Where Philosophy, Morality & Pragmatics Collide:

The Meaning & Role of the Functional-Organic Distinction to Clinicians in Practice

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Thesis Declaration Form

I confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

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Overview

This thesis explores the functional-organic (FO) distinction, a controversial but widely used principle in the diagnosis and treatment of neurological and psychiatric disorder. It centres around the meaning clinicians attribute to it and how they utilise this within their practice. The project was joint with another trainee, Jordan Harvey, who researched the same topic from the perspective of people with brain injury (the reference for this can be found in the reference list for both parts 2 and 3).

Part 1 provides a conceptual introduction to the FO distinction, attending to its various meanings throughout history, the basis of these and the paucity of research into its role in practice. A case for further research needed is made.

Part 2 describes an empirical study investigating the meaning and role of the FO distinction to clinicians in practice. Interviews with 20 clinicians working in a range of disciplines, including (neuro)psychiatry, neurology and clinical (neuro)psychology, were analysed using a qualitative approach, utilising components of constructivist grounded theory. This revealed four main categories: ‘Conceptualising Causal Explanations’, ‘Grappling with Complexity & Limitations’, ‘Prioritising Pragmatism’ and ‘Navigating Moral Issues’, all for which the category ‘Recognising Contextual Influences’ provides context.

Part 3 presents a critical appraisal of the research overall, with a focus on reflexivity and relationality as key to the rigor of qualitative research, especially constructivist grounded theory.

Impact Statement

This thesis investigates the functional-organic distinction, which remains a key model used to diagnose signs, symptoms and syndromes despite much controversy. It appears by name mainly within neuropsychiatric settings but has relevance across the medical system in the way that it attempts to distinguish between disorders that can be explained medically ('organic') and that which cannot ('functional'). It has potentially serious consequences for people's access to healthcare investigations and treatment, and the judgements that are made about them, such as whether their problems are worthy of clinical time or not.

In asking clinicians who work with the functional-organic distinction about its meaning and role as relevant to their practice, this research provides insight into their mental models of health and disease. It centres on the aspects of this that have the most important implications i.e. for patient care. It highlights the ways in which it is useful but also where it is failing.

Clinicians face day-to-day challenges in terms of trying to work out what is behind people's problems and getting them to the treatment they feel would be most beneficial, all with many limitations on resources; this is shown to often necessitate strategic simplification using the functional-organic distinction. Thus, increased resources for disorders categorised as functional is recommended.

Based on these understandings, potential changes to the language clinicians use are suggested with the aim of enhancing quality of care such as via increased consistency and transparency. Tackling the stigma that comes with mainly the functional side because of its connection to psychological or mental health problems is advocated in particular.

The results of this study therefore focus the ongoing debate over the functional-organic distinction and contribute to advancing our understanding of human health more generally. It is also hoped that they will add to the discussion of how the mind and brain relate, which has posed a philosophical problem for thousands of years.

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Acknowledgements

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Part 1: Conceptual Introduction

What are Clinicians Thinking When They Use the Functional-Organic Distinction?

Introduction

For centuries, Western medicine has been dominated by the quest for biological explanations of all health problems, which, when found, have often been termed ‘organic’ and when not, ‘functional’. The scope of the latter ranges from indicating the absence of organic causality to suggesting the presence of different kind altogether, such as psychological. Since the functional-organic (FO) distinction’s first explicit mention by Gowers (1892) when dividing neurological disorders, it has remained in one form or another a central organising principle in clinical practice and diagnosis; this has been despite inconsistencies in its conceptual scope, requirements for differential diagnosis, conceptualisation and use by clinicians, and how its implication of ‘either-or’ is often incompatible with how research demonstrates a dynamic interaction between personal, social and neuropathological factors in many presentations of ill health (Bell et al., 2020).

Since the FO distinction has been broadly evaluated in this way within neuropsychiatric medicine by Bell et al. (2020), this chapter will focus more specifically on this from the perspective of the clinicians who are engaged with it. Although the literature on this is scarce, neurologists and psychiatrists are highlighted as key users of the distinction (Benrimoh et al., 2018; Kanaan et al., 2009; Kanaan et al., 2012; Kendler, 2005; Kendler, 2012; Mace & Trimble, 1991; Trimble, 1981). Similar research with other clinical disciplines who are known anecdotally to work in areas of healthcare where the FO distinction is relevant, such as clinical psychology or physiotherapy, seems to be even more lacking. However we can deduce from other critiques of the FO distinction that it is likely being used across a range of areas and disciplines, for example for patients with psychosis (Hays, 1985), pain (Trief et al., 1987), gastrointestinal problems (Müller-Lissner, 2000), dysphonia (Millar et al., 1999) and erectile dysfunction (Sachs, 2003).

Functional is often used synonymously with ‘medically-unexplained symptoms’, the prevalence of which has been estimated at 20% for new consultations in primary care (Bridges & Goldberg, 1987; Knapp et al., 2011) and 52% of new referrals to secondary care (Nimnuan et al., 2001). This highlights a practical and ethical issue that a substantial

proportion of people are experiencing functional difficulties and that, as implied by the label of medically unexplained, there is still no clear consensus on what underlies these. This chapter will start by exploring the different possible meanings of FO distinction, particularly from the functional side where there is the most variation, suggested by the literature thus far. It will also look to briefly explain what its widespread use is based on in terms of research and diagnostic systems.

The FO distinction has roots dating back to Cartesian dualism, in which mind and body are said to be separate with the former broadly mapping onto functional and the latter organic, and has not escaped criticism from those who refute this (Arnaudo, 2017; Benrimoh et al., 2018; Greco, 2019; Kendler, 2005; Kirmayer, 1988; Sachdev, 1996). Mental and philosophical models underlying the distinction will thus be examined in this chapter as a primary aspect of the debate over the distinction.

Use of the FO distinction has potentially serious implications for patient care via perceptions of factors such as legitimacy, controllability and deservedness, the consequences of which include allocation of treatment, stigma and epistemic injustice (Arnaudo, 2017; Beale, 2021; Bell et al., 2020; Benrimoh et al., 2018; Corrigan & Watson, 2004; Greco, 2019; Lebowitz & Appelbaum, 2019; Schomerus et al., 2012; Stuart et al., 2012; Ungar & Knaak, 2013). These will be investigated in more detail within this chapter by separating different possible aspects of what clinicians are intending to use the distinction for and what the actual consequences might be.

It is hoped the chapter overall will bring to light the need for further research into how clinicians conceptualise and use the FO distinction in their daily practice and more specific suggestions for this will be outlined.

Possible Meanings of the FO Distinction

As the sweeping use of the FO distinction might suggest, there are many possible meanings attributed to it. For example, interviews with neurologists found ‘not organic’, physical disability, brain disorder and psychiatric problem to be the four prevailing uses of functional albeit with significant ambiguity (Kanaan et al., 2012). A strength of this study was

the use of mixed-methods, with a concurrent survey adding to the picture of ambiguity in the meaning of functional. Indeed, this widespread use may mask key differences in how different clinicians understand the nature of functional illness, for example, how seriously neurologists take the functional model for conversion disorder, the paradigmatic functional disorder, where it is believed that functional neuroimaging will eventually reveal underlying physiological alterations (Kanaan et al., 2012).

There is perhaps more consensus on the meaning of the concept of organic, which the study outlined in the previous paragraph did not address. This is defined in the *International Statistical Classification of Diseases and Related Health Problems* as 'a range of mental disorders grouped together on the basis of their having in common a demonstrable aetiology in cerebral disease, brain injury, or other insult leading to cerebral dysfunction' (10th ed.; ICD-10; World Health Organization [WHO], 2016). Thus, this section will further explore the different meanings of functional suggested by research into how clinicians use and define the concepts, and historical writing on the distinction. The following meanings of course have much overlap with each other, but each will be focussed on separately to aid explanation.

Organic but Undetectable by Current Methods

When the term functional was first introduced in late 19th century, it did not mean non-organic but actually an organic process was assumed that current methods could not detect; neurologists and psychiatrists used it for conditions without gross anatomical changes but that were thought to have molecular disturbances, which in turn were caused by either physical or mental trauma (Beer, 1996). For example, Charcot had the view that 'more powerful microscopes' would detect minute changes in physiology causally linked to hysteria (Charcot, 1889).

This idea has retained significance in times since, with Schneider (1959) holding the belief that the non-organic psychoses, which he termed 'endogenous' rather than 'functional', had organic causality yet to be discovered. In more recent research previously mentioned, some neurologists expressed optimism in interviews that 'functional disorders'

could be explained physiologically in the future and some survey respondents agreeing, in that 10% viewed conversion as neurological now and 26% thought it would be in the future (Kanaan et al., 2012).

Psychological vs Physiological

The term functional has been used to mean both psychological and physiological at different points in time (Trimble, 1981). The former refers to the mental functions of thought, emotion and will, and the latter to a disorder of the functions of the organs of the mind without structural change i.e., 'functional nervous diseases'.

Freud and the first world war influenced functional disorders and the neuroses to be categorised officially as non-organic and of psychological origin (Beer, 1996). In the 1880s, Freud disagreed with how the anatomo-clinical method had been applied to all medicine and proposed that four neuroses were in fact psychological in nature: the actual neuroses of anxiety neurosis and neurasthenia, and the psychoneuroses of hysteria and obsessional neurosis. Evidence of the efficacy of psychological treatment provided by psychiatrists in the first world war validated this view.

So, Freud's theory of conversion, first coined in 1894 (2014), and Janet's theory of dissociation (1907) both transformed hysteria into a psychiatric condition, though their theories have since declined in popularity (Kanaan et al., 2009).

In the early 1900s, Jung similarly questioned the assumption of psychiatry at the time that psychological disturbance was secondary to a primary organic one even when the links between the two were not clear like in dementia praecox/schizophrenia (Beer, 1996). He attempted to pass the baton to psychology by emphasising the functional or psychological causality of mental disorders. However, 50 years later, when the psychological nature of the neuroses was endorsed by all psychiatrists including Jung, he separated psychosis from these and implied it could have an organic aetiology, linking back to the first outlined possible meaning of functional as 'Organic but Undetectable by Current Methods'.

More recent research suggests that functional continues to straddle psychological and physiological meanings. For example, the aforementioned four dominant uses of

functional revealed during interviews with neurologists – ‘not organic’, physical disability, brain disorder and psychiatric problem – span both of these meanings (Kanaan et al., 2012).

Other studies have provided more support for a psychological interpretation of functional. In a questionnaire completed by neurologists, the proportion of patients seen where psychological factors were thought to be significant correlated with that of those lacking neurological pathology (Mace & Trimble, 1991). This also implies a dualistic view of psychological vs neurological disorder. This survey had only multiple choice or simple answer options, meaning no further detail on neurologists’ views about the role of psychological mechanisms in functional disorders was gained.

The earlier of only two studies to date to use in-depth interviews to investigate at least an aspect of the FO distinction in neurologists (Kanaan et al., 2009; Kanaan et al., 2012) found that psychological models of causation for conversion disorder/hysteria were endorsed, providing additional backing for functional meaning psychological; this research will be examined further in the next section on the meaning of functional as ‘Malingering’ (Kanaan et al., 2009).

Malingering

The focus of Kanaan et al’s (2009) interviews with neurologists was conversion disorder, which was often understood as a form of malingering in the 19th century given the lack of neuropathological explanation despite being mostly classified as a neurological condition. Their use of exploratory interviews combined with snowball sampling in the form of obtaining nominations from participants of other potential participants they thought had a contrasting view to their own is likely to have enabled the collection of wide-ranging and nuanced data.

An example of this seems to be the finding that participants were divided in how far they thought conscious feigning played a role in conversion disorder. Nonetheless, deception seemed to remain the basis on which neurologists understood conversion disorder for the majority of those interviewed although most accepted the possible role of the

subconscious in this. The authors argue that this makes sense given how conversion patients typically appear ‘as though’ they did have a neurological disorder.

The mentioned study was limited to conversion disorder, which can be said to be one example of a so-called functional disorder and distinguished by participants themselves from other unexplained symptoms. Nevertheless, it adds weight to the idea that functional can mean malingering. Additionally, the older study amongst neurologists found that, although there was consensus that the term functional should be used for pseudoseizures, anxiety neurosis and Munchausen’s syndrome, application of the term was wide-ranging overall and covered both involuntary symptoms and feigning (Mace & Trimble, 1991). Overall then, the connection between the concept of functional and feigning seems not to be a straightforward one.

Non-Organic

Often going hand in hand with the aforementioned meanings of functional, particularly psychological, but perhaps less ambitious, is to define functional as ‘non-organic’. In line with this meaning, Bumke (1925) and Jaspers (1963) defined the three major psychoses of epilepsy, schizophrenia and manic-depression as functional due to a lack of organic findings (Beer, 1996). In the survey completed by neurologists, ‘functional’ was found to be one of the most popular terms for patients lacking a neurological basis for symptoms, along with ‘psychogenic’ and ‘hysteria’ (Mace & Trimble, 1991). The more recent mixed methods study with neurologists found ‘non-organic’ to be 1 of 4 dominant uses of functional in interviews and the majority of survey respondents defined functional as non-organic exclusively i.e. as a diagnosis of exclusion (Kanaan et al., 2012) . This is linked to an ‘agnostic’ view of non-neurological pathology expressed in the earlier interviews on conversion disorder with neurologists where many believed it was not their job to discover or understand aetiology they saw as belonging to other disciplines such as psychology (Kanaan et al., 2009). Thus for them, this definition of functional to mean non-organic is likely to suffice.

Overall

Historically then, the psychoses have broadly been seen as having an organic aetiology versus the neuroses which have been seen as functional. Although the psychosis-neurosis dichotomy was abandoned in the 1990s with the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.; DSM-IV; American Psychiatric Association [APA], 1994) and the ICD-10 (WHO, 2016) no longer distinguishing between the two, the FO distinction seems to continue as a sort of manifestation of this (Beer, 1996).

The wide-ranging and variable meanings of functional and organic throughout history with much disagreement suggests there is likely to be inconsistency in how the concepts are understood now and therefore applied. Indeed, in the survey with neurologists, a minority used functional to signify different things depending on context, including abnormalities in brain or body function, or psychiatric disorder (Kanaan et al., 2012). The use of functional has been discouraged due to the potential confusion it creates (Mace & Trimble, 1991).

It is worth noting that the key studies investigating the meaning of the FO distinction thus far have involved mostly only neurology (Kanaan et al., 2009; Kanaan et al., 2012). When psychiatry has been compared on which syndromes the term functional should apply to, consensus was not found in that psychiatrists included paranoid schizophrenia in their answer to this whereas neurologists did not (Mace & Trimble, 1991). This suggests variation between different disciplines' understanding of the FO distinction but research into this remains limited.

Moreover, we are left guessing how any type of clinician understands the distinction as a whole or relates the two sides as none of these studies have researched this, with those in neurology asking about the functional side only.

Basis of the Meaning of the FO Distinction

We may now wonder what the discussed meanings of the FO distinction have been based on. Evidence of disorders on both sides of the dichotomy being shown to have features of the other in the 1990s started to challenge dividing in this way (Beer, 1996). It has also been argued that it does not fit with how evidence suggests that 'difference-makers'

for psychiatric disorders are dispersed across biological, psychological and social-cultural domains, thus preventing us from integrating diverse information from research (Kendler, 2012) and even discouraging certain types of research, for example, into organic factors of a disorder thought to be purely functional (Beer, 1996).

Diagnostic Systems

The distinction's relationship to diagnostic systems has mostly been inconsistent (Bell et al., 2020). The category of 'organic mental disorders' was abandoned in the DSM-IV (APA, 1994) then DSM-5 (APA, 2013). However, it was replaced by 'secondary' to 'diseases or disorders classified elsewhere', the definition of which has been conceded to be entirely consistent with that of the ICD-10's definition of organic (Spitzer et al., 1992) and the implications remain mostly the same (Bell et al., 2020). The concept of 'organicity' was retained in ICD-10 classification, for example, in the category of organic mental disorders (WHO, 2016). The ICD-11 (WHO, 2019) has now followed the example set by the DSM and refers to 'secondary mental or behavioural syndromes associated with disorders or diseases classified elsewhere' and more specifically that the syndrome in question is 'judged to be a direct pathophysiological consequence'.

We might predict that the gradual removal of terms relating to organicity from key diagnostic manuals since up to around 30 years ago would discourage use of these. However, there is evidence of continued use of 'organic causes' by psychiatry – in one study, 55.9% reported using it at least monthly, despite less than 30% thinking its use appropriate (Benrimoh et al., 2018). Use was associated with younger age, working in more hospital-based settings and finding alternative terminology difficult. Although the sample was specific to Canada and the authors note that it was somewhat biased towards a younger, urban and academic demographic, the size of 391 is respectable. It may still not be transferrable to British psychiatry. It does imply though that terminology use in practice does not necessarily reflect that in diagnostic manuals. This may cause confusion amongst

clinicians, especially those new to their profession, possibly negatively impacting their performance and patient care.

Mental & Philosophical Models

Thinking now about what mental models clinicians might be using when they encounter the FO distinction, it has been argued that the dichotomous conceptualisation of psychiatric disorder has three main origins, which are mutually reinforcing: Cartesian dualism, 19th century neuropathology and computer functionalism (Kendler, 2012). The key points of the second have been explored in an earlier section so the first and third are investigated below.

Dualism

Many psychiatrists who thought the use of 'organic causes' was inappropriate believed it to falsely imply dualism, although there was great variation in this amongst all survey respondents (Benrimoh et al., 2018). It was a strength of this study that narrative comments were collected and analysed qualitatively, illuminating ideas such as this association between the FO distinction and dualism that were not covered by the quantitative survey questions. Nonetheless, the nature of a survey still precludes these being explored further.

In philosophy of mind, dualism is the idea that mind, or mental states, and body, or physical states, are distinct kinds of thing; the way in which they are separate varies amongst different types of dualism (H. Robinson, 2020). Dualism can be traced back to the ancient Greeks, for example Plato's *Phaedo* (Bostock, 1986), but the greatest influence on modern types has been Descartes' substance dualism, where mind and body are posited as two essentially different kinds of substance (Descartes, 1641).

The mind-body distinction, along with each pole's associations, is 'well-established empirically as a *metaphor we live by*' in Western societies, inherent in education, healthcare, legal & economic systems (Greco, 2019, p. 108). Greco examines dualism from the perspective of its resilience, demonstrated particularly through the psychosomatic medicine movement led by Deutsch in the 1920s & 30s; this aimed to transform medicine on the basis

of increased evidence of mind-body relations and the stance of monism but was ultimately forced to fit the dominant medical model thereby reinforcing dualism. She argues that the hold of modern dualism is best tackled by investigating where it fails pragmatically as opposed to epistemologically.

Dualism can be observed in different forms throughout healthcare. For example, looking particularly at complex pain conditions, Arnaudo (2017) outlines epistemological dualism, in which the clinician is positioned as the active knowing one and the patient as passive and subject to this knowledge; this can then manifest as etiological dualism, with pain either in body or mind, depending on whether the patient's experience fits into the boundaries of medical knowledge (organic) or not (functional).

Functionalism

Functionalism has roots in both modern and ancient philosophy, although gained significance in the final third of the twentieth century with the influence of the digital computer (Levin, 2021). Within this, the human mind-brain system can be seen as analogous to that of a computer system or 'Turing machine', with the brain as the hardware and mind software (Putnam, 1960). This divide maps seemingly neatly onto the FO distinction, allowing us to categorise disorders as either functional/software problems or organic/hardware problems.

Alternatives

Epiphenomenalism is the idea that physical states in the brain cause mental states but this causation applies only one way i.e. mental states have no impact on physical ones in and of themselves (W. Robinson, 2020). When considering the nature of psychiatric disorders, Kendler (2005) rejects dualism based on clinical and scientific evidence to the contrary and epiphenomenalism because causality applies both ways. Similar to Greco, he notes how explanatory models are too often based on ideological rather than empirical ideas and we should strive for the latter. He argues first for integrative explanatory pluralism, which denotes that natural phenomena can be studied from multiple different perspectives that do not replace or invalidate each other and may then build up to a more complete overarching aetiological model of psychiatric disorder. He later develops this into empirically based

pluralism, which emphasises being based in the results of research on ‘difference makers’ for psychiatric illness rather than theoretical musings (Kendler, 2012).

On a broader level, an increased multidisciplinary approach in healthcare has been advocated as a way of overcoming the segregation of medical specialisations and creating an integrated framework in the hope of moving beyond dualistic splits (Arnaudo, 2017).

If the models on which the FO distinction is based are flawed, this could result in an incorrect or insufficient understanding in both clinicians and patients subject to it. More specific to dualism, it could also mean that subjective experience i.e. that relating to the mind is regarded as of less importance and more vulnerable to error (Greco, 2019).

FO Distinction in Practice

Clinicians’ Intentions

Turning now to what happens when clinicians use the FO distinction, it may help to start with what they think they are doing or hoping to achieve.

To Allocate Treatment

A key purpose of the FO distinction could be to direct patients to the most appropriate treatment. This use has been described in the group of psychiatrists who reported using the term ‘organic causes’, perhaps despite not supporting it, to convey plainly to other professionals that a patient needs investigation for other medical causes of psychiatric symptoms; this need was hypothesised to be based on beliefs that other specialties assume psychiatric disorders do not have physiological aetiologies and that they understand the term ‘organic causes’ (Benrimoh et al., 2018).

In neurologists however, a very low proportion of patients whose symptoms lacked a neurological basis were referred on to another specialty for more investigations – fewer than 1 in 10 to psychiatry and even fewer to other specialisms, despite the overall view of a comparison group of psychiatrists that most would benefit from this (Mace & Trimble, 1991).

