ENACTED PHRONESIS IN GENERAL PRACTITIONERS

by

Dr Sabena Yasmin Jameel

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ABSTRACT

Aristotle described five intellectual virtues; this thesis sought to understand one of them in detail - phronesis (practical wisdom). The thesis demonstrates why phronesis is a useful way of conceptualising professional knowledge in the field of medicine. Two of these intellectual virtues have become well embedded in medical education; episteme (scientific knowledge) and techne (technical skill), but phronesis has not. Sophia (philosophical wisdom) and nous (intellectual insight) are the remaining excellences in knowledge described in the Nicomachean Ethics.

A critical interpretive literature review was conducted, scoping the published literature on the topic of phronesis in medicine. Twelve themes were generated which related to the historic, present, and future applications of phronesis in medicine. The literature review identified a lack of empirical work on the characteristics of phronimoi (wisdom exemplars). This thesis worked within the paradigm of constructivism and adopted mixed method research techniques. Part one involved administering a wisdom questionnaire to a large group of family medicine practitioners (GPs) in the West Midlands (UK). From this group (N=211), outlier scoring doctors were invited to participate in biographic narrative interviews. 18 interviews were conducted which included 16 doctors who fulfilled the criterion for high levels of wisdom.

The transcripts were analysed using two methods. First, a biographic narrative interpretive method was used which enabled the generation of case summaries, like

character statements, which charted the lived life and told story of the exemplar. Second, a corpus linguistic frequency analysis enabled a conceptual framework to be produced which facilitated comparison and contrast of the exemplar transcripts. This also reflected the expressed thought processes of the wisdom exemplars.

The thesis describes 34 constituent features of enacted phronesis in a population of family medicine practitioners. It identifies key areas (personal qualities, contexts, mental habits, knowledge of self and relational aspects) that inform practical action through wise deliberation. It has resulted in the creation of a new theory which seeks to describe phronesis through analogy, the *Fish School theory.* It makes explicit what is ordinarily tacit in relation to the process of phronesis. This work has the potential to impact professional practice and medical education policy. The work also relates the concept of phronesis to eudaimonia (flourishing) and demonstrates that wiser doctors are happier doctors.

THE PERSONAL CONTEXT OF THE THESIS

The moral grounding of medicine has been usurped by industrialisation, commercialisation, micromanaged accountability processes and technical rationality. This distracts something of great value from the important relational and humanistic aspect of medical practice, a place where much fulfilment comes from. This is what I have felt in my 30 years in medicine. Probably more than 30 years to be honest, because prior to starting medical school, I saw my father work as a dedicated and committed single-handed general practitioner in a small town in Derbyshire. I sometimes used to sit in the car, keeping him company when he had home visits to do on the weekend. Dad often seemed weary, but you could tell he loved his connection with patients. We used to have Christmas parties in the surgery and the staff used to make a lovely buffet. It seemed a funny contrast, the stark clinical white walls and sterilised stainless-steel equipment against the eclectic jumble of a tinsel adorned, bring-a-dish party paraphernalia. Medicine is a bit like that, the clarity of bioscience pitched against messy stories that require interpretation.

I have been an inner-city GP for 20 years now. I love my job, both the intellectual challenge of making a good diagnosis and the humble pursuit of offering care and understanding people; they are difficult in different ways. I am also a medical educator, previously responsible for GP training in Birmingham and Solihull (Health Education England), and now a clinical academic appointed as Medical Professionalism lead and Academic Quality lead at Birmingham University Medical

School. These roles align, and my experience, briefly summarised above, informs my motivation to influence the future of medical education, bringing character and values back into the fore.

"Where is the wisdom we have lost in knowledge?" (Eliot, 2004)

This line in T.S Eliot's 1934 poem,'*The Rock',* reminds me that so much has been lost in reductionist science. Aspects of medical practice seem disjointed. The holism of wisdom has been lost in the need to codify and simplify. My M.Med Ed dissertation explored tacit knowledge as a primary mode of learning in clinicians. It highlighted the importance of metacognition in how we come to know what we know. It is not all explicit and it is not all taught. This started my journey in trying to grasp the nature of wisdom. The search for wisdom, in my view, is the ultimate continuing professional (and personal) development.

This PhD uncovers the constituents of enacted phronesis in a particular population of UK medical practitioners. In doing so, it provides a stimulus to reconsider what the future of medical education could look like if we are to address the dominance of positivistic ways, embracing more constructivist ways that attend to values, virtues, feelings and dealing with uncertainty; all attributes required for phronesis and professional practice.

Novitius waited after class for Veteratoris.
She said:
I want to be a good practitioner
so I need to learn the virtue of Techne.
I want to critique my practice
so I need the virtue of Episteme
to learn new ideas and strategies
that science can offer.
And, more than everything else,
I want someday to be wise like you
To make what I do
make a positive difference to people's lives
so I need to accept the challenge of Phronesis
to bring reflection, ethics and practicality
to my journey of becoming
a good and wise practitioner.

Higgs, J.(2012) Realising Practical Wisdom from the Pursuit of Wise Practice.

DEDICATION

I started this PhD in earnest in 2013, unsure of what lay ahead. The journey has been amazing, but I lost two parents along the way. Dr Mohamed Abdul Jameel and Mrs Syeda Masuma Khanam this is for you. Undoubtedly my biggest fans who loved this work, not because you understood the ancient Greek terminology, but because you believed in me. You were the source of the most incredible unconditional love. Your deaths reinforced the need for wisdom in medicine.

I miss you.

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I must thank the highly respected professors who have agreed to act as thesis examiners. It is an honour to have you critique this work.

Thank you to all the incredible GPs who agreed to be interviewed for this research. Every one of you inspire me, and it is my hope your stories will continue to inspire many other healthcare professionals for years to come.

Finally, thank you to my supportive husband Sultan and my three children Hayaan, Safiyah and Khaleel. You have tolerated much household neglect as a result of this passion of mine. Thank you to my mum and sister for their PhD prayers! There are generations of doctors in my ancestry, most who practised in India. I thought of them a lot whilst writing this thesis. I want to thank them too.

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GLOSSARY/ABBREVIATIONS

Ancient Greek Terminology	
Arete	Excellence
Deinotes	Cleverness
Episteme	Scientific knowledge
Ethos	Habit
Eudaimonia	Flourishing
Gnome	Judgement
Nous	Intuition, insight
Poesis	Making, production
Praxis	Action, conduct (purposeful)
Prohairesis	Context sensitive, rightly reasoned decision
Phronesis	Practical wisdom, prudence
Phronimos	Person who possesses phronesis
Phronimoi	People who possess phronesis
*Scalar**	Requirement X varies with time/context/domain
*Satis**	Can satisfy a requirement X by being X enough
Sunesis	Understanding
Techne	Art, craft, skill, technical expertise

Abbreviations	
BAME	Black and minority ethnic
BDA	Biographic data analysis
BNIM	Biographic narrative interview method
EBM	Evidence-based medicine
FRCGP	Fellow of the Royal College of General Practitioners
GMC	General Medical Council
GP	General Practitioner (family medicine practitioner)
IMG	International medical graduate
MSF	Multi-source feedback
NHS	National Health Service
NICE	National Institute for Clinical Excellence
PIN	Particular incident narrative
PSQ	Patient Satisfaction Questionnaire
RCGP	Royal College of General Practitioners
SBM	Scientific Bureaucratic Medicine
SDM	Shared decision making
SQUIN	Single question inducing narrative

Telos	Purpose	SUM	Shared understanding of medicine
Theoria	Understanding truth	TFA	Teller Flow Analysis
		WAV	Waveform audio file
		3DWS	Three-dimensional wisdom scale (Ardelt)

*****Latin not Greek origin

The word **Ethos has been used in this thesis with its more modern meaning *the characteristic spirit of a culture, era or community as manifest in its attitudes and aspirations.*

1. INTRODUCTION

The introduction of this thesis will outline the historical background and context of the enquiry. The aims and rational will be explained and the research questions and objectives will be outlined. The introduction section will conclude by signposting how the thesis will be structured. The study will be referred to as the EPGPS – The Enacted Phronesis in General Practitioners' Study.

This doctoral thesis applied the Aristotelian concept of phronesis (practical wisdom) as a research paradigm for exploring enacted and embodied wisdom in a population of family medicine doctors (general practitioners, GPs) in the West Midlands (UK). By using phronesis as a tool to explore the work of the GP, it captured the reflective and affective components of healthcare provision as well as the cognitive reasoning involved. The character of the doctor is central to the concept of phronesis. This research aspired to learn more about the character of wise doctors.

Pelligrino and Thomasma describe phronesis as medicine's indispensable virtue (1993), acknowledging that medical and clinical decisions require close integration of moral and scientific reasoning and judgement. They draw upon Aristotle's Nicomachean Ethics [1106 a22-24] (Aristotle, 2004), when they describe the importance of character in the context of medical practice.

> *"The excellence of human beings will also be the state of character which makes a person good, and which makes that person do his or her work well*."
> (Pelligrino and Thomasma, 1993 p85)

Phronesis is an intellectual virtue and Aristotle asserted that intellectual virtues can be taught as well as learned through experience. Recent research on virtues in the medical profession has identified that character, though deemed important, is largely ignored in UK medical curricula (Arthur *et al.*, 2015). Aristotle's work on the excellences of knowledge and character contributes to what is called virtue ethics. Virtue ethics is one of the three major approaches in normative ethics, the others being deontology (duties/rules-based) and consequentialism (emphasis on consequence of actions).

The thesis will justify using phronesis as a research paradigm; namely, using phronesis as a more holistic way of exploring the work of a good clinician. Virtues along with rules can synergistically enrich the understanding of practitioner excellence (Arthur *et al.*, 2015). Aristotle stated that phronesis is underpinned by a moral orientation towards good resulting in eudaimonia (flourishing of self and others). Eudaimonia is achieved by striving to live virtuously through developing moral and intellectual excellences. Phronesis is a metacognitive, proactive process that facilitates decision making, it integrates the moral orientation towards good, along with the appreciation of context and results in action (praxis). It is these features that distinguish phronesis from the concept of generalised wisdom. Modern day medical practice priorities are becoming increasingly conflicted, and clinicians are feeling increasingly demoralised (Andah *et al.*, 2021). There is a pressing need for an academic focus on flourishing and practical wisdom (Arthur *et al.*, 2015).

1.1 Historical background to the enquiry

Positivist (rationalist and empirical) approaches have become medicine's dominant philosophy since the early 19th Century. It can be traced back to the European Enlightenment period (1715-1789) which gave rise to an intellectual and philosophical movement emphasising reason, science, individualism, and scepticism. Positivism rejects metaphysics and theology as pseudo-scientific, and holds that experimental investigation and observation are the only sources of substantial knowledge. Positivism has its benefits, it has enabled Evidence-Based Medicine (EBM) to revolutionise healthcare and strengthen the robustness of the profession (Hilton and Southgate, 2007). It has ensured that basic minimum standards are achieved by the majority of practitioners and that safety and quality standards are in place.

Reeve criticises positivist research, and the policy that emerges from it. She states it is better suited to secondary healthcare provision, where populations are more predictable, and poly-morbidity is less of a complication compared to family medicine (Reeve, 2010). Misslebrook aligns with Reeve, and they suggest that the problem with EBM is that it is simplistic and reductionist (Misslebrook, 2001). It can only work by restricting our gaze in the search for evidence. It is not well suited to dealing with the particulars and complexity of an individual doctor-patient interaction.

In 1910 in America, non-clinician Abraham Flexner (BA in Classics), did a comprehensive review of medical education on behalf of the Carnegie Foundation. His report led to far reaching reform and resulted in many medical schools being

closed as they were not able to comply with the standardisation recommendations. He concluded that basic sciences were the way forward, promoting positivism, particularly rationalism, within the undergraduate medical curriculum (Newton, 2001). It was at this point that medical curriculum content shifted to contain predominantly bioscience. Flexner's recommendations infiltrated medical education delivery in Europe too.

The biomedical emphasis in the early stages of training resulted in these models being adopted in post graduate training and practise, the ramifications of which confine the bounds of analysis and guidelines. Positivist ideology became the gold standard to which the practice of medicine was held to account. Even in current undergraduate bioethics modules the principlist approach has the biggest influence (Beauchamp and Childress, 2001); rules-based ethics over virtue ethics, in line with the deontological and utilitarian principles that dominate healthcare and harmonise with positivist ideology (Gillies, 2018).

Misslebrook advises that we need to guard against biomedicine becoming a means of social control, whether for the benefit of doctors or of politicians (Misslebrook, 2001). Reeve refers to this social control as scientific bureaucratic medicine (SBM). Reeve appeals for the gaze to be shifted from easy-to-measure, limited accounts of practice to a more holistic assessment of practical knowledge. Many authors have called for social science educational and research theory to play a greater part in medical education (Ross, 2015; Sandars, 2016; Dennick, 2016). Philosophy and ethics also need to be accepted to better address questions relating to the goals and

purpose of medicine. These authors assert that we may be able to address challenges that a positivist approach has failed to capture such as inequality in health, social justice, and attention to professional virtues (Ross, 2015; Sandars, 2016; Dennick, 2016).

Positivist approaches pride themselves on being value-free with context stripped, therefore objective. The doctor patient interaction, however, is an inherently moral interaction with interpretation and subjective judgement being pivotal to patient-centred care. The positivist approach is unable to address this. Promising initiatives like *values-based-practice* (Petrova, Dale and Fulford, 2006; Fulford and Peile, 2018) have been introduced but have not propelled as one may have liked, maybe because of operating in a positivist environment. We need a balanced system which appreciates the value of both the positivist and constructivist ways of being a doctor:- a way which empowers a doctor's decision to be robust in objectivity, but also empathic in subjectivity in any given context.

Moral Frameworks Underpinning Medicine

The positivist methodology that dominates medical education and the societal need for rules, evidence and guidelines as means to regulate, measure, and standardise care provision manifests as the favoured ethical frameworks which can be classed as code-based (or rules-based) ethics. This includes Utilitarianism (consequentialism), Deontology and Libertarianism.

The formation of the NHS in 1948 represents an essentially Utilitarian-Consequentialist model of healthcare free at the point of access. Its aim was improving the health of the Nation (the single currency outcome) (UK Gov, 1944). With UK healthcare commissioning and provision of services following a free-market commercial path (BMA, 2020) as in the USA, an element of Libertarian philosophy emerged (first described in 1789 by William Belsham). Libertarians believe in the right of self-ownership in a free, unfettered, commercial market (Sandel, 2009). This model fails to ease inequality and promote common good. This model reflects society's fixation with hedonic (as opposed to eudaimonic) outcomes.

The other overriding moral philosophy in medical education is Deontology:- an ideology heavily influenced by the work of Immanuel Kant (1742-1804), a rationalist Enlightenment philosopher. Deontological reasoning has no concern for emotion or consequences, just for duty (Dale, 2013; Darnell *et al.*, 2019). Kant discusses in his *'Groundwork'* that morality is not about maximising happiness, or any other end. It is about respecting persons as ends in themselves (Sandel 2009). Deontology forms the basis of the present day *Universal Human Rights Declaration* (1949) and the GMC '*Duties of a Doctor'* document (GMC, 2013). Classified under the deontological moral framework is the four-principle ethical model (autonomy, beneficence, non-maleficence, and justice) from Beauchamp and Childress (1979). It is a model which is drilled into medical students who are often oblivious to alternative moral underpinnings (Arthur *et al.*, 2015). It is often applied unreflectively to many ethical problems, especially at undergraduate level. In their book on practical wisdom, Schwartz and Sharpe describe the work of clinical academics' Dr Hafferty and Dr

Hojat. They suggest that taught ethics is in direct conflict with real experiences on clinical placements where medical students often learn an insensitivity to pain and suffering, this is referred to as the hidden curriculum. Moral reasoning skills and capacity for empathy are found to decline as students pass through medical school (Hafferty and Franks, 1994; Hojat *et al,* 2004; Schwartz and Sharpe, 2010).

Time for change

Professor Don Berwick is a leading authority on healthcare quality. He is a Kings Fund advisor (UK), emeritus professor for the Institute of Healthcare Improvement (US) and former administrator for Medicare and Medicaid (US). Berwick is the author of *Era 3 for Medicine and Healthcare* (2016). Berwick refers to the Era 1 as the noble and beneficent profession of medicine having the ability to self-regulate and judge its own work. Berwick calls this the *Ascendancy Era* and traces it back to Hippocrates. He states that this idealistic era had flaws. There was a huge variation in practice alongside indignities, inequalities, and profiteering. As a result, it was also known as the *Protectionist* era. Sadly, this meant that the high-trust functions, that enabled innovators to thrive and be creative were crushed by cunning profiteers and law breakers.

