm prescribed as long as a) it works and b) doesn't cause me any additional damage. Nothing wrong with a placebo if it does the job!
>
> F6: I don't care whether it's a placebo or not, I just want to feel better and if tricking my mind is part of that, so be it.

Explicitly giving control to the healthcare profession in this way, patients ceded their role in the decision making process.

Within the placebo pill construct, therefore, patients took active (resisting expertise) and passive (ceding control) individual decision making positions. Both these approaches were informed by the third discursive resource supporting the placebo pill construct: biomedicine.

Biomedicine

It was common for commentators to focus on physical explanations at the expense of social, cultural, or intersubjective factors. This was manifest through a number of techniques. First, through bifurcating nature into different degrees of reality, for example stating that "a placebo is NOT a drug, it is an inert substitute which is known to have zero direct physical effect." (A24), or that "there is a plausible (though as yet unproven) theory that the placebo effect has a *real* physiological effect by stimulating the body's immune system to kick fully into swing" (A26).

Second, despite the often broad effects of pharmacological treatment, some commentators set placebo pills against what they viewed as proper, 'targeted' drugs, for example noting that "when having to pay out for a prescription, you should have a drug that is designed for your problem" (A7).

Third, commentators positioned placebos as ineffective against 'genuine' illnesses, viewing them merely as something to placate a patient. For example noting that, "the

placebo would not work if the illness was genuine and the patient would then have to go back." (E6), and that "if someone had a genuine illness and was prescribed a placebo, it would become obvious very quickly that the tablet wasn't working, and they would have to go back to the doctor." (E7).

It is not surprising that biomedicine was a dominant discursive resource. After all, to extend Quine's (1953, p. 44) analysis to medicine, "the myth of physical objects is epistemologically superior to most in that it has proved more efficacious than other myths as a device for working a manageable structure into the flux of experience.". Medicine has been historically successful precisely because it has adopted the myth of physical objects. But such a myth has its limits. The paradox inherent in solely conceiving of placebos biomedically, as pills, perhaps reflects the efficacious limits of biomedicine's myth of physical objects. This has implications for medical practice, particularly in primary care, where clinicians are expected to practise person-centred medicine, synthesising technical medical knowledge with individual patient values.

The treatment process

Although the placebo pill construct dominated, from the data we developed a less prevalent counter discursive construct – the treatment process. Through this construct the placebo is not conceived of as an substance, such as a pill, but as the whole clinical treatment process in which a material substance may or may not be involved. We identified two discursive resources supporting this construct: self-healing, and shared decision making.

Self-healing

The first discursive resource is self-healing. In contrast to the notion of the passive patient, prevalent in the placebo pill construct, commentators presented themselves as active actors in the treatment process, focussing on their own 'self-healing' capacity:

> D4: It is my knowledge that the human body has an amazing/powerful way of self healing. You will need some in depth education in understanding the amazing way in which the human body defends itself from viruses, bacteria and many other illnesses. The human body is very efficient at resolving it's own health issues without medical intervention or drugs

> A41: The body has a remarkable ability to heal itself. What placebo's show is that we just need to convince ourselves that we will be better and in many cases the body does the rest. This is the root I think of all miracle cures. To poo poo placebo's and other alternative treatments is to shut the door on allowing the body to heal itself.

Moreover, some commentators explicitly stated their views on the limitation of the biomedical model, and its delivery within the institution of England's National Health Service (NHS):

> C6: But the reality is that many doctors, and the NHS structure itself, is such that these methods are not treated as important enough to prioritise because their methodologies do extend beyond the mechanical, they extend into psychological wellbeing, breathing, state of mind, awareness, none of which is recognised by the popular interpretation of a biomechanical medical model.

> A35: the body is a fantastic piece of kit with great healing abilities. Perhaps education on this is better than perpetuating the myth that the medical model has all the answers, especially when it doesn't, hence the article.

Others noted that, "the body is perfectly capable of producing its own drugs and placebo may work by illiciting [sic] this response." (F8), echoing the numerous studies which have shown that placebo treatment can, for example, stimulate the production of endogenous opiates (Amanzio & Benedetti, 1999; Eippert et al., 2009; Gracely et al., 1983; Pecina & Zubieta, 2018).