Thus, the FO distinction may indeed be ‘a tool that helps determine treatment priority dressed up in the language of causation’ (Bell et al., 2020, p. 7). If it is unsound and

treatment allocation based on it, this may result in poorer outcomes for patients, for example, if a problem not diagnosed coherently or only one area is treated while others are neglected.

To Exclude Explanations Perceived to be in the Remit of Their Discipline

Clinicians may use the FO distinction to exclude causes they believe to be within the remit of their role. This purpose is suggested by neurologists who did not see it as their job to derive psychological explanations for conversion disorder despite endorsing these (Kanaan et al., 2009), viewing their role as finishing with the exclusion of neuropathology (Kanaan et al., 2012). This use could be seen to maintain the separation of different disciplines, consequently preventing the integration of diverse information that those such as Kendler advocate.

To Communicate Different Ideas to Colleagues vs Patients

The FO distinction might be used to imply one thing to colleagues and another to patients. There is evidence that neurologists use the term functional adaptively or as a 'simplifying euphemism', for example, to mean conversion disorder to colleagues and disturbance of brain or body function to patients (Kanaan et al., 2012). Thus, the ambiguity of the term can be seen as serving a useful purpose when interacting with patients. The implication of this use could be a cementation of the divide in terms of understanding between clinicians and patients, perhaps contributing to epistemic dualism and even injustice.

Consequences

Having explored some of the possible intentions behind the use of the FO distinction, some of the consequences, whether intended or not, will now be examined.

Disciplinary

As suggested by some of the research mentioned thus far, the FO distinction can be said to divide psychiatry and neurology, with functional problems typically attributed to the former discipline and organic to the latter. Some have argued that this is an artificial separation based on a history of differing philosophical frameworks and approaches to

research and treatment that are now less apparent and should be broken down to achieve better collaboration and integration (Martin, 2002; Zeman, 2014).

Mode of Intervention

A consequence related to the intention of directing treatment is how particular types can then be favoured. For example, biomedical explanations of mental disorders have been found to impact preferences for intervention with pharmacological favoured over psychotherapy (Lebowitz & Appelbaum, 2019). It makes sense that as the receiver of a recommended intervention, this should mirror that of the explanation given for the problem. However it can be conceived that sometimes this is not the case, potentially causing confusion in patients and decreasing engagement.

Stigma

An important potential consequence of the FO distinction is stigma towards those subject to it. Beale (2021) refutes the mind-body divide apparent in the organisation of healthcare into separate physical and mental health services and outlines it as a form of exclusion of care and stigma, for example, referrals to secondary mental health care are often refused on the basis of the presence of organic problems. This highlights the capacity for clinicians working in mental health to find anything related to physical health unfamiliar and thus possibly aversive or to be avoided and vice versa.

Great variation was found among psychiatrists as to whether ‘organic causes’ was considered stigmatising (Benrimoh et al., 2018). Other research into the link between organic conceptions of illness and stigma has been mostly focussed on mental disorders. Biomedical i.e. organic explanations of mental illness have been found not to decrease related stigma and discrimination amongst the general public, related to beliefs about lower controllability and recoverability, along with higher unpredictability, dangerousness and fundamental difference (Corrigan & Watson, 2004; Schomerus et al., 2012; Stuart et al., 2012).

On the other hand, it has been argued that emphasising organic aspects of mental disorder, for example biomedical correlates such as brain scans of people both during illness

and on recovery, may reduce stigma and discrimination amongst clinicians, although this is currently based on professional experience as there is limited evidence for this (Ungar & Knaak, 2013). Lebowitz and Appelbaum (2019) take a contrasting stance to this and point out that although biomedical explanations for mental disorders have been shown to reduce perception of blame and thus also stigma in clinicians, as suggested by attribution theory, possible negative outcomes include pessimism about prognosis, and decreased clinician empathy affecting the clinician-patient relationship and patients' sense of self-efficacy. They state one way of lessening these is through education on biological factors as nondeterministic.

A potential problem with the approaches described of increasingly applying biomedical explanations to mental health problems to try and reduce stigma is that it may also act to maintain the stigma and discrimination associated with the so-called 'non-organic' or functional side of the coin, by avoiding rather than tackling whatever is behind this. Patients can take certain diagnostic labels especially those that imply a psychological explanation offensively, perceiving them to mean they are 'mad' and 'putting on' or 'imagining' their symptoms (Wessely, 2000). Attempting to answer the question of what clinicians should say to patients whose symptoms are not explained by disease in a neurology outpatient department, patients were asked how offended they would be if their symptoms were given different labels and 'functional' was deemed the least offensive overall (Stone et al., 2002).

Epistemic Injustice

Connected to stigma is the potential epistemic injustice resulting from the use of the FO distinction. Epistemic injustice can be defined as 'a wrong done to someone specifically in their capacity as a knower', more specifically through testimonial injustice, when reduced credibility is given to the speaker because of prejudice, or hermeneutical injustice, where insufficient collective hermeneutical resources render a person less able to make sense of their experiences and have these understood by others (Fricker, 2007, p. 1). Thus, considering the potential for stigma for both functional and organic problems in different

contexts outlined in the previous section, this creates the possibility of epistemic injustice also. If we take organic to refer to that which is known, objective and evidence-based, and functional to mean that which is lacking these qualities i.e. is less known, subjective and experiential (Greco, 2019), we can see how the testimonies of those whose experiences of illness are attributed to the latter could be taken as less credible, legitimate and reliable. This can be linked back to dualism, in particular the epistemological dualism mentioned earlier, which has been argued to lead to the delegitimisation of suffering in chronic pain patients (Arnaudo, 2017). Bell et al. (2020) notes the glaring absence of the testimony of those subject to the FO distinction in research and related debates thus far.

Further Research Needed

Research to date demonstrates the persistence of the FO distinction in clinical practice despite its flaws, controversy and related efforts to de-emphasise. This warrants a deeper look in order to explain this.

How do Clinicians Understand the FO Distinction?

One major aspect of its contention is the meaning of the concepts of functional and organic, and how they relate, which this chapter has shown to be widely varied, even inconsistent, across different times and contexts. This raises the question: how do clinical professionals today really understand the FO distinction? Investigating this should highlight what still lives on in terms of its meaning and more importantly, what is most pertinent about this to clinical practice. This would help to narrow the discussion over the distinction's validity in the areas with the most important consequences i.e. those of treatment allocation, stigma and justice for patients outlined in the previous section. It may also help to increase consistency in understanding across different disciplines and realms of healthcare, in turn improving clinical practice and ultimately patient care.

As has been illustrated throughout this chapter, research with clinicians who use the FO distinction so far has been limited to one side of this i.e. organic or functional, rather than the distinction as a whole. It has also been mostly restricted to one discipline, rather than a multitude of those we know encounter the concepts in their regular practice, especially

clinical psychologists who seem to be missing from the debate altogether. This has resulted in what could be argued to be disparate pockets of research that are difficult to put together into any kind of coherent whole. It is therefore suggested that further research should aim to explore the FO distinction as a whole and across a range of disciplines working in relevant areas. This may work towards a more complete understanding that spans a range of contexts.

Research to date has also relied heavily on surveys (Benrimoh et al., 2018; Kanaan et al., 2012; Mace & Trimble, 1991), with only two studies utilising interviews (Kanaan et al., 2009; Kanaan et al., 2012) and thus enabling deeper exploration of the meanings clinicians attribute to the FO distinction. Considering the likely vast array of these, often overlapping and with complex surrounding philosophical and ethical issues, a qualitative approach using open-ended interviews with individual clinicians would give the best chance of capturing rich data in this regard.

Grounded theory (GT) is one of many approaches to qualitative analysis and, while drawing on an inductive process of reasoning like others, emphasises systematically constructing abstract and analytical understandings of data thus moving beyond descriptive accounts with the aim of identifying a central explanatory process; it also focusses on implicit meanings, processes and actions instead of themes and structure (Charmaz, 2014). This method may help to probe deeper into clinicians' understanding of the FO distinction, especially where this may be taken for granted, even unarticulated, in the context of busy and pressured clinical practice. The aim of taking data up into broader analytical categories may support then being able to link these back to philosophical models underpinning the FO distinction.

Although the proposed research would of course be inquiring about terminology that is assumed to be shared across different disciplines i.e. the FO distinction, it is noted that these do vary in their overarching epistemologies and language to some degree. Thus, GT's focus on implicit meanings and process of abstraction may assist in drawing out

commonalities and bringing together what different clinicians say in terms of the meaning of the distinction to them.

How do Clinicians Use the FO Distinction?

As this chapter has shown, there has been much philosophical and conceptual debate over the distinction but this has been lacking in the arena of the empirical and pragmatic, as pointed out by both Greco (2019) and Kendler (2012). Bell at al's (2020) conceptual analysis begins to address this gap by taking a pragmatist approach to the distinction's use in clinical practice and research, highlighting its inconsistencies and shortcomings. The question remains however of how clinicians themselves grapple with these and use the distinction in their practice – what may indeed be useful about it, thereby explaining its resilience, and where might it be performing poorly? Answering this may serve towards resolving continuing debates but again, those most relevant to clinical practice especially outcomes for patients. It could additionally inform where alternatives are most needed and what these might look like, utilising the wealth of clinical experience and expertise of healthcare professionals.

There are likely to be limits to how far everyday use of the FO distinction can be captured via interviewing individual clinicians in that it relies on their report of this, rather than being embedded as a researcher in the workplace for example. They may be away from the contexts in which they usually work including various clinical environments and colleagues, which are both likely to influence how they use the FO distinction. GT's emphasis on actions and processes seems well-suited to help extract these with regards to use of the FO distinction as far as possible from what clinicians say.

Overall

So, the research suggested would entail exploring with clinicians in individual interviews the meanings they assign to the concepts of functional and organic, and how these interact with each other. The other aspect would be finding out more about their deployment of the terms in practice. A variety of disciplines would be involved, including psychiatry, neurology and clinical psychology i.e. those we know work in areas where the

distinction is used. Using components of the qualitative approach of GT would aid delving further into meanings and capturing use of the distinction in practice.

Conclusion

This chapter started by exploring the array of possible meanings allocated to the FO distinction throughout time and different professions, with an emphasis on the definition of functional as the side that appears to vary most. This began as denoting that an organic cause existed but was not detectable with current methods of investigation. Then following those such as Freud posing the idea that some disorders were actually psychological in nature, functional was used to mean this or physiological at different points in time. It was varyingly applied to different categories of disorder but predominantly what were then known as the neuroses. Throughout this, it has held connotations of malingering on the part of the patient, whether conscious or unconscious. The more agnostic meaning of functional as simply 'non-organic' avoids these potential psychological explanations as they are seen to be outside of the realm of medicine.

The basis of the above meanings was then investigated in the form of research and diagnostic systems. Despite the former providing evidence inconsistent with the FO dichotomy and the latter trying to discourage its use, this has persisted. It has been wondered whether this can be explained by the potential flexibility in meaning as outlined in the previous paragraph (Kanaan et al., 2012).

Moving then to mental and philosophical models underpinning the FO distinction, Cartesian dualism was positioned as key, with functional broadly equating to mind and organic to brain/body. Functionalism has become another way of understanding this using the analogy of the computer, with brain/body acting as the hardware and mind software. Alternative models were then briefly explained in particular, Kendler's (2012) empirically-based pluralism which aims to bring together the different levels of explanation provided by different professions with the hope of developing an overarching theory of psychiatric disorder which is grounded in evidence.

Potential intentions or hopes of clinicians when using the FO distinction was then outlined. Evidence for this is scarce but included allocation of treatment, exclusion of aetiology perceived to be within their own professional remit and to mean different things to colleagues vs patients. Possible consequences of using the distinction were then explored, firstly on a more practical level of dividing specialties, mainly psychiatry and neurology perhaps falsely, and impacting preference for type of treatment. Stigma was highlighted as an important outcome of how the FO distinction is applied, with functional carrying that related to the suggestion of psychological aetiology and blame, and organic a lack of perceived control and hope. Epistemic injustice is a potential product of this stigma for those subject to it, particularly with regards to functional where this is typically viewed as more subjective and therefore prone to error than organic.

Two key questions were then posed as requiring further research, namely how clinicians understand the FO distinction and how they use it in practice. Investigating these would be beneficial for honing the extensive debates over the FO distinction in terms of what is most pertinent to current clinical practice, ultimately aiming to inform improvements to this and patient care. Including a range of disciplines would help to marry existing disparate research. Given the extensive scope and possible meanings of the FO distinction, open-ended individual interviews with a qualitative approach to analysis is suggested. GT in particular is recommended for its focus on implicit meanings and processes, allowing a more in-depth exploration of how clinicians understand and use the FO distinction.

References

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.).

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). https://doi.org/https://doi.org/10.1176/appi.books.9780890425596

Arnaudo, E. (2017). Pain and dualism: Which dualism? *Journal of Evaluation in Clinical Practice*, *23*(5), 1081-1086. https://doi.org/https://doi.org/10.1111/jep.12804

Beale, C. (2021). Magical thinking and moral injury: Exclusion culture in psychiatry. *BJPsych Bulletin*, 1-4. https://doi.org/10.1192/bjb.2021.86

Beer, M. D. (1996). The dichotomies: Psychosis/neurosis and functional/organic: A historical perspective. *History of Psychiatry*, *7*(26 Pt 2), 231-255. https://doi.org/10.1177/0957154x9600702603

Bell, V., Wilkinson, S., Greco, M., Hendrie, C., Mills, B., & Deeley, Q. (2020). What is the functional/organic distinction actually doing in psychiatry and neurology? *Wellcome Open Research*, *5*, 138. https://doi.org/10.12688/wellcomeopenres.16022.1

Benrimoh, D., Pomerleau, V. J., Demoustier, A., Poulin, S., Maltais, J.-R., Brouillette, J., & Ducharme, S. (2018). Why we still use “organic causes”: Results from a survey of psychiatrists and residents. *The Journal of Neuropsychiatry and Clinical Neurosciences*, *31*(1), 57-64. https://doi.org/10.1176/appi.neuropsych.18050099

Bostock, D. (1986). *Plato's Phaedo*. Clarendon.

Bridges, K., & Goldberg, D. (1987). Somatic presentation of depressive illness in primary care. *The Journal of the Royal College of General Practitioners. Occasional paper*(36), 9.

Charcot, J. M. (1889). *Clinical lectures on the diseases of the nervous system delivered at the infirmary of La Salpêtrière* (T. Savill, Trans.; Vol. 3). The New Sydenham Society.

Charmaz, K. (2014). *Constructing grounded theory* (2nd ed.). SAGE Publications.

Corrigan, P. W., & Watson, A. C. (2004). Stop the stigma: Call mental illness a brain disease. *Schizophrenia Bulletin*, *30*(3), 477-479. https://doi.org/10.1093/oxfordjournals.schbul.a007095

Descartes, R. (1641). *Descartes: Meditations on first philosophy: With selections from the objections and replies* (J. Cottingham, Trans.). Cambridge University Press. https://doi.org/10.1017/9781107416277

Freud, S. (2014). *The neuro-psychoses of defence*. Read Books Ltd.

Fricker, M. (2007). *Epistemic injustice: Power and the ethics of knowing*. Oxford University Press.

Gowers, W. R. (1892). *A manual of diseases of the nervous system* (2nd ed.). J. & A. Churchill.

Greco, M. (2019). On illness and value: Biopolitics, psychosomatics, participating bodies. *Medical Humanities*, *45*(2), 107-115. https://doi.org/10.1136/medhum-2018-011588

Hays, P. (1985). Implications of the distinction between organic and functional psychoses. *Acta Psychiatrica Scandinavica*, *71*(6), 620-625. https://doi.org/10.1111/j.1600-0447.1985.tb02557.x

Janet, P. (1907). *The major symptoms of hysteria*. Macmillan Publishing.

Kanaan, R., Armstrong, D., Barnes, P., & Wessely, S. (2009). In the psychiatrist's chair: How neurologists understand conversion disorder. *Brain: A Journal of Neurology*, *132*(Pt 10), 2889-2896. https://doi.org/10.1093/brain/awp060

Kanaan, R. A., Armstrong, D., & Wessely, S. C. (2012). The function of 'functional': A mixed methods investigation. *Journal of Neurology, Neurosurgery and Psychiatry*, *83*(3), 248-250. https://doi.org/10.1136/jnnp-2011-300992

Kendler, K. S. (2005). Toward a philosophical structure for psychiatry. *American Journal of Psychiatry*, *162*(3), 433-440. https://doi.org/10.1176/appi.ajp.162.3.433

Kendler, K. S. (2012). The dappled nature of causes of psychiatric illness: Replacing the organic-functional/hardware-software dichotomy with empirically based pluralism. *Molecular Psychiatry*, *17*(4), 377-388. https://doi.org/10.1038/mp.2011.182

Kirmayer, L. J. (1988). Mind and body as metaphors: Hidden values in biomedicine. In M. Lock, D. Gordon (Ed.), *Biomedicine Examined* (Vol. 13, pp. 57-93). Springer. https://doi.org/10.1007/978-94-009-2725-4_4

Knapp, M., McDaid, D., & Parsonage, M. (2011). *Mental health promotion and mental illness prevention: The economic case*. Department of Health. http://eprints.lse.ac.uk/32311/

Lebowitz, M. S., & Appelbaum, P. S. (2019). Biomedical explanations of psychopathology and their implications for attitudes and beliefs about mental disorders. *Annual Review of Clinical Psychology*, *15*(1), 555-577. https://doi.org/abs/10.1146/annurev-clinpsy-050718-095416

Levin, J. (2021). Functionalism. In E. N. Zalta (Ed.), *Stanford encyclopedia of philosophy* (Winter 2021 ed.). Stanford University. https://plato.stanford.edu/archives/win2021/entries/functionalism/

Mace, C. J., & Trimble, M. R. (1991). 'Hysteria', 'functional' or 'psychogenic'? A survey of British neurologists' preferences. *Journal of the Royal Society of Medicine*, *84*(8), 471-475. https://pubmed.ncbi.nlm.nih.gov/1886115

Martin, J. B. (2002). The integration of neurology, psychiatry and neuroscience in the 21st century. *American Journal of Psychiatry*, *159*(5), 695-704. https://doi.org/10.1176/appi.ajp.159.5.695

Millar, A., Deary, I. J., Wilson, J. A., & MacKenzie, K. (1999). Is an organic/functional distinction psychologically meaningful in patients with dysphonia? *Journal of Psychosomatic Research*, *46*(6), 497-505. https://doi.org/https://doi.org/10.1016/S0022-3999(99)00026-4

Müller-Lissner, S. (2000). Is the distinction between organic and functional disorders helpful? *Digestive and Liver Disease*, *32*(1), 9-11. https://doi.org/https://doi.org/10.1016/S1590-8658(00)80037-7

Nimnuan, C., Rabe-Hesketh, S., Wessely, S., & Hotopf, M. (2001). How many functional somatic syndromes? *Journal of Psychosomatic Research*, *51*(4), 549-557. https://doi.org/https://doi.org/10.1016/S0022-3999(01)00224-0

Putnam, H. (1960). Minds and machines. In S. Hook (Ed.), *Dimensions of Minds* (pp. 138-164). New York University Press.

Robinson, H. (2020). Dualism. In E. N. Zalta (Ed.), *Stanford encyclopedia of philosophy* (Fall 2020 ed.). Stanford University. https://plato.stanford.edu/archives/fall2020/entries/dualism/

Robinson, W. (2020). Epiphenomenalism. In E. N. Zalta (Ed.), *Stanford encyclopedia of philosophy* (Fall 2020 ed.). Stanford University. https://plato.stanford.edu/archives/fall2020/entries/epiphenomenalism/

Sachdev, P. (1996). A critique of 'organic' and its proposed alternatives. *Australian & New Zealand Journal of Psychiatry*, *30*(2), 165-170. https://doi.org/10.3109/00048679609076090

Sachs, B. D. (2003). The false organic–psychogenic distinction and related problems in the classification of erectile dysfunction. *International Journal of Impotence Research*, *15*(1), 72-78. https://doi.org/10.1038/sj.ijir.3900952

Schneider, K. (1959). *Clinical psychopathology*. Grune & Stratton.

Schomerus, G., Schwahn, C., Holzinger, A., Corrigan, P. W., Grabe, H. J., Carta, M. G., & Angermeyer, M. C. (2012). Evolution of public attitudes about mental illness: A systematic review and meta-analysis. *Acta Psychiatrica Scandinavica*, *125*(6), 440-452. https://doi.org/10.1111/j.1600-0447.2012.01826.x

Spitzer, R. L., First, M. B., Williams, J. B., Kendler, K., Pincus, H. A., & Tucker, G. (1992). Now is the time to retire the term "organic mental disorders". *American Journal of Psychiatry*, *149*(2), 240-244. https://doi.org/10.1176/ajp.149.2.240

Stone, J., Wojcik, W., Durrance, D., Carson, A., Lewis, S., MacKenzie, L., Warlow, C. P., & Sharpe, M. (2002). What should we say to patients with symptoms unexplained by disease? The "number needed to offend". *BMJ (Clinical research ed.)*, *325*(7378), 1449-1450. https://doi.org/10.1136/bmj.325.7378.1449

Stuart, H., Arboleda-Florez, J., & Sartorius, N. (2012). *Paradigms lost: Fighting stigma and the lessons learned*. Oxford University Press.

Trief, P. M., Elliott, D. J., Stein, N., & Frederickson, B. E. (1987). Functional vs. organic pain: A meaningful distinction? *Journal of Clinical Psychology*, *43*(2), 219-226.

Trimble, M. R. (1981). *Post-traumatic neurosis: From railway spine to the whiplash*. Wiley.