All became subject to accountability, measurement, and scrutiny which Berwick describes as Era 2. This introduced incentives, performance related pay and punishment (otherwise known as the *Reductionist* era). This is where the romance of autonomy in Era 1 clashed with the external accountability of Era 2. Many doctors became disillusioned. Lloyd captures this well in his paper *on 'Power, Responsibility*

and Wisdom' where he writes that the accountability measures enforced to curb the dangers posed by the '*power-hungry megalomaniacs'* have deleterious consequences on everyone else (2010). Inspection, control, and regulation were the new norm. The regulators seemingly demonstrating accountability to service users (patients). The meaning of service changed rapidly, from the rather altruistic notion of serving someone out of duty and a degree of humility, to a system of supplying a consumer. With this consumerism came a shift in language. The shift in the term from patient to service-user became a voice of demanding entitlement. Medicine has become industrialised (Montori, 2020). We are deeply embedded in this era now. The quote below describes Berwick's reflection on the effects of Era 2 on healthcare practice and medical education.

> *"When the ethos of professionalism clashes with the ethos of markets and accountability immense resources get diverted from the crucial and difficult enterprise of recreating care."*
>
> (Berwick, 2016)

Berwick predicts what should come next. He describes Era 3: *The Moral Era* which rejects the protectionism of Era 1 and the reductionism of Era 2. The third era is a pendulum finding equilibrium, getting to the heart of what matters most. Berwick outlines nine necessary changes in medicine and healthcare in working towards the third era.

1. Stop excessive measurement
2. Abandon complex incentives
3. Reduce the focus on finance but increase attention to quality of care
4. Reduce professional prerogative
5. Recommit to improvement science

6. Embrace transparency
7. Protect civility
8. Really listen (especially to the poor, disadvantaged and excluded)
9. Reject greed (it erodes trust)

(Berwick, 2016).

Reintroducing Virtue Ethics and moving into the 3rd Era.

Deontology and Consequentialism have been favoured in medicine due to their apparent impartiality and universalisability (Dale 2013). The ability to analyse a situation using simplistic rules (like the four-principle model described earlier) has appeal, in that it can portray expertise without the need to deeply engage with ethical complexity. Deontology and Consequentialism are both rules-based, outside-in models, but rules often fail as they are inflexible (Schwartz and Sharpe, 2010). Rules-based ethics fails to capture sensitivities and responsibilities by which a good doctor is judged, and it fails to capture professional behaviours (Oakley and Cocking, 2001).

Jost and Wuerth present a compelling argument in the introduction to their book on perfecting virtue (Jost and Wuerth, 2010). They speak about how code ethics has focussed on actions and “rightness” at the expense of developing character and virtue. The code-based (Kantian) approach has led to an over emphasis on rationality, a failure to recognise the moral significance of emotion. Impartiality is revered, with a failure to recognise the importance of relationships and community, along with an over-emphasis on an individual being the focus or moral concern.

Kinsella and Pitman echo this sentiment in their book which puts forward the case for using phronesis as a synonym for professional knowledge. The aim of their book is to reinvigorate the moral dimension of professional practice which they argue has been lost in instrumentalist technical rationality (Kinsella and Pitman, 2012).

It was in the mid-twentieth century that discontent arose regarding the way moral philosophy was practiced, namely through the frameworks that fell into the deontological or consequentialist camps. In the book *After Virtue* Alasdair MacIntyre advanced arguments first proposed by Elisabeth Anscombe in 1958 (1981). The argument observed that the Enlightenment period's preoccupation with reason and scientific method resulted in moral philosophy losing its idea of a telos (purpose). MacIntyre suggested that losing the concept of telos made it impossible to compare one moral theory to another, resulting in a competition of influencing powers only (emotivism). MacIntyre and Anscombe suggested that moving to an Aristotelian position would revive the concept of telos and therefore enable the important dimensions of virtue, character, and wisdom to be recognised. This would enable a more refined analysis of the interaction between facts and values, where values are informed by telos.

Virtue ethics is not as simplistic as described above, it is beyond the scope of the thesis to describe the different types of virtue ethics, such as non-eudaimonist virtue ethics and non-western (e.g., Confucian) virtue ethics (Baril and Hazlett, 2019). This work focusses specifically on aspects of Aristotelian virtue ethics that are relevant to professional practice. In a chapter on practical rationality and a recovery of Aristotle's

phronesis for the professions, Ellet outlines the aspects of Aristotelian virtue theory that are relevant and retrievable when considering its application to professional practice (2012). The last 70 years has seen a profound revival in virtue ethics in the field of moral philosophy - It has now become the third normative ethical framework, alongside deontology and consequentialism. It is in the last 40 years that its influence has been percolating into the study of professional practice, especially medicine and nursing. This relatively recent renewed interest will become evident in the literature review chapter (Chapter 2).

Another reason why there has been renewed interest in research on phronesis and wisdom in psychological and philosophical disciplines is the rising interest in the integrative and dialectical aspects of postformal adult thinking (Perry, 1970). Kallio states the epistemic approach of postformal adult thinking is of trying to see the bigger picture and embracing complexity (Kallio, 2020). Postformal adult thinking is characterised by being multi-perspectival (often complementary, not always competing perspectives), and seeks to integrate and synthesise for the purpose of living well (Perry, 1970). Postformal adult thinking, and the dominant conceptualisations of wisdom, strongly resonate, both intending to successfully negotiate life challenges, conflict, and uncertainty.

Gardiner claims that virtue ethics is well suited to the medical consultation (2003). Clinicians' emotions are an integral part of their moral perception. Virtue ethics considers the motivation of the clinician rooted in their characteristic virtuous disposition. It is an inside-out way to be, as opposed to the rules based outside-in

way. There are no rigid rules to be obeyed. It can be specific, with two people resolving the same situation in different appropriate ways, this flexibility encourages creative solutions. Virtue ethics accounts for the fact that the resolution of a dilemma may not be to the complete satisfaction of all parties and residual painful emotions may remain, but the integrity lies in the fact that the best decision has been sought.

Rules-based ethics provide one source of knowledge to use in conjunction with a plethora of other sources of knowledge which include intuition, imagination, sensory and self-knowledge (Fish and de Cossart, 2013). The Chair of the National Institute for Clinical Excellence (NICE) has himself stated:

> "*Read and understand the guidelines and apply your wisdom and experience along with the hopes, fears and wishes of your patients, to decide how best they should be professionally applied."*
>
> (keynote speech by NICE Chair Dr David Haslam 28th Nov 2017)

Haslam gives doctors permission to really strive for excellence by using a virtue ethics framework applied to professionalism. Studying phronesis and understanding it better can enable the revival of wisdom in professional practice. The key element of phronesis is that it shows us how to adjudicate with context specific particulars and not simply just apply generalisations to each encounter. Understanding phronesis can help the transition to the moral era that Berwick calls for.

Can the third era bring flourishing?

The 3rd Era would be a welcome turning point, having instinctually felt the erosion of my own values whilst being medically trained, and seeing how the current system is

so consumed with perpetuating positivism that doctors (medical students to practising clinicians) and patients fail to benefit (Montori, 2020).

It is unclear if the 3rd Era will bring flourishing, but it is evident that Berwick's nine steps are sagacious suggestions. An obstacle to progress is that the NHS infra-structure is not ready to embrace and operationalise these ideas whilst positivist ideation dominates. The medical profession and the medical educators need to reconsider how Critical Theory and Constructivism can help achieve holistic medical practice. This will be a step towards a better academic understanding of society, community, illness, wellness, and the foibles of humanity.

1.2 Aims and rationale for thesis

Doctors are feeling burdened by excessive administration and measurement (Hannah, 2014; Andah *et al.*, 2021). Not everything that can be measured counts, and not everything that counts can be measured (Toon, 2014). Positivism has led to reductionism and professional morale within medicine is low (Hannah, 2014). Clinicians are experiencing burn out and the favoured solution is to be more "resilient". Resilience implies there is a problem with the doctor, however the problem is systemic and organisational. Medicine has become a transactional service provision, rather than an interactional therapeutic relationship (Toon, 2014; Arthur *et al.*, 2015; Montori, 2020). We need to find a way where both clinicians and patients can flourish.

Despite this, there are doctors who are thriving, they enjoy their work, they feel fulfilled, valued, and appreciated. They practise medicine by integrating the bioscience, social science, and humanities for the benefit of their patients and their community. This thesis sought to find some of these wisdom exemplars and learn more about them, so that their lives can inspire a future generation of clinicians, through carefully considered medical education interventions using storytelling and narrative as a favoured mode of delivering moral education (MacIntyre, 1981).

1.3 The research questions and the research objectives

The main goal of this research has been to gain a more nuanced understanding of what constitutes enacted phronesis in a population of family medicine practitioners (GPs). The need to elucidate this will be introduced in Chapter 2 (literature review). The overarching question and the sub-questions are described below:

The overarching question

Q1. What constitutes enacted phronesis in a population of general practitioners?

Sub-questions have been formulated in order to break down the broad overarching question:

Q2. What characteristics are common to GP phronimoi? How does this differ from GP peers?

Q3. Is phronesis in general practitioners a transient or stable state? Can phronesis consistently be demonstrated?

Q4. What do GP phronimoi do differently in their approach to practice?

Q5. Does enacted phronesis result in better doctor-patient relationships?

Q6. Does enacted phronesis result in a sense of greater personal wellbeing?

Q7. What motivates phronetic GPs?

The main challenge of this PhD research was to find clinicians who were deemed wise. Once identified, the research had to find a way to reveal aspects of their character, virtues, and values that aligned with being practically wise. This goal was achieved by adopting mixed methods techniques. The first part of the research identified an exemplar group using a quantitative wisdom scale. The second part of the research was designed to learn more about the exemplars, such as their thought patterns and deliberative processes, by using a qualitative biographic narrative methodology. It is hoped that these findings will be useful and instructive in understanding the constituents of enacted phronesis.

Objectives

By reviewing the literature and by performing mixed methods research this thesis aims to:

I. Synthesise published findings on the literature to date on phronesis in Medicine, eliciting the key themes describing what has already been written about and identifying where research/knowledge/theory gaps exist.

II. Provide baseline wisdom score data on a population of UK general practitioners.

III. Provide descriptive accounts of what constitutes a wise general practitioner (phronimos), offering character insights into the attributes of these doctors.

IV. Test the relationship between phronesis and eudaimonia (flourishing) as suggested by Aristotle by drawing on the questionnaire and interview data.

V. Suggest areas for further research and propose how medical education can support the development of wiser doctors using the new knowledge and theory generated from this research.

1.4 Structure of thesis

The thesis is divided into 9 chapters**.** Chapter 2 is the critical interpretive literature review which looks at published work on phronesis in medicine. Chapter 3 outlines the rationale for using mixed methods research in coming to an answer of what constitutes enacted phronesis. Chapter 4 describes the methodology for part 1 of the research; the empirical wisdom questionnaire used to identify wisdom exemplars. Chapter 5 outlines the results from the wisdom questionnaire including the characteristics of the whole group sampled, and those identified as having outlier scores. Chapter 6 introduces the methodology to Part 2 of the research; the narrative interviews conducted on exemplars. Chapter 7 presents the results of the narrative interviews. Chapter 8 offers an analysis, discussion, and interpretation of the results from both parts of the work. This has resulted in the generation of a new theory, the *Fish School theory*, which will be described. Finally, Chapter 9 includes methodological limitations and strengths, key findings, personal reflections, how this work contributes to existing knowledge in the field, recommendations for further research, and implications for clinical and educational practice and policy.

2. LITERATURE REVIEW

2.1 Introduction

This thesis explores what constitutes enacted phronesis (practical wisdom) in family medicine doctors. In order to do this, it is important to summarise current research and thinking in this field. The aspiration to look at phronesis with respect to medical practitioner behaviours, involves a cross-disciplinary understanding of concepts. Practitioner phronesis has been explored and referenced by philosophers and psychologists, especially over the last 40 years. This was described in the introductory chapter and will be expanded on in the literature review. Excellence in the delivery of care and practitioner decision making has also been a noble academic endeavour for medical educationalists and clinicians. The thesis brings these two elements together by focussing specifically on enacted phronesis in family medicine doctors.

This chapter utilises two literature review methodologies that have enabled a transparent and rigorous method of mapping the literature in the area of interest (Arksey and O'Malley, 2005; McDougall, 2015). The goal is to present an overview of the materials reviewed and to expose the research gap which will be addressed with the current PhD research.

This chapter will outline the context and chosen focus of the review. The methodology of the literature review will be described, and the rationale for choosing (and reflexively evolving) the methodology will be explained. The specific literature review questions which led to identifying relevant papers will be defined. The

mechanism for choosing papers that help address the research questions will be discussed. The next stage shows how the data was charted. This involved a process of sifting and sorting material according to key themes and topics. The penultimate stage of the literature review is a description of the collation, summarising and reporting of the results. A synthesis of key ideas will be presented. This will demonstrate that a good understanding of the academic research on phronesis in medicine has been achieved. The chapter will conclude by suggesting how this PhD research can contribute to the academic understanding of phronesis in medicine and carve a unique position in elucidating it's worth.

2.2 Context of review

The topic is embedded in ethical frameworks and moral philosophy. Little *et al*., consider that virtue ethics as a strong contender for suiting medical work (2011). Understanding virtue ethics requires an appreciation (and translation) of the ancient Greek words that Aristotle introduced to explain how we should think and live, which can mainly be found in *The Nicomachean Ethics*, which he wrote in 340BC (Aristotle, 2004). It also requires a firm grasp of the nature of knowledge and all the terms that help us know (epistemology, ontology, hermeneutics). It requires a reflective application of how these moral frameworks have played out in modern healthcare practises (in the West), and the ramifications on the contemporary setting of healthcare provision and medical education, which also include educational philosophy and politics. Aristotle's phronesis has also been approximated to well-researched psychological concepts of wisdom (Ferraria et al., 2011; Darnell *et al.*, 2019; Grossmann *et al.*, 2020a).

What has come to light in this literature review is that over the 7 years of the thesis some of these difficult *combined* concepts have been explained and researched further. This is very welcome and has enabled a better narrative synthesis to ensue.

2.3 Focus of the literature review

This work crosses many disciplines, many centuries, and many different ways of describing. The language and literary style of a philosopher is different to that of a clinician, both have quite unique language syntax. In reading the largely theoretical philosophical literature, I contextualise the concepts, applying them to clinical settings. I then consider how those could be explained to a medical audience. The goal is to make practical wisdom an accessible concept for medical practitioners. It is hoped that the main benefactors of this PhD research are the medical profession and all those that teach them.

The research aims to look at enacted phronesis in family medicine doctors. These are not well-defined concepts that can simply be merged. The words themselves are fraught with possible misunderstanding and multiple understandings. In maintaining a tight focus in the literature review, these definitions and their nuances will unfold. This can only happen if the literature review attends to depth of meaning.

2.4 Literature review methodology

A good literature review should adopt robust and reproducible methods, this thesis aspired to achieve this. Unlike healthcare interventions, systematic reviews do not best suit bioethical problems. This is because the literature in this area is often theoretical (normative and evaluative), with less empirical work. It does not lend itself well to formulaic quality assessment seen in systematic reviews (McDougall, 2015). This non-systematic literature review had to focus my mind on answering literature review research questions that are relevant to my PhD research, without being distracted by all the other concomitant issues outlined previously (philosophical theory and psychological wisdom research on parallel themes).

A close approximation to the subject under study for this PhD is the work of Mervyn Conroy and colleagues, his research team obtained an Arts and Humanities Research Council grant to explore *Phronesis and the Medical Community* 2015-2018 (Conroy *et al.*, 2018; Conroy *et al.*, 2021), which is summarised on a University website.

https://www.birmingham.ac.uk/Documents/college-social-sciences/social-policy/phronesis/phronesis-in-medical-decision-making.pdf

Their literature review question was *"What empirical qualitative research on phronesis has been done in the past?"* Their report states they adopted the critical interpretive method outlined by McDougall (2015).

They used numerous search terms (14) and a collection of medical and social science databases. Their initial search generated 794 papers; this was condensed to 15 papers for the purposes of answering the literature review question. I do not feel the 15 papers got to the heart of what phronesis is, but it did provide empirical,

qualitative research summaries. It clearly showed breadth within the literature search. This seemed to fulfil the Arksey and O'Malley style of non-systematic literature review, rather than the McDougall style. The difference will be discussed later in this chapter.

Arksey and O'Malley describe the time-consuming process of data selection and charting. Their work, which considered services for carers, consisted of having three full time researchers distil 3876 papers to 204 (2005). Inclusion and exclusion criteria were set, along with deadlines halting any further study additions. These numbers sounded daunting and impractical for a lone researcher wanting to get to grips with key ideas in a particular field. Whilst it is important to get breadth and depth of relevant research to answer the literature review question, this literature review also needed to be pragmatically possible.

Arksey and O'Malley present a methodological framework for reviewing the literature when a full systematic review is not possible or appropriate. They term their approach *scoping studies* (2005). The term scoping is used as a technique to map relevant literature in the field of interest. McDougall comments that the term *scoping studies* is too vague for bioethics research and prefers the *critical interpretive* approach which respects the uncertainty of biomedical definitions, provides pragmatism in not needing to look at every single paper published on a topic, and focuses on ethical justifiability and conceptual analyses and arguments (McDougall, 2015). McDougall stipulates that a critical interpretive review is interactive, iterative, dynamic, and recursive. It is not, however, as unstructured as a purely narrative literature review.