By accepting the limitations and fallibility of biomedical knowledge, commentators did not present themselves as active agents set against treatment – as with the self-reliant patient – but as patients taking an active role in treatment, for example noting that "in many cases placebo's [sic] work by *enhancing* your bodies healing mechanisms" (A34). This broadly concurs with recent embodied and enactive accounts of placebo effects (Ongaro & Ward, 2017; Thompson et al., 2009), whereby "the living body is a self-producing and self-maintaining system that enacts or brings forth relevance, and that cognitive processes belong to the relational domain of the living body coupled to its environment." (Varela et al., 1991/2016, p. xxv). Although there are a range of broadly enactive accounts (e.g., Hutto & Myin, 2012; Thompson, 2010; Varela et al., 1991/2016) it is this notion of an active, autonomous organism co-dependent with its environment that characterised our findings. This leads to the second discursive resource: shared decision making.

Shared decision making

Developing his interpretation of the consequences of modernity, Giddens (1990, p. 79) noted that "people [increasingly] live in circumstances in which disembedded institutions, linking local practices with globalised social relations, organise major aspects of day-to-day life.". But he complemented the notion of disembedding with *reembedding*, meaning "the reappropriation or recasting of disembedded social relations as to pin them down (however partially or transitorily) to local conditions of time and place." (Giddens, 1990, pp. 79-80).

For Giddens, the disembedding mechanisms (symbolic tokens or expert systems, understood together as *abstract systems*) interact with reembedded contexts of action. One of these contexts is the encounter with strangers or acquaintances, who serve as the access points to abstract systems. This encounter is one focus of commentators using the discursive resource of shared decision making, whereby treatment is understood as a joint venture between patient and healthcare professional:

> A37: If something is being tried like this then it's probably best that the Dr discusses it with the patient, in the same way they would if offering a new drug / therapy as part of a clinical trial. Would probably get better feedback that way.

> C7: Not sure about placebos as I've never had any, as far as I know but agree that a good doctor can make an enormous difference to a patient and their illness just by listen and discussing the problem in a manner the patient can understand.

Developing this notion, some commentators explicitly took the position of patient as contributor, focussing on the importance of trust, for example noting:

> A38: I told my doctor and my hospital quite clearly and respectfully that I trust their judgement and want to be involved in my care, and that I always insist on knowing what the treatment or medicine is, why it is being given, the side-effects, risks, etc., and that I expect those questions to be answered honestly. I think everyone should be as involved in their care as possible.

One commentator noted that placebo treatment could be conducted "in a perfectly honest way, telling patients that this is a treatment that is not proved to work better than a placebo, but can be expected to be as good, and that Placebos are known to work." (A40). This view reflects a trend in placebo studies research focussed on 'open label' placebo treatment, purportedly bypassing the issue of deception (Carvalho et al., 2016; Colloca & Howick, 2018; Kaptchuk et al., 2010; Kaptchuk & Miller, 2018; Sandler et al., 2010).

The use of shared decision making as a discursive resource highlights the importance of trust in the therapeutic encounter for placebo treatment, whereby "encounters with the representatives of abstract systems… take on the characteristics of trustworthiness associated with friendship and intimacy." (Giddens, 1990, p. 85). And, moreover, offers a way towards understanding placebo treatment as a powerful, productive force bringing patients and healthcare professionals together within a wider communitarian discourse.

Through the notion of the therapeutic encounter, we can situate placebo treatment in a modern conception of evidence-based medicine that promotes expert judgement, shared decision making, and a strong patient-clinician relationship (Charles et al., 1997; Greenhalgh et al., 2014; Greenhalgh, Snow, Ryan, Rees, & Salisbury, 2015; Little et al., 2001; Stewart, 2005). This suggests that placebo treatment might sit more comfortably than previously thought within modern medical practice.

Discussion

In our discursive exploration of public perspectives on placebos and their effects, we highlight two discursive constructs of the placebo: the placebo pill, and the treatment process. The consequence of the first, more dominant, construct is an understanding of placebo treatment, informed by an individualist discourse, which divides healthcare professionals and patients. This division, and the paradoxical nature of conceiving of placebos in such a way, closes down potentially therapeutic placebo treatment by rendering it illogical and deceptive.

Within the second, counter discursive construct, we posit that placebo treatment, informed by a communitarian discourse, can be conceptualised as a collective and productive force. We suggest the placebo-as-treatment-process construct can be supported by conceiving of the 'power of the placebo' through the therapeutic encounter. Healthcare professionals can promote this notion by taking opportunities to engage patients using the counter discursive resources of self-healing and shared decision making. This might open up a productive and collaborative mode of clinical practice by which healthcare professionals could ethically and effectively use placebo treatment. However, although conceiving of placebos in this way seems more intelligible, stretching the definition of placebo treatment so far does raise serious concerns for the utility of the placebo concept itself.