Ungar, T., & Knaak, S. (2013). The hidden medical logic of mental health stigma. *Australian & New Zealand Journal of Psychiatry*, *47*(7), 611-612. https://doi.org/10.1177/0004867413476758

Wessely, S. (2000). To tell or not to tell? The problem of medically unexplained symptoms. In A. Zeman & L. Emmanuel (Eds.), *Ethical dilemmas in neurology* (pp. 41–53). W. B. Saunders.

World Health Organization. (2016). *International statistical classification of diseases and related health problems* (10th ed.). https://icd.who.int/browse10/2016/en

World Health Organization. (2019). *International statistical classification of diseases and related health problems* (11th ed.). https://icd.who.int/

Zeman, A. (2014). Neurology is psychiatry—and vice versa. *Practical Neurology*, *14*(3), 136. https://doi.org/10.1136/practneurol-2013-000761

Part 2: Empirical Paper

Where Philosophy, Morality & Pragmatics Collide: The Meaning & Role of the Functional-Organic Distinction to Clinicians in Practice

Abstract

Aims

The functional-organic distinction attempts to separate disorders with diagnosable biological aetiology from those without. It has mostly been researched from a theoretical standpoint with a lack of research on how it is deployed. This study thus aimed to explore how clinicians understand and utilise the distinction in neuropsychiatric healthcare, with a focus on what is most pertinent to their practice.

Method

Twenty clinicians working in (neuro)psychiatry, neurology and clinical (neuro)psychology participated in in-depth semi-structured individual interviews, which were analysed qualitatively using components of constructivist grounded theory.

Results

The category 'Recognising Contextual Influences' sets the context for the four main categories identified: 'Conceptualising Causal Explanations', 'Grappling with Complexity & Limitations', 'Prioritising Pragmatism' and 'Navigating Moral Issues'.

Conclusions

'Organic' acts as the clear, objective and default mode of disease with 'functional' accounting for its absence and/or a multiplicity of subjective meanings in the realm of the psychosocial. Distinguishing between the two does not fit with how clinicians conceptualise patients' problems in holistic ways. They struggle to apply these in practice given their complexity and various limitations, and so prioritise getting the job done, utilising the distinction as a simplifying method of communication. Moral issues surround the distinction with functional problems attracting the stigma associated with the psychological.

Introduction

The functional-organic (FO) distinction attempts to divide symptoms, syndromes and disorders which can be attributed to identifiable, 'organic' biological changes from those which cannot, assigned to the 'functional' category (Kendler, 2012). It has received many challenges since its first known introduction by Gowers (1892), often for not representing the evidence base which has shown disorders categorised under one side i.e. as functional or organic, have aspects of the other (Beer, 1996) and that psychiatric 'difference-makers' in fact span biological, psychological and socio-cultural spheres (Kendler, 2012). Its clinical implications include those of an ethical nature such as judgements of credibility, controllability and value (Greco, 2019).

Bell et al. (2020) examine how the FO distinction continues to be a principal organising tool in diagnosis and clinical practice despite its failings in differentiating between different aetiologies reliably. Additionally, despite gradual removal of concepts of organicity from diagnostic manuals, the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed. & 5th ed.; DSM-IV & DSM-5; American Psychiatric Association, 1994, 2013) and the *International Statistical Classification of Diseases and Related Health Problems* (11th ed.; ICD-11; World Health Organization, 2019), the implications for its replacement 'secondary mental or behavioural syndromes associated with disorders or diseases classified elsewhere' have remained mostly unchanged (Bell et al., 2020).

Three key mutually reinforcing origins for dichotomously categorising psychiatric disorders have been posed by Kendler (2012): Cartesian dualism, 19th century neuropathology and computer functionalism. Descartes' dualism is one of multiple different kinds and posits that mind and body are made of two distinct types of substance (Descartes, 1641; Robinson, 2020). Dualism has been argued to have a continued influence in different forms on healthcare (Arnaudo, 2017; Beale, 2021; Greco, 2019), with some psychiatrists believing 'organic causes' specifically to erroneously imply dualism (Benrimoh et al., 2018). In functionalism, the human mind-brain system is analogised to that of a computer, with mind

(or functional) as software and brain (or organic) as hardware (Levin, 2021). The FO distinction therefore retains links to these philosophical models.

Meaning of FO Distinction

There are many different interpretations of the FO distinction, particularly on the functional side. This has been found to span the meanings of 'not organic', physical disability, brain disorder and psychiatric problem amongst neurologists (Kanaan et al., 2012).

In the late 19th century when the functional label was coined, it referred to an organic process that could not be detected with present methods (Beer, 1996). Some neurologists have continued to hold this view, believing physiological explanations for functional disorders may be discovered in time (Kanaan et al., 2012). Functional then can be taken to mean organic but yet to be identified with current technology.

Towards the start of the 20th century, figures such as Freud (2014), Janet (1907) and Jung contested the assumption at the time that all functional disorders including the neuroses had an organic basis and instead proposed that some of these such as hysteria were of a psychological nature (Beer, 1996). The meaning of functional has then oscillated between physiological and psychological throughout its history.

In more recent studies, neurologists have recognised psychological aetiology for the classic functional disorder of conversion or hysteria (Kanaan, Armstrong, Barnes, et al., 2009). Similarly, the percentage of patients for whom psychological factors were deemed significant correlated with the same of those without identifiable neurological causation in a questionnaire filled out by neurologists (Mace & Trimble, 1991). These therefore provide backing for the psychological interpretation of functional.

Functional has tended to be associated with malingering due to the absence of neurological pathology. This has spanned both conscious feigning and involuntary symptoms in both neurologists and psychiatrists (Kanaan, Armstrong, Barnes, et al., 2009; Mace & Trimble, 1991). This meaning of functional as malingering seems more compatible with attributing it to psychological rather than physiological factors.

Lastly, functional has been used as a diagnosis of exclusion i.e. to simply mean non-organic. This has often accompanied the other meanings outlined above but some neurologists have been found to define it in this way exclusively (Kanaan et al., 2012). This bears likeness to 'medically unexplained symptoms', which have been found to account for a considerable proportion of patients presenting in both primary and secondary care, 20% (Bridges & Goldberg, 1987; Knapp et al., 2011) and 52% (Nimnuan et al., 2001) respectively. This highlights the real need for such presentations to be better understood.

Overall, functional has an array of different possible meanings both historically and in more recent research. The question then is how do clinicians working with the FO distinction actually make sense of it today? Increasing insight into this would assist in focusing the debates outlined by revealing what remains relevant in terms of its meaning. Most importantly, it could highlight that which has the greatest relevance to clinical practice, where its meaning has potentially serious implications, for example, in treatment given and moral perceptions as will be explored in the next section. For instance, it could serve to improve consistency in language across professionals and healthcare areas, increasing quality of care. Moreover, it is difficult to research and advance our understanding of what the FO distinction attempts to represent without agreement on what exactly we are talking about when we use either term.

The studies cited which aim to address this question have mostly used surveys and typically focused on one profession. None have investigated the FO distinction as a whole. Therefore, the degree to which we can know what is behind clinicians' conceptual understandings of the FO distinction and how this varies across disciplines is limited by these somewhat disparate pieces of research.

Role of FO Distinction

Despite problems with the FO distinction, its inconsistencies in meaning being a major one, there is evidence that it continues to be used in practice. For example, 55.9% of psychiatrists reported using 'organic causes' at least monthly, although less than 30% of

them thought this was appropriate (Benrimoh et al., 2018). This suggests there may be a contradiction between what clinicians think about the distinction and how they use it.

It has been wondered whether the FO distinction chiefly acts as ‘a justification and language to allow clinicians to prioritise healthcare interventions’ (Bell et al., 2020, p. 7). A minority of neurologists were found to utilise functional’s multiple meanings by applying the term strategically i.e. to mean different things in different contexts (Kanaan et al., 2012). Additionally, psychiatrists have reported using ‘organic causes’ to signify to colleagues that investigations into possible medical causes of psychiatric disorder are required, believing this to be understood by other specialties (Benrimoh et al., 2018). Taken together, these suggest the FO distinction may act as an adaptive tool of communication.

From the side of neurology, it has been found that functional can be used to communicate that neuropathology has been excluded and their role in the patient’s care has therefore come to an end (Kanaan et al., 2012). This highlights how the divide between psychiatry in neurology is associated with the FO distinction, with psychiatry taking responsibility for functional disorders and neurology organic. This separation has been contested by some on the basis that developments in understanding have rendered it less clear, even false (Martin, 2002; Zeman, 2014).

The mind-body divide in healthcare has been argued to result in stigma and exclusion of care, with those whose disorder has been diagnosed on one side of the dichotomy being denied access to certain services on this basis (Beale, 2021). More specifically, ‘organic causes’ was varyingly thought to be stigmatising by psychiatrists (Benrimoh et al., 2018). This points to a potential role for the FO distinction in moral issues such as stigma.

Although explaining mental disorders biomedically, thus emphasising organic aspects, has been found to decrease stigma in clinicians via perception of blame, this could lead to hopelessness about prognosis, and decreased empathy and patient perception of self-efficacy (Lebowitz & Appelbaum, 2019). Indeed, perceptions in the general public of reduced controllability and recoverability accompanied by increased unpredictability,

dangerousness and fundamental difference in mental disorders with biomedical explanations have been shown to contribute to stigma and discrimination (Corrigan & Watson, 2004; Schomerus et al., 2012; Stuart et al., 2012). Consequently, the relationship between the FO distinction and stigma may not be a straightforward one.

The possible stigma related to both functional and organic disorders could result in epistemic injustice (Bell et al., 2020), in which a person's testimony is assigned less credibility due to prejudice (testimonial injustice) or a reduced capacity for a person's experiences to be understood by themselves and others due to inadequate hermeneutical resources (hermeneutical injustice) (Fricker, 2007). The delegitimisation of chronic pain patients' suffering has been attributed more specifically to epistemological dualism, in which the active knowing position is given to the clinician with the patient as a passive subject of this knowledge (Arnaudo, 2017). There are potentially then critical consequences of the FO distinction in terms of epistemology and justice.

So we have some ideas about what the FO distinction's role might be, mainly based on theoretical debate rather than empirical investigation as noted by Greco (2019) and Kendler (2012). Its pragmatic failings have been elucidated in Bell at al's (2020) conceptual analysis yet the question of how clinicians themselves view the purpose of the FO distinction and how they employ it alongside its shortcomings is still unanswered. Gaining a better understanding of this could reveal both what might be valuable about it and where it may prove to be inadequate, even harmful. This, along with clinicians' practical expertise and experience, could inform potential alternatives.

Rationale & Aims

In summary, the meaning of the FO distinction remains contentious with much debate over its many variations throughout history, making it difficult to know how clinicians today might make sense of it. Debate has mostly been focused on theoretical underpinnings, neglecting its utilisation in practice. Investigating its meaning and purpose in clinical practice from the perspective of professionals could serve to narrow down the debate to what is most significant to this with the implications of greatest importance i.e. for patient care. Recent

research addressing these questions has been restricted to one side of the distinction and, on the whole, to surveys and one of the multiple relevant disciplines.

This research thus aimed to discover how the most relevant professions, including psychiatrists, neurologists and clinical psychologists, understand and use the FO distinction as a whole. It utilised individual interviews to enable in-depth exploration of this, informed by the qualitative approach of grounded theory (GT) in particular, firstly for its focus on implicit meanings, allowing deeper exploration of these in relation to the FO distinction (Charmaz, 2014). It was also hoped that GT's emphasis on processes and actions rather than themes and structure would help to capture clinicians' use of the FO distinction in practice. Finally, GT methods attempt to move beyond descriptive accounts of data into more analytical understandings in aid of theory development, hopefully assisting in connecting the data back to overarching models related to the FO distinction.

Overall, this study hoped to contribute to understanding of human health and disease by explicating across a range of disciplines the diversity of meaning, purpose and practical use attached to the FO distinction, which, as described throughout this introduction, patients' lives and wellbeing could very well depend on.

Method

Joint Project

This project was joint with another trainee whom investigated the same topic but with people who have survived a brain injury (Harvey, 2022). Details of his and the research supervisor's contributions to this study can be found in appendix A.

Ethical Approval

Ethical approval for the study was gained from the University College London research ethics committee (see appendix B).

Qualitative & Epistemological Approach

The ontological and epistemological stance of this research was towards the social constructionist end of the spectrum, using Charmaz' guide for this version of GT (2014). Constructivist GT is based on interpretive definitions of theory, viewing data as co-

constructed between researcher and participant, and situated within multiple contexts. This is as opposed to the more objectivist approach adopted by earlier proponents of GT such as Glaser and Strauss (2017), stemming from positivism, with the researcher seeking to discover objective truths through data analysis. Constructivist GT centres researcher reflexivity where objectivist GT positions the researcher as a neutral observer (Charmaz, 2014).

Existing notions of the FO distinction were used as 'points of departure' for the research in providing a tentative guide when, for example, refining interview questions or attending to what participants were saying, without being limited to them (Charmaz, 2014, p. 31).

This study aimed to develop theory, the key component of GT (Oktay, 2012a). It is often not possible however to incorporate all aspects of the GT method in any given project considering common restraints on resources, the most relevant here being the context of a doctoral dissertation (Oktay, 2012b). Indeed, other studies have utilised aspects of GT without adherence to the full methodology (e.g. Boumans et al., 2017; Hipolito et al., 2011; Katsakou et al., 2012). It was recognised from an early stage that this may limit the extent of theory development. The components of GT that were employed in this project will be detailed where relevant throughout this methods section.

Researcher(s) Perspective(s)

I am a white British, middle-class female in my late-20s currently training as a clinical psychologist. I had some experience prior to this of working in National Healthcare Service (NHS) memory services and started a placement in neurorehabilitation towards the end of this project, both areas of healthcare relevant to the FO distinction. During the course of the research, I myself developed the neurological condition of chronic migraine and someone close to me suffered a serious acute neurological problem which, aside from disrupting progress, meant that the broad topic became more personally relevant.

I attempted to 'bracket' some of these perspectives both before commencing the research and during, as recommended by Rolls and Relf (2006). There are multiple methods

of bracketing, which can complement each other (Tufford & Newman, 2012). The ones used in this project included being interviewed at the start of the research process by another trainee working on a separate project, and keeping a reflective journal and writing memos throughout. Nonetheless, my preconceptions will have undoubtedly influenced how I engaged with the research and thus the results.

The trainee whom this project was joint with also engaged in bracketing, details of which can be found in the methods section of their paper (Harvey, 2022).

Recruitment

Participants were recruited through professional organisations including the British Neuropsychiatric Association and the British Psychological Society Division of Neuropsychology, via both email mailing lists and conferences. The only criterion for participation was working in psychiatry, neurology, clinical neuropsychology, neuropsychiatry and related specialisms.

When a potential participant expressed interest, they were emailed with a brief summary of what taking part would involve and the participant information sheet (see appendix C). If still interested, the interview was arranged and consent form (see appendix D) sent. Participants either signed this electronically or gave verbal consent at the start of the interview, which was audio-recorded. See appendix E for the email templates used.

Participants

A total of 23 clinicians expressed interest in participating, including 12 clinical psychologists, seven psychiatrists and four neurologists. Two of these did not respond to further communication and one declined to participate. Twenty clinicians therefore took part, for whom professional and demographic information can be found in Table 1.

Participants have been labelled according to profession as follows:

P: Psychiatry, including neuropsychiatry

N: Neurology

C: Clinical psychology, including neuropsychology

Table 1

Participant Demographic & Professional Information

Ppt (by profession)	Ppt (original)	Gender	Age range	Ethnicity	Profession and/or professional roles	Grade or seniority	Services or departments currently working in
P1	2	Female	30-39	Chinese	Psychiatrist, academic clinical fellow	Registrar	Psychiatry rehabilitation community service
P2	8	Male	50-59	White British	Neuro-psychiatrist	Consultant	Neuropsychiatry
P3	10	Female	30-39	White British	Psychiatry registrar	Core trainee 3	Recent six-month placements have included inpatient psychiatric services, community psychiatric services, national specialist units in neuropsychiatry, anxiety disorders & liaison psychiatry
P4	11	Male	30-39	White British	Psychiatrist	Core trainee 3	Recent six-month placements have included general adult psychiatry, a mixture of inpatient & outpatient, and some more specialist roles, including old age, addictions, forensics, learning disabilities & liaison psychiatry
P5	12	Male	40-49	White British	Neuro-psychiatrist	Consultant	Inpatient & outpatient neuropsychiatry in a tertiary neurosciences centre
P6	15	Male	50-59	Asian other	Psychiatrist	Consultant	Early intervention in psychosis, general adult & attention deficit hyperactivity disorder
N1	3	Female	40-49	White British	Neurologist	Consultant	Neurology
N2	5	Male	40-49	White British, white other	Neurologist, lecturer	Consultant	Neurology departments within hospitals
N3	13	Female	30-39	White British	Neurologist	Registrar	General neurology, inpatient & outpatient, both general referrals from GPs and the emergency department, cognitive clinic

N4	14	Male	40-49	Asian Indian	Neurologist	Consultant	Tertiary neurology centre (neurology, epilepsy)
C1	1	Male	40-49	White British	Clinical psychologist	Band 8A	Community neurorehabilitation
C2	4	Male	30-39	White	Clinical psychologist, senior lecturer	Consultant	Clinical neuropsychology
C3	6	Female	30-39	White British	Clinical psychologist	Band 8	NHS neuropsychology & private practice
C4	7	Male	40-49	White British	Neuro-psychologist	Consultant	Regional neurosciences centre in neuropsychology - general neuropsychology, stroke & functional neurological disorders (FND)
C5	9	Male	40-49	White British	Clinical psychologist	N/A	Private psychotherapy practice
C6	16	Male	30-39	European	Clinical psychologist	Qualified	Specialist chronic pain service in hospital & concussion service
C7	17	Female	40-49	White British	Clinical psychologist	Band 8A	FND service & stroke service
C8	18	Female	40-49	White British	Neuro-psychologist	Consultant	Outpatient neuropsychology
C9	19	Male	40-49	White British	Neuro-psychologist	Consultant	Community neurorehabilitation team & stroke services
C10	20	Female	40-49	White British	Neuro-psychologist	Consultant	Older people's mental health, including memory assessment service

Interviews

The interview guide (see appendix F) was developed in discussion amongst the research team based on the broad research question of how clinicians understand and use the FO distinction in practice. Using Charmaz's advice on constructing a GT interview guide (2014), the initial questions were revised and refined to become more open-ended and neutral, with possible follow-up questions which were more focussed. The resulting interview guide covered what participants understood by the terms functional and organic, including

how they relate to each other and what had led to this understanding, what purposes participants thought the concepts served and how they themselves and others used them in their practice. The interviews were semi-structured in that the guide was applied flexibly, with not all questions being asked to all participants and instead being adapted to each individual and what they brought to the interview.

Interviews were conducted via video call and lasted between 45 minutes to an hour, including time for briefing at the start and debriefing at the end. Interviews were audio-recorded then transcribed, some manually but most with the assistance of an AI transcription service. The latter still required the researcher to check for accuracy and make edits, enabling immersion in the data.

To enhance credibility and validity and as detailed in appendix A, triangulation was used in the form of data collection being shared between the different members of the research team (Noble & Heale, 2019).

Analysis

In line with the constructivist GT approach (Charmaz, 2014), analysis started with initial coding of each interview, generally incident-by-incident. Chunks of data which appeared to be particularly relevant to the research question were coded line-by-line in an attempt to capture more detail and depth.

These initial codes were then raised to focused codes by comparing them with each other and against the data, assessing which best accounted for this and their conceptual power. This method of constant comparison is a key part of GT (Charmaz, 2014).

Although initial and focussed coding is often sufficient to form an analysis, Charmaz advises to ‘allow yourself to raise the analytic level of a code where your data indicate it’ (2014, p. 146). She emphasises the role of memos in this, which were written throughout the research process, for example following interviews, during transcribing or coding, in accordance with this aspect of GT. The content of these was then utilised in elevating focussed codes to tentative conceptual categories, continuing with constant comparison by checking these categories against the data and referring to Charmaz’s description of how

categories ‘explicate ideas, events, or processes in your data – and do so in telling words. A category may subsume common themes and patterns in several codes’ (Charmaz, 2014, p. 189).

Diagramming, treated by some but not all as core to GT (Charmaz, 2014), was used in this project to compare the developing categories and experiment with their organisation and properties. Due to the wide breadth of the research question and heterogenous sample, it was beyond the scope of this project to identify a central explanatory process that accounted for the categories reached without losing their individual detail and nuance, which would have moved the data further into theory development.

Due to various constraints, it was not possible to adhere to the GT approach of simultaneous data collection and analysis, which would have enabled theoretical sampling; this involves seeking to gather more data most relevant to the identified categories in order to further explicate and refine their properties (Charmaz, 2014). There was an attempt to address this by analysing chunks of data (e.g. five interviews) in the way that has been described then applying the identified focussed codes and, towards the later stages, categories to the next batch of interviews to be analysed.

Codes and categories were framed as gerunds wherever possible throughout to maintain a focus on processes and actions, consistent with the constructivist approach to GT (Charmaz, 2014).

In the interest of increasing credibility, codes and categories were discussed and revised with the other trainee clinical psychologist and research supervisor at regular intervals throughout analysis, roughly every five interviews.

NVivo was used for all aspects and stages of analysis (see appendix G for example screenshots of this).