The Arksey and O'Malley's structure was adopted as a starting point to help guide the daunting process in a linear way. This is how the chapter headings have been laid out. As the area of study was bioethical in nature, what resulted was more in line with what McDougall described as a critical interpretive approach, particularly in regard to synthesis and goal. Table 2.1 outlines the main similarities and differences. The McDougall Critical Interpretive method seemed a more organic way to deal with the bioethical topic of phronesis in medical practice and was therefore helpful in the latter analysis stage. The Arksey and O'Malley method was useful for considering the breadth, depth, and rigour of search.

Table 2.1 – A comparison of two non-systematic literature review methodologies.

Non-systematic Literature review	**Arksey and O'Malley Scoping review (2005)**	**McDougall Critical Interpretive review (2015)**
Breadth of search (covering all material)	Identifies ALL relevant literature regardless of study design (published and unpublished). Quantity of data can be considerable. Search terms not strictly limited. Aims to be comprehensive and process driven whist maintaining reflexivity and iteration.	Capturing all literature is not necessary or appropriate in biomedical literature search. Comprehensiveness of data not required when considering conceptual arguments/analyses and ethical justifiability.
Depth of search (providing detailed analysis of a smaller number of papers)	Breadth versus Depth conflict leading to difficult decisions on parameters. Parameters set when sense of volume of bibliographic references known.	Iterative rather than linear process. Depth comes from reflexive iteration.
Rigour	Process documented to allow transparency and reproducibility, thus claiming methodological rigour.	Rigour should match the purpose of the review. Critical interpretive reviews reflect research questions that arise in bioethics; the method reflects the nature of the discipline.

		Search strategy should be clearly reported
Type of Evidence	Normative/evaluative and empirical. Literature less likely to be able to address a specific research question.	Normative/evaluative and empirical. The literature identified enables a specific research question to be answered.
Quality of Evidence	Not assessed, therefore cannot determine if particular studies are generalisable and robust.	Not assessed, therefore cannot determine if particular studies are generalisable and robust.
Inclusion and Exclusion criteria	Clearly defined terminology. Criteria devised post hoc. Deadlines set for study inclusion. Researcher judgement required leading to risk of bias.	Biomedical terminology is fraught with lack of specificity. Papers are NOT excluded based on rigid quality assessment criteria. Only papers that are fatally floored excluded. Researcher judgement required leading to risk of bias.
Methodological Steps	1. Identify research question 2. Identify relevant studies 3. Study selection 4. Charting the data 5. Collating, summarising, and reporting the results 6. (Optional) Stakeholder consultation.	Biomedical papers are often not "studies". 1. Answering a research question 2. Capturing relevant key ideas 3. Analysing the literature as a whole 4. Theory generation 5. Not excluding papers based on rigid quality criteria 6. Reporting the search strategy
Synthesis	Charting akin to narrative review (including process and intervention) allowing a contextualised outcome. Limited aggregated synthesis.	Critiquing all literature as a whole rather than individual studies. Offering qualitative insights into the contours of the literature.
Goal	Presents an overview of all material reviewed. Narrative description in line with qualitative understanding. Identification of gaps in the literature. Acts to justify subsequent research.	Capture and analyse key ideas. Identifies gaps in the literature. Generates new knowledge/theory in the form of data interpretation. Acts to justify subsequent research.

McDougall uses the term introductory review and scoping review synonymously. She claims the term ‘scoping’ lacks a clear, consistently applied definition and as a result she does not feel it is well suited to bioethics research:

> *“Bioethics research that uses existing literature as data is often undertaken via a fundamentally different type of literature review process. I use the term ‘critical interpretive review’ to refer to this type of literature review.”*
>
> (McDougall, 2015 p525)

The methodological steps for both types of non-systematic literature reviews have clear commonalities. I will highlight where the McDougall approach served the purpose of my research better than the Arskey and O’Malley approach, and where the methodology was expanded and adjusted to gain those benefits.

This critical interpretive approach is faithful to phronesis. Positivistic *Systematic Reviews* favour praxis (measurable and action orientated) research, interpretive *Narrative Review* favour sophia (philosophical wisdom). Much of our reality lies in-between, especially regarding bioethics. A rigorous methodology that appreciates the spectrum of analysis needs to be reflexive to the task in hand.

2.5 The literature review research questions

Whilst immersed in reading about phronesis, it became clear that authors discussing the term phronesis use it in different ways, which indicate they are interpreting it in different ways. I wanted the literature review to explore this and see if a majority consensus was available in relation to phronesis in medicine. This would then provide a solid foundation for considering its *enactment* in general practitioners.

Whether any research could purport to describe enacted phronesis within medicine when the original term lacks clarity and consensus, was the starting point for the research questions for the literature review.

I formulated three research questions for the literature review:

1. What has been written about Phronesis in Medicine?
2. What empirical research has been done on Phronesis in Medicine?
3. What narrative commentary prevails in relation to Phronesis and Medicine?

2.6 Identifying relevant papers

Prior to a formal literature review, my initial PhD reading consisted of background reading on medical ethics and the philosophical and psychological nature of ‘good’, ‘flourishing’ and wisdom (Weiss and Butterworth, 1975; MacIntyre, 1981; BMA 1986; BMA, 1988; Sternberg, 1990; Crisp and Slote, 2000; Beauchamp and Childress, 2001; Blackburn, 2001; Gomes, 2003; Aristotle, 2004; Seligman, 2011).

In order to demonstrate that a literature review could be performed with a more robust methodology an Ovid Medline search was performed. I stipulated that I wanted papers from 1946-Feb 2020 (the longest period of search at the time).

Search term **Phronesis AND Medic***

Using the word phronesis (and no other substitute or synonym) meant I could get to the depth of the meaning, but meant I lost some important papers by not using its frequently used translation (practical wisdom). I felt restricting myself to using the

term phronesis could give well-needed clarity to the term and provide a position in which to move forward with the research. This was a conscious decision to keep a tight focus. Any seminal papers using the term practical wisdom, or alternative terms like practical rationality, would be picked up from snowball references.

When considering phronesis in relation to medicine, I wanted to encompass many related areas where this is relevant, so I used the prefix Medic* which allowed me to capture medicine, medical practice, medical education, medical competence, medical decision-making, medical judgement, medical speciality. It would not limit me to just phronesis in doctors but expand to include research in other medical disciplines.
I was limited to papers published in the English language. I was restricted by the Ovid Medline database start date (1946) and was unable to go as far back as Aristotle (340 BC). Most literature appeared after 1986 so the start date was adequate.

I considered the merits of broadening the search further by using other terms (healthcare, healthcare education, clinical education, clinical practice, virtue ethics, virtues, medical ethics, ethics, bioethics, medical philosophy, medical codes of ethics, ethics, research, empirical, qualitative, knowledge, professionalism), but based on the quality of what was distilled from 794 to 15 papers (Conroy *et al.*, 2018), I decided against it as I felt that the depth was lost (in understanding phronesis) at the expense of breadth, with a tremendous sifting exercise along the way.

I recorded the detail of the papers from the Ovid Medline search on an excel spreadsheet, where I logged the author(s), date, reference, keywords, type of paper, strengths, criticisms, general commentary, and snowball references. The volume of references was felt to be manageable. The Ovid Medline search provided the foundation of the critical interpretive literature review.

The exact search terms (phronesis and medic*) were used again on other databases. The outputs are described below. Important papers were read in full, (i.e., those that focussed on my research questions).

Table 2.2 – Database searches

Database 1 **Ovid Medline** (Span 1946- March 2020)

Date 31/03/2020 (during Covid19 lockdown) Uni VPN at home.

Research Questions:

1. What has been written about Phronesis in Medicine?
2. What empirical research has been done on Phronesis in Medicine?
3. What narrative commentary prevails in relation to Phronesis and Medicine?

Search terms **Phronesis and Medic***

62 results

57 results in English Language

All papers were read in full (where possible, limited by university and public access rights). Each paper was summarised on an excel spreadsheet.

Snowball references, network referrals (3) added.

Database 2 **Web of Science** (All databases)

Date 16/06/2020

Search terms **Phronesis and Medic***

115 results

108 results in English Language

61 new reference (compared to Ovid Medline)

61 Abstracts were reviewed

5 papers not directly relevant

38 papers relevant of which 7 deemed important

10 papers possibly relevant to wider discussion (on virtue ethics in medicine, healthcare, and medical education)

Database 3 **Ovid ASA Psychinfo** (1806-1966 and 1967- June 2020 Week 2)

Date 16/06/2020

Search terms **Phronesis and Medic*** (Limited to English only)

22 results

9 new reference (not picked up in previous searches)

9 Abstracts were reviewed

1 paper not directly relevant

2 papers relevant of which 0 deemed important

6 papers possibly relevant to wider discussion (on virtue ethics in medicine, healthcare, and medical education)

Database 4 **EMBASE 1974- June 15th, 2020**

Date 16/06/2020

Search terms **Phronesis and Medic***

88 results

87 results in English Language

27 new references

27 Abstracts were reviewed

7 papers not directly relevant

8 papers relevant of which 1 deemed important (conference proceeding; grey literature, could not access further detail)

12 papers possibly relevant to wider discussion (virtue ethics in medicine, healthcare, and medical education)

Database 5 **CINAHL**

Date 16/06/2020

Search terms **Phronesis and Medic***

4 results (all known, all relevant)

Database 6 **ASSIA** (Applied Social Science Index and Abstracts)

Date 16/06/2020

Search terms **Phronesis and Medic***

10 results (all known, all relevant)

2.7 Study selection

The additional five searches resulted in 48 new and relevant papers being identified, 8 of which were deemed important in answering the research questions, so they were added to the 57 papers from the original search, making a total of 65 core papers. These searches demonstrate a sufficient breadth and depth was sought.

References and snowball references were a source of further understanding of concepts related to the central question. These were analysed at various depths depending on their relevance to the literature review questions and the illumination of some key concepts. This allowed for terms like practical wisdom (instead of phronesis) to be captured, but selected only if they were relevant to the research question; this would include the important work of Kaldjian and Paes who use the term *Practical Wisdom* in their published works (Kaldjian, 2010; Kaldjian, 2014; Paes, 2019; Paes, Leat and Stewart, 2019).

A reflexive database search was performed (on Ovid Medline) using the terms Practical Wisdom AND Medic* to ensure no important papers were omitted. 31 papers were new, but the term practical wisdom did not refer to Aristotelian phronesis. 7 papers were found to be relevant and there were no new themes as compared to the original Ovid Medline search for *Phronesis AND Medic**, suggesting a saturation of themes. This validated the methodology adopted.

In addition to the above, important new papers were available through my academic networks. Three recently published papers were added to the literature review **(total**

= 68 papers). One important paper, accessed via networks, was reviewed prior to PhD submission, 9 months after the original literature review (Conroy *et al.*, 2021). The Ovid Medline search was run again on 22nd March 2021 prior to thesis submission. A further three papers were identified. They relate to phronesis in relation to collaborating with patients in making treatment decisions (Nierenberg, 2020), surgical ethics and the importance of phronesis (Cardenas, 2020) and finally, phronesis recognising personhood of patients (Mitchell, 2019) .These would naturally slot into themes 5, 2 and 8 respectively within this literature review (described in section 2.8), but will be referred to in the discussion chapters, cross-referenced with research findings.

In summary, the literature review adopted a strategy that obtained relevant information from various sources: electronic databases, reference lists and existing networks/organisations and conferences proceedings. There was a conscious, strategic process to ensure both depth and breadth were covered in the electronic database search. This was achieved by an Ovid Medline deep dive followed by tailored focussing of literature from 5 other electronic databases.

As phronesis is a philosophical concept, the importance of books in the understanding of phronesis as applied to medicine plays a major role. Two seminal texts that much of the searched literature allude to are Aristotle's the *Nicomachean Ethics* (2004) and MacIntyre's *After Virtue* (1981). Other publications relevant to the research questions of this literature review, and instructive in my own understanding during the course of this PhD include; *The Virtues in Medical Practice* (Pelligrino and

Thomasma, 1993), *Practical Wisdom – the right way to do the right thing* (Schwartz and Sharpe, 2010), *Phronesis as Professional Knowledge* (Kinsella and Pitman, 2012), *A Flourishing Practice* (Toon, 2014), *Towards Professional Wisdom: Practical Deliberations in the People Professions* (Bondi *et al.*, 2011), *Medical Wisdom and Doctoring: The Art of 21st Century Practice* (Taylor, 2010), *Practice Wisdom ;Values and Interpretations* (Higgs, 2019), *Applying Wisdom to Contemporary World Problems* (Sternberg, Nusbaum and Gluck, 2019), *Transformative Reflections for Practicing Physicians and Surgeons: Reclaiming Professionalism, Wisdom and Moral agency* (de Cossart and Fish, 2020) and *The Trusted Doctor: Medical Ethics and Professionalism (Rhodes, 2020).* In addition there was an important non-medical paper that called for research that uncovers the characteristics of a phronimos in order to operationalise a realistic way forward (Darnell *et al.*, 2019). This paper was rooted in moral psychology and moral education but was the first paper that offers a conceptual model of phronesis and how that might translate to an empirical measurement tool (as yet unavailable). Darnell ***et al's*** conceptual model will be used as a benchmark to compare and contrast the research findings from the thesis (Chapter 8), having addressed their call for determining what the constituent features of a phronimoi are.

2.8 Charting the data

I inductively generated 12 main themes from the literature which I have classified into a natural chronological sequence. I will categorise 1 to 3 as relating to the *past* (historic concerns) , 4-8 as relating to the *present* (current issues) and 9-12 as relating to the *future* (potential application).

Past (historic concerns)

1. Phronesis: Is it the right term (for the purpose of developing good doctors)?
2. Judgement versus Evidence-Based Medicine (EBM)
3. Phronesis in the context of Virtue Ethics

Present (current issues)

4. Working with Phronesis as conceptual model: Problematics and Positionings
5. Phronesis orientated towards Professionalism, or for ethical decision making?
6. Lack of empirical work
7. Individual phronesis within organisations
8. Telos, patient care, narrative, and ways of knowing

Future (potential application)

9. Theory to practice, knowledge translation and decision making
10. Phronesis for dealing with complexity and moral distress
11. How to develop phronesis
12. Phronesis education

All the themes respond to the first research question; *What has been written about Phronesis in Medicine?* Theme 6 specifically addressed the research question; W*hat empirical research has been done on Phronesis in Medicine?* The final question: *What narrative commentary prevails in relation to Phronesis in Medicine*? will consist of a synthesis of all the literature reviewed, offering qualitative insights into the contours of the literature (McDougall, 2015). This will be summarised in section 2.10.

Narrative account of the findings

The dominant areas of research could be found in theme 11 – How to develop Phronesis, closely followed by theme 7 –Individual Phronesis within Organisations. This suggests, rightly or wrongly, that there is already an assumption that phronesis is a good thing, and worth developing in the medical arena. The majority of the papers favour phronesis; the literature as a whole is lacking some criticality and diversity of thought. The majority of papers were theoretical reflections, some were very lengthy and philosophical in nature. From my perspective, it is welcoming to note that many of the authors were clinicians who were able to illustrate their philosophical arguments with clinical examples.

The Web of Science database produced some interesting quantitative data on the frequency of publications from this particular search. There was a peak of 10 publications in the year 2011, followed by smaller peaks of 8 publications in 2017 and 2019. In 2019 there was a peak of 178 citation of the papers collectively, (2020 data incomplete). Compare this to 2001 when there were less than 10 citations in total. It is clearly a growing area of research and deliberation. The average citation per item was 14.4. The most cited paper was on *Dropping the knowledge transfer metaphor* by Greenhalgh and Wieringa (2011), which was cited 242 times. The second most cited paper was Hilton and Slotnick's Proto-professionalism paper that was cited 200 times (2005). Aristotle aside, the oldest paper goes back to 1986 (Gatens-Robinson, 1986) and the most recent being forthcoming but unpublished work.

There were a number of authors who had published more than one paper in this area, they include Braude, Kristjánsson, Cook and Leathard, Fuks and Bodreau, Kotzee, Malik and Conroy, Greenhalgh, Schultz. The most frequent journal to appear was *Theoretical Medicine* and *Theoretical Medicine and Bioethics,* (these are two names of the same journal). It is a bimonthly peer reviewed journal covering bioethics and the philosophy of medicine. It has a more theoretical outlook than other journals in that area. It was established in 1980 as *Metamedicine*, it was renamed *Theoretical Medicine* in 1983. It was further renamed *Theoretical Medicine and Bioethics* in 1998). There were 8 references from this journal. This was closely followed by 6 articles from the *Journal of Medicine, Healthcare and Philosophy* and 3 articles from the *Journal of Medicine and Philosophy*. An interesting connection is that Edmund Pellegrino was the founding editor-in-chief of the *Journal of Medicine and Philosophy* in 1976. It is Pellegrino who described phronesis as "indispensable" to good medical practise, as it coordinates the doctor's moral virtues bringing to bear ethical decisions as part of wise moral action (Pelligrino and Thomasma, 1993).