As we have indicated, a modern scientific understanding of placebos and their effects has moved from the 'psychological' effects of 'inert' substances (Beecher, 1955), towards accounts grounded in different theoretical backgrounds. These include the enculturated meaning of treatment (Brody, 1997; Moerman, 2002); healing rituals and symbols (Kaptchuk & Miller, 2015); motor-intentionality (Frenkel, 2008); embodiment (Thompson et al., 2009); and enactivism (Ongaro & Ward, 2017). But although these modern theories provide interesting accounts of healthcare practices in general, it is difficult to see how they effectively delineate placebo from non-placebo. All treatment processes can be conceived of in these terms and, therefore, they make no credible argument as to why the placebo is a special case. As Ongaro and Ward (2017, p. 529) themselves noted, "the utility of enactivism for understanding placebo effects stems from its general features as a paradigm for understanding cognition". Given the competing and confusing discourses that underpin the understanding of placebo treatment, these theories do not offer convincing arguments for why we should talk about placebos in the first place. If we merely want to

talk about the potential benefits of the therapeutic encounter, why invoke the confusing and often paradoxical placebo in the first place?

This point has been made previously (Moerman, 2013; Nunn, 2009b; Nunn, 2009c; Turner, 2012). In response, Howick (2017) developed Grünbaum's (1986) notion of characteristic and incidental treatment factors as a viable way to delineate non-placebo from placebo. In this model, placebos are treatment processes remedial for a particular disorder, relative to the patient, condition and the therapeutic theory in question (Howick, 2017). For example, the characteristic factor of giving Fluoxetine for depression is purportedly the increase of serotonin in the brain through inhibiting reuptake. An incidental factor might be, for example, expectations about receiving the drug. In this way, one can identify the difference between placebo and non-placebo, and make a case for the promotion of placebo treatment *per se*.

However, although the characteristic/incidental distinction makes linguistic sense, questions remain as to its practical use. In line with the findings from this study, a recent review showed that, despite an increasingly more coherent understanding of placebos in the research community, both healthcare professionals and patients still broadly conceive of placebos as inert substances (Hardman et al., 2018). If most patients think placebos are 'inert' pills having a 'psychological' effect, is it just too difficult to convince them otherwise?

Furthermore, is it even clinically useful to group together such a disparate group of factors under the banner of 'placebo effects'? Some researchers may argue that other perspectives can offer a better way to understand the psychological, social and cultural effects of treatment the placebo concept purports to explain. For example, the Habermasian lifeworld/medical system distinction (Scambler, 2015; Scambler & Britten, 2001), narrative medicine (Charon, 2006) or, as previously noted, enactive or embodied accounts of healthcare practices.

These questions are beyond the scope of this study, but they illustrate that the placebo phenomenon raises important questions about modern evidence-based medicine; about healing; and about the limits of narrow biomedical approaches to healthcare. And whatever one thinks of the clinical viability of placebo treatment, the 'placebo effect' still seems an interesting paradigm in which to consider these important medical issues.

Strengths and limitations of the study

A strength of this study is that by focussing on mainstream media articles related to placebos, we were able to incorporate a broad range of views. However, there are limitations to this approach. In sampling mainstream media, there is a risk that marginalised voices are ignored – it is important that future research on public perspectives on placebos also includes, if possible, a wider range of media and other interactional settings. Moreover, the nature of the data – short comments – may preclude more nuanced reflection by commentators, and this limitation must be considered when reflecting on the findings.

Conclusion

Based on our discursive exploration of public perspectives on placebos and their effects, we suggest that the dominant way in which placebos are constructed – as inert pills – renders placebo treatment illogical and deceptive. We also identified a counter discursive construct – the treatment process – through which placebo treatment is grounded in the therapeutic encounter. We suggest that through this construct, placebo treatment might be productively promoted as part of modern evidence-based medicine. However, we also question the clinical worth of stretching the concept of placebo treatment so far, given the current dominant lay understanding. We therefore suggest other theoretical models through which the power of the therapeutic encounter might also be exploited.

In doing so, however, we do not necessarily propose that researchers should stop investigating the placebo phenomenon *per se*. Merely that by grounding the concept more explicitly in the therapeutic encounter, placebo research would be more orientated to the particular settings in which these 'placebo effects' occur. In this sense, we echo recent calls for more ethnomethodological or ethnographic fieldwork in the domain of placebo research (e.g. Hardman et al., 2018; Hutchinson & Moerman, 2018). Such a re-orientation towards "the endogenous methods employed by members of societies in the co-production of the order and meaning of clinical settings" (Hutchinson & Moerman, 2018, p.377) may lead to a more fruitful relationship between placebo research and clinical practice.

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The authors declare that there is no conflict of interest.

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Ethics

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