Results

> It's quite interesting that it's taken someone from outside the disciplines, if you like, who are seeing [the FO distinction] to … say 'what the heck is going on here? This looks like a mess', which we all know it is a mess, but it's a mess … which intuitively

> makes some degree of sense as well … because you instinctively know what you're talking about. But when you try and get down into it, it's a bit of a mess. (P5)

Table 2 shows the key processes identified, divided into main and subcategories, which attempt to make some sense of the mess the participant above refers to. Under the heading of each main category in the following text, **subcategories** will be bolded and *key processes* within these italicised. The categories are explicitly not intended to imply that these processes happen in a linear fashion in order of their presentation and it is recognised that they have much overlap with each other.

Table 2

Main Categories & Subcategories

Main Category	Subcategories
1. Recognising Contextual Influences	
2. Conceptualising Causal Explanations	1. Objectifying Organic 2. Subjectifying Functional 3. Integrating Organic & Functional
3. Grappling with Complexity & Limitations	1. Recognising Complexity 2. Facing Limitations 3. Growing Understanding 4. Moving Beyond
4. Prioritising Pragmatism	1. Compromising on Concepts for Utility 2. Manoeuvring Patient Journey
5. Navigating Moral Issues	1. Discerning Moral Attributes 2. Responding to Moral Issues 3. Controlling Access to an Illness Identity

Recognising Contextual Influences

Clinicians recognise the importance of context in interpreting and using the FO distinction, feeling it cannot be “delineated in an objective way outside of the context of the culture and also the scientific advancement and availability of various techniques to look at the body and [its] function” (P3). This spans many levels most notably “sociocultural factors” (P4) and one’s “philosophical starting point” (P4): “functional neurological disorders like

dissociative seizures are a worldwide phenomenon … but other cultures and societies don't have this Western rationalism from Descartes where the mind-body divide started" (N2).

Clinicians cite different influences of "historical context" such as how "hysteria would typically be applied to women" (P4) and "dominant ideologies" (C8) such as the "phase of bio-optimism" where there were attempts to "identify universal biological causes for problems" (P6). The other main ones talked about by participants included, "professional epistemology" (C4), "different settings" (N2) and individual colleagues or patients.

Functional in particular can "mean about 100 different things" (C6), including "functional analysis … to do with behaviour" (C7), in "occupational therapy … your day-to-day functioning" (C8), "functional imaging or functional networks" (N2). Although participants were deliberately not led to adopt any particular definition of functional, some stated that they would "stick to medically unexplained … because that [makes] more sense to me as a neuropsychologist, any mental health condition" (C3).

Conceptualising Causal Explanations

Clinicians conceptualise causal explanations both explicitly when defining the concepts of functional and organic and implicitly when they are discussing topics around these. This often reflects "both an academic, scientific interest and curiosity about why symptoms present in the way they do" (N4). This overarching process consists of **objectifying organic presentations** and **subjectifying the functional**; organic causes are to be identified via tests and investigations whereas functional causes are invisible and to be hypothesised through thinking and conversation. This is reflected in the vast number of ways in which participants defined functional (see appendix H).

Clinicians feel there is "something more objective about [organic disorders] in that it's a visible lesion or it's a blood test or it's positively evidenced" (P1). Consensus was found in that most participants *conceptualised organic as an identifiable physical aetiology*. So the first component of this being the presence of "some sort of damage" (C7), "structural disease process" (P3) or "physical substrate in the brain" (P1), such as "a lesion or a biochemical abnormality" (N3). The second aspect is that this "seems to be clearly causative in this

condition. So it would be something like hypothyroidism and depression or say amphetamine-induced psychosis or I suppose dementia" (P6). The final aspect is that this is "easily identifiable with current investigation techniques, be that imaging … neurophysiology … blood tests" (N4).

Clinicians **subjectify functional** by *attributing it to psychosocial factors*, "as a bit of a grab bag of other mechanisms that might include social factor[s], psychological mechanisms" (C9) such as trauma. This includes framing it in terms of the mind, mental health, and emotions, as well as cognitive processes such as attention in particular.

Most participants also *defined functional as the absence of physical or organic causation* or "diagnosis of exclusion" (C1, C4, C8 & C10). However, a proportion emphasised the "positive signs" (C4) of "differential functioning" (C2) or "malfunctioning" (P3) such as Hoover's sign.

The FO distinction was often equated with mind-body dualism by participants with comments that it "reeks of Cartesianism" (P4), which "no one really believes in" (P5). Indeed, functional and organic were not talked about as being separate by any participant as part of their own understanding and only recognised as being thought of in this way at service and population levels, as opposed to individual, which will be covered in later categories. Two participants clearly stated their disbelief in the metaphysical as an "unrealistic" (P1) implication of separating the two.

There was rich and wide variation in how participants related the two sides of the dichotomy, both explicitly and implicitly. The majority of participants integrated functional and organic in their thinking, for example, acknowledging organic aspects to functional disorders and vice versa:

> Even when you identify a clear biological cause, as in the organic conditions, there are often psychosocial factors that are involved somewhere. TB [Tuberculosis] is a classic social disease … how people express say their delusions or how they express their distress, the idioms of distress, are culturally determined … there is always going to be some impact of culture there. (P6)

Around half of participants conceptualised functional and organic as being inseparable in that “mind is body and body is mind” (C7), often illustrated through specific patient examples. The way in which they were inseparable for around half of participants was that they conceptualise organic as the basis for functional so believing that “ultimately, everything's organic. To a degree, everything originates from the kilo of flesh up here (gestures head)” (N4). Some participants believed functional and organic to represent “different prism[s]” (P5) for looking at the same thing through or two opposing ends of a spectrum where, for example, “it's either predominantly an organic depression, predominantly a functional depression or anywhere in between” (P4). Some conceptualised functional and organic as interacting causally in that “body, brain and mind or psychological, cognitive processes [are] … all jumbled up … all one complex system, and the effects of one can act both downwards and upwards within that” (P4).

Organic generally takes the “default” (N3) position for clinicians in being the first line of thought and that “we can understand what an organic problem is in its own terms … [as the] conceptual boss, the one which can stand alone” (C5).

Grappling with Complexity & Limitations

Participants described grappling with complexity and limitations. They **recognise all the FO distinction potentially refers to as** “a philosophical minefield … wildly **complex**”, believing it “defies simple explanation” (C2). They question how far “our scientific methodology really apply to the human body … you have all our concepts of causality that we learn, but really the human body doesn't work like that and you don't have these linear causal relationships within biology” (P3). A few participants discussed how clinical experience had shown them the lack of a neat one-to-one mapping between disease and symptoms across both functional and organic disorders:

> Patients are complicated. It's not as simple as this mapping of physiology equals disease, which equals symptoms. No, not at all. There's all this stuff in between that modulates that process in terms of how they present to you with symptoms… and that's present in whatever disease you want to look at to different degrees. (N4)

They **face various limitations**, firstly in *current knowledge*. This was spoken about mostly in relation to functional presentations, where there was a general sense that “the level of training … is so incredibly low, pretty much across all professions” (C3). Those who showed awareness of relevant explanatory models deemed these “really difficult” (P2) and it was wondered whether anybody “really knows a great deal about it” (C5):

> I'm really sceptical of anybody who feels they fully understand it or who has a simple answer for what might be causing it, or worst of all … feels like FND is always explained by trauma or always explained by illness beliefs or always explained by something. (C2)

> Here's the mystery … why does that person not have full control when we've just said that there's clearly not a lesion, and there's nothing that we can identify that's externally causing them to not be able to lift their leg at times? … That's the bit where we don't understand very well at the moment. We hypothesise that there is a problem to do with the focus of that person's attention. Perhaps there's an over-focus of attention on something that the person has framed as being abnormal and that is somehow stopping them from being able to use the leg in a normal automatic way. But that hypothesis we use is difficult to exactly be able to test that directly. (N3)

This highlights how around half of participants acknowledged the limitations of current technology more specifically and conceived the possibility of discovering an organic cause for presentations currently categorised as functional:

> Although you can't see something with our current biological tests or the current sort of standard investigations that are done, it doesn't mean that there is not a pathology there that perhaps is more subtle that we aren't able to pick up on yet. (P3)

Some participants were in fact involved in finding physiological markers for functional disorders through research such as “abnormalities on certain imaging sequences or … neurophysiological tests” (N4).

Limitations in knowledge and skills in other clinicians were often cited as reasons for perceived dismissiveness of functional problems or “bad experiences” on the part of the

patient (N4), “because they don't fit with the model. So people don't like them. They prefer not to look at it rather than to try and integrate it, because that's a very complex process” (P3).

Clinicians *face limitations in language or concepts*, feeling dissatisfied with the terms functional and organic and that “our ability to fit language around knowledge is … quite poor” (P2). This was talked about mostly with regards to the term functional because “you don't really unpick what's happened and why” (N3), making it “only the beginning of a description of mechanisms that might apply to the individual narrative” (N2). One participant felt the term organic to be “useless because it suggests that there's something out there that's non-organic, which is nonsense … at least as unhelpful, probably more unhelpful, than the term functional” (N4).

The **understanding of the FO distinction in clinicians grows** in multiple ways, in particular *learning from clinical experience and literature*. Interactions with patients were highlighted as key in that “each person who I meet, it does slightly change the way I'm viewing it and understanding it” (N3), sometimes leading to what was taught on training being “all turned upside down” (C7) and “[opening] the realms of possibility” (C8). Over half of participants talked of “reading a lot around [the FO distinction] and trying to understand it" (C2) and cited many literary influences on their understanding, including their own experiences of writing.

This understanding becomes more complex with time and, due to the outlined *limitations in training or current knowledge*, requires theorising to “come up with our own model because it’s just so vast … maybe in 500 years [there] will be, but there’s no big picture yet of … how it all fits together” (C1), again reflecting an overall curiosity to know how humans work.

Clinicians have different ways of **moving beyond** this complexity and limitations. For some participants, *being willing* was a part of this, to take on the unknown and what others do not want to:

> What I hope by having my functional neurology clinic … is that … the neurologists who don't like it and aren't sure that it's relevant, can make the diagnosis and refer on and it's my problem then and not theirs … there was a bit of a … confession phase … that actually I found this interesting … it was a bit like 'ahh' from some people and 'yay' from other people. (N1)

They *make the best of current understanding*, one participant feeling that "until there's something better, for me at the moment, [the FO distinction] is the best possible solution" (N4). They also look to the future in terms of *advocating for a more holistic approach* to all patients, considering a range of factors and thus being able to give a more nuanced picture of any diagnosis:

> What we really need is a revolution in terms of how we approach patients so that people aren't afraid to embrace the complexity and recognise that actually, this is a whole person in front of me and, if I'm really going to do them a service, I need to at least engage with all of them, not just this mind-body divide. (N4)

They see the benefits to this such as providing a better guide for treatment. They felt this could be achieved through *using alternatives* to the FO distinction, such as being more specific with "a term that describe[s] the mechanism" (P2) and also using the biopsychosocial model to "make you think about all the different factors that impact on someone's mental health and how they develop these problems and why these problems persist" (P6). Some participants recognised how they could move beyond the FO dichotomy through "individual conversations with individuals about their individual behaviour and experience and emotions" (N2).

Prioritising Pragmatism

Participants spoke strongly of prioritising pragmatism. They are willing to **compromise on concepts** that they believe to be imperfect such as the FO distinction **for the sake of utility**:

> Whenever you're in a meeting and people talk about functional or organic … everyone will say 'this is a terrible split, this doesn't make any sense'. But as soon as there's disagreement over how to manage the patient, then people talk about it. (P5)

They prioritise practical usefulness over a complete understanding, despite perhaps wanting this as described within the process 'Grappling with Complexity and Limitations'. They view the FO distinction therefore as "not a reality … just a model", as "a quick shorthand" (P2) or "useful heuristic" (P6) to allow things to keep moving within the healthcare system. Some participants were clear that they base their understanding of the FO distinction on its use rather than theory:

> I don't think it's a great distinction in the sense that my understanding of how the body works and how human beings [are] set up doesn't really correspond neatly … so I understand it on the basis of how I think it's used, as a method of communication. (P3)

Clinicians use the FO distinction to *make complex ideas accessible*. The most common example of this was explaining mind-body interactions using the analogy of a computer, with the mind equating to software and the body equating to hardware. Clinicians are aware that this is a simplification but deem it useful as a "simple metaphor that bridges that gap between what people think about things being psychological or functional or cognitive and the physical systems" (C4) and demystifies the idea of functional. This is with both patients to "allow [them] to grab hold of what the diagnosis is, give them something to work with, even though it's not perfect, so that they can move forwards in terms of their health journey" (N4) and with other clinicians, particularly those in training.

Manoeuvring patients' journeys through the healthcare system is an important way in which clinicians find the FO distinction useful. Participants spoke of *estimating causality*, working out the relative causal contributions of different factors, based on the nature of the presenting problem and previous diagnoses, and pattern recognition:

> Recognising the different sorts of patterns in which the central nervous system versus peripheral nervous system might have been involved, or if it's the brain, which

> bits of the brain are next to each other and therefore are likely to be affected altogether if there's a big lesion in there, and also the time course of how quickly things get worse or get better can be quite a good clue to what type of problem is underlying things. (N3)

There was a clear sense of seeking an organic explanation first and foremost in the context of both practice and research: “although everybody says 'oh, we shouldn't have this dualistic attitude', people, the medics, still … hanker after a very physical conceptualisation” (C4).

A few possible reasons were cited for this, including that “generally if it's something dangerous that's gonna kill you, you can usually identify it on a biological test” and “so that there's an obvious focus there of something you can change” (P6). Organic causes are felt to be more certain than functional ones:

> The opposite of yes [a problem being organic] isn't no, the opposite of yes is I guess a whole bunch of things that might approximate to yes, somewhere between yes and absolutely not, but we don't know yet or maybe it's a bit of yes and a bit of no. (P2)

This was echoed in participants’ impressions of patients diagnosed with functional problems:

> Is it some obscure parasite they picked up 15 years ago? I had one woman who was convinced that this was all from when she stepped on a weaver fish when she was seven. I had one man who kept … making analogies with Parkinson's before we knew about the dopamine link or some of the cancers … it must be all kinds of frustrating for them because you're just going to feel that you're being palmed off, told you're mad effectively and just desperately worried that there's something sinister lying behind this that no one is looking for. (C7)

This relates to how clinicians desire clarity and feel a discomfort with not knowing: “if they can't show someone the cause of their problems … then they might have to say 'well, I don't know, there's nothing clear and identifiable', which clinicians don't like doing” (C6).

Participants talked about containing a lack of understanding with functional “as a catch-all umbrella term for 'we don't know what's going on here'” (P4) typically applied to:

> A group that sits a little bit in the middle where we can say that it's clearly not as best as we can tell a more neurodegenerative formal dementia diagnosis. But also maybe we're struggling to say that it's some of these other things that might affect your cognitive abilities. (C10)

Clinicians use the FO distinction to *communicate this suspected causality*. A key part of this process is reassuring others “that symptoms do not necessarily map onto a progressive and frightening disease process” once certain organic causes have been ruled out or “there's something about [the patient’s] presentation that makes us worry that we might be missing something” (P3). Indeed, for some this is the only time they use the term organic.

They adapt their language to different contexts, using the term functional in particular “differently with different audiences and with patients slightly differently to other clinicians” (C9), in order to communicate in a way that will be understood perhaps by “reflect[ing] back their understanding of functional” (N3) and to a level of detail that is useful to their audience. They try to influence colleagues’ views perhaps by “explain[ing] how people's trauma symptoms interact … explain[ing] how things like noticing bodily sensations is really important in the context of a functional symptom. So stuff that our colleagues may not necessarily have ever been taught” (C3). Some clinicians expressed a desire for more consistency in language across these contexts although one noted a tension with this in relation to functional as “so vague that it can mean different things to different people, and that can be useful. But it also can make it useless” (N2). Clinicians are aware that the terms functional and organic “will direct a little bit in terms of what service you can access” (C10), for example neurology typically excluding functional and mental health typically excluding organic.

Communicating how to approach a patient’s problems was another related process identified: “in giving them a diagnosis, you're by extension, labelling them in terms of where

they need to go next … the process of health care … investigations … treatment" (N4). This may include directing to other disciplines or even "a move in a game to try and get someone else to take responsibility for the patient" (P5). Functional problems were talked about by many as being most "amenable to psychological therapy" (C8). However, clinicians believe it can be "reductionist to take away the psychological and organic components to a person's presentation" (C8) and thereby limiting treatment to only one side of the distinction.

Some participants spoke of prioritising treatment based on urgency with organic causes being prioritised due to potential deadliness. The stakes are seen as higher in some settings than others:

> [In an] acute setting, people need to be able to tell the difference very quickly because the implications of either withholding treatment or giving the wrong treatment can be fatal. So … distinguishing between an epileptic seizure, where there is damage in the brain and it is causing damage to the brain while it goes on, that actually being more black-white about that and saying 'no, this is what a dissociative seizure looks like, this is what an epileptic seizure looks like', that's really helpful. (C7)

There was a sense that ultimately, patients diagnosed with functional disorders face a "really long journey of being diagnosed, misdiagnosed … diagnostic uncertainty and being really functionally impaired for years" (P1) and that this could take "on average … seven years … from their symptoms first starting to actually sitting down with a psychologist … the recommended treatment for FND" (C7).

More broadly, the FO distinction is used to *plan services*. It can determine funding for different specialties and maintains boundaries around these, "divvying up the terrain of disease and saying who is responsible for what" (P5) with organic generally under neurologists and functional, psychiatrists. Some participants spoke of how patient groups are demarcated based on the distinction, for example "in older adult services, we have two different crisis services … our dementia rapid response team, which is our organic crisis team, and … our in-reach and home treatment, which is our functional crisis team" (C10).

Navigating Moral Issues

Navigating moral issues is an important process in the meaning clinicians make of the FO distinction in practice.

Participants spoke of **discerning moral attributes** both explicitly and implicitly. In *discerning levels of stigma and prejudice*, clinicians recognise this in both patients and colleagues as predominantly associated with psychological presentations. Participants spoke about functional as a more neutral alternative "because it was seen that patients with these symptoms really didn't like the implication of psychological inferences" (C4) but it was felt by many that it is "still picking up all the other stigmas and the lack of services … these people are really discriminated against" (C7). Multiple stories were relayed of a functional diagnosis being "accompanied by a bit of an eye roll" (C9) and "associated with personality disorder and just difficult patients … the heart sink patient … a nod, nod, wink, wink, functional meaning like basically, this person is crazy" (P3). Some participants acknowledged "the dark past of this [where] you've got ideas like hysteria, which is very gendered and very much I think couched in ideas of personal weakness or vulnerability or manipulation or personality disorder" (C2).

When *discerning levels of agency and control*, this is perceived to be varied along a spectrum of conscious control in functional problems to potentially include malingering and factitious disorder, related to how psychological factors are thought to be "imbued with intentionality to some degree" (P4). A lack of control was assigned to organic, for example "after a stroke, there are very natural processes … the brain trying to repair and … overcome whatever the insult is, so we can't influence them directly" (C10). Connected to this, clinicians *discern levels of credibility and legitimacy* and find functional illness to be perceived as less credible than organic although themselves contest this. When describing a derogatory remark to this effect heard about people in functional comas, one participant strongly asserted the validity of all components of experience:

> If you could step back from that and think for a second about what a girl in [country affected by war] might have gone through that actually, this sort of living death was

> preferable to that on so many levels. I think … the functional-organic distinction doesn't help in situations like that. That girl has been through a traumatising experience, which will have been mental, will have been physical, will have been social, all of them together, that she has on somewhere between conscious and unconscious, somewhere on that spectrum, has decided that it would be better just to be dead, to switch off. (C7)

Clinicians perceive functional as gaining credibility through advancing technology and evidence of brain changes such as “shearing in neural tracks” (C3), implying organic to be associated with greater legitimacy innately, and of proven efficacy in treatments. Participants spoke of ways in which credibility is measured such as against organic evidence or “based on our life experiences for people where we literally cannot comprehend what it's like to live in their body” (C3). When *discerning levels of value and deservedness*, clinicians believe others to view functional problems as not “worthy of a medic's time” (N4) but they themselves assert that these are deserving of clinical time.

In **responding to these moral issues**, participants spoke of *tackling stigma* especially that associated with functional disorders. Clinicians do this by emphasising their belief in the person’s experience: “I deliberately … explain to them …’What you have is real. You're not imagining it. You're not going crazy. You're not making it up. It's not voluntary. I'm sorry you've had bad experiences with other health professionals’” (N4). They advocate for better language by “getting rid of the word organic” and, along with it, “non-organic” (N2). Some believed labels alone could not change underlying stigma because of “the nature of what it is you're dealing with [the psychological and intentional], I think that's always going to be somewhat stigmatising … until we radically change our views of mind-body interactions” (P4).

Participants gave many examples of explicitly communicating to patients a belief that they are not responsible or to blame for their symptoms although the possibility that some patients are indeed malingering was held by many: “you end up … reassuring them that ‘it's

not all in your head', which it is anyway in your head, whatever that means, or that they're not doing it on purpose and you don't even know that's true" (P2).

This connects to how clinicians use the FO distinction to *hide meanings*, in particular to make the psychological "more palatable" (C2, P4 & C7) to both patients and the medical system by calling it functional instead. They might also use functional to suggest meanings that are stigmatised to colleagues such as "that someone is difficult without writing that in the report [so] other people can read between the lines" (C6). They suspend any belief they might have in patients' intentionality and are cautious in diagnosing malingering, especially with the patient's knowledge:

> The diagnosis of functional neurological illness is what was described to her and … the work that was done with her was around that diagnosis with the psychologist. The diagnosis that tended to be used [without] her was that of a factitious disorder. (P4)

Clinicians use the FO distinction to *give hope* for improvement, particularly with regards to functional presentations where the absence of physical injury "gives one hope I think that … proper functioning could be restored" (C5). They spoke of diminishing blame while instilling agency. This contrasted with how participants perceived their colleagues to often be hopeless about prognosis for functional disorders.