The fact that the literature review has a predominance of theoretical evidence aligns with McDougall's observation that bioethical literature is often theoretical, with less empirical work. Of the core 68 papers, only eleven had a qualitative empirical component. These will be discussed later (theme 6). The quality of evidence will be scrutinised and commented on, but as much of the evidence is theoretical opinion it cannot be reviewed in the traditional systematic review fashion.

2.9 Collating, summarising, and reporting the results

THE PAST

Theme 1 - Phronesis: Is it the right term (for the purpose of developing good doctors)?

Aristotle describes phronesis as the ability to apply universal or general knowledge to particular situations. The phronimos identifies what is unique and particular about the situation making a moral judgment about the resultant rational action:

> *"Phronesis is concerned with human goods i.e. the things about which deliberation is possible; we hold that it is the function of the Phronimoi to deliberate well…and that the end is practical good.*"
>
> [NE VI,1141b 8] (Aristotle, 2004).

Eudaimonia (flourishing) is the ultimate goal. In the *Nicomachean Ethics*, Aristotle described Medicine as *Techne* (skill/technical expertise), with the goal being good health [NE VI, 1094a 9] (Aristotle, 2004). He did, however, seem to blur the distinction when he uses medicine as an example of phronesis (Kristjánsson, 2015). This ambiguity has been the focus of academic deliberation, especially as applied to medical practice. The literature review has confirmed a lack of clarity in the application of terms like techne (craft/skill), episteme (scientific knowledge), sophia (theoretical wisdom), nous (intellectual insight), praxis (practice), poesis (creation of something new) and phronesis (practical wisdom) in relation to medical practice (and in relation to each other).

This section will outline how phronesis and medical practice have been written about by various authors. I will highlight differences in how words like techne and praxis

have been used, and the theoretical arguments about which word is most appropriate when talking about the modern-day practice of medicine. I will then summarise what the consensus is regarding phronesis and the development of good doctors. This section draws upon 14 papers from the literature review and 3 seminal books.
In the context of medicine, Paes offers clarity describing how Theoria, Poesis and Praxis are forms of human action (2019). Theoria seeks to understanding the truth, poesis are activities that brings something new into being that did not exist before. Paes suggests poesis is underpinned by techne. Praxis is an activity that seeks to promote the good life, through actions and behaviours rather than an end product. I have devised an evolving heuristic model, in an attempt to try and understand how phronesis and praxis relate to each other and the other intellectual virtues and actions (see appendix A2.1 for a diagrammatic representation of this relationship).

The literature review identified that much of the literature refers to medicine as praxis, but also as techne (technical expertise as a knowledge process). Svenaeus states that medical practice is not the same as praxis (2003), but that phronesis is the best way to capture what is required. Joseph Dunne alludes to the difference between techne (doing) and phronesis (being) and explains why he feels medicine is not merely about phronesis (2009). The perceived dichotomy between techne and phronesis, and Dunne's view, has been analysed in detail by Kristjánsson (2016). It is beyond the scope of this literature review to describe that narration. It is worth noting however, that in contrast to a long tradition of wisdom research in psychology, which has explored wisdom as a combination of sophia and phronesis, a new consensual model of wisdom, agreed upon by various wisdom researchers, including

Monika Ardelt, whose work will feature later in this thesis, has recently been proposed. This new wisdom model is brought much closer to phronesis than previous psychological conceptions (Grossmann *et al.*, 2020a).

The recent literature suggests phronesis is a more appropriate knowledge process than techne in the realms of contemporary medical reasoning. It could be that the goals of medicine (telos) determine whether it is a praxis or techne. If the goal is healing of illness, this would be a praxis concept, ethically directed towards flourishing, it would consider the psychological processes required to feel subjectively well. Compare this to the goal of medical treatment of disease*,* which would be more of a techne to practice concept, considering the body as a biomedical machine that can be fixed. The literature review demonstrates there is no consensus regarding the telos of modern medicine, hence the ambiguity in defining it as praxis or techne. This ambiguity is reflected in the definitions of health which vary from "*a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity"* (WHO, 1946) to Dietrich Bonhoeffer's maxim "*the strength to be",* despite disability (Marty, 2011).

Dunne explicitly replaces the term *profession* with *practice* in his chapter in the book *Towards Professional Wisdom* (Bondi *et al.*, 2011). He says he borrows this tradition from MacIntyre (1981) and Aristotle (Book VI). It appears that this is how many writers on medical phronesis are using the word 'practice' instead of praxis.

Gatens-Robinson was an early advocate for phronesis being a useful model for the rational orientation of clinical judgment in medicine (1986). He argued that medicine is a human science and requires interpretation and judgement which is best captured by phronesis. Some years later, Pelligrino and Thomasma wrote the book *The Virtues in Medical Practice* (1993) . In Chapter 7 they claim that phronesis, which coordinates all the different moral virtues, is “indispensable” for wise moral action of the good doctor. They state phronesis *provides a grasp to the end, the good (p84)*. This text became a foundation for much subsequent exploration of the concept. In 1997 Davis anchors his argument on Pelligrino’s philosophy of medicine as healing (rather than fixing), with a work entitled *Phronesis, clinical reasoning, and Pellegrino's philosophy of medicine.* Davis states the most compelling paradigm for the rationality of the physician’s actions is phronesis (1997).

When considering whether phronesis is the right term to use in producing good doctors, (the theme of this section), we can trace back its usage in medical journals. In 1999 in a paediatric surgery journal, Hutson and Myers presented a very real clinical dilemma for surgeons dealing with severely disabled children. They offered phronesis as a framework for exploring the complexity of the situation. They suggested that with increasing medical and technical advances, ethical considerations should be part of the decision-making process (Hutson and Myers, 1999). Tyreman published aligned thoughts, suggesting that uncertainty is an innate feature of clinical practice, this is largely due to the interpretative nature of illness pitched against the certainty of the science; illness versus disease (2000). Tyreman

concludes that phronesis add a corrective dimension to the perception that medicine is a techne.

Waring's paper entitled, *Why the practice of medicine is not a phronetic activity,* would appear to be an emphatic rebuke. In actual fact, it is a contemplative observation that Aristotle himself felt that medicine was a techne (skill) rather than a phronetic activity (Waring, 2000). Waring blames Jonsen and Toulmin for conflating phronesis with techne in their work, *The abuse of casuistry: A history of moral reasoning* (1998). Waring suggests that a modern-day interpretation of phronesis may actually work as a conceptual model (moral prosthetic), but we need to be clear that this is a deviation from Aristotle's original notion.

In 2003 Svenaeus suggests that phronesis shows a way forward for medical ethics. Phronesis being a deliberative process rather than an outcome. He focuses on Hans Georg Gadamer's work where Gadamer takes inspiration from Aristotle (Svenaeus, 2003). Svenaeus reports that Gadamer considers the doctor-patient relationship as interpretive, and phronesis is the best way to apply ethical principles to medical decision making. This contrasts to Landes's account of Gadamer's work – *The Enigma of Health*, where Gadamer speaks of medicine being *techne with a difference* (2015). Svenaeus explores virtue ethics and phenomenological hermeneutics as alternative ways to reframe medical practice. Two papers allude to French philosopher Merleau Ponty's work on language shedding light on the meanings of techne, phronesis and praxis (Chan, 2005; Landes, 2015). Exploring Merleau Ponty's work was outside the scope of this focussed review.

In 2005 Chan looks at the application of phronesis in the context of end-of-life care in the Emergency Department (2005). He concluded that understanding this difficult context in the emergency room required an appreciation for the clinicians' actions (praxis), and their embodied knowledge (phronesis). This most closely resembles my understanding of the relationship between phronesis (knowledge process) to praxis (human action) as described in the beginning of this section. Chan also made me reflect on the terms enacted and embodied, these words will be revisited in Theme 7.

When thinking of good doctors, Kinghorn deals with the issue of medical professionalism and asserts that phronesis is a far better representation of the work of a clinician compared to techne. Kinghorn suggests phronesis must take the lead in steering educational initiatives in medical professionalism formation (2010). By now, it is becoming clear that most writers are using MacIntyres definition of practical wisdom and practice, rather than Aristotle's definition. This will be expanded on later.

Fuks, Brawer and Bodreau, through the foundation of physicianship, stipulate that cognition and character synthesised is expressed through the concept of phronesis. They conclude that doctoring cannot be simply described by the accumulation of skills that is techne (Fuks, Brawer and Boudreau, 2012). Philips and Hall write about phronesis in relation to nurses working in Australian General Practice (2013). They also align with the majority of the published predecessors, and state that the concept of phronesis enables the translation of techne to impact on the way in which organisations function. This is an interesting perspective on how the skill (techne)

relates to practical action (praxis). It also infers a shift in the goals/goods from health (which would use techne as a knowledge process), to the goal of flourishing (of self and others, applying it to an organisation), which would use phronesis as a knowledge process.

LeBlond writes about the *ends of medicine* and *ways of knowing* (2013). He does not really define phronesis in his paper. He suggests that the insight, understanding, and judgment required for phronesis forms the core competency of excellent physicians, and this has been the case for centuries. He speaks about the knowledge process moving from *knowing what* (episteme/techne) to *knowing how* (phronesis).

Braude brings a new, interesting perspective. He feels that clinical reasoning as techne is flawed because it does not account for intuition. He introduces the Aristotelian conception of intellectual intuition (nous) and its association to phronesis (2013). Kristjánsson states phronesis requires nous, but it combines nous with mastery of the correct desire to react (2015). Braude says, "*phronesis links both praxis and techne which is necessary for the work of a clinician"* (2013).

Phronesis is an intellectual virtue just as nous is. Nous is one of five excellences in knowledge that leads to the truth [NE VI 1139b 15] (Aristotle, 2004). The others being episteme (scientific knowledge), techne (technical skill), sophia (philosophical wisdom) and phronesis. Nous can certainly join the other excellences in informing the human action of praxis (which aspires to eudaimonia). Phronesis must be the master adjudicator of the excellences in knowledge when it comes to morally reasoned

action because it is the only one that places the knowledge in the context of a decision leading to action.

Braude is arguing against Pelligrino and Thomasma's concept that medicine is a techne (Braude references their old work from 1979 and 1981, but his paper was published in 2013). Pelligrino and Thomasma had clearly changed their position by 1993 and considered medical practice as phronesis, the whole of Chapter 7 is dedicated to this in their book (1993). Braude argues that Pellegrino and Thomasma exclude clinical intuition from their philosophy of medicine (2013), but he is referencing their old position. Braude's paper is problematic because he forms his argument on concepts that Pelligrino and Thomasma have progressed. He did not appear to recognise this. This highlights the dangers of only considering limited and dated sources of literature and claiming it is the author's current position.

One of the few critical commentaries of the adoption of phronesis in understanding medical reasoning comes from Bontemps-Hommen, Baart and Vosman (2019). They speak of phronesis as a heuristic concept that can be adapted (Bontemps-Hommen, Baart and Vosman, 2019). They define the good of medicine as only known retrospectively, which can be problematic when it comes to decision making. They are candid in their summation that phronesis lacks practical application and it is merely a theoretical concept. They attempt to redefine phronesis, giving it a contemporary feel that considers both the individual and the organisational environment. Bontemps-Hommen, Baart and Vosman's relative scepticism comes as

refreshing change to the consensus in written literature which concurs that phronesis is the right modality for conceptualising what good doctors do.

I agree that the best outcome in medicine can only be known retrospectively in many cases, thus creating a challenge in decision making orientated towards flourishing. I have devised another heuristic model considering medical decision making (categorised as safe, right, good, and best) and the overview that phronesis offers, this heuristic can be found in the appendix (A2.2). It highlights that the best decision can only be known retrospectively. Follow up of decision consequences and intellectual curiosity are essential feedback elements in developing professional practice. I do not agree with Bontemps-Hommen, Baart and Vosman that phronesis is merely a theoretical concept, but I do agree that it should have applications at both individual and organisational levels in order to have relevance to modern day medical practice.

In answer to the question *Is phronesis an appropriate term to use for developing good doctors?* The literature seems to support that it is the right term, despite undergoing an evolution from Aristotle's original thoughts (that medicine is a techne). It is more in line with MacIntyre's definition which exerts that that medical practice is phronesis. The literature assumes that phronesis is inherently useful, this needs more robust intellectual, theoretical, and empirical support to prove the resilience of phronesis in the longer term (see *generation of new theory* section 2.12).

Theme 2 – Judgement versus Evidence-Based Medicine (EBM)

This section draws content from 13 papers from the literature review. Most have identified that the process that best describes the practice of medicine is phronesis. The following important headlines can be drawn from the papers below.

- The practice of medicine is best defined as phronesis (Hutson and Myers, 1999; Tyreman, 2000; Montgomery, 2009).
- Good clinical practice is the amalgamation of scientia (episteme) and phronesis (Fugelli, 1998).
- Medicine should not be defined as a science and physicians do not practice it that way, nor should it be described as an art (Montgomery, 2009).
- Phronesis translates techne (skill) to impact (Phillips and Hall, 2013).
- Phronesis captures what is really happening (Russell and Greenhalgh, 2014).

Some papers go on to say that clinical guidelines need to reflect this amalgamation of judgement and evidence (Fugelli, 1998), and that an understanding of phronesis is required to develop the entirety of medical education (Boudreau and Fuks, 2015). Phronesis bridges the theory-practice gap (Paes, 2019; Darnell *et al.*, 2019).

The strongest narrative is the contrast between the dominant evidence-based medicine/scientism practice of medicine and the medicine that is dependent on exercising judgement in a contextual way i.e., using phronesis. All the papers emphasise the limitation of scientism and technical rationality. Fugelli says that "*only to a limited extent can clinical practice be based on science"* (1998). Goldner and Bilsker state that (in psychiatry) the decision making process *"balances individualized*

clinical acumen (phronesis) and information derived from empirical study of groups of patients (techne)" (1995). Muench states that "*techne without phronesis results in unguided mechanical healthcare that can cause disease just as readily as health"* (2018).

One key argument favouring phronesis over technical rationality and EBM is that medicine is messy and complex (Schei, Fuks and Boudreau, 2019), medical judgements are fundamentally about the management of uncertainty (Muench, 2018), and complex ethical situations and uncertainty are commonplace in medicine (Tyreman, 2000). Medicine is constantly evolving with regard to medical, technical and ethical considerations (Hutson and Myers, 1999). Experienced doctors are more likely to rely on judgement, whilst early career doctors rely more on rules (Arthur *et al.*, 2015).

Technical rationality in the form of evidence-based medicine seeks universal truths and generalisation (Macnaughton, 1998; Montgomery, 2009). This is a paradox because it undermines the importance of context and particulars and results in demoralised clinicians who are left with patient narratives that do not fit the evidence (Montgomery, 2009). Scientific rationality is haphazardly applied to individual treatments (Phillips and Hall, 2013).

Outcomes are not always neatly quantifiable and objective (Muench, 2018). Fugelli suggests that EBM is essential but not sufficient (1998). EBM can obscure evidence (Macnaughton, 1998). Overemphasis on this form of techne is dangerous (Fugelli,

1998; Tyreman, 2000). It can give the impression that medicine can master the universe and it results in patients being treated like bio machines. This is further exacerbated by the commercialisation and bureaucratisation of medicine. Fugelli refers to this trend as medico-scientific megalomania. In this situation described by Fugelli, medicine loses its purpose and meaning (Paes, 2019). There is an instrumentalist misapplication of reflection (Schei, Fuks and Boudreau, 2019) and scientific maxims do not consider philosophical enquiry, and there appears to be no time for philosophy (Tyreman, 2000; Schei, Fuks and Boudreau, 2019).

In medical practice, what is really happening is a fusion of rational and emotional decision making, best represented by phronesis (Russell and Greenhalgh, 2014). The aim is for effective treatment, not perfect treatment. Doctors are pragmatists (Fugelli, 1998) and the doctor acts for the sake of patient wellbeing and has one key instrument to do this – phronesis (Hutson and Myers, 1999). Doctors use practical reason to navigate the course of illness and disease (Gatens-Robinson, 1986), they account for the patient's (sometimes) irrational perspective. Interpretation, deliberation, and context are key. Montgomery refers to this as analogical interpretation and contrasts this with the hypothetico-deductive methods of technical rationality and scientism (2009).

These debates are not new, they caused controversy at the time of the Enlightenment period with Descartes favouring empiricism, technical rationality, and certainty (1637 AD), lifting mankind out of medieval darkness and religious dogma (Muench 2018). He was termed a renaissance rationalist. Michel de Montaigne

contested Descartes and was classed as a renaissance humanist. He stressed the importance of meaning, context, and metaphysics. History has instructed us of the dominant scientific rationality narrative and this prevails in healthcare to this day (Muench, 2018).

Theme 3 - Phronesis in the context of virtue ethics

This section draws content from 9 of the papers from the literature search. It is beyond the scope of this literature review to present the larger debate of rules-based ethics, also known as principlism, leading to failings in medical practice, though this has been touched upon in the introductory Chapter. The predominant rules-based ethical frameworks include deontology and utilitarianism.

> *"Consequentialism in medical ethics sees good practice as consisting in securing good outcomes for patients and society and deontologism sees it as practicing in accordance with ethical rules or principles. By contrast, virtue ethics sees good practice as practice that results from the virtuous moral character of the doctor."*
>
> (Kotzee, Ignatowicz and Thomas, 2017 p2)

The papers derived from the literature search adopt the stance that rules-based ethical frameworks are not suitable due to their abstract nature when applied in context. Rules-based ethics is inept in dealing with complexity. Its aspiration is to provide minimum standards rather than aspiring for excellence (Kotzee, Ignatowicz and Thomas, 2017). Schwartz and Sharp offer further compelling reasons why rules-based ethics fails, in their book on practical wisdom (2010).

Virtue ethics is enjoying a revival in discourse about professional ethics (Bondi *et al.*, 2011; Kinsella and Pitman, 2012). Seminal literature by MacIntyre, Pelligrino and

Thomasma make a strong case for the need for virtue ethics and in particular the intellectual virtue of phronesis in contemporary medical practice (MacIntyre, 1981; Pelligrino and Thomasma, 1993). This has been reinforced by more recent texts (Oakley and Cocking, 2004; Toon, 2014; Neighbour, 2016). Rhodes argues that medicine has a special ethic that cannot be captured by common ethics (2020).

Virtue ethics and phronesis seem central to the formation of good physicians (Svenaeus, 2003; Bishop and Rees, 2007; Montgomery, 2009; Leblond, 2013; Braude, 2013). Svenaeus calls for more research to determine this. Virtue ethics would provide a platform where the profession and society are in dialogue about the telos of medicine (Bishop and Rees, 2007).

Hall, a practising surgeon, reflects on how virtue ethics works better than standard ethics in his field (2011). When he talks about standard ethics he is referring to the widely taught Beauchamp and Childress four-principles model; autonomy, beneficence, non-maleficence, and justice (2001). Schultz and Carnevale write that the four principle model can be applied unreflectively and without real engagement with the moral imperative (1996). A doctor needs to know the right and good thing to do for a particular patient in a particular context. The right thing to do is determined by the particularity of the goals of medicine. That is what makes it phronesis (Svenaeus, 2003).

Phronesis is of central importance in making ethical choices, it is an intellectual virtue (as defined by Aristotle) which instructs the moral virtues. Aristotle says the *“moral*

virtues make the goal correct, phronesis makes what promotes the goal correct" [NE VI 1144a 7-9] (Aristotle, 2004). He goes on to claim that *"we cannot be fully good without phronesis, nor can we possess phronesis without moral goodness"* [NE VI 1144b 30-33] (Aristotle, 2004).

Virtue ethics is the most useful approach where the practitioner is applying skills and then socialising it into professional practice (Radden and Sadler, 2008). It is the application of science into everyday life and it requires an ethical orientation (Morley, 2009). Kristjánsson writes that focussing attention on phronesis could be a helpful way to rescue professional ethics from a culture of compliance and unreflective code/rule touting. Phronesis is a concept that can orchestrate the virtue ethics approach in medicine (Kristjánsson, 2015). It can really capture the essence of the clinician's moral orientation, something which common rules-based-ethics lacks.

The most detailed attempt to articulate an Aristotelian model of phronesis within the parameters of a virtue ethics approach, informed by contemporary moral psychology and Aristotle's original insights, is that described by Darnell *et al* (2019). While commenting on the details of their 4-component model would take me too far afield in a thesis that focusses on phronesis in a bioethical context, it is in order to present here a visualisation of the model (Kristjánsson personal correspondence 2020). This model has not yet been applied to the constituents of phronesis in medicine. This model will be referred to in the discussion section when reviewing its application in the context of the EPGPS results.

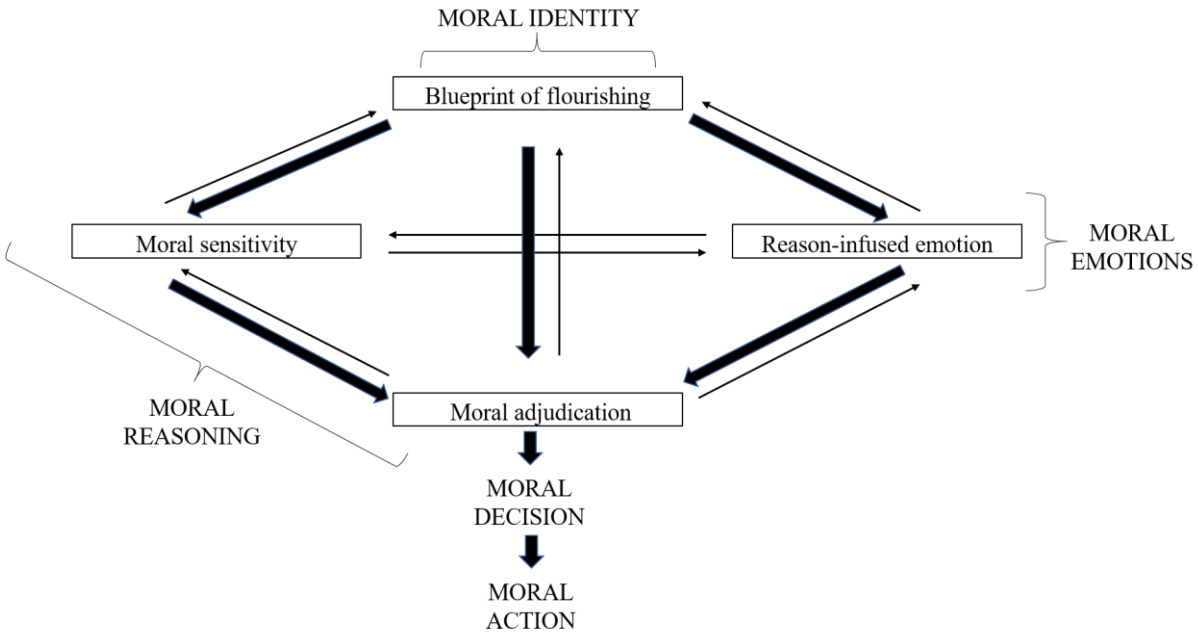


Fig 2.3 A Neo-Aristotelian Model of Wise (Phronetic) Moral Decision-Making

THE PRESENT

Theme 4 - Working with Phronesis as a conceptual model: Problematics and Positionings

This section draws content from 4 papers in the literature review. This is significantly less than in the other themes, but they cover important conceptual considerations that are often overlooked. The main paper it will refer to is by Kristjánsson (2015).

Theme 1 began to present the problem that the term phronesis and affiliated terms, are interpreted, and therefore used in different ways by different authors. This means it can be difficult to use phronesis as a conceptual framework when there are significant conceptual controversies. Kristjánsson sought to present an analytical framework that would allow phronesis researchers to identify their own position and

identify the conception of phronesis that they are using (2015). Kristjánsson fervently appeals to all researchers to take a stand on the controversies. His framework calls for those occupied with studying phronesis to consider four binaries:

i) Universal or Relativist

ii) Generalist or Particularist

iii) Natural or Painful

iv) MacIntyre or Aristotle

The first binary is socio-moral and ask researchers to commit to being universalist or relativist in their conceptions of phronesis. MacIntyre was predominantly a relativist. He suggests that virtues are inextricably linked to moral and cultural traditions, thus are specific for the group being studied, and not universal in nature. One group may abhor a virtue that another group respects. Martha Nussbaum on the other hand described an objective truth about human nature, she is universalist in her socio-moral orientation. I am Universalist in my socio-cultural outlook as I believe there are certain essential virtues that humans require to thrive. My own stance is influenced by Maslow's hierarchy of need which describes sequential levels in which human motivation moves (1943).

The second binary relates to epistemology and the nature of knowledge. One interpretation of phronesis is that it operates on the basis of value adjudication in particular circumstances, which means it is strongly particularist**.** It is dynamic and flexible and responds to the context**.** This is contrasted with the generalist

epistemological view which considers the big picture and the aspiration to eudaimonia (flourishing). I incline towards being a particularist, we can have a good grasp of the context and the ramifications of contextual decisions, but a widely accepted concept of flourishing is more esoteric.

The next binary relates to the psychology of how difficult it is to learn, develop and master phronesis. Is it natural or painful? The painful binary recognises that moral development and character refinement is a journey that has obstacles. Feelings can be unfamiliar and uncomfortable in the process of working through deliberations. 'Natural' assumes that with good character phronesis should emerge organically. My position is that phronesis is painful, especially when you consider the literature supporting its development in times of moral distress and complexity (see theme 10).

The final binary is based on the understanding of praxis (Aristotle) or practice (MacIntyre). Aristotle sees phronesis as a specific mode of considering moral ends within a moral praxis (the way in which the theory or skill is embodied or realised). MacIntyre states phronesis is related to internal goals and complex social practice. Macintyre describes phronesis as un-codifiable. Dunne seems to challenge Kristjánsson's binary by stating that MacIntyrean practice cannot be insulated from Aristotelian Praxis (Bondi *et al.*, 2011). A conciliatory position would appreciate that each encounter in medicine concerns a moral dimension with respect to judging what flourishing means in a specific context for an individual patient. The concept of flourishing is an ethically fraught concept. We can therefore deduce that it would

affect the daily practice of a clinician. I differ from MacIntyre in that I think some aspects of phronesis can be codified, and as such, reflected as outputs of this thesis.

Kotzee, Paton and Conroy, in their paper *Towards an Empirically Informed Account of Phronesis in Medicine* are one of the few authors to acknowledge the conceptual differences between Aristotle and MacIntyre's accounts of Phronesis (2016). Considering the 68 papers from this literature review as a whole, most refer to the MacIntyrean concept of phronesis with few staying faithful to Aristotle. This would align with Kristjánsson's exercise on analysing four papers with his binaries (Beresford, 1996; Hutson and Myers, 1999; Tyreman, 2000; Kaldjian, 2010), where all four were found to be MacIntyrean in their application of phronesis in practice.

Grasping Kristjánsson's binaries allow a more nuanced understanding of phronesis. This will feed into the reflexivity of the research that is being conducted for the PhD. During the literature review it was clear that there were a few publications which used the word phronesis with a weaker grasp of the connotations.

Theme 5 - Phronesis orientated towards professionalism or for ethical decision making?

Kristjánsson's pivotal paper on how to appraise the conceptions of phronesis, and their divergent philosophical assumptions (2015) described in detail in theme 4, was used as the screening lens of whether the authors were taking a view of phronesis that was orientated toward the whole of professional practice (MacIntyrean), or a view that focussed on ethical decision making in the moral sphere (Aristotelian).

Within this literature review the authors do not appear to recognise that there is more than one position, and it is only by critically analysing the papers that their position became clear. This section draws upon 6 papers from the literature search.

Toon, in his book *A Flourishing practice* (2014) applies the work of MacIntyre (1981) to the current state of healthcare provision (in the UK). Being MacIntyrean orientated, Toon takes a view that phronesis is orientated to the whole of professional practice. This is a view also taken by clinician authors such as Sadler, who reviewed professional practice in psychiatry training (Radden and Sadler, 2008), Hilton and Slotnick who wrote about proto-professionalism (2005), Kinghorn who wrote about the professionalism movement where professionalism is inseparable from other domains of practice (2010), and Boudreau, Creuss & Cruess and Fuks who write about professional identity and physicianship (Boudreau and Fuks, 2015; Boudreau, Cruess and Cruess, 2011).

Non-clinical authors like Hovedenak and Wiese designed and evaluated a phronesis orientated undergraduate MBChB curriculum revision (2018), with a view to focussing on professional development. They clearly also take the position that phronesis relates to the whole of professional practice. Conversely, Kristjánsson articulates his position as Aristotelian (2015), that is, phronesis as restricted to ethical decision making, though he recognises much of the work done in medicine has a strong moral dimension. Fellow philosopher Schultz also takes this stance when writing about ethics and interpretation in illness narratives. His co-author Flasher is a clinical psychologist (Schultz and Flasher, 2011). Joining this list of Aristotelian

leaning authors, who see phronesis as relating to ethical decision-making is Dr Aisha Malik, who previously worked as a pathologist, and now works as a senior teaching fellow focussing on ethics and bioethics. She is lead author for a paper which analyses phronesis as components (based on Kaldjian's 5 step model) of ethical decision making (Malik, Conroy and Turner, 2020).

From the literature described in this section it appears that the clinicians (including myself) favour a position that covers the whole of clinical practice (MacIntyrean), and that non-clinical academics lean more towards phronesis application in the context of ethical challenge (Aristotelian). The clinicians imply that clinical practice involves ethical and moral choices, because in dealing with patients they deal with the interpretation of an illness narrative and a conundrum of what is right and best in regard to decision making. This interpretation has moral consequences although it covers a wider sphere that Aristotle envisaged originally with his link between morality and phronesis.

Theme 6 - Lack of empirical work

This critical interpretive literature review analyses the literature relating specifically to phronesis and medicine. The majority of work is theoretical in nature. The viability of these theories need to be tested with empirical studies and consistency needs to be tested against real experience (Kotzee, Paton and Conroy, 2016; Darnell *et al.*, 2019). Numerous authors have identified this gap and have called out for more empirical work. This section draws upon 4 papers describing the lack of empirical

work, and 12 papers presenting empirical research, 2 additional papers were added after the literature search as they were noted to be relevant.

Carnevale observes that there are phronimoi in practice, but they have not been identified or studied (2007). Bontemps-Hommen, Baart and Vosman, in their semi-critical piece, state that phronesis lacks evidence rooted in praxis (2019). Kotzee, Paton and Conroy went a step further and laid out the considerations required for observing phronesis empirically (2016). They emphasise that research is required not just for understanding phronesis, but also to promote it. Promotion of a phronesis intervention would need baseline data, and that reinforces the need to start some empirical work. They go on to say that minimal research has been performed on the psychology of phronesis and the enactment in real clinical decision making. Kotzee Paton and Conroy suggest narrative research is the best way to capture this with storytelling being the preferred method (2016). They conclude the paper by introducing the research project, *Phronesis in the Medical Community* AHRC funded 2015-2018. It was a project designed to collect medical students' and doctors' narratives of phronesis in medical practice. This research was published just prior to the submission of this PhD thesis (Conroy *et al.*, 2021).

Aristotle himself suggests phronesis is an inexact science (Irwin, 2000). MacIntyre suggested phronesis is uncodifiable (MacIntyre, 1981). Empirical work would require a sensitive and nuanced understanding of phronesis.

Table 2.4 Summary of the published empirical work on phronesis in medicine.

Paper	Comment
(Cook and Leathard, 2004) ***Learning for clinical leadership.***	Ethnographic observational study on 4 nurses. The results showed that Clinical leaders needed education that taught them how to become a phronimoi.
(Nieminen, Mannevaara and Fagerström, 2011) ***Advanced practice nurses' scope of practice: a qualitative study of advanced clinical competencies.***	Focus group interviews on 34 Scandic advance nurse practitioners (ANPs). The results showed clinical competence is based on facts, subject knowledge, interdisciplinary knowledge, and other scientific knowledge that develops cognitive competence. Refers to head-heart-hand model for articulating phronesis.
(Baum-Baicker and Sisti, 2012) ***Clinical wisdom in psychoanalysis and psychodynamic psychotherapy: a philosophical and qualitative analysis.***	8 psychotherapists interviewed (narrative). Responses coalesced around the following themes: (1) Creative Technique and Pushing Treatment Limits; (2) Wise Listening; (3) Humility, Kindness and Humour; (4) Pearls of Wisdom; (5) An Appeal to Paradigm Cases; (6) Mentors and Mentoring.
(Phillips and Hall, 2013) ***Nurses and the wise organisation: techne and phronesis in Australian general practice.***	This was a mixed method study-rapid ethnographic appraisal of 25 general practices and year-long case studies in six Australian states. Conclusion - Nurses also exemplify phronesis in the clinical setting, and techne in the organisational setting.
(Russell and Greenhalgh, 2014) ***Being 'rational' and being 'human': How National Health Service rationing decisions are constructed as rational by resource allocation panels***	Linguistic ethnographic research of clinical commissioning group individual funding research panels. Panel member's language analysed. Explores how rationality is enacted and accounted for in deliberations about the rationing of health care. Aristotle's notion of phronesis provides a useful lens for theorising our observation of panel deliberations.
(Plews-Ogan *et al.*, 2016) ***Wisdom in Medicine: What helps Physicians after a medical error?***	Adopted "post-traumatic growth" as a model. Semi-structured interviews with 61 physicians who had made a serious medical error.