The FO distinction is utilised by clinicians in **controlling access to an illness identity**. A diagnostic label is seen to legitimise a person's experience of illness as "something to hold onto, a badge of 'I've got this thing'" (C8). Thus the label of functional can provide this where no organic cause can be found. As outlined under 'Prioritising Pragmatism', it gives access to service pathways that may be out-of-bounds to psychological disorders and opens up information and support.

Giving access to an illness identity involves providing patients with an explanation for their symptoms, which can be "very validating and helpful for people to get that understanding … to explain what underpins is helpful for treatment and the person's own formulation" (C8). Participants relayed how they start by discerning patients' current perspective, including their "disease concepts … how they think about health and illness"

(P3) and “experiences … in terms of a process of diagnosis” (C9). Clinicians recognise they often have differing perspectives and priorities with patients. This linked to a feeling of humility for many about their own knowledge, which came with experience and taught them to “keep a very open mind … because it's not my place to tell them that they're wrong” (C3) about aetiology for example. These processes are in aid of broadening patients’ views of causality. Clinicians perceive dualistic thinking in patients, which they tackle by educating them on how everything is a mix of functional and organic, mental and physical, mind and body. They tread carefully around the concept of functional and its links to the psychological by “slowly building up the psychosocial, psychogenic formulation and then gently chip[ping] away at the ‘there is something terribly wrong with my brain’ organic aetiology” (C1).

However, one participant spoke of needing to be honest about potential psychological mechanisms, believing this to be beneficial in the long run:

> The truth of it is … the people that I have worked with who have had the best outcomes are the ones who have bought into the psychological elements of the formulation … if we had the courage to say what it is, I think the general public are a lot more accepting and believing of it and willing to buy it because we're human. We've got human bodies, we've got tummies that gurgle when we've got an exam coming, we've all experienced the urge to go to the loo when we're stressed … we know this whole thing is completely connected. (C7)

Others concurred in perceiving the potential harm associated with colluding in unhelpful psychological mechanisms. When participants spoke of times that patients were *denied access to an illness identity* in the form of “their problems … being minimised or dismissed” (C9), this was always in the context of hearing about other clinicians doing this, often through patients themselves.

Building on this idea of giving access to an illness identity, this can be in exchange for treatment cooperation. Clinicians recognise the danger to disbelieving and invalidating patients’ experiences and the benefits of creating an alliance between them and patients. This allows things to keep moving despite all the complexity that has been outlined,

especially any doubts about the genuineness of patients' symptoms on the part of the clinician:

> There's been a pact, it's a political pact between the functional doctors and the patients. The functional doctors have said 'we'll agree not to say it's your fault and you haven't done it on purpose if you agree to join us and be allies with us … and that means we'll allow you the, if you like, status of being poorly people and all the things that come with it'. (P2)

Discussion

Key Findings

Conceptualising Causal Explanations

A major finding was that the scope of the FO distinction reaches beyond what is required pragmatically in clinicians' immediate clinical work to how they conceptualise causal explanations for symptoms more generally. Importantly, these conceptualisations did not correspond neatly to how participants defined the FO distinction in that none felt functional and organic to be separate at an individual level, as was felt to be implied by the distinction's associations to Cartesian dualism. Rather, organic was understood to be the basis of functional for many participants alongside other alternatives for how the two relate, including representing different lenses for observing the same thing and inhabiting either end of a spectrum.

We might not be convinced by the above that clinicians are not dualists on some level in that they still broadly talked about organic as inhabiting the realm of the physical, and functional the psychological and social. So we might still agree with those who have critiqued ongoing dualistic splits in healthcare (Arnaudo, 2017; Beale, 2021; Benrimoh et al., 2018; Greco, 2019; Kendler, 2005; Sachdev, 1996).

Organic is thought to predominate as the objective, measurable and clearly defined concept relative to functional as subjective, difficult to measure and with many possible meanings; this split has likeness with Greco's (2019) characterisations of body vs mind respectively in her examination of the resilience of dualism in healthcare. The multiple

meanings of functional add to evidence of this previously found in neurologists (Kanaan et al., 2012) and is reflective of its many variations throughout the history of neuropathology (Beer, 1996). The functional side of the distinction therefore provides much more to be reckoned with, possibly explaining why it was the most talked about throughout all interviews.

A lower proportion of the interviews with neurologists was coded to 'Conceptualising Causal Explanations' when compared with psychiatry and clinical psychology. This could be because their training is likely to include less on what is behind functional problems than psychiatry and clinical psychology where psychosocial factors are more of a focus, consistent with how neurologists have been found not to place hypothesising psychological aetiology within their remit (Kanaan, Armstrong, Barnes, et al., 2009; Kanaan et al., 2012). The age range who spoke the least about 'Conceptualising Causal Explanations' was between 50 and 59 years old (both psychiatrists) suggesting a potential influence of years of experience or differences in training.

Overall, although some of these ideas have been alluded to and/or hypothesised in the existing literature as outlined, this is the first piece of research to make explicit the process and meaning of this aspect of how clinicians' understand the FO distinction as whole, bringing together the separate components under the analytical category of 'Conceptualising Causal Explanations'.

Grappling with Complexity & Limitations

As suggested by the range of ways in which clinicians conceptualise the FO distinction, this research highlighted for the first time the complexity they recognise in this and how they feel limited by current knowledge, technology and language surrounding this in everyday practice. It may be that these limitations prevent them from fully integrating the two sides of the distinction, or the biological with the psychosocial, in their thinking or communication as far as they conceive of or would wish to.

Again, this was more prominent for the functional side of the distinction, suggesting patients with problems categorised as such do face hermeneutical injustice (Fricker, 2007) in

that these are far less understood than organic ones, rendering their experiences less intelligible. This is despite all participants asserting their value and deservedness.

Another new insight was how they grow their understanding of this complexity in the face of limitations, mainly through clinical experience and literature, which enables some to move beyond the FO distinction in fathoming alternatives. This potentially fits with how the use of 'organic causes' by psychiatry has previously been associated with younger age and finding alternative terminology difficult (Benrimoh et al., 2018) in that alternatives may be harder to grasp and use earlier in one's career.

Alternatives included naming the suspected mechanism more specifically or using the biopsychosocial model. The former appears to fit well with Kendler's 'difference-makers' for psychiatric illness, which he describes as "dappled, distributed widely across multiple categories" in his case for empirically based pluralism (Kendler, 2012).

'Grappling with Complexity and Limitations' was talked about the most by neurology and those between the ages of 50 and 59. Since these groups spoke the least about 'Conceptualising Causal Explanations', it is possible then that having fewer ideas about causal explanations may mean grappling more with complexity and limitations. By contrast, what clinical psychologists said was more dominated by 'Conceptualising Causal Explanations' than 'Grappling with Complexity and Limitations'.

Prioritising Pragmatism

Despite perhaps wanting a more complete understanding as outlined above, it was found that clinicians are willing to compromise on the concepts they deploy for utility's sake, considering the complexity and limitations described in the previous two sections. This can be in aid in of manoeuvring patients' journeys through the healthcare system with this study implicating the FO distinction as currently a necessary part of this for many.

This process of 'Prioritising Pragmatism' offers a richer interpretation of what might be happening when clinicians use the FO distinction strategically, a previous finding (Benrimoh et al., 2018). It may also provide a reason for any tension between clinicians' views and their practice, for example, in psychiatrists with 'organic causes' (Benrimoh et al.,

2018). The same study found that use of this concept was associated with working in more hospital-based settings; this fits with the identified category of 'Prioritising Pragmatism' in that the stakes may be higher in these settings with greater limitations on time, thereby increasing the need for shorthands.

Navigating Moral Issues

This study highlighted how moral issues are associated with each side of the FO distinction in clinicians' minds. Again, these discussions were dominated by functional problems which were assigned the most stigma, largely due to their link to the psychological; this fits with how patients have been found to take offence to diagnoses suggesting psychological causality (Wessely, 2000). This makes sense considering how the functional side of the distinction is assigned a greater level of subjectivity than the organic when 'Conceptualising Causal Explanations', consequently leaving more room for different interpretations and judgements from different individuals. Functional disorders being seen to gain credibility through biomedical correlates is also consistent with Ungar and Knaak's (2013) idea that emphasising these in physicians' conceptualisations of mental health difficulties may decrease connected stigma.

Agency and control was shown to be a pivotal attribute in that a lack of this can be associated with hopelessness and the presence of this with blame. This adds to previous literature linking organic with reduced agency and control, and functional with increased (Corrigan & Watson, 2004; Lebowitz & Appelbaum, 2019; Schomerus et al., 2012; Stuart et al., 2012).

There are many ways in which these discerned moral attributes were found to influence clinicians' practice. These included attempting to avoid sparking stigma by hiding the psychological within functional, which is similar to Kanaan et al's (2012) idea of functional as a 'simplifying euphemism'. Just above a third of neurologists surveyed frequently utilised codes or euphemisms in letters to GPs, usually to indicate conversion disorder or psychological difficulties (Kanaan et al., 2011). Functional may then be an example of one of these.

Participants spoke of how they themselves give patients access to an illness identity through the functional label while believing other clinicians can deny this to functional patients, echoing concerns over the FO distinction as a version of exclusion of care (Beale, 2021). Clinicians spoke much of humility in their own ideas when giving patients an explanation, challenging Arnaudo's (2017) application of epistemological dualism to the clinician-patient relationship in which the clinician holds the true knowledge.

This relates to the category of 'Prioritising Pragmatism' in that clinicians might suspend some of their views or doubts about how patients present in order to create an alliance and keep things moving especially as moral attributes are, like the concept of functional, subjective. This bears resemblance with Parson's concept of the sick role, where ill persons' social expectations change on certain conditions such as participating in recovery-directed activity (Varul, 2010). It also adds to previous evidence of how the need to build rapport with patients 'limits truth-telling' in neurologists about suspected psychological causality in conversion disorder (Kanaan, Armstrong, & Wessely, 2009).

Interestingly, all participants generally portrayed themselves in a better light than their colleagues so believing them to have more stigmatised attitudes resulting in them being more dismissive of patients than themselves. This could reflect a biased impression of their colleagues possibly through patients' second-hand stories of negative experiences. Another possible explanation is that those who took part are likely to be particularly motivated or knowledgeable about the topic, potentially mitigating more derogatory or dismissive attitudes. Additionally, there is likely to have been some effect of social desirability bias within the interviews, which can be defined as "the tendency of research subjects to give socially desirable responses instead of choosing responses that are reflective of their true feelings" (Grimm, 2010); this could mean participants may not have fully explicated their own views that were felt to be less socially desirable i.e. more stigmatised or derogatory, especially towards patients.

Overall, this category of 'Navigating Moral Issues' weaves together some of the existing research on the FO distinction specifically and that on stigma and other moral

perceptions more generally. It also gives detailed insight into how these perceptions affect the behaviour of clinicians when encountering the distinction.

Clinical Implications

A major finding of this study was that there is an important difference between how clinicians conceptualise causal explanations for patients and people in general, and their pragmatic use of the FO distinction. The former appears to reflect an innate curiosity and aspect of training in their discipline and the latter a presently necessary tool. Difficulties seem to emerge when these two things become conflated in day-to-day practice in that the FO distinction may be taken by some, especially those less experienced or laypersons such as patients, as a truth or reflection of how clinicians are making complete sense of their symptoms rather than a way of manoeuvring them towards the treatment that is likely to be most helpful to them based on a number of factors. Thus if these two things were more clearly delineated in practice, this may serve to resolve some of this tension. For example, when clinicians use the hardware-software metaphor to make complex ideas accessible, it should be made clear that this is a simplification and not an accurate portrayal of how the mind and body are believed to interact.

This research revealed many problems related to treating functional as one thing or category, meaning clinicians generally desire more consistency and clarity about what is meant when people use this term. Its use has been discouraged previously for the confusion it can create (Mace & Trimble, 1991). So, as suggested by participants, an alternative is to label patients' symptoms according to the key suspected mechanism rather than grouping lots of these under functional. Using functional to contain a lack of understanding in particular is likely to give false impressions to others and therefore be a source of confusion. Thus, although it may be a more uncomfortable position for clinicians, admitting when a causal explanation is unknown is likely to be more helpful.

As mentioned above, this study has found that clinicians generally do try to think of their patients in holistic and nuanced ways, for example using the biopsychosocial model. However, the limits they described to their knowledge of the psychosocial or functional

factors and how these connect with the biological or organic may force them into more simplistic dichotomous conceptualisations when faced with the limitations of everyday practice. Providing more training on what is lacking may then help clinicians to maintain their holistic thinking in day-to-day clinical situations. This could also help to tackle some of the moral issues such as clinicians being dismissive of functional problems, as this was partly linked to limitations in understanding.

Of course, individual clinicians and disciplines cannot be expected to have a complete understanding all on their own. Thus, more joined up multidisciplinary working, even breaking down the divide between neurology and psychiatry (Martin, 2002; Zeman, 2014), could aid in sharing expertise of the different realms of explanation and reducing the need to shift complete responsibility to another discipline, ultimately resulting in more holistic care and hopefully better outcomes for patients. This has also been advocated by Arnaudo (2017) for complex pain conditions.

Limitations in available resources in the healthcare system was shown to play a significant role in the use of the FO distinction, with organic problems dominating these generally. If disorders classified as functional were allocated more resources, this could help to balance this out and enable the holistic approach outlined in the previous paragraph. It would potentially also increase perceived deservedness of functional problems and consequently willingness to give them clinical time, as this research has added to evidence that there clearly are clinicians who assert this and a significant proportion of patients presenting in this way.

The stigma associated with psychological and social factors has been emphasised through this research. Indeed this seems to be a key reason for vagueness in the term functional being useful in that it allows clinicians to hide more stigmatised meanings both with colleagues and patients. This was spoken about as perhaps assisting with engagement, enabling clinicians and patients to get along at least in the short-term, consistent with evidence that patients deem functional the least offensive label for symptoms without a medical explanation (Stone et al., 2002), but ultimately not tackling what is underlying this

stigma and simply masking it temporarily. It could be argued that using functional in this way may even serve to increase the stigma associated with psychological problems in avoiding talk of them, as was recognised by some participants. It is recommended then that communicating suspicion of psychological causality is not avoided, allowing any resulting stigma to be understood and ideally challenged head-on. Again, more training in how psychological factors relate to physical symptoms for all professions, particularly neurology, may help to provide some grounding for this, even if they are not the ones to proceed to provide treatment. More specifically, the insinuation of interpersonal difficulties that accompanies the label of functional for some in this research raises the idea that more training in these kind of issues for all clinicians could be beneficial.

Strengths, Limitations & Future Research

A strength of this research is that it explored the FO distinction across a range of disciplines, which has not been done to date to the author's knowledge. This was fairly balanced with 10 physicians (4 psychiatrists, 2 neuropsychiatrists & 4 neurologists) and 10 psychologists (4 neuropsychologists & 6 clinical psychologists) taking part. The study is however missing data from other disciplines who we know work with the FO distinction such as physiotherapists and occupational therapists. It is important to note that, as a qualitative study, the results are not intended to be representative in the way quantitative ones would. Nonetheless, future studies could explore similar issues with these disciplines and any others.

Most participants were senior in their profession at the level of consultant. This was an advantage in that they had a wealth of experience to draw from in their field or discipline. However, it may be that including clinicians working at lower levels would have different views to contribute, for example about what they feel is most lacking in their knowledge related to the topic, and so may also want to be included in any future research of this kind.

Although participants were not necessarily embedded in the context in which they usually work such as their workplace during the interviews meaning the influence of this may not have shown itself during these. Hopefully though, this allowed participants time and

space to reflect more deeply on the topic than the likely busy and pressured workplace environment would allow.

Most participants were white British meaning the results are potentially biased towards this ethnicity. This is not necessarily representative of the demographics of the actual workforce and so future research should seek to achieve this as far as possible. On a similar note, it is important that the results are interpreted within the context of the UK and the NHS as this was the main setting in which participants worked. It would be interesting to explore the same topic across other settings such as those in other countries and/or cultures to add to the picture painted here.

Because the majority of participants interviewed were working in neurology, neuropsychology and/or psychiatric settings, the FO distinction was mostly talked about in relation to functional neurological disorder and psychiatric disorders. However, as suggested by the literature and alluded to by some participants, it is relevant to other areas of healthcare where the concept of functional may take a different name such as medically unexplained symptoms. This study then is limited to one subsection of the where the FO distinction is applied and so future ones could explore it in relation to others, for example chronic pain or gastrointestinal problems. These could then be compared to reveal any differences or similarities.

Based on the fact that participants responded to an advert for the research via professional interest groups, it is probable that it is biased towards those who take a particular interest in the FO distinction. This may have enhanced some of the resulting categories such as ‘Conceptualising Causal Explanations’, which may in fact not be so prominent for clinicians who are less interested in the topic in general.

This study was the first to explore the understanding and use of the FO distinction as a whole in depth with clinicians to the author’s knowledge, meaning it was broad in its scope. The specific methodology used i.e. GT was well suited to this because of the strong emphasis on inductive reasoning; it encourages an open research question to mitigate the

risk of imposing preconceived ideas or hypotheses on the data, allowing the researcher to go in whatever direction is indicated by the data (Charmaz, 2014).

Additionally, using GT methods enabled the categories developed to cover more complex and abstract meanings and processes than might be achievable with another qualitative approach like thematic analysis; they work to enhance theoretical sensitivity, bringing 'analytic precision to [the] work, whether or not you pursue constructing theory' (Charmaz, 2014, p. 160). Consider the difference between the category of 'Conceptualising Causal Explanations' and a theme of 'Causal Explanations' – the former tells you more about the *process* involved in how clinicians' understand and *make meaning* of the FO distinction; it keeps the clinician's thinking connected to their conceptualisations, rather than positioning these as separate, even objective, entities.

There is much debate over what constitutes theory, with the constructivist perspective recognising the subjectivity in judgements of this. Charmaz (2014) points out that many studies claiming to use GT methods do not purport to have made a theory. However, Oktay (2012b) advocates not shying away from using GT methods to develop theory, even when it is not possible to include all of its techniques. Limits on resources, including time, within this project made it difficult to adhere to some aspects of GT, most notably theoretical sampling. This highlights a downside to GT, namely the difficulty predicting how the project will turn out, including how far it may be possible to develop theory within the given time and other limitations (Oktay, 2012b).

There are some alterations that could have been made to the research to increase the chances of moving data analysis further into theory development. For instance, a slightly narrower question focussed on either how clinicians understand or use the FO distinction was considered in the early stages of data collection but it was felt that the data thus far implicated these two angles as too intimately tied up with each other to be separated. However, the project could have been made more specific to a particular area of healthcare such as FND, the most talked about throughout the interviews. This still would have allowed the FO distinction to be addressed as a whole with a range of disciplines while tapering the

focus. On a more practical note, changes to the timeline of the research process may have enabled more engagement in theoretical sampling, which would have further aided theory development.

An alternative qualitative approach could have been used such as thematic analysis, which is in the same broad family of qualitative approaches as GT and similar in its methods but without the aim of producing theory (Pistrang & Barker, 2012). This may have been better suited in its ability to summarise key parts of a large body of data; on the other hand and as alluded to already, it offers less in the way of interpretation beyond description (Braun & Clarke, 2006). This could have then limited the depth and construction of the theoretical categories presented here.

Interpretive phenomenological analysis like GT aims to capture deeper meanings by going beyond participants' words but differs in its focus on inner experiences (Pistrang & Barker, 2012). This may have worked well for investigating the meaning clinicians attribute to the FO distinction but less so for how they use it, with perhaps too much emphasis on the personal worlds of clinicians than was desired.

Overall then, the results of this study can be seen perhaps as the start of a developing theory, remaining fairly broad with potential for the identified categories to be explored more specifically and in greater detail within future research. For example, data most relevant to the category 'Navigating Moral Issues' could be collected by asking clinicians more specific questions, guided by the subcategories and key processes constructed within this project. For instance, the question 'others have said a medical diagnosis is the only way to truly validate a patient's experience of illness – what do you think about this?' could reveal more insights into the subcategory **controlling access to an illness identity**.

Any resulting theory could consequently be more thoroughly compared and integrated into existing theory, such as the concept of the sick role first introduced by Parsons (Varul, 2010). This could have important implications for power relations between clinicians and patients, perceptions of illness and the structure of health services particularly

with regards to access. In line with the constructivist approach, it would be important however to keep this contextualised to the FO distinction rather than claiming generalisability across other healthcare contexts.

Conclusion

In investigating the meaning that clinicians today assign to the FO distinction as relevant to their practice, this research exemplifies previously only theoretical ideas that organic is perceived as the clear, objective and default model of disease, leaving functional to indicate simply its absence and/or absorb all that is subjective, mainly within the realms of the psychosocial. The meanings attributed to functional were shown to be multiple and complex with the possibility of an undiscovered organic cause acknowledged. Clinicians integrated the two sides of the distinction in varied ways, none of which positioned them as separate as was thought to be implied by the FO distinction's links to Cartesian dualism.

This study emphasised for the first time the great complexity clinicians recognise in conceptualising causal explanations for patients' problems and disease generally in more holistic ways, with many limits to understanding and putting language to this. This was more apparent for the functional or psychosocial side of the distinction, highlighting the need for increased research, training and resources in this for all healthcare professionals.

With regards to the FO distinction's purpose in clinical practice, this was described as fulfilling mainly a pragmatic role to enable efficient communication both with colleagues and patients by simplifying the mentioned complexity. Although this meaning and role of the FO distinction has been emphasised in previous studies, the present research provides more depth to our understanding of this, mainly around how this is often with the goal of manoeuvring patients through the healthcare system based on estimated causality and thus the approach most likely to be helpful. It is recommended that this is done as transparently as possible to prevent the FO distinction unintentionally masquerading as an exemplar of the best in present scientific understanding.