(Gunasekara, Patterson and Scott, 2017) ***What makes an excellent mental health doctor?' A response integrating the experiences and views of service users with critical reflections of psychiatrists***	Iterative qualitative study. Qualitative research on patients (22) perception of excellence. It illustrated the clinician having to *know what* and *how* to apply knowledge.
(Hovdenak and Wiese, 2018) ***Promoting professional development in medical education: perspectives from the Norwegian medical school in Tromsoe***	Qualitative study following the revision of the study programme in medicine at the Medical School. Phronesis embedded in new curriculum. Project evaluated before and after on 40 med students. 20 on old curriculum, 20 on new curriculum.
(Saraga, Boudreau and Fuks, 2019) ***Engagement and practical wisdom in clinical practice: a phenomenological study.***	IPA qualitative research. 11 interviews on a purposive sample of physicians, considered themes of what constitutes Phronesis (engagement).
(Paes, Leat and Stewart, 2019) ***Complex decision making in medical training: key internal and external influences in developing practical wisdom***	Qualitative semi-structured interviews on training doctors regarding difficult decision making and key training influences. Grounded theory approach. Conceptual model with internal and external factors presented.
(Ko *et al.*, 2020) ***Phronesis of nurses: A response to moral distress.***	Narrative research, 27 nurses selected (Taiwan). Recommendations : Face moral distress in a positive manner. Focus on solution, not cause. Future education should be Phronesis orientated.
(Kristjánsson *et al.*, 2020) ***Phronesis: Developing a conceptualisation and an instrument.*** *non-clinical*	Two large empirical pilot studies (Adults=285/Adolescences=207) to test new Phronesis inventory. Phronesis involves moral perception, moral integration, a blueprint of the good life and emotion regulation. This conception may address the gappiness problem (knowing good – doing good).

The total number of qualitative empirical papers from the systematic literature search was 10. The Kristjánsson *et al* paper did not strictly relate to medicine and was obtained through personal correspondence. The Paes, Leat and Stewart (2019)

paper was found from a hand search, it was not picked up in the systematic literature search as it used the term practical wisdom rather than phronesis. These were added as they were deemed to be relevant to this research. From the studies in this literature review most were small scale qualitative studies apart from the 2020 work by Kristjánsson *et al.*

Two further empirical studies were included later:

1) The Conroy led Arts and Humanities Research Council funded project on phronesis was published after this literature search was conducted (Conroy *et al.*, 2021). Their work sampled 131 medics (predominantly students/foundation doctors and 23% established practitioners) in a three-year ethnographic study, their focus was decision making in medical practice.

2) Another report that was not picked up in the literature search, (because it did not contain the keywords phronesis AND medicine, and it was an organisation publication rather than a journal publication), was by Harrison and Khatoon who evaluated an online educational intervention to enhance virtue knowledge and reasoning in trainee lawyers, teachers and medics (Harrison and Khatoon, 2018). They were able to get responses from 277 medics (pre intervention) and 207 medics (post intervention). They concluded that the online educational intervention aided character-based ethical reasoning (as opposed to rules-based reasoning) and improved the theoretical understanding of phronesis.

In total I identified 14 studies which were performed on psychotherapists, clinical leaders, mental health patients, medical students, physicians, nurses, and the

general public. I am aware that Professor Plews-Ogan is evaluating an undergraduate medical curriculum for phronesis (personal correspondence). This is based on the reflective, supervised learning that is generated from clinical longitudinal placements (Plews-Ogan, 2014). There is no academic paper outlining the programme. Published material does not represent or capture reality, though it can be a representative in understanding trends; It is important to recognise the existence of grey literature and tacit ways of knowing when discussing phronesis evaluations.

I compared these titles with the 15 titles from the *Phronesis in the Medical Community report* (Conroy et al., 2018) which asked the research question *"What empirical, qualitative research on phronesis has been done in the past?".* They used 14 search terms and 7 databases. The 794 results were distilled to 15 papers. Interestingly, only one of the titles were common to both searches. It is unclear why there was not a more significant intersection.

From the Conroy *et al* literature review the majority of the empirical studies they found were conducted on nurses. I was particularly interested in 7 of the papers which detailed the requirements for developing phronesis through educational opportunities (practical training/experience is essential/preceptorships help/time and space to develop phronesis needed/reflection is important/phronesis is linked to the culture it is developed in/learning from colleagues is important and finally a paper suggesting phronesis cannot be taught directly). These issues will be revisited in Themes 11 and 12. The aim of this section was to emphasise the relative lack of

empirical research on phronesis in medicine. It also outlined the nature of the empirical research that has been performed so far.

Theme 7 - Individual phronesis within Organisations

Theme 1 explored some Aristotelian virtue theory terminology and the different ways the same term can be interpreted. We assume that people understand them in the same way, but this is wrong, and has led to lack of clarity in reviewing the published works. Theme 3 puts the individual at the centre of the discussion, because that is the level that virtue ethics functions. Theme 4 considered Kristjánsson's analytic framework to assist researchers understand some conceptual assumptions. All these areas focus on the individual.

The bulk of literature focuses on the individual development and attainment of phronesis. This section will not be covering the vast topic of individual phronesis, but it will articulate some themes relating to the individual as identified in the literature search. There is some interesting literature emerging that speaks of how individual phronesis relates to organisations and institutions. It was that contrast that I wanted to highlight in this section. This would also embrace the concept that an aspiration to eudaimonia would include the communities, societies, and populations that organisations have influence over. This section draws upon 16 papers from the literature search.

Individual Phronesis: Expressed-Enacted- Embodied, which is the better term?

One key idea is the importance of individual prosocial behaviour (in preference to altruism which does not attend to flourishing of self). Prosocial behaviour can be measured and does not depend on any internal factors (Bishop and Rees, 2007). Prosocial behaviour has also been identified as a characteristic of generalised wisdom (Meeks and Jeste, 2009), reinforcing the need to know what it is and promote its expression.

Expression is an external enactment of a behaviour (*doing*) and may not engage any individual moral imperative. Dunne describes phronesis as *being,* and techne as *doing* (2009). Bodreau and Fuks draw on Dunne for inspiration when they use the terms *doing* and *being* in the title of their paper (2015). Dunne presents the idea of internal goods of a practice (which he uses synonymously with the term profession) and splits the internal goods into two categories. One related to the end result of the practice (telos), the other related to the qualities of the practitioners themselves (Bondi *et al.*, 2011). He states together these qualities focus and direct the practitioners' energy and attention.

Sveneaus speaks about *feeling* (2014) and Malik, Conroy and Turner write about the importance of *motivation* as a key instigator of phronesis (2020). These are very internally programmed attributes which are more coherent with engagement and embodiment. These papers demonstrated the validity of Dunne's assertion.

Bishop and Rees allude to the importance of measurement in assessing wisdom (referring to prosocial behaviour). Measurement plays into the technical rationalist thinking, Dunne considers this in opposition to wisdom development as feelings and motivation will be hard to measure (Bondi *et al.*, 2011). Saraga, Boudreau and Fuks (2019) along with Kotzee, Paton and Conroy (2016) speak of the importance of personal *engagement* in the task. Saraga actually uses the term engagement synonymously with phronesis. Kumagai links personal *agency* to phronesis (2014):

> *"A physician sees her- or himself as a moral being-in-the-world who acts justly for the benefit of the self and of humankind. It is the continual shifting of one's gaze from internal values, motivations, and perspectives outward into the world."*
>
> (Kumagai, 2014)

How do we encourage that level of internal involvement? It must be at least related to knowing the goals and purpose of the task (telos). If one's goal is to strive for excellence with the moral orientation of eudaimonia, then the actions should follow. These qualities will be important to identify for when considering the characteristics of my empirically derived wisdom exemplars which I present in Chapter 8.

I finalise this literature review after the empirical work has been performed. I entitled the study the EPGPS study – The *Enacted* Phronesis in General Practitioner Study and ethical approval was approved on those grounds. If I were to start afresh, knowing what I know now, I would use the term embodied phronesis rather than enacted phronesis, because the word embodied includes internal processes like motivation and emotion, whereas enacted could just refer to an external appearance of phronesis. I would like to suggest that *embodied* is a better term when it comes to

phronesis. This would not change my rationale, methodology or research questions significantly. I will address this matter again in the discussion and conclusion sections of the thesis.

Phronesis means the physician assimilates the biomedical, clinical, intuitive, and interpreted knowledge and comes to a *good* decision that addresses human need with action (good orientated towards flourishing, which is ethically fraught, on a MacIntyrean conception). Muench brings in an interesting perspective, suggesting that *context* can affect the embodiment of phronesis. He describes how third world countries with sparse medical resources would require a more rapid embodiment of phronesis (Muench, 2018). It might follow that rationing of resources in any setting could fast track the adjudicative function developing, this could relate back the theme 2 and the socio-culturo-political climate we are in now, requiring the production of phronimoi to deal with all the competing external challenges. I would agree that the context of modern-day medical practice is more complex than ever, with more competing demands in relation to sparsity/rationing (particularly in the NHS) and also the paradox of choice. This reinforces the call to develop phronesis.

Phronesis and Organisations

One organisational rationing exercise was the subject of study. Russell and Greenhalgh wanted to see how decisions were made on Primary Care Clinical Commissioning Group (CCG) individual funding research panels – IFR panels (2014). They concluded that rational universal rules and policies were known and were a front for control, order, and accountability (for those within the organisation

and for those observing the organisation from the outside). Decisions often boiled down to individual instinct and empathy which led to convincing the panel to act a certain way. The authors concluded that decisions in these panels were guided by collective phronesis, identifying a combination of the subjective and the rational aspect of the deliberation.

Davidoff also spoke of phronesis being needed in healthcare improvement endeavours. He suggested that healthcare improvement required the science of social change to be considered with biomedical and clinical insights and a moral orientation (Davidoff, 2011). Phillips and Hall write about nurses in wise organisations in their paper on Australian General Practice (2013), they stated that the introduction of nurses to general practice brought phronesis to clinical work (especially in dealing with complex patients), and techne to the organisation, resulting in greater organisational wisdom.

Stanak discusses tragedy in the neonatal setting, describing the uncertainty of the work and moral injury as a result of difficult decisions (2019). He asserts that virtue ethics is essential in such settings. He outlines the characteristics of the neonatal intensive care physician; moral virtues such as courage, compassion, trust, integrity and the need for the intellectual virtues, episteme and phronesis. He states that the healthcare organisation needs to recognise the ethical issues and their ramifications. He calls for organisations to understand phronesis so that better decisions can be made.

Bontemps-Hommen, Baart and Vosman attempt a new definition of practical wisdom within their paper on *Practical Wisdom in complex medical practices: a critical proposal* (2019*)*. Their definition below speaks of acting jointly. It acknowledges institutional and systemic pressure and working in circumstances of complexity. This implies the need for shared goals and organisational leadership. Social practices need to be included in this definition if it is to truly attend to flourishing. This is affirmed in a paper by Martimianakis on medical education, social responsibility and praxis (2016).

> *"Practical wisdom is the capability which emerges in acting jointly in medical practices, consisting of knowing how to remain focused on achieving the good for every individual patient, within the context of the practice and its telos, in ever changing situations, and how to accomplish this through the most appropriate means, while operating in complexity and institutional and systemic pressure."*
>
> (Bontemps-Hommen, Baart and Vosman, 2019 p103)

Deliberated judgements, with a moral consequence, need to be made at all kinds of levels in healthcare settings. The last five papers illustrate how phronesis needs to be understood and embodied at organisational level too. This is something that could be explored with further research. That research would need to make a more systematic difference than seen so far in the literature between individual and collective/organisational phronesis. Aristotle does discuss collective phronesis in his *Politics* (Kristjánsson, personal correspondence) as an attribute of rulers/managers, but when Aristotle's account of phronesis is referenced in the literature surveyed here, the focus remains exclusively on his account of phronesis as the intellectual virtue of the individual, in the *Nicomachean Ethics*.

Theme 8 – Telos, patient care, narrative, and ways of knowing

For this section I will draw upon thirteen papers from the literature review. They cover the topic of *ways of knowing* and how these feed into patient care. Central to this activity is ascertaining the goals of medicine, the telos (Svanaeus, 2003; Bishop and Rees, 2007).

In this section, I accept that scientific ways of knowing are necessary and important, but I wish to focus on the neglected ways of knowing. These ways have featured in the literature I have read. They should accompany, with equal vigour, the scientific way. If a full range of ways of knowing is not embraced, we risk fragmenting the patient (and ourselves). Within the context of general practice, Gillies states, *"A truly holistic approach means the interaction of the whole patient and the whole doctor"* (2005).

Phronesis is being used as a conceptual framework for understanding and capturing what good doctors do. Good doctors need to provide good patient care. Good patient care would involve knowing the science and knowing humans i.e. Scientism - belief in the power of scientific knowledge and techniques, and humanism – understanding the value and agency of people (Boudreau and Fuks, 2015; Chin-Yee, Messinger and Young, 2019).

The Enlightenment period saw the rise of scientific empiricism, as explained earlier (Montgomery, 2009). This scientific grounding has been beneficial in improving standards and consistency of provision. Good doctors are familiar with Evidence-

Based Medicine (EBM) and its application in providing good patient care. Reliance on Scientism may have detracted, or even diverted from the telos of medicine. Intervention increasingly limits reflection on the goals of medicine, which should:

> *"encompass the relief of pain and suffering, the promotion of health and the prevention of disease, the forestalling of death and the promoting of a peaceful death, and the cure of disease when possible and the care of those who cannot be cured."*
>
> (Callahan, 1998)

Callahan embraces the inevitability that death is also a part of good medicine. Much EBM focusses on intervention and prolonging life. Stanak refers to this in his reflections on the work of a neonatal Intensive Care Unit physician (2019). He speaks of the futility of some interventions and the moral injury that can result. It assumes that the goal of medicine is to have a long life. Butlin searches for lessons on practical wisdom in her work as a psycho-oncologist (2015). She describes how patients have taught her about attending to the mind, body, and soul. She links wisdom to the soul, the soul to purpose, the purpose to goals of care. She draws upon the work of Dr Rachel Remen and the development of an integrative health programme which is relationship focussed (Rishi Institute). Remen also established the *Healers Art* programme. This is an innovative curriculum aimed at understanding illness, reintegrating the heart and soul into contemporary medicine. This programme is now taught in half of all US Medical School (rishiprograms.org). Remen has written many books, the most famous being *Kitchen table wisdom* (1996).

The literature suggests that the physician needs to know the *science* and *the world*. Kumagai draws upon Habermas when stating this (Kumagai, 2014). Chin Yee, Messinger and Young refer to it as multiple ways of knowing (2019). How can

physicians know the world? The work that I have reviewed suggests we can know the world through self-awareness and through the humanities (Hilton and Slotnick, 2005; Boudreau and Fuks, 2015;Chin-Yee, Messinger and Young, 2019). Self-awareness and knowing oneself enables a greater degree of professional identity formation and clarifies the limits of understanding more effectively. It guards against the physician imposing their own story on that of the patients.

The potential is endless in learning from humanities; literature, theatre, prose, and art, each bring something to the quest of understanding the world. One of the most important learning outcomes in engaging with humanities is the importance of subjective interpretation. Here objective truths of scientism evaporate. The complexity of interpretation and the uncertainty that it brings become evident. Physicians should not feel threatened by this, but accept its existence and build it into the heuristic of clinical reasoning (Gatens-Robinson, 1986).

The literature focussed particularly on narrative as a means to understanding (Schultz and Flasher, 2011; Russell and Greenhalgh, 2014; Kotzee, Paton and Conroy, 2016). Kotzee, Paton and Conroy discuss narrative in the context of studying phronesis in doctors. Russell and Greenhalgh discuss it in the context of understanding narrative ethics to assist organisational resource allocation decisions. Schultz and Flasher stress how narrative knowing involves empathic understanding of illness and affliction. The language and the discourse express experiential and social realities along with the significance of those realities.

It is essential physicians learn to interpret stories, as this is how most patients present to physician. Anecdote (singular contextual story) becomes the central focus and it loses it pejorative disdain that positivism gave it (Montgomery, 2009).
After the story has been understood, Leblond attempts to describe what needs to happen next in progress towards phronesis (2013). He describes how the physician needs to move from *knowing that* (craft knowledge) to *knowing how* (problem solving and experiential learning) via *knowing what* is important (prioritising problems, recognising challenge, setting goals). This is whilst incorporating *knowing who* (understanding the patient and their life situation) and *knowing how-it-feels* (emotional connection and empathy). Some of the ways of knowing describe above could be informed by intuition (Montgomery, 2009; Braude 2013; Russell and Greenhalgh, 2014). Intuition it not simply premonition, it is related to experience and expertise via tacit knowledge.

The task of assimilating all the information that came from the various ways of knowing need to feed into a decision-making process. Good medicine should recognise that this is usually a negotiated task between the doctor and the patient (see figure Appendix A2.2) Doctor and patient co-construct a way forward, agreeing on shared goals (Reeve, 2010; Schultz and Flasher, 2011). This constitutes the important movement the is known as the “shared understanding of medicine” (SUM) (Lehman, 2017).

THE FUTURE

Theme 9 - Theory to practice, knowledge translation and decision making

Most academic research has the perennial problem of turning theoretical ideas into practice. Phronesis is no different, it has the additional challenge that the theory is not even justified by empirical evidence (Kotzee, Paton and Conroy, 2016). The theory-practice gap has been recognised and documented in relation to phronesis (McKie et al, 2012; Kotzee, Paton and Conroy, 2016; Chin-Yee, Messinger and Young, 2019, Darnell et al., 2019; Kristjánsson *et al.*, 2020). This section will draw upon 11 papers from the literature search.

Theme 8 explored the positivist, technical rationality approach to Medicine. This works on the principle that universal rules can be applied. Gaten-Robinson calls this a hypo-thetico-deductive approach (1986). He argues it makes judgements about what is good for wellbeing. Medicine is both a natural science and a human science. In order to perform well in medicine, the deductive aspects need to be paired with the interpretive aspects. Gatens-Robinson asserts that phronesis offers a rational orientation of clinical judgment.

Dieppe explores the need for phronesis in orthopaedic surgery (knee joint replacements) where every patient encounter requires decision making based on wisdom, experience, and scientific data. He points out pain cannot be measured, therefore can only be subject of interpretation. He states theories and generalised rules cannot be applied blindly. Each encounter is unique, and the context requires interpretation (Dieppe, 2011). Goodyear-Smith adds the caveat *we cannot know*

everything about context (2011). We often only know what the patient chooses to tell us.

The most rigorous analysis of the theory to practice problem, and knowledge translation, is provided by Greenhalgh and Wieringa (2011). They explore what has happened in Medicine (UK) and argue that the term 'knowledge transfer' has become constraining. This is due to policy makers and management leaders using (theoretical) evidence obstinately. Greenhalgh and Wieringa contrast this to the disciplines of philosophy and sociology where knowledge is created, constructed, and embodied. It is value-laden and less obstinately used. Greenhalgh and Wieringa conclude by offering four recommendations in bridging the knowledge-action gap. They call for (1) acknowledgement of the importance of context along with the recognition of tacit ways of knowing and mind-lines, (2) organisations to be mindful of how knowledge is used, (3) knowledge and its relationship to power, (4) more joined up thinking between academics, researchers, practitioners', policy makers and those with commercial interests (2011). Strategic-level approaches are required in the cycle of development, implementation, and revision of clinical guidelines in a way that recognises and captures phronesis. This links in with theme 7.

Theme 10 - Phronesis for dealing with complexity and moral distress

This section draws upon 8 papers from the literature review. The presence of ethical deliberation is more pronounced in the situations of tragedy (Stanak, 2019). Uncertainty and complexity are inherent to many clinical situations (Tyreman, 2000; McKie et al., 2012; Bontemps-Hommen, Baart and Vosman, 2019). Stanak discusses

grey area decisions and moral injury where scientific frameworks do not seem to capture or address the complexity (Stanak, 2019). The ethical frameworks of deontological principlism are distressingly arbitrary. Hall observes that they are often misused to justify questionable innovation (2011). Hall is a Professor of General Surgery, he believes that all surgeons are phronimoi as they are, by nature, practical. I had previously considered surgery to be one of the most techne-natured specialities in medicine. I have been convinced by the literature that surgeons need phronesis too (Hutson and Myers,1999; Hall, 2011; Elledge *et al*, 2020). Hall relates a common dialogue with patients; *"I understand the options you have explained for treating my rectal cancer, but I can't make this decision on my own. What should I do, doc?"* (2011 p123). Episteme (scientific knowledge) and techne (technical expertise) do not provide the answer, and Hall states phronesis is required. There is a moral component that overarches surgical practice. The surgeon is a moral agent, not just a skilled technician.

Hutson and Myers discuss the complexity of dealing with a baby with profound disabilities from their clinical perspective of paediatric urology and thoracic surgery. It is one that requires deliberation in medical, technical, and ethical considerations. Those considerations have a wide array of ramification affecting the baby, the family and society as a whole. They present phronesis as a viable intellectual tool in such circumstances. Kinghorn refers to phronesis as supportive in such circumstances, being nourishing and enriching to the practitioners (2010). Bontemps-Hommen, Baart and Vosman describe it as a helpful heuristic concept in dealing with complexity (2019).

One paper by Ko *et al* observed complexity and challenge in the nursing profession (2020). Ko's team specifically explored moral distress, defined as not being able to carry out their moral intention. They analysed the nurse's actions rather than the cause of moral distress. Considering the actions enabled the nurses to reframe their distress behaviour, develop their phronesis and be in a better place to deal with complexity in the future. They codified four steps to achieving phronesis in this setting; 1) write down the experience, 2) identify the difficulty in the story, 3) seek the possibility of action, 4) form a new care attitude (Ko *et al*, 2020)

The process described in this paper is not dissimilar to the psychoanalytic approach that is performed in Balint groups. Balint groups are an opportunity for doctors to reflect on psychodynamic factors in relation to patient care. It actively encourages seeking the cause of unhappiness and anxiety through case-based narrative. The goal is not a clinical solution but a creative insight into the relationship and the cause of moral distress. Muench made a connection between Balint groups and the development of phronesis (2018).

A study led by Professor Plews-Ogan observed what helped develop wisdom in doctors who have made medical errors. Her team generated eight themes that were evident in wisdom exemplars. These were: discussing the issue, disclosure and offering an apology, forgiveness (from patients and themselves), accepting imperfection, preventing recurrence, improving teamwork, understanding the moral context, learning mastery and helping others/teaching (Plews-Ogan *et al.*, 2016).

These papers highlight the value of phronesis in light of complexity and moral distress experienced in medical practice.

Theme 11 - How to develop phronesis

This section draws upon 15 papers from the literature search. The predominant narrative within the literature search refers to how to develop phronesis in the individual. I will also discuss how the organisations (educational and healthcare systems) need to promote the development of phronesis. I have classed this as being outside of the individual. Attempts to develop phronesis are subject to erosive influences and these will be explored too.

Kinghorn along with Hilton and Slotnick have explicitly aligned the development of phronesis with professional development (Hilton and Slotnick, 2005; Kinghorn, 2010). There are some clear parallels in the attributes and mental habits required in developing both. Kumagai speaks about the clinical learner realising their position in the world as an actor, and realising their responsibility and accountability in addressing human needs and values (2014). In order to appreciate this fully the clinical learners need to understand the goals of medicine (personal and societal), this has been reinforced by a few authors (Frank, 2004; Baum-Baicker and Sisti, 2012). With a goal in mind, a sense of agency can develop (Kumagai, 2014) and therefore the motivation to act (Baum-Baicker and Sisti, 2012; Kumagai, 2014).

Hilton and Slotnick acknowledge the developmental stages of psychosocial development in clinical learners and how this interacts with moral development

(2005). Ethical practice and moral development are the subject of much theorising and criticism in the body of literature reviewed. Fugelli criticised the political and cultural factors that have eroded the humanity of clinical practice (1998). Other authors have reflected on the current situation and called for attention to moral development, and in particular the use of a virtue approach (Gillies, 2005; Radden and Sadler, 2008; Baum-Baicker and Sisti, 2012).

A key to developing phronesis is self-awareness (Hilton and Slotnick, 2005; Bishop and Rees, 2007; Baum-Baicker and Sisti, 2012; Muench, 2018; Paes, Leat and Stewart, 2019). This will help the learner address their misperceptions, have insight into ways-of-knowing and develop the intellectual humility to want to know more about what is relevant to the context. Baum-Baicker and Sisti write about the importance of emotional balance, this is also an attribute of self-awareness and effective reflection (2012).

Reflective practice is a key component of nurturing phronesis (Baum-Baicker and Sisti, 2012; Kumagai, 2014; Muench, 2018; Schei, Fuks and Boudreau, 2019). It promotes discourse on ill-structured problems, accepting paradox as inevitable. It should promote balance as a goal rather than a singular right answer. The ideal way to reflect is via case base discussion (Muench, 2018), that involves exploratory dialogue (Chin-Yee, Messinger and Young, 2019).

Apprenticeship, mentorship, and role-models are connected themes that allude to how the reflective learning is embedded. The apprenticeship model is well

established in most post-graduate training programmes. Carnevale describes how highly contemplative experiential learning through apprenticeship is essential in developing phronesis, he suggests that morally meaningful learning is drawn out through dialogue with a supportive supervisor (2007). Moral meaning has also been highlighted by Frank and Muench where the mentor or teacher should be someone who embodies phronesis, in order for it to develop effectively (Frank, 2004; Muench, 2018).

Hilton and Slotnick along with Radden and Saddler describe how role-models and clinical teachers can inspire habituation of virtue in the learner, the learner comes to learn more about role-morality (Hilton and Slotnick, 2005; Radden and Sadler, 2008). This would align with work by Leathard and Cook who described phronesis in clinical leaders. They discuss the need for clinical curricula to explicitly name the need for phronesis development and that this happens through experiential learning (Leathard and Cook, 2009). There is consensus that experience along with reflection-on-experience is a key aspect of developing phronesis. Chin-Yee introduces the concept of *slow medicine*, which is intentional deliberation and reflection on the goals and decisions taken in medicine (Chin-Yee, Messinger and Young, 2019). This has some appeal in its intentionality to remove oneself from the fast pace of clinical practice in order to deliberate and reflect.

As we have seen above, dialogue between learner and teacher is important in developing phronesis. Patients speak in narrative and clinicians think in narrative; it is therefore imperative that an understanding of narrative and story become part of

developing phronesis. A number of authors have suggested this is important (Baum-Baicker and Sisti, 2012; Chin-Yee, Messinger and Young, 2019; Paes, Leat and Stewart, 2019), some extend this to a wider appreciation of humanities and its role in developing phronesis (Boudreau and Fuks, 2015; Chiavaroli and Trumble, 2018).

Developing phronesis in the individual involves organisational and institutional support. For clinicians in training this would include their academic institutions and the healthcare organisations where the apprenticeships take place. There needs to be organisational commitment to moral development (Baum-Baicker and Sisti, 2012; Paes, Leat and Stewart, 2019) and be incorporated into curriculum design with explicit discussion about the goals of medicine (Frank, 2004; Baum-Baicker and Sisti, 2012), understanding the different ways of knowing in medicine; promoting phronesis as an executor in decision making processes (Leathard and Cook, 2009; Chin-Yee, Messinger and Young, 2019). Promotion of prosocial behaviour is also suggested, (as opposed to altruism, which can lead to self-sacrifice and burnout which is not in keeping with flourishing/eudaimonia) (Bishop and Rees, 2007).

Hilton and Slotnick describe six ways professionalism develops using phronesis, they refer to this process as proto-professionalism (2005). They present three as intrinsic to the doctor and three as extrinsic. The three internal matters have been discussed above; these are ethical practice and moral orientation, reflection with self-awareness and a sense of responsibility and accountability for their actions. The extrinsic issues involve the requirement to genuinely learn to respect patients and how they affect

patients, work effectively in teams, and understand the social responsibility that comes with clinical practice.

Paes, Leat and Stewart empirically derived six internal and six external influences in developing practical wisdom (2019). They studied doctors in training and concluded that the internal influences were 1) self-efficacy, 2) doctors' skills as self-regulated learners, 3) co- ordinating learning to get the most out of a situation, 4) doctors' rhetoric, the language they use to communicate, 5) resilience and 6) relational agency. The external influences were named as 1) management of rotations to allow for progressive independence, 2) the emphasis on quality rather than just competence, 3) opportunities for informal learning and discussion, 4) time and space, 5) a learning environment culture that is open and supportive, stretching and promoting discussion and 6) supervisor training as co-configurators (Paes, Leat and Stewart, 2019 p172). It appears that the Paes, Leat and Stewart intervention areas could be subsumed in the Hilton and Slotnick categories. The binary of intrinsic and extrinsic categorisation is slightly false as there are clearly overlaps in how and where these attributes are developed. Theoretically it is useful in emphasising that organisations and institutions have an important role to play in the development of phronesis.

This is particularly evident if we look at the things that erode the development of phronesis. Many of the authors cited in this section refer to aspects that erode the development of phronesis. These setbacks include: the hidden curriculum (Hilton and Slotnick, 2005), anti-mentors, which can both promote and inhibit phronesis (Baum-

Baicker and Sisti, 2012), unhelpful pedagogies and the dominance of assessment driving learning and competency based education (McGee, 1996), the harshness of the healthcare system, environmental stress, commercialisation and technical rationality applied unreflectively (Fugelli, 1998).

If medical educators and those that care about the future of the clinical workforce want to develop practically wise clinicians, they need to be aware of the issues outlined in this section. There are opportunities to work on the development of phronesis at an individual and organisational level. What is interesting to note is that many of the authors feel that phronesis cannot be taught, educators can only set the conditions, and provide opportunities for it to develop.

Theme 12 - Phronesis education

The previous section describes how some authors convey that phronesis cannot be taught (Gunasekara, Patterson and Scott, 2017; Chiavaroli and Trumble, 2018; Muench, 2018), others suggest it can be taught (Kinghorn, 2010). Kinghorn takes a strong Aristotelian stance in considering phronesis an intellectual virtue that can be taught. Clinicians who have written about phronesis put forward a strong call for phronesis education, but no proposal for how this should be done (Paes, 2019; Elledge *et al.*, 2020). Chiavaroli and Trumble conclude that phronesis provides the theoretical framework and pedagogical legitimacy for embedding into medical curricula (2018). The findings from the educational intervention conducted by Harrison and Khatoon indicate that character-based educational intervention can have a positive influence on professional practice but introducing such intervention

into professional education is not in itself sufficient for the development of phronesis which would require institutional and societal investment (Harrison and Khatoon, 2018).

This section will draw upon 13 papers from the literature search. It introduces some wider issues relating to phronesis education. Many of the papers previously discussed span over a period of 35 years. It is interesting to note that most the papers in the phronesis education theme have been written in the last 10 years. This could reflect the trend that the usefulness of phronesis in medical education is no longer questioned, the goal now is to operationalise it in educational practices.

The first step in considering phronesis education is raising awareness of its importance. The term is very unfamiliar to medical educators, its adjudicative function and importance in medical decision making is not widely known. It will never make it into educational processes if it is poorly understood by the mainstream. Dowie calls for phronesis to be in the working vocabulary of all medical educators (2000).

The next question is at what stage should phronesis be introduced? Boudreau, Cruess and Cruess reflected on whether students should be selected to undergraduate courses on the basis that they already have a good foundation for phronesis in relation to their moral values (2011).

Once selected how could phronesis be embedded in the curriculum, and should it be embedded in a curriculum? If phronesis is value laden, and values are learnt via the

hidden curriculum (Hafferty and Franks, 1994), the education providers need to appreciate that phronesis, and the values that underpin phronesis, are learnt both ways. Chiavaroli and Trumble state that medical educators can learn from humanities educators as they set the conditions for which more tacit learning happens (2018). Dieppe calls for educationalists to ensure the curricula embody open pluralism, engaging communities outside of medicine to help medical educators understand better (2011). Dowie observes that medical curricula have been able to deal with knowledge, skills and attitudes and map those theories to competencies, but now curricula need to be able to encompass wisdom concepts, including the limits of knowledge (2000).

Hovdenak and Wiese and have published an evaluation of their phronesis curriculum in a Norwegian Medical School, they compared it to their previous more traditional curriculum (2018). They purposefully and intentionally built-in learning experiences to develop phronesis (which they equate with professionalism). Lectures and seminars would emphasise meaningful context, seminars were problem based with a goal of eliciting how the doctor could act well, offering the best solution for the patient. A longitudinal mentorship programme, named *ProfCom*, was offered across the six-year training. Students were able to discuss difficult cases with their mentor and gauge different perspectives. Another form of mentorship was encouraged within their clinical placements both in the community and in hospital. This contact was deemed essential when students met patients. This was more than just learning and supervision, this was an opportunity to reflect and learn from feedback in relation to complex decision making, this was reinforced in a paper by Paes, Leat and Stewart

too (2019). Plews-Ogan developed a clinical longitudinal placement where each student followed one patient over a period of time. This also engendered a sense of compassion in the therapeutic relationship (2014). One key aspect of the mentors was they needed to role model phronesis, so faculty level understanding of phronesis was required.

The literature search also highlighted another specific curricular area that needs attention, in relation to how medical ethics is currently taught. Many authors were disappointed in the principlism/rules-based approach that seems somewhat removed from the goals of medicine and understanding 'the good' (Hall, 2011; Dieppe, 2011; Dowie, 2000). Dowie states that ethics is a function of knowledge and must not be uncoupled from knowledge content, it should be taught that way rather than as reductive principles. Dieppe criticises the pharmaceutical industry for overly influencing research agendas, thus the evidence-based medicine that is taught. Hall describes how rules-based ethical reasoning can be applied arbitrarily to achieve means that are not in the spirit of 'the good'. These reflections suggest that ethics education is central to the understanding of phronesis and that the current situation remains an obstacle to educating for phronesis.

Other obstacles have been identified. McKie *et al* describe three erosive influences on the holistic integration of phronesis on nursing education. These include the modularisation of higher education, the uncoupling of pastoral and academic support and the theory-practice gap (2012). Hilton and Slotnick write about the *de*formative experience created by the hidden curriculum (2005). They also acknowledge that

environmental stress inhibits the development of phronesis. One could infer that institutions and organisation should be mindful of this and should mitigate the environmental stress where possible. Hall suggests communities of practice with phronesis as a goal, might be a way forward (2011). Paes has alluded to the promotion of learner self-efficacy (believing they can succeed) and relational agency (learning how to gain help and give help) as enablers to developing phronesis (Paes, 2019).