Functional was also found to act to some degree as a container for a lack of understanding which, considering its many other possible meanings within the psychosocial

arenas, could of course be confusing for both professionals and patients. In order to delineate between these and echoing the views of many participants, frankness and specificity about any suspected mechanism is encouraged.

Relevant to both the FO distinction's meaning and role, the border between the two sides has been shown to harbour a collection of moral issues that clinicians inevitably need to navigate when encountering it. This is the first piece of research to integrate different moral perceptions of the FO distinction and related actions in this way. Clinicians perceive the most negative attributes to befall functional; although well-intentioned as more neutral than a psychological explanation to some extent, it seems unable to shake the stigma that continues to permeate this, making it more akin to a cover than an alternative. Tackling this directly by not shying away from its psychological connotations is therefore recommended.

On the other hand, functional was shown to be valuable in allowing access to an illness identity and all that comes with it when no other medical diagnosis can be made. Albeit ambitious, a rethink of what is required to obtain healthcare interventions may provide other options for this, where people whose symptoms are not understood within the bounds of current knowledge are still able to access some kind of support. As suggested by some participants and functional's synonymity with medically unexplained symptoms, this issue likely reaches further across the medical system than the settings this study chose to focus on i.e. those dealing predominantly with neurological and psychiatric disorder.

Clinicians were found to be humble about the current state of understanding of illness and disease and envisage how this may develop in years to come. In the meantime, it is advocated that, instead of using the word functional, clinicians have the courage to say what they mean, including if what they mean is that they do not know what they mean. This may then allow the increase in consistency, precision and bravery that clinicians, and perhaps patients, so clearly desire.

References

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.).

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). https://doi.org/https://doi.org/10.1176/appi.books.9780890425596

Arnaudo, E. (2017). Pain and dualism: Which dualism? *Journal of Evaluation in Clinical Practice*, *23*(5), 1081-1086. https://doi.org/https://doi.org/10.1111/jep.12804

Beale, C. (2021). Magical thinking and moral injury: Exclusion culture in psychiatry. *BJPsych Bulletin*, 1-4. https://doi.org/10.1192/bjb.2021.86

Beer, M. D. (1996). The dichotomies: Psychosis/neurosis and functional/organic: A historical perspective. *History of Psychiatry*, *7*(26 Pt 2), 231-255. https://doi.org/10.1177/0957154x9600702603

Bell, V., Wilkinson, S., Greco, M., Hendrie, C., Mills, B., & Deeley, Q. (2020). What is the functional/organic distinction actually doing in psychiatry and neurology? *Wellcome Open Research*, *5*, 138. https://doi.org/10.12688/wellcomeopenres.16022.1

Benrimoh, D., Pomerleau, V. J., Demoustier, A., Poulin, S., Maltais, J.-R., Brouillette, J., & Ducharme, S. (2018). Why we still use “organic causes”: Results from a survey of psychiatrists and residents. *The Journal of Neuropsychiatry and Clinical Neurosciences*, *31*(1), 57-64. https://doi.org/10.1176/appi.neuropsych.18050099

Boumans, J., Baart, I., Widdershoven, G., & Kroon, H. (2017). Coping with psychotic-like experiences without receiving help from mental health care. A qualitative study. *Psychosis*, *9*(1), 1-11. https://doi.org/10.1080/17522439.2016.1178798

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77-101. https://doi.org/10.1191/1478088706qp063oa

Bridges, K., & Goldberg, D. (1987). Somatic presentation of depressive illness in primary care. *The Journal of the Royal College of General Practitioners. Occasional paper*(36), 9.

Charmaz, K. (2014). *Constructing grounded theory* (2nd ed.). SAGE Publications.

Corrigan, P. W., & Watson, A. C. (2004). Stop the stigma: Call mental illness a brain disease. *Schizophrenia Bulletin*, *30*(3), 477-479. https://doi.org/10.1093/oxfordjournals.schbul.a007095

Descartes, R. (1641). *Descartes: Meditations on first philosophy: With selections from the objections and replies* (J. Cottingham, Trans.). Cambridge University Press. https://doi.org/10.1017/9781107416277

Freud, S. (2014). *The neuro-psychoses of defence*. Read Books Ltd.

Fricker, M. (2007). *Epistemic injustice: Power and the ethics of knowing*. Oxford University Press.

Glaser, B. G., & Strauss, A. L. (2017). *The discovery of grounded theory: Strategies for qualitative research*. Routledge.

Gowers, W. R. (1892). *A manual of diseases of the nervous system* (2nd ed.). J. & A. Churchill.

Greco, M. (2019). On illness and value: Biopolitics, psychosomatics, participating bodies. *Medical Humanities*, *45*(2), 107-115. https://doi.org/10.1136/medhum-2018-011588

Grimm, P. (2010). Social Desirability Bias. In *Wiley International Encyclopedia of Marketing*. https://doi.org/https://doi.org/10.1002/9781444316568.wiem02057

Harvey, J. (2022). *How do people with brain injury understand the interaction between mind, brain, self and injury?* [Unpublished doctoral thesis, University College London].

Hipolito, M. M. S., Carpenter-Song, E., & Whitley, R. (2011). Meanings of recovery from the perspective of people with dual diagnosis. *Journal of Dual Diagnosis*, *7*(3), 141-149. https://doi.org/10.1080/15504263.2011.592392

Janet, P. (1907). *The major symptoms of hysteria*. Macmillan Publishing.

Kanaan, R., Armstrong, D., Barnes, P., & Wessely, S. (2009). In the psychiatrist's chair: How neurologists understand conversion disorder. *Brain: A Journal of Neurology*, *132*(Pt 10), 2889-2896. https://doi.org/10.1093/brain/awp060

Kanaan, R., Armstrong, D., & Wessely, S. (2009). Limits to truth-telling: Neurologists' communication in conversion disorder. *Patient Education and Counseling*, *77*(2), 296-301. https://doi.org/https://doi.org/10.1016/j.pec.2009.05.021

Kanaan, R. A., Armstrong, D., & Wessely, S. C. (2011). Neurologists' understanding and management of conversion disorder. *Journal of Neurology, Neurosurgery and Psychiatry*, *82*(9), 961-966. https://doi.org/10.1136/jnnp.2010.233114

Kanaan, R. A., Armstrong, D., & Wessely, S. C. (2012). The function of 'functional': A mixed methods investigation. *Journal of Neurology, Neurosurgery and Psychiatry*, *83*(3), 248-250. https://doi.org/10.1136/jnnp-2011-300992

Katsakou, C., Marougka, S., Barnicot, K., Savill, M., White, H., Lockwood, K., & Priebe, S. (2012). Recovery in borderline personality disorder (BPD): A qualitative study of service users' perspectives. *PLoS ONE*, *7*, e36517. https://doi.org/10.1371/journal.pone.0036517

Kendler, K. S. (2005). Toward a philosophical structure for psychiatry. *American Journal of Psychiatry*, *162*(3), 433-440. https://doi.org/10.1176/appi.ajp.162.3.433

Kendler, K. S. (2012). The dappled nature of causes of psychiatric illness: Replacing the organic-functional/hardware-software dichotomy with empirically based pluralism. *Molecular Psychiatry*, *17*(4), 377-388. https://doi.org/10.1038/mp.2011.182

Knapp, M., McDaid, D., & Parsonage, M. (2011). *Mental health promotion and mental illness prevention: The economic case*. Department of Health. http://eprints.lse.ac.uk/32311/

Lebowitz, M. S., & Appelbaum, P. S. (2019). Biomedical explanations of psychopathology and their implications for attitudes and beliefs about mental disorders. *Annual Review of Clinical Psychology*, *15*(1), 555-577. https://doi.org/abs/10.1146/annurev-clinpsy-050718-095416

Levin, J. (2021). Functionalism. In E. N. Zalta (Ed.), *Stanford encyclopedia of philosophy* (Winter 2021 ed.). Stanford University. https://plato.stanford.edu/archives/win2021/entries/functionalism/

Mace, C. J., & Trimble, M. R. (1991). 'Hysteria', 'functional' or 'psychogenic'? A survey of British neurologists' preferences. *Journal of the Royal Society of Medicine*, *84*(8), 471-475. https://pubmed.ncbi.nlm.nih.gov/1886115

Martin, J. B. (2002). The integration of neurology, psychiatry and neuroscience in the 21st century. *American Journal of Psychiatry*, *159*(5), 695-704. https://doi.org/10.1176/appi.ajp.159.5.695

Nimnuan, C., Rabe-Hesketh, S., Wessely, S., & Hotopf, M. (2001). How many functional somatic syndromes? *Journal of Psychosomatic Research*, *51*(4), 549-557. https://doi.org/https://doi.org/10.1016/S0022-3999(01)00224-0

Noble, H., & Heale, R. (2019). Triangulation in research, with examples. *Evidence Based Nursing*, *22*(3), 67-68. https://doi.org/10.1136/ebnurs-2019-103145

Oktay, J. S. (2012a). Evaluating Quality. In *Grounded Theory*. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199753697.003.0005

Oktay, J. S. (2012b). Grounded Theory in Social Work Research: Problems and Promise. In *Grounded Theory*. Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199753697.003.0006

Pistrang, N., & Barker, C. (2012). Varieties of qualitative research: A pragmatic approach to selecting methods. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *APA handbook of research methods in psychology, Vol. 2. Research designs: Quantitative, qualitative, neuropsychological, and biological* (pp. 5-18). American Psychological Association. https://doi.org/10.1037/13620-001

Robinson, H. (2020). Dualism. In E. N. Zalta (Ed.), *Stanford encyclopedia of philosophy* (Fall 2020 ed.). Stanford University. https://plato.stanford.edu/archives/fall2020/entries/dualism/

Rolls, L., & Relf, M. (2006). Bracketing interviews: Addressing methodological challenges in qualitative interviewing in bereavement and palliative care. *Mortality*, *11*(3), 286-305. https://doi.org/10.1080/13576270600774893

Sachdev, P. (1996). A critique of ‘organic’ and its proposed alternatives. *Australian & New Zealand Journal of Psychiatry*, *30*(2), 165-170. https://doi.org/10.3109/00048679609076090

Schomerus, G., Schwahn, C., Holzinger, A., Corrigan, P. W., Grabe, H. J., Carta, M. G., & Angermeyer, M. C. (2012). Evolution of public attitudes about mental illness: A systematic review and meta-analysis. *Acta Psychiatrica Scandinavica*, *125*(6), 440-452. https://doi.org/10.1111/j.1600-0447.2012.01826.x

Stone, J., Wojcik, W., Durrance, D., Carson, A., Lewis, S., MacKenzie, L., Warlow, C. P., & Sharpe, M. (2002). What should we say to patients with symptoms unexplained by disease? The “number needed to offend”. *BMJ (Clinical research ed.)*, *325*(7378), 1449-1450. https://doi.org/10.1136/bmj.325.7378.1449

Stuart, H., Arboleda-Florez, J., & Sartorius, N. (2012). *Paradigms lost: Fighting stigma and the lessons learned*. Oxford University Press.

Tufford, L., & Newman, P. (2012). Bracketing in qualitative research. *Qualitative Social Work*, *11*(1), 80-96. https://doi.org/10.1177/1473325010368316

Ungar, T., & Knaak, S. (2013). The hidden medical logic of mental health stigma. *Australian & New Zealand Journal of Psychiatry*, *47*(7), 611-612. https://doi.org/10.1177/0004867413476758

Varul, M. Z. (2010). Talcott Parsons, the sick role and chronic illness. *Body & Society*, *16*(2), 72-94. https://doi.org/10.1177/1357034x10364766

Wessely, S. (2000). To tell or not to tell? The problem of medically unexplained symptoms. In A. Zeman & L. Emmanuel (Eds.), *Ethical dilemmas in neurology* (pp. 41–53). W. B. Saunders.

World Health Organization. (2019). *International statistical classification of diseases and related health problems* (11th ed.). https://icd.who.int/

Zeman, A. (2014). Neurology is psychiatry—and vice versa. *Practical Neurology*, *14*(3), 136. https://doi.org/10.1136/practneurol-2013-000761

Part 3: Critical Appraisal

Introduction

This chapter presents the opportunity to explore in more detail some reflections on the research process. Reflexivity and relationality have been argued to be conducive to the rigour of grounded theory (GT) studies, in particular attending to the impact of interactions between researcher and participant explicitly (Hall & Callery, 2001).

Therefore, this paper will attempt to address these issues by reflecting on each one, starting with my preconceptions as the researcher. Triangulation will then be outlined as a key part of practising reflexivity, moving then to considerations about the interview context. Dynamics between researchers and participants will provide a major focus, ending with acknowledgements of whose voices might be missing from this research.

Researcher Preconceptions

I attempted to outline my position explicitly under 'Researcher(s) Perspective(s)' in the methods section of the empirical paper, something that is highly recommended within qualitative research as part of engaging in reflexivity (Greene, 2014). This was partly informed by listening back to my initial bracketing interview, more of which can be added here by reflecting on what originally attracted me to the project.

The first thing was that there seemed to be a strong philosophical and/or conceptual element, which felt familiar to me having studied philosophy in my undergraduate degree jointly with psychology. The prospect therefore of combining the two again in some way I found quite exciting. Another key factor that drew me to the project was having had some experience in neuropsychology before training when I worked as an assistant psychologist in memory services for a couple of years, contributing to assessment of dementia in older adults. Here, I had some exposure to how the FO distinction could manifest itself in clinical practice although it was not referred to in these terms. More generally, like many of the clinicians interviewed, I have always had an interest and passion for neuroscience and the brain. Therefore I was keen for the opportunity to complete a project where this was applied clinically. However, Doucet (2008) points out the limits to how far we can be conscious of the

motivations behind our research, perhaps only being revealed with time and space away from it.

Earlier versions of GT have explicitly recommended completing the literature review after data collection and analysis (Glaser & Strauss, 1967). This is with the intention of minimising the impact of the researcher's preconceptions on data collection and the resulting theory. It was not possible to adhere to this fully due to the various constraints of a thesis project, including deadlines set by the course for the different parts and the requirement for some knowledge of the relevant literature prior to starting data collection, for example, for the research proposal. However, this was followed to some degree in that the conceptual introduction was worked on towards the latter half of the data collection period, meaning a substantial proportion the initial interviews took place before immersion in the existing literature. This complete abstinence from the literature has been challenged by some as disproportionate and even at risk of diminishing the quality of the research (Dunne, 2011), meaning the approach taken within this thesis may suffice as a practical in between.

In relation to this, although I have some experience of working in a relevant area of healthcare as mentioned, this is fairly minimal. Thus there was much of what participants talked about that I was not familiar with, perhaps meaning I was more inclined to ask them for more detail or clarification than take the meaning behind what they were saying for granted. For example, I had not come across the Hoover's sign or the term 'functional overlay' prior to hearing this from participants during interviews and asking them to define these for me. During analysis, this may have allowed fresher insights less impinged on by prior experience. A possible disadvantage of having little experience in the area clinically was that I may have had fewer ideas about aspects worth exploring in more depth or things that may have been related to what was being spoken about in ways that might not be clear to a person without similar experience.

Triangulation

As outlined in the empirical paper, this research was joint with another trainee whose project explored the same topic from the perspective of people who had survived a brain

injury (Harvey, 2022). We completed roughly half of each other's data collection, with our supervisor also carrying out two interviews for this project. This is an example of investigator triangulation i.e. the use of multiple researchers (Denzin, 1970). As well as providing much-appreciated general support, our familiarity with each other's projects was a great advantage in enabling rich ongoing discussion and reflection on each stage of the research process, particularly the interviews and subsequent analysis. This enabled further engagement in reflexivity, for example, in thinking about the effects of one's own preconceptions as outlined in the previous section. This hopefully served to enhance the credibility and validity of the results in line with the aims of triangulation (Cohen et al., 2018). A potential downside is that, although many of our conversations did centre around the differences between our two projects, some of our ideas and consequently results may have naturally converged to some degree through this process.

Interview Context

The original plan for interviews was for these to take place either in clinicians workplaces or at UCL, depending which was the most convenient for participants. The COVID-19 pandemic prompted a quick change in this and all interviews were consequently held by video call. One study found that interviewees tend to say more in interviews conducted in person directly compared to those by video call, providing a marginal increase in quality (Krouwel et al., 2019); the authors note however that advantages with regards to time and budget may outweigh this in some instances for qualitative studies. Indeed, despite the pandemic proving a significant disruption to the research, it is likely that it's necessitation of carrying out interviews online made it more convenient for many participants to fit this into their busy schedule. It may therefore have assisted overall in reaching the desired number of participants (20).

Conducting the interviews by video call meant that some participants were not at their workplace during this and so were not embedded in the environment which was of most interest to the research in its aim to focus on what was most relevant to clinical practice. This may have given participants the space needed to be able to reflect more freely on their

thoughts, feelings and experiences in relation to the FO distinction. On the other hand, it may have resulted in participants being disconnected from certain aspects of these. For this reason, it would be interesting to investigate the meaning and role of the FO distinction as a researcher embedded within relevant healthcare settings. FitzGerald and Mills (2022) advocate for wider utilisation of ethnographic observational data within GT studies, with a key benefit being the opportunity to directly witness the social processes under investigation. This method could also aid in detecting any views of participants that may be inherent in their communications or actions in this context that they might not otherwise speak of.

Charmaz (2014) advises prioritising participants comfort over the quality of the data obtained. Therefore, in respect of how busy and time-pressured clinicians were likely to be, I was aware of the need to keep the length of interviews to the agreed amount of time of no longer than an hour. This meant that there were times in which I felt a particular topic could have been explored in more detail but moved on from this perhaps prematurely. Re-interviewing individual participants is a methodological change that may have assisted with this issue to enable further exploration of topics of interest.

Dynamics between Researcher & Participant

Constructivist GT views researcher and participant as co-constructing data, rather than the interviewer simply 'obtaining' this from the participant as an objective observer (Charmaz, 2014). More specifically 'how your research participants identify you influences what they will tell you' (Charmaz, 2014, p. 29). It is worth taking a look then firstly at this with regards to both participants and interviewers being clinicians; being part of the same social group in terms of occupation makes this an example of insider research (Greene, 2014).

The three interviewers (me, the other trainee clinical psychologist whom the project was joint with and our supervisor) had reflected during discussions amongst us and bracketing that being insiders in this way may lead to shared understandings being assumed or taken for granted between the interviewer and participant, limiting the degree of detail and complexity that could be gained from further exploration. This seemed especially relevant when the participant was a fellow clinical psychologist, given being part of the same

discipline and likely having had similar undergraduate and doctoral training experiences. Greene (2014) speaks of the advantages of insider research in that this familiarity can help in orientating to the research context, enabling more natural interactions with participants and enhancing authenticity and meaning in the understanding gained.

Asking participants for concepts in their own words was particularly helpful for managing this tension in that the interviewer could still own the fact that they had knowledge of the topic or concept in question while recognising that there might actually be important differences between our two understandings. Despite our best attempts at this, it is likely that there were still times where we were unaware that we were taking a particular meaning for granted, consequently missing opportunities for deeper exploration or nuance.

An interesting dynamic was noted when it was myself or the other trainee asking for more elaboration or about a concept or person we were unfamiliar with, which was that participants often moved into what I perceived as a somewhat supervisory or educational role during the interviews when compared with those conducted by our supervisor. This included pointing us in the direction of relevant reading or researchers, or advising things that should be included in the write-up. Participants were aware of our status as trainee clinical psychologists and we were aware that, for most of them, they were working at a senior level in their profession, making it likely that they were experienced in supervising trainees in some form with some referring explicitly to this. Put together, it makes sense then that they may have slipped into this role with us and vice versa, whether advertently or not.

In terms of how this may have influenced the data, it could be that participants were at points more concerned with teaching us what they deemed to be the ‘correct’ view or theory and less on what their personal opinions were, potentially leading to less nuance and variation between individuals. I wondered whether this could provide another potential explanation for participants painting themselves in a better light than their colleagues during the interviews, as was explored in the discussion section of the empirical papers, in that they may have wanted to ‘set a good example’ or convey best practice.

Related to this, it was observed that participants' initial responses to the first main question of the interview – what do you understand by 'functional' and 'organic'? – was often 'textbook' in nature. It is recognised that the question itself could be said to sound somewhat textbook although its phrasing was thought through carefully in terms of aiming to gather definitions from participants without leading them to any in particular. This was felt to be important given the likely multiple meanings of the FO distinction especially on the functional side, and to set them up with a basis for exploration during the rest of the interview.

Another pertinent consideration with insider research is the potential for bias and subjectivity (van Heugten, 2004). However it has been noted that the same can be said for outsider research (Greene, 2014), perhaps just in differing ways. With relevance to the insider aspect of this study, there may have been a wish to see and frame participants in a positive light overall based on the researchers' own identifications with them and relation to them as fellow clinicians. A methodological change based on this could be to extend the use of triangulation in the form of multiple observers to include ones who do not share the identity of being clinicians; this may serve to increase detection of the bias and subjectivity mentioned.

I reflected on how me being a woman may have impacted what participants felt able to say or not say, especially thinking about the historical context of so-called functional disorders such as hysteria being typically applied to women as many participants noted. In some cases, particularly when the participant was also female, it may have made it easier for participants to talk about issues surrounding this. Conversely, it may have been more difficult in making participants wary of saying something that could potentially be taken offensively.

One participant, whom I interviewed and was also female, spoke of the continuing relevance of gender in the present day. She reported that the majority of her caseload were female and described how they had often in her view experienced "incredibly unethical levels of pain" that had been written off as psychological. This struck a personal chord with me in that, although I have been fortunate to have had overall positive experiences with healthcare

professionals in relation to my chronic migraine, I could not help but imagine how it would have felt to have my pain invalidated in the way she was describing. My identification in these ways with what functional patients were said to experience may have meant that I attended more to these and more specifically the surrounding moral issues in both the interviews and analysis.

There were points noted in which participants may have been communicating nonverbally some embarrassment or reluctance to say what they were thinking, particularly when talking about derogatory attitudes towards patients with problems diagnosed as functional. This included laughing of a seemingly nervous nature, long pauses, using more speech fillers or tutting. Although these occurrences were transcribed, it proved difficult to integrate these into codes meaning they were lost to some degree during analysis. Denham and Onwuegbuzie (2013) contest the frequent omission of non-verbal communication data from qualitative research as unjustified based on its central relevance to all different types of social interaction. Other methods of qualitative analysis which attend to these more so would perhaps have been useful in making sense of this within the present study (e.g. Onwuegbuzie & Byers, 2014).

Missing Voices

Although context featured significantly in this research, for example the many ways in which the meaning of the FO distinction varies with this, I often felt that this could have been attended to in much more detail. As mentioned in the empirical paper, the majority of participants were white British like me. Qualitative research does not seek to be representative and generalisable in the way that quantitative does. It did strike me however that this bias towards white British ethnicity might not be representative of the workforce this study sought to investigate or additionally the patient population who are served by them.

The voices of the patients whom participants spoke of are obviously missing from this research. The other trainee's project investigated the same topic with survivors of brain injury (Harvey, 2022), thereby beginning to address the lack of the testimonies of those who

have been subject to the FO distinction pointed out by Bell et al. (2020). This could be expanded by conducting research with other patient groups subject to the FO distinction, most notably those diagnosed with functional neurological disorder as this was the most talked about throughout interviews with clinicians in this project. This could either remain fairly broad as in this study to compare what people diagnosed with FND say compared with clinicians. Alternatively, it could focus on one of the main categories identified within this research or the other trainee's (Harvey, 2022), allowing more detailed exploration.

Conclusion

This chapter started by noting the importance of engaging in reflexivity within GT research and qualitative more broadly, hence setting the rationale for focusing on this throughout. My preconceptions as the researcher were outlined as transparently as possible to a degree that was beyond the scope of the empirical paper, more specifically my motivations for choosing the research, to provide readers with additional context for my interpretations of the data.

The use of investigator triangulation was then discussed as a useful tool for enhancing the credibility and validity of the results. Considerations about the interview context were explored, including the potential impact of changing the mode of these from face-to-face to video call and the predicted limitations of participants' time.

Dynamics between researcher and participant were given the most attention, with discussion of how differing or similar identities between the two may have affected data collection and thus the results. This included researcher and participant sharing the identity of being a clinician as an instance of insider research and also how differing levels of experience came into this. Gender identity was also considered and the potential neglect of non-verbal communication during analysis.

Lastly, the voices that might be said to be missing from this research were briefly attended to with some suggestions for how future studies might involve these.

References

Bell, V., Wilkinson, S., Greco, M., Hendrie, C., Mills, B., & Deeley, Q. (2020). What is the functional/organic distinction actually doing in psychiatry and neurology? *Wellcome Open Research*, *5*, 138. https://doi.org/10.12688/wellcomeopenres.16022.1

Charmaz, K. (2014). *Constructing grounded theory* (2nd ed.). SAGE Publications.

Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education* (8th ed.). Routledge.

Denham, M. A., & Onwuegbuzie, A. J. (2013). Beyond words: Using nonverbal communication data in research to enhance thick description and interpretation. *International Journal of Qualitative Methods*, *12*(1), 670-696. https://doi.org/10.1177/160940691301200137

Denzin, N. K. (1970). *The research act: A theoretical introduction to sociological methods*. Aldine Publishing Company.

Doucet, A. (2008). "From her side of the gossamer wall(s)": Reflexivity and relational knowing. *Qualitative Sociology*, *31*(1), 73-87. https://doi.org/https://doi.org/10.1007/s11133-007-9090-9

Dunne, C. (2011). The place of the literature review in grounded theory research. *International Journal of Social Research Methodology*, *14*(2), 111-124. https://doi.org/10.1080/13645579.2010.494930

FitzGerald, J., & Mills, J. (2022). The importance of ethnographic observation in grounded theory research. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research*, *23*(2), Article 13. https://doi.org/10.17169/fqs-22.2.3840

Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Aldine.

Greene, M. J. (2014). On the inside looking in: Methodological insights and challenges in conducting qualitative insider research. *The Qualitative Report*, *19*(29), 1-13. https://doi.org/10.46743/2160-3715/2014.1106

Hall, W. A., & Callery, P. (2001). Enhancing the rigor of grounded theory: Incorporating reflexivity and relationality. *Qualitative Health Research*, *11*(2), 257-272. https://doi.org/10.1177/104973201129119082

Harvey, J. (2022). *How do people with brain injury understand the interaction between mind, brain, self and injury?* [Unpublished doctoral thesis, University College London].

Krouwel, M., Jolly, K., & Greenfield, S. (2019). Comparing Skype (video calling) and in-person qualitative interview modes in a study of people with irritable bowel syndrome – an exploratory comparative analysis. *BMC Medical Research Methodology*, *19*(1), 219. https://doi.org/10.1186/s12874-019-0867-9

Onwuegbuzie, A. J., & Byers, V. T. (2014). An exemplar for combining the collection, analysis, and interpretations of verbal and nonverbal data in qualitative research. *International Journal of Education*, *6*(1), 183. https://doi.org/10.5296/ije.v6i1.4399

van Heugten, K. (2004). Managing insider research: Learning from experience. *Qualitative Social Work*, *3*(2), 203-219. https://doi.org/10.1177/1473325004043386

Appendices

Appendix A

Others' Contributions to the Project

Other Trainee Whom Project was Joint With – Jordan Harvey

- Discussed ideas with during development of interview guide
- Completed 9 out of 20 interviews
- Transcribed eight of these
- Discussed codes with at regular intervals throughout analysis

Research Supervisor – Dr Vaughan Bell (in addition to usual supervisory support)

- Completed 2 out of 20 interviews
- Discussed codes with at regular intervals throughout analysis

Appendix B

Ethical Approval

UCL RESEARCH ETHICS COMMITTEE
OFFICE FOR THE VICE PROVOST RESEARCH

12/04/2021

Dr Vaughan Bell
Department of Clinical Educational and Health Psychology
UCL

Cc: Alice Chesterfield

Dear Dr Bell,

Notification of Ethics Approval
Project ID/Title: 19031/001 How do clinicians conceptualise the functional-organic distinction in neuroscientific medicine?

Further to your satisfactory responses to the reviewer's comments, I am pleased to confirm that your study has been ethically approved until **12/04/2022.**

Ethical approval is subject to the following conditions:

Notification of Amendments to the Research
You must seek Chair's approval for proposed amendments (to include extensions to the duration of the project) to the research for which this approval has been given. Each research project is reviewed separately and if there are significant changes to the research protocol you should seek confirmation of continued ethical approval by completing an 'Amendment Approval Request Form'
http://ethics.grad.ucl.ac.uk/responsibilities.php

Adverse Event Reporting – Serious and Non-Serious
It is your responsibility to report to the Committee any unanticipated problems or adverse events involving risks to participants or others. The Ethics Committee should be notified of all serious adverse events via the Ethics Committee Administrator (ethics@ucl.ac.uk) immediately the incident occurs. Where the adverse incident is unexpected and serious, the Joint Chairs will decide whether the study should be terminated pending the opinion of an independent expert. For non-serious adverse events the Joint Chairs of the Ethics Committee should again be notified via the Ethics Committee Administrator within ten days of the incident occurring and provide a full written report that should include any amendments to the participant information sheet and study protocol. The Joint Chairs will confirm that the incident is non-serious and report to the Committee at the next meeting. The final view of the Committee will be communicated to you.

Final Report
At the end of the data collection element of your research we ask that you submit a very brief report (1-2 paragraphs will suffice) which includes in particular issues relating to the ethical implications of the research

i.e. issues obtaining consent, participants withdrawing from the research, confidentiality, protection of participants from physical and mental harm etc.

In addition, please:

- ensure that you follow all relevant guidance as laid out in UCL's Code of Conduct for Research: www.ucl.ac.uk/srs/governance-and-committees/research-governance
- note that you are required to adhere to all research data/records management and storage procedures agreed as part of your application. This will be expected even after completion of the study.

With best wishes for the research.

Yours sincerely

Professor Michael Heinrich
Joint Chair, UCL Research Ethics Committee

Appendix C

Participant Information Sheet

Participant Information Sheet

How do clinicians understand the functional / organic distinction?

UCL Research Ethics Committee Approval ID Number: 19031/001

Department:
UCL Faculty of Brain Science, Division of Psychology and Language Sciences

Researchers:
Alice Chesterfield (alice.chesterfield.19@ucl.ac.uk)
Jordan Harvey (jordan.harvey.19@ucl.ac.uk)

Principal Researcher:
Dr Vaughan Bell (vaughan.bell@ucl.ac.uk, 07528 073 178)

UCL Data Protection Officer:
Alex Potts (a.potts@ucl.ac.uk)

1. **Invitation to take part**
   You are being invited to take part in a research project being conducted as part of doctoral research. Before you decide whether to participate, it is important for you to understand why the research is being done and what participation will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is unclear, or you would like more information. Take time to decide whether or not you wish to take part.

2. **What is the project's purpose?**
   The aim of the study is to explore qualitatively how clinicians understand and talk about the functional / organic distinction as relevant to their professional practice. Despite much debate about the distinction, little research has been done on its use in clinical practice to date.

3. **Why have I been chosen?**
   We are hoping that around 20 clinicians who work in psychiatry, neurology, neuropsychology, neuropsychiatry and related specialisms will take part.

4. **Do I have to take part?**
   Your participation is entirely voluntary. If you choose to take part, you will be given a copy of this information sheet to keep and asked to sign a consent form. You may withdraw at any time without providing a reason and there will be no penalty or prejudice as a result. If you withdraw at any point up until one week after taking part in the interview, you will be asked if you would like your data provided so far to be removed. After one week, we will have deleted contact details and the recording of the interview, and anonymised the transcripts and so it will not be possible to delete your data.

5. **What will happen to me if I take part?**
   You will be asked to sign a consent form. We will then ask you to provide contact details, which we will use only to invite you to take part in an interview, after which they will be deleted. The interview should last for around one hour. It will be held with a researcher by video call, using either Microsoft Teams or UCL Zoom, and audio recorded. At the start of the interview, you will be asked to provide some demographic information. Following the interview, your participation in the study will end.

6. **Will I be recorded and how will the recorded media be used?**
   Interviews will be audio recorded. The recordings will be transcribed by one of the researchers or an external UCL approved and GDPR compliant transcription service then deleted. The transcripts of the interviews will be anonymised and stored securely on UCL systems. These will be used for qualitative analysis and quotes may be included in the write-up. No other use will be made of either the audio recordings or transcripts without your written permission, and no one outside the project will be allowed access to either.

7. **What are the possible disadvantages and risks of taking part?**
   We do not foresee any reasonable discomforts, disadvantages or risks as a result of taking part. Any unexpected discomforts, disadvantages and risks to participants that arise during the research will be brought immediately to participants' attention.

8. **What are the possible benefits of taking part?**
   If you choose to take part, you will be compensated for your time with a £10 Amazon voucher, even if you later decide to withdraw. This will be sent by email before your contact details are deleted, which will be as soon as the interview has taken place or at the point of withdrawal. While there are no other immediate benefits for participants, it is hoped that the results of the study will help to further understanding of the functional/organic distinction in clinical practice and shape future research in this area.

9. **What if something goes wrong?**
   If you have any concerns about your participation in the study or wish to make a complaint, please contact the Principal Researcher Dr Vaughan Bell (vaughan.bell@ucl.ac.uk, 07528 073 178). If any concerns or complaints are not addressed satisfactorily, please contact the UCL Research Ethics Committee (ethics@ucl.ac.uk).

10. **Will my taking part in this project be kept confidential?**
    All personal information that we collect about you during the course of the research will be kept strictly confidential. Any personal information will be stored securely and only the researchers will have access to this. You will not be identifiable in any ensuing reports or publications.

11. **Limits to confidentiality**
    We intend to maintain confidentiality as far as possible. However, if there are compelling and legitimate reasons for this to be breached, such as danger of harm, we might have to inform relevant agencies of this. We would try to inform you of any decisions that might limit your confidentiality.

12. **What will happen to the results of the research project?**
    It is intended for this research to be presented within a doctoral thesis and published in a scientific paper. You will be able to find a copy of the published results by following this URL

https://vaughanbell.net/cliniciansfunctionalorganicstudy/ from June 2022 onwards. Anonymised transcripts and demographic data will be stored securely indefinitely.

13. Local Data Protection Privacy Notice

The controller for this project will be University College London (UCL). The UCL Data Protection Officer Alex Potts provides oversight of UCL activities involving the processing of personal data and can be contacted at data-protection@ucl.ac.uk.

This 'local' privacy notice sets out the information that applies to this particular study. Further information on how UCL uses participant information can be found in our 'general' privacy notice:

For participants in health and care research studies, click here

The information that is required to be provided to participants under data protection legislation (GDPR and DPA 2018) is provided across both the 'local' and 'general' privacy notices.

The categories of personal data used will be as follows: name, contact details, age, gender, ethnicity and occupation details.

The lawful basis that would be used to process your *personal data* will be performance of a task in the public interest. The lawful basis used to process *special category personal data* will be for scientific and historical research or statistical purposes.

Once interviews have taken place, your name and contact details will be deleted and your remaining personal data will be stored anonymously and securely on UCL systems. We will endeavour to minimise the processing of personal data wherever possible.

If you are concerned about how your personal data is being processed, or if you would like to contact us about your rights, please contact UCL in the first instance at data-protection@ucl.ac.uk.

14. Who is organising and funding the research?

The study is led by researchers at UCL and funded by UCL.

Thank you for reading this information sheet and for considering taking part in this research study.

Appendix D

Participant Consent Form

Participant Consent Form

How do clinicians understand the functional / organic distinction?

UCL Research Ethics Committee Approval ID Number: 19031/001

Department:
Division of Psychology and Language Sciences

Researchers:
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Thank you for considering taking part in this research. The person organising the research must explain the project to you before you agree to take part. If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

I confirm that I understand that by initialling each box below I am consenting to this element of the study. I understand that it will be assumed that boxes left not initialled means that I DO NOT consent to that part of the study. I understand that by not giving consent for any one element that I may be deemed ineligible for the study.

		Initials
1.	I confirm that I have read and understood the Information Sheet for the study. I have had an opportunity to consider the information and what will be expected of me. I have also had the opportunity to ask questions which have been answered to my satisfaction.	
2.	I understand that I will be able to withdraw my data up to one week following the interview, when interviews will be transcribed and anonymised.	
3.	I consent to participate in the study. I understand that my personal information (name, contact details, age, gender, ethnicity and occupation	

	details) will be used for the purposes explained to me. I understand that according to data protection legislation, 'public task' will be the lawful basis for processing.	
4.	I understand that all personal information will remain confidential and will be deleted when it is no longer needed. I understand that if there are compelling and legitimate reasons for this to be breached, such as danger of harm, the researchers might have to inform relevant agencies of this and would try to inform me of any decisions that might limit my confidentiality.	
5.	I understand that my information may be subject to review by responsible individuals from the University for monitoring and audit purposes.	
6.	I understand that my participation is voluntary and that I am free to withdraw at any time without giving a reason and without penalty or prejudice as a result.	
7.	I understand that the data will not be made available to any commercial organisations but is solely the responsibility of the researcher(s) undertaking this study.	
8.	I understand that I will be compensated for the portion of time spent in the study with a £10 Amazon voucher, even if I choose to withdraw.	
9.	I understand that the information I have submitted will be published as a report and I will be able to access a summary of the results using the URL provided in the Information Sheet after June 2022.	
10.	I consent to my interview being audio recorded. I understand that the recordings will be destroyed immediately following transcription by either one of the researchers or an external UCL approved and GDPR compliant transcription service. The transcriptions will be anonymised by removing any references to identifiable people and personal details and the pre-anonymisation transcripts will be deleted. I understand that if I do not consent to being audio recorded in the interview, I cannot take part in the study.	
11.	I hereby confirm that I understand the inclusion criteria as detailed in the Information Sheet and explained to me by the researcher.	
12.	I am aware of who I should contact if I wish to lodge a complaint.	
13.	I voluntarily agree to take part in this study.	

For remote interviews, this consent form may be completed verbally and a recording kept of the process.

_____	_____	_____
Name of participant	Date	Signature

_____	_____	_____
Name of researcher	Date	Signature

Appendix E

Recruitment Email Templates to Participants

Email templates

Dear _,

Thanks for getting in touch. It would be great if you're interested in taking part.

I've attached the somewhat wordy information sheet although the practical details regarding participation are exactly as mentioned in the advert: a freeform online interview lasting not longer than an hour.

I've CC'ed in Alice Chesterfield who is coordinating the interviews and she'll be in touch to organise an interview time if you're still happy with the details.

Many thanks against for your interest and don't hesitate to drop us a line if you have any queries.

All the best,

Dear _,

Thank you very much for confirming you are interested in taking part in our research study on reading the information sheet Vaughan sent over.

It would be great to arrange a date and time for the interview. This would be with me or Jordan Harvey, one of the other researchers. Generally, we have availability on Mondays, Wednesdays and Fridays but can be flexible if needed - please let me know when would suit you best.

If you would like to discuss anything prior to arranging an interview, please let me know a phone number and convenient time to contact you and I would be more than happy to give you a call to do so.

Best wishes,

Dear _,

[Date & time] would be great for the interview and this will be with me. We can use either Zoom or Teams - let me know if you have a preference and I will send over a link.

Please find attached the consent form for the study. You can either sign (electronically or by printing and taking a photo/scan) and email this back to me in advance of the interview or we can go through it verbally at the start (which takes a little time) - whichever you prefer.

Do not hesitate to contact me in the meantime if you have any questions or things you would like to discuss.

Best wishes,

Dear _,

Thank you for returning the signed consent form. I have attached a copy with my signature also, for your records.
/
A reminder that for the consent form, you can either sign (electronically or by printing and taking a photo/scan) and email this back to me in advance of the interview or we can go through it verbally at the start (which takes a little time) - whichever you prefer.

Please see the link for the interview below.

[Copy link]

I look forward to speaking with you then. Do not hesitate to contact me in the meantime if you have any questions or things you would like to discuss.

Best wishes,

Dear _,

I am just following up on my previous email to see whether you may still be interested in taking part in our research on the functional-organic distinction.

If so, please let me know and we can look to arrange a date and time for the interview as well as discussing any questions you may have beforehand.

If you are no longer interested, do of course feel free to disregard this email.

Best wishes,

Dear _,

Thank you very much again for participating in our research and for donating the £10 compensation to _, confirmation of which is copied below.

Best wishes,

Appendix F

Interview Guide

Draft Interview Guide

1. What do you understand by the term/distinction ‘organic’/‘functional’, as relevant to your clinical practice?
2. When might you use the term ‘organic’/’functional’ in your clinical practice?
3. Why/What purpose does this serve?
4. How does it help to achieve this purpose?
5. What are the consequences of this use?
6. How does this use relate to your understanding of the term ‘organic’/‘functional’?
7. How do you feel about using the term ‘organic’/‘functional’?

Interview Guide

A. *Introductions & background to study (part of thesis at UCL):* ***How do clinicians understand the functional / organic distinction?***
B. *Set-up of space: private, undisturbed, headphones/close to mic*
C. *Check read information sheet and understanding of participation – remind of key points*
D. *Consent form (if not sent back signed copy): go through points, confirm name of study, researcher & participant*
E. *Explain nature of interview: asking questions, interested in their views and experiences, may ask for more detail, clarity or to slow down to help my understanding*
F. *Start recording & remind what will happen with this*
G. *Check if any questions*

Initial questions

- Age range:
- Gender:
- Ethnicity:
- What is your profession and / professional roles?
- What is your grade or seniority?
- What sorts of services or departments do you work in?

Interview questions

8. What do you understand by 'functional' and 'organic'?
    a. How do you think they relate to each other?
9. How have you come to this understanding?
    a. How, if at all, has your understanding changed? What led to this change?
10. What purpose(s) do these concepts serve?
11. How do you and others use the concepts?
    a. Tell me about times you might use the concepts differently.
    b. Tell me about your experiences with the concepts.
    c. How do these uses relate to one another?
    d. Could you describe the events led to that experience/you using the concept(s)?
    e. What do you recall thinking then?
    f. What happens when you use the concept(s)?
    g. What about in your clinical work? (if haven't mentioned)

Ending questions

H. Is there something else we haven't talked about that you think is important for me to understand?
I. Do you have some questions for me?
J. Thank for participation
K. Where would you like me to send the £10 voucher for your participation?
L. Remind that all contact details will be deleted and to follow URL provided in information sheet for a summary of the results from June 2022

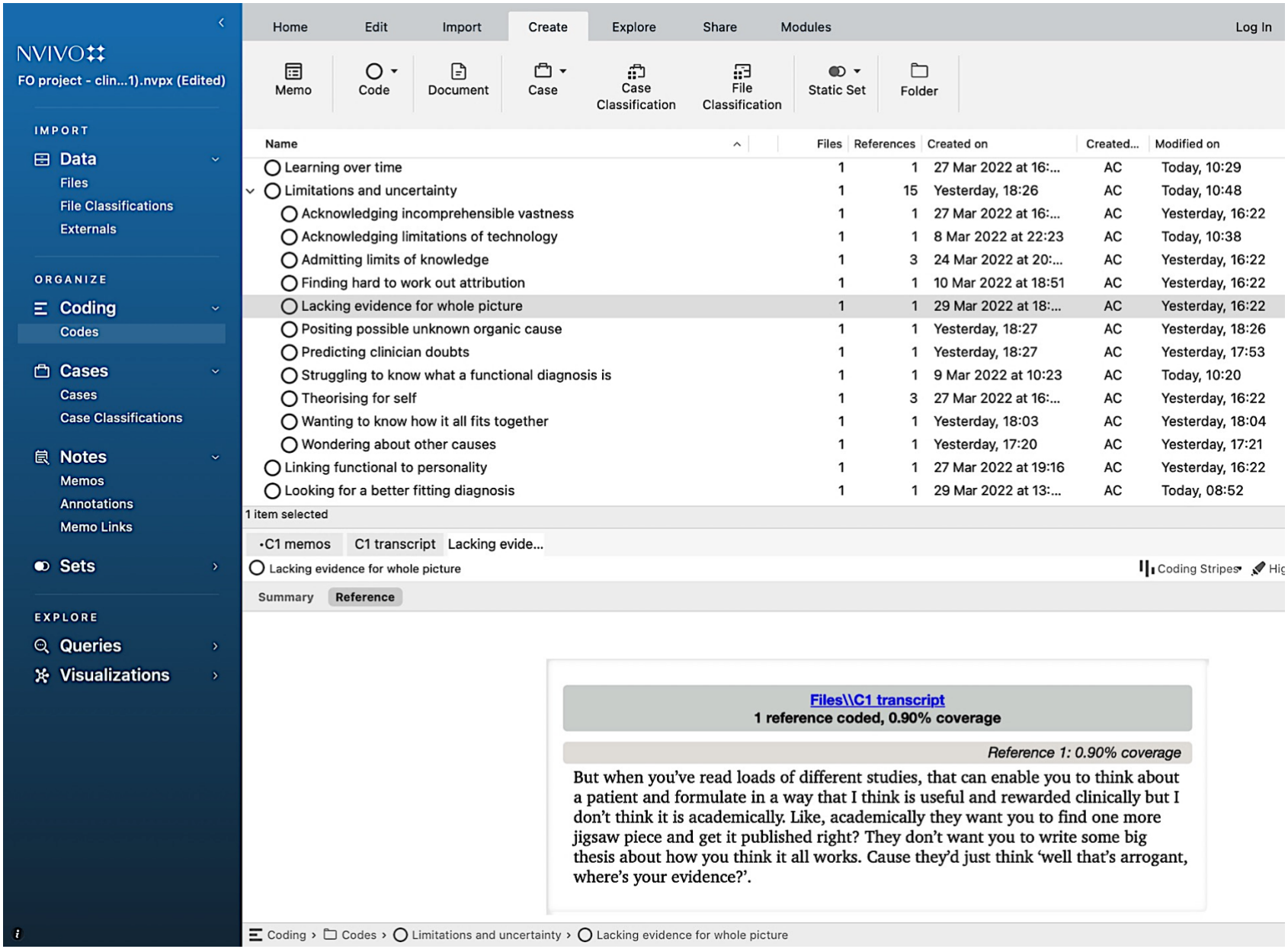
Other potentially useful questions

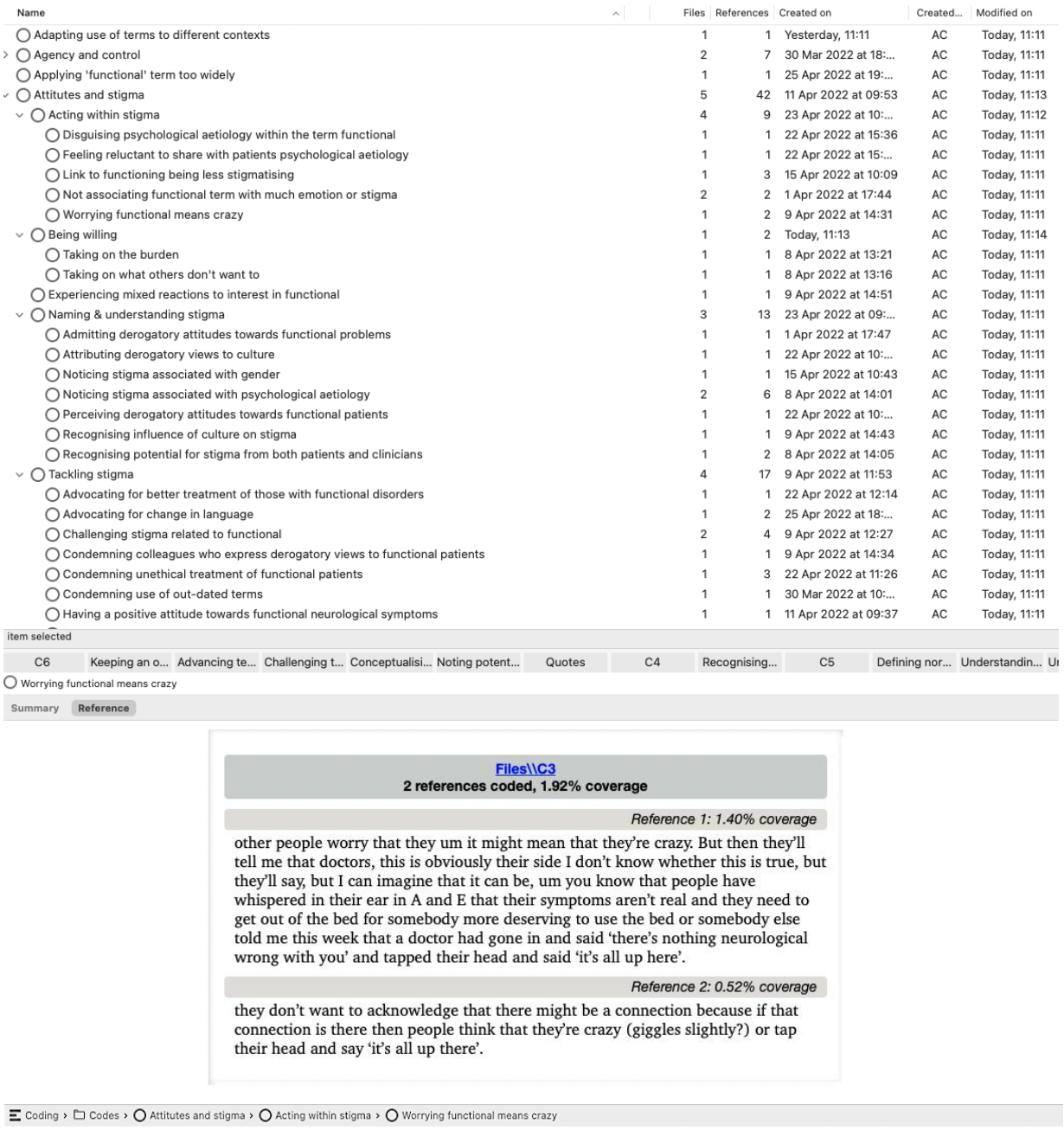
- Would you tell me how you define it, so I have it in your words? (e.g. if they ask us to define concepts)
- Other people have told me… could I ask [something about their own potentially similar experiences]?

Appendix G

Examples of Analysis

NB. All participant numbers had the prefix ‘C’ during analysis before they were re-labelled according to profession. Thus, any instances of C1-20 in screenshots denote original participant numbers, which are listed in table 1 alongside those by profession.





NB. All participant numbers had the prefix 'C' during analysis before they were re-labelled according to profession. Thus, any instances of C1-20 in screenshots denote original participant numbers, which are listed in table 1 alongside those by profession.

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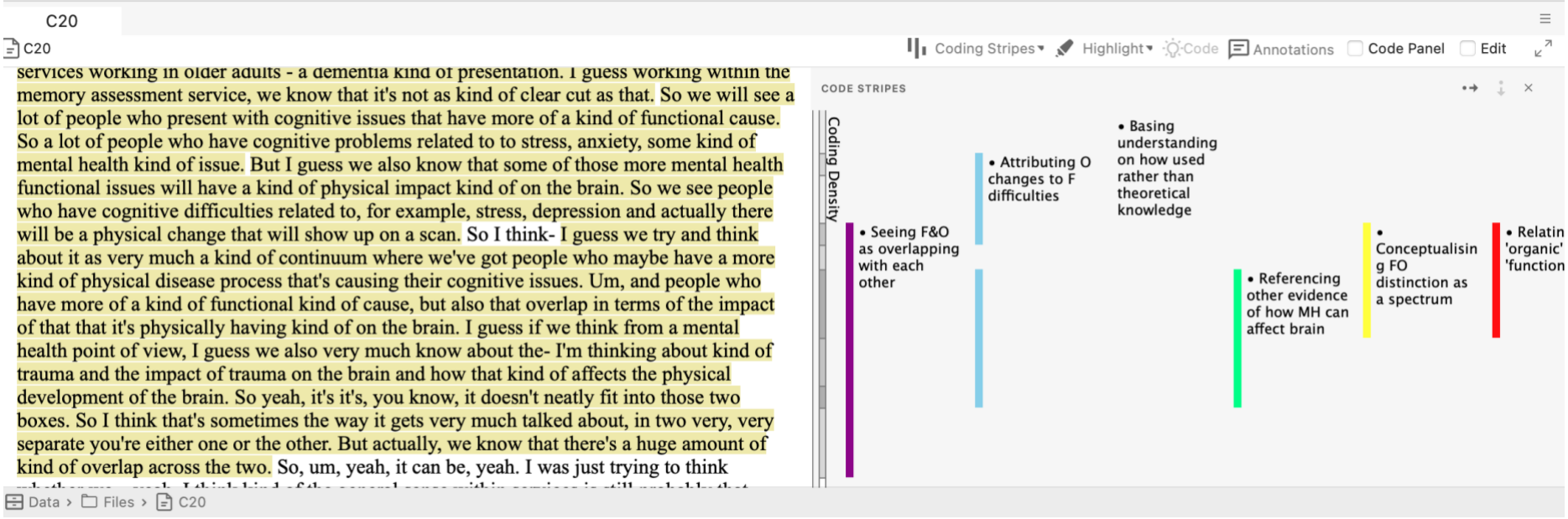
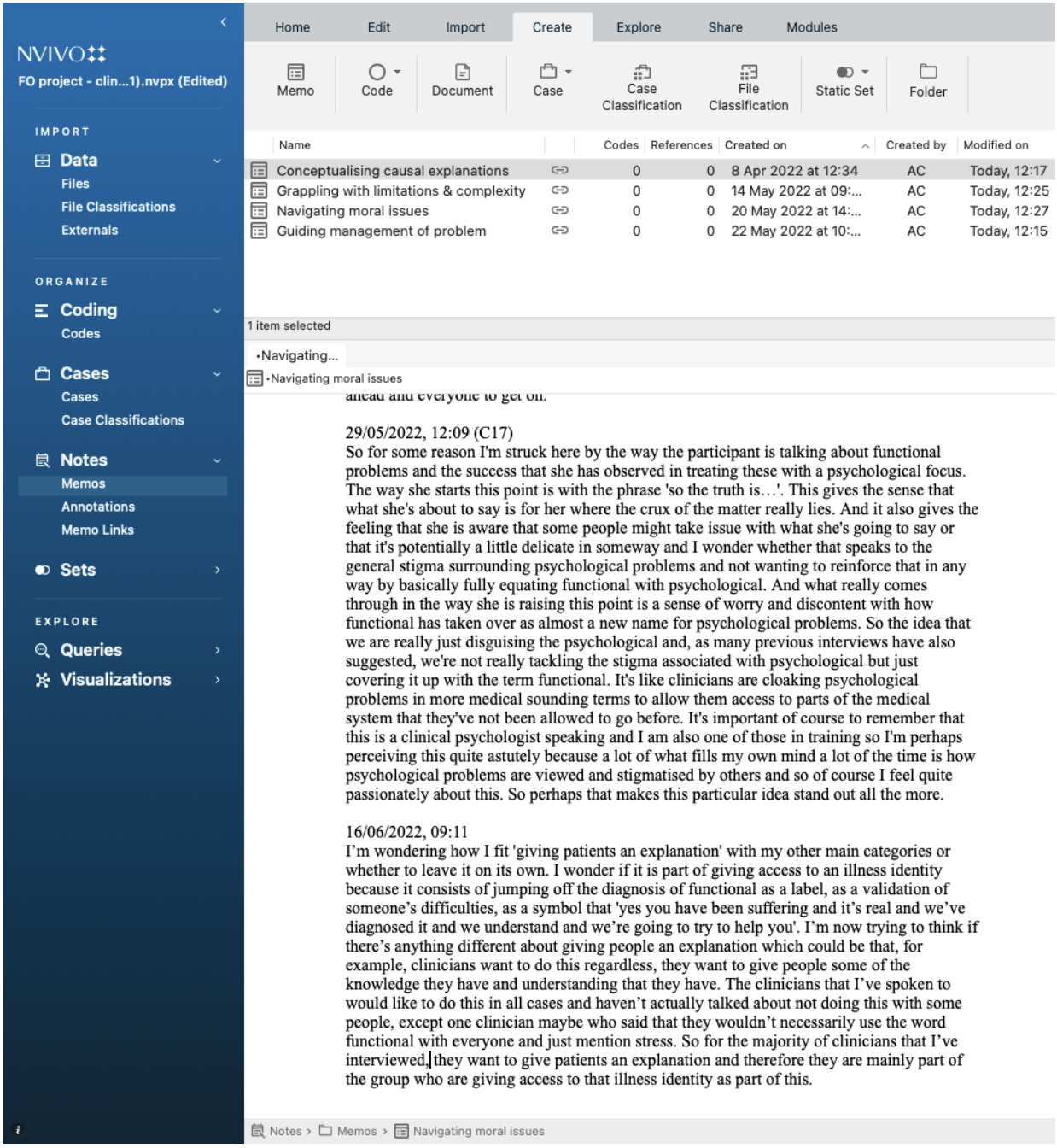
Name	Files	References	Created on	Created...	Modified on
Assigning value and deservedness	7	19	11 Apr 2022 at 09:48	AC	Yesterday, 15:24
Attributing O changes to F difficulties	1	2	Today, 16:16	AC	Today, 16:22
Basing understanding on how used rather than theoretical knowledge	1	1	Today, 16:10	AC	Today, 16:11
Being willing	3	7	30 Apr 2022 at 11:13	AC	23 May 2022 at 14:...
Communicating diagnosis at admission and discharge	1	1	Today, 13:24	AC	Today, 13:24
Conveying information quickly	5	7	22 May 2022 at 20:...	AC	Yesterday, 15:25
Covering a range of different things with umbrella of F	1	1	Today, 13:49	AC	Today, 13:50
De-medicalising labels for psychologically mediated problems	1	1	29 May 2022 at 19:...	AC	Today, 15:15
Determining funding for different specialties	1	1	22 May 2022 at 18:...	AC	23 May 2022 at 15:...
Diagnosing FND when can't find anything on tests	1	1	Yesterday, 22:54	AC	Yesterday, 22:55
Discerning patients' reactions to F&O	3	4	27 May 2022 at 19:...	AC	29 May 2022 at 16:...
Dismissing patients	13	19	13 May 2022 at 14:...	AC	Today, 15:22
Engaging patients in 'non-organic' treatment as more effortful	1	1	28 May 2022 at 11:...	AC	28 May 2022 at 17:...
Experiencing inconsistency between beliefs and use	1	2	22 May 2022 at 16:...	AC	23 May 2022 at 15:...
Explaining mismatch between level of injury and disability with F	1	2	Yesterday, 17:19	AC	Yesterday, 17:24

0 item selected





NB. All participant numbers had the prefix 'C' during analysis before they were re-labelled according to profession. Thus, any instances of C1-20 in screenshots denote original participant numbers, which are listed in table 1 alongside those by profession.

Name	Files	References	Created on	Created...	Modified on
Categories	20	1,769	14 Jun 2022 at 15:27	AC	Today, 10:27
Conceptualising causal...	20	435	13 Jun 2022 at 10:04	AC	15 Jun 2022 at 17:40
Subjectifying F	20	207	14 May 2022 at 10:...	AC	16 Jun 2022 at 15:36
Relating F&O	19	182	14 May 2022 at 11:...	AC	16 Jun 2022 at 09:...
Objectifying O	18	46	14 May 2022 at 10:...	AC	16 Jun 2022 at 15:37
Grappling with complex...	20	390	10 Jun 2022 at 15:04	AC	16 Jun 2022 at 17:59
Facing limitations	20	189	16 Jun 2022 at 17:32	AC	16 Jun 2022 at 17:32
Growing understandi...	20	117	11 Apr 2022 at 18:48	AC	16 Jun 2022 at 09:...
Recognising comple...	14	40	10 Jun 2022 at 10:06	AC	15 Jun 2022 at 18:37
Moving beyond	11	44	29 Apr 2022 at 09:...	AC	16 Jun 2022 at 17:32
Navigating moral issues	20	473	15 Jun 2022 at 09:...	AC	17 Jun 2022 at 11:39
Controlling access t...	20	173	16 May 2022 at 09:...	AC	17 Jun 2022 at 09:...
Discerning moral att...	20	215	12 Jun 2022 at 13:06	AC	14 Jun 2022 at 16:15
Responding to moral...	17	85	14 Jun 2022 at 16:13	AC	17 Jun 2022 at 10:31
Prioritising pragmatism	20	380	16 May 2022 at 09:...	AC	17 Jun 2022 at 14:32
Manoeuvring patient...	20	285	11 Apr 2022 at 16:57	AC	17 Jun 2022 at 14:25
Compromising on co...	15	95	15 Jun 2022 at 12:03	AC	17 Jun 2022 at 14:32
Recognising different c...	19	91	4 Apr 2022 at 14:38	AC	1 Jul 2022 at 09:16
General	11	22	19 May 2022 at 16:...	AC	17 Jun 2022 at 13:08
Philosophy	7	10	16 Jun 2022 at 09:...	AC	16 Jun 2022 at 10:25
Setting	7	11	16 Jun 2022 at 09:...	AC	17 Jun 2022 at 11:30
Discipline or specialty	6	12	16 Jun 2022 at 09:...	AC	17 Jun 2022 at 11:29
History & time	6	6	16 Jun 2022 at 09:...	AC	16 Jun 2022 at 10:38
Individual person	5	14	16 Jun 2022 at 09:...	AC	16 Jun 2022 at 10:27
Sociocultural	5	6	16 Jun 2022 at 09:...	AC	16 Jun 2022 at 10:25
System	4	5	16 Jun 2022 at 09:...	AC	17 Jun 2022 at 11:31
Ideology	2	5	16 Jun 2022 at 09:...	AC	17 Jun 2022 at 12:07

Appendix H

Codes for Definitions of Functional

Name	Files	References
Conceptualising causal explanations	20	435
Subjectifying F	20	207
Attributing F to psychosocial factors	18	82
Defining functional as absence of physical aetiology	16	31
Defining functional as abnormal function	9	17
Conceptualising functional as having multiple different causes	6	7
Believing F has positive signs	4	4
Conceptualising 'functional' as inconsistency between symptoms & pathology	4	8
Defining 'functional' as 'non-organic'	4	4
Conceptualising 'functional' as the extreme end of a universal spectrum	2	2
Conceptualising F as dissociation	2	3
Conceptualising functional as involving false belief that organic	2	2
Conceptualising functional as miscommunication	2	4
Connecting all different ways 'functional' symptoms can present together in one syndrome	2	2
Defining 'functional' as ability to carry out daily tasks of living	2	2
Needing a holistic approach to 'functional' problems	2	2
Positioning hysteria or conversion disorder as archetypal functional illness	2	2
Assuming mind to be a thing or substance	1	1
Assuming problems presenting to psychiatry are 'functional'	1	2
Attributing F symptoms to social factors	1	1
Attributing functional symptoms to a physiological trigger	1	1
Being less able to separate out cause and effect for 'functional'	1	1
Categorising according to impairment for functional	1	2
Categorising functional as one of multiple non-organic causes	1	1
Conceptualising 'functional' as a metaphor of human body as a machine	1	1
Conceptualising F as basic needs	1	1
Conceptualising F as denoting a reason for presentation	1	1
Conceptualising FND as not fitting into typical physical or mental health presentations	1	1
Conceptualising FND as psychologically based with physical impacts	1	1
Conceptualising functional as more than just non-organic	1	2
Conceptualising functional as unusual movement	1	1
Conceptualising functional diagnosis as subjective	1	2
Connecting functional with structural change	1	1
Contrasting functional to rest of neurology	1	1
Deeming functional when symptoms fluctuate more than expected for organic	1	1
Defining 'functional overlay' as when symptoms cannot be explained by confirmed 'organic' pathology alone	1	1
Defining functional as a different kind of physical	1	1
Distinguishing between functional mental health and functional physical disorders	1	1
Distinguishing between functional neurological and bladder or intestinal symptoms	1	1
Functional combining physical body and life experiences	1	1
Labelling symptoms as functional when they don't disappear with the physiological trigger	1	1
Making distinction between emotional and physical symptoms in FND	1	1
Needing to put more thought into understanding 'functional' problems	1	1
Positioning 'functional' and psychiatric symptoms as having big overlap	1	1
Separating FND from functional psychiatric conditions	1	1
Separating functional symptoms from the brain	1	1
Supporting idea of 'functional' rather than structural problem via imaging	1	1
Synonomising functional and somatisation	1	1