Assessing phronesis is a contentious issue as conveyed in the literature search. Some authors feel it is imperative if phronesis is to be taken seriously that it is assessed. American doctors now have to demonstrate professionalism as part of their 6 core post graduate competencies for the ACGME – The Accreditation Council for Graduate Medical Education (NEJM, 2017). Hall sees this as a very positive step in the development and assessment of phronesis (2011). Boudreau, Cruess and Cruess have also introduced a summative P-MEX (work-place based assessment) to assess aspects of phronesis (2011). Kumagai asserts that competency based assessment erodes the development of phronesis, he calls for attention to quality not just competence (2014). This is echoed by Paes who describes that medical education is mechanistic and systems driven, and this is translated into the assessments. He suggests that the system is losing touch with the purpose of producing good doctors (Paes, 2019). Dowie takes a balanced stance suggesting that competence needs to be assessed summatively, but the aspect of phronesis that involves the quality of the clinician-learner should be formatively assessed (2000).

Much of the literature urges the development of phronesis and the ethical reasoning that underpins it to be optimally covered in the formative years of medical education i.e., at undergraduate level. Hilton and Slotnick describe developmental stages and professional identity formation being gradual (2005). Boudreau, Cruess and Cruess also appreciate the gradual nature of the process (2011). They stress the need for the learners own moral traditions to develop alongside their professional identity, allowing for integration within themselves. Hilton and Slotnick conclude their paper with a suggestion that the consequence of not adopting and creating conditions for a phronesis approach leads to having cynical clinicians who have become disillusioned due to lack of support and poor environmental conditions, which would paradoxically align with Aristotle's notion that phronesis leads to flourishing. Hilton and Slotnick call for more research on what mature phronesis constitutes (2005). Paes, Leat and Stewart begin to address this with their work on internal and external influences on developing practical wisdom in trainee doctors (2019). I believe my empirical work presented in Chapter 7 will contribute to current knowledge, as outlined in this literature review.

2.10 Literature review synthesis

The iteratively generated 12 themes from the literature review have now been presented. The preceding analysis has, by necessity, included some repetitions as the themes overlap in various ways. This section will synthesise some of the main concepts in order to address research question 3, *"What narrative commentary prevails in relation to Phronesis in Medicine?"*

Phronesis is conceptually vague and different authors understand it in different ways. There is even some debate if the modern use of the term is faithful to Aristotle's original assertions. Aristotle was not prescriptive in how it should be developed; therefore, it has been an exploratory journey for theorists and practitioners.
There are two camps with regard to what phronesis does and when it is useful. One camp uses phronesis synonymously with professionalism and the whole of professional practice (MacIntyrean view), the other camp describes it in the context of ethical decision making only (Aristotelian view).

Phronesis is a process not an output. It identifies the morally salient issues, by interpretation, within a contextual problem and draws upon different 'ways of knowing'. It uses these ways of knowing, (and the conflicts that arise from that), to feed into an adjudicative process that result in a good decision, all things considered, for that particular situation. Phronesis is an intellectual virtue, a meta-virtue that uses perspectival, context-sensitive metacognitions to integrate, guide and synthesise moral virtues, especially when they come into conflict.

The epistemology (theory of knowledge) and ways of knowing in relation to clinical practice are particularly important. This should be juxtaposed against the current predominance of technical rationality. There is much work to be done in convincing the technical rationalists and empiricists (positivists) about the value of Critical Theory and Constructivist ways, this will be explored further in Chapter 3. These are also essential in the practice of medicine, which is seen as an interpretive task by many authors on phronesis.

Phronesis has the potential to fill a theory-practice gap, with a moral orientation as a guiding force. There is a lack of empirical work which could illuminate the theoretical questions relating to phronesis. The last eight years has seen a slow increase in empirical work, prior to that most work was purely theoretical. This highlights a gap, which this thesis seeks to address.

The moral orientation is largely dependent on the individual character of the clinician. There is more published work on the character and moral formation of individuals than of organisations, though there is some literature on how phronesis fits into organisational decision making. Organisational and Institutional appreciation of phronesis is important if it is to have practical impact.

If we take individuals as the focus of phronesis endeavour, then the role of education becomes salient. Published work has focussed on self-awareness and habits of the mind, reflective practice teamed with experience and mentorship, role models/exemplars and habituation, the role of humanities and clinical reasoning/decision making processes. There is some consensus that phronesis requires cognitive, reflective, and affective synergy in the individual.
An effective synergy will mean that phronesis is not simply enactment, which suggests a visible *doing* with an output. It is best defined as being embodied (*doing, being* and *feeling*) which includes the doctor's motivation and internal activity. The EPGPS – Embodied Phronesis in General Practitioners study (rather than enacted)

would be a more appropriate term, and this will be revisited in Chapter 8 when the phronesis exemplar narratives are described.

It is maybe because of this that the literature has concluded that phronesis cannot be taught. The literature from the review suggests that we can only provide the opportunities and the environment for it to happen. This somewhat deviates from the work on Aristotelian character education which is built on the premise that character, and virtues that inform character, can be taught. Aristotle states the intellectual virtues can be taught and the moral virtues are learnt by habituation.

> *"Virtue, then, is of two kinds, intellectual and moral. Intellectual virtue owes both its inception and its growth chiefly to instruction and for this very reason needs time and experience. Moral goodness on the other hand, is the result of habit."* [NE II 1103a 14-17] (Aristotle, 2004).

Motivation has a central part to play in the endeavour to be a Phronimoi. There is some debate as to whether this is at the end of deliberation, resulting in action (Kaldjian, 2014), or necessary at the outset (Malik, Conroy and Turner, 2020). This means that emotion has an important part to play, which is far-removed from the objectivity that doctors are typically indoctrinated with in their biomedical training.

There is literature that explores phronesis education, moving on from the technicalities of how it should be developed onto the challenges in delivering phronesis education (especially if it cannot be taught). The question of assessment has also been source of debate, suggesting formative rather than summative modes are more suited to its development (as with professionalism education).

Phronesis as a process, seems well equipped for helping clinicians work through complexity and uncertainty. There are papers tackling this issue and some which touch upon moral distress experienced in clinical settings. Phronesis is most useful in such circumstances. This summarises the literature as a corpus, identifying and linking themes and relating it to my own work. These themes will be mapped to the discussion in Chapter 8.

2.11 Identifying the literature gaps

There is a lack of empirical evidence to substantiate the many theories on the usefulness of phronesis in medicine. This sets the scene for my mixed method research that empirically identifies phronimoi from a population of general practitioners and conducts biographic narrative interviews with the outliers.
The empirical element of my research illuminates the embodiment (thinking habits, actions, moral virtues, and goals) of the exemplars, which makes a unique contribution to the existing body of knowledge. This will inform the educational task of defining how phronesis could be nurtured.

For any effective change, (in education and culture) it would be pertinent to adopt a more critical narrative about the usefulness of phronesis per se. There is minimal literature on this. It would also be helpful to scope more of a consensus on whether phronesis and professionalism are synonymous, as often presented.

2.12 Generation of new theory

This literature review exercise has enabled the formation of some abstract theoretical ideas that would form the basis for further related research. This would be in keeping with McDougall's critical interpretive process (2015), and where I deviate from Arksey and O'Malley's methodology where no new theory is generated (2005). The points and considerations below form the basis of new theory.

1. Svenaeus, Reeve and Lehman state the doctor-patient consultation is a co-construction of knowledge (Svenaeus, 2003; Reeve, 2010; Lehman, 2017). This is mutually negotiated towards an assumed good. It is an interpretive event that requires phronesis (as a morally informed deliberative process). The outcome is something new, contextual for the particulars of the encounter. This could be described as *poesis* enroute to *praxis*. There is a need for more clarity in the relationship between human actions (theoria, poesis and praxis) to the knowledge processes (sophia, nous, episteme, techne, phronesis).
2. How important is clinician motivation in relation to phronesis and how does this relate to the Spinozan concept of conatus medicine? (Conation is the mental faculty of purpose, desire or will to perform and action. It means to endeavour and strive, it is volition (Shinik, 2016).
3. How are the concepts of motivation (and conation) related to flourishing (eudaimonia)?
4. Healthy philosophical scepticism and critical thinking is required for any academic stance to be sound. This is lacking in the more recent assertions about the use of phronesis as a conceptual framework in medicine.

Pyrrhonism (philosophical scepticism) provides inspiration for a theoretical paper when pitched against phronesis in medicine. Pyrrhonism's most renowned philosopher was the physician Sextus Empiricus (160-21- AD). He provided counter argument to Aristotle's work (Bett, 1999), claiming that the good cannot be known or agreed upon. There is no craft knowledge on how to achieve the good. Empiricus goes on to suggest that one's opinion on non-evident matters actually prevents the attainment of eudaimonia.

The outputs of my PhD narrative interviews begin to touch upon motivation and flourishing (points 3 and 4). This will be a firm foundation for further post-doctorate research whose aim would, inter alia, be theory construction.

2.13 Chapter summary

This literature review had three research questions:

1. What has been written about phronesis in Medicine?
2. What empirical research has been done on phronesis in Medicine?
3. What narrative commentary prevails in relation to phronesis in Medicine?

An appropriate literature review methodology was sought which appreciated the theoretical nature of the bioethical topic (McDougall, 2015). This was an iterative process that involved starting off with a non-systematic review methodology (Arksey and O'Malley, 2005). Both were able to give clarity in the requirements of a good literature review.

The literature aspired to breadth and depth and this was achieved by strategically analysing a smaller corpus for depth, thus eliciting what was relevant when answering the research questions. The search was then expanded to other databases and further important literature was retrieved if it covered the essential questions outlined in the research goal (study selection). This was a post hoc insight into inclusion and exclusion criteria and was based on increasing familiarity with the literature from the initial search on Ovid Medline. Arskey and O'Malley describe something similar (2005). I assert that the process is reproducible, thus indicating academic rigour.

Once relevant studies were identified from various sources (electronic databases, reference lists, networks, and books), summaries were recorded on an excel spreadsheet. Basic numerical analysis of the core 68 papers was conducted along with comment on the dominant areas of research and the nature of the literature (mainly theoretical). 14 papers had some empirical content. The literature was sifted and sorted into themes. 12 themes were generated inductively. These themes allowed a more refined analysis of the literature, the commentary was based on comparing and contrasting the literature.

A synthesis of the work was documented, critiquing the literature as a whole. Key ideas were identified and gaps in the literature became evident. Finally, an imaginative, creative exercise involved documenting abstract thoughts that arose during the review process, this forms the potential for new theory generation and

areas for future research. These were steps outlined in the McDougall non-systematic review methodology (McDougall, 2015).

The literature review was a valuable exercise in both demonstrating academic rigour and becoming intimately acquainted with published work in this area. It has enabled me to answer my literature review questions and has provided justification for the PhD research that follows.

3. OVERVIEW OF APPROACH USED FOR THE ENQUIRY

3.1 Introduction

The PhD research adopted a mixed methods approach. In the first part of the empirical research that subsequent chapters describe, I employed a quantitative wisdom questionnaire to obtain a purposive sample of high and low scoring wisdom exemplars to study. In the second part, I conducted qualitative biographic narrative interviews on the exemplars. This chapter will outline why it was felt to be the best way to achieve the research goals. It will explain why mixed methods provided unique information that sought to address issues of breadth, depth, and validity. Qualitative or quantitative research could not have reached this alone. The chapter will describe the theoretical educational framework that underpinned the work, and how it aligned with the philosophy of the subject under study. The chapter concludes with particular theoretical issues and ethical considerations that relate to mixed methods. Ethical issues for each individual method will be covered in Chapters 4 and Chapter 6.

3.2 Theoretical research framework – Constructivism

The research highlighted a constructivist theoretical research perspective, particularly in Part 2. There is limited empirical research specifically on phronesis as a research paradigm in medicine, though some work can be found (Plews-Ogan *et al.*, 2016; Conroy *et al.*, 2018). Much of the other literature refers to phronesis as a desirable research paradigm but does not go as far as to conduct empirical research (Hutson and Myers, 1999; Hilton and Slotnick, 2005; Kaldjian, 2010; Schultz and Flasher, 2011; Toon, 2014). There is no real precedent regarding the best theoretical

research framework to use when studying phronesis. Darnell *et al* describe phronesis as having a constructivist undercurrent (Darnell *et al.*, 2019). If we consider that constructivism operates on the premise of constructing meaning by linking new ideas with pre-existing knowledge, we can see how narrative methods support constructivism (Neimeyer and Levitt, 2001).

In the constructivist perspective, knowledge is constructed by the individual through their interaction with the environment. The main concern of constructivism is therefore construction, context, and collaboration in the creation of knowledge. From a constructivist perspective knowledge is a synthesis that honours human complexity and social interactions. This type of knowledge appears to provide individuals with the capacity to act (Biloslavo and Trnavcevic, 2007). Constructivists shift knowledge as a product to knowledge as a process (Jones, Brader-Araje, 2002). Phronesis is a process, not a product, it is about mastering complexity in a particular context, with a view to practical action. We can now begin to see how constructivism aligns with the characteristics and therefore the study of phronesis.

Narrative methods are often adopted as an aligned method of understanding the nature of phronesis. MacIntyre describes how humans are story-telling animals where stories of exemplars can nurture moral growth and character development by awakening a curiosity for what is good. MacIntyre asserts that there is a strong connection between virtue ethics, narrative and moral growth (MacIntyre, 1981). Narrative studies are embedded in the hermeneutic tradition, focusing on meaning and interpretation (Kotzee, Paton and Conroy, 2016).

The field of wisdom research is growing, and this has enabled a greater understanding of generalised wisdom, (historically the domain of psychology research). Understanding generalised wisdom then helps juxtapose it with phronesis (the focus of philosophically orientated research). These types of wisdom are not the same, but over the course of this PhD research they are coming to a closer consensus definition (Grossmann *et al.*, 2020a). In the absence of an empirical research tool to measure phronesis, an approximation has been proposed. The growing field of generalised wisdom research has inspired the specific approach within this thesis. This will be explored further in Chapter 4.

Wisdom research has identified that dealing with uncertainty, reflection/self-understanding, and value pluralism are key criterion (Baltes and Staudinder, 2000; Jeste *et al.*, 2010). These are terms that align with constructivist notions of knowledge (Illing, 2007). Chapter 1 described how the predominant theoretical research framework in medicine is positivism. Positivism dictates that knowledge is unambiguous and predictable. Reflective values, opinions and feelings are of no interest, they detract from objectivity. Epistemologically, context is stripped from positivist research leading to accuracy and certainty in deductions (Illing, 2007). Context is critically important when considering the nature of phronesis, however, as shown in the literature review.

It would be problematic to use positivistic methods to study phronesis because they would be misaligned and reductive. A constructivist research framework better defines the hermeneutic, epistemological, and ontological perspectives on knowledge that align with the study of phronesis. Grossmann proposes that

constructivist model for wisdom better embraces the socio-cultural context in the development of wisdom, he relates this to the importance of wisdom exemplars, see Figure 3.1(2017a).

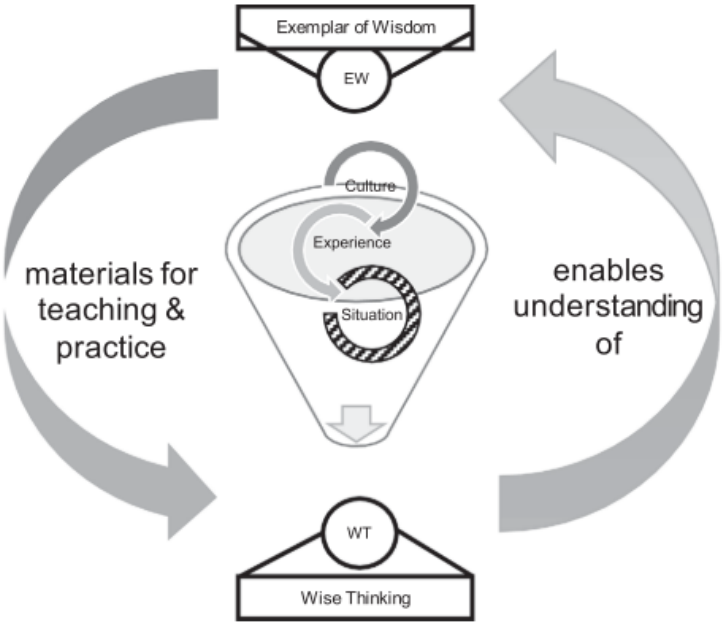


Figure 3.1 A constructivist model of wise thinking showing a relationship between the expression of wise thought and the educational value of wisdom exemplars (Grossmann, 2017a)

Figure 3.1 offers a model by which this PhD research could inform both an understanding of enacted wisdom in exemplars, but also provide materials for teaching which the student would apply during their contextual, cultural, and experiential learning.

The focus is on considering a more hermeneutic theoretical stance which embraces the possibility of multiple truths and value-pluralism, acknowledging that knowledge is socially constructed. The experimental design aims to uncover constructs of self and others, reconstructing the ‘multi-voice’ into informed constructs (Illing, 2007).

This thesis requires a research framework where values play a central role in shaping and creating outcomes, just as virtues (collectively known as values) play a role in phronesis. Therefore, if we use Illing's rationale, constructivism best fits the requirements of research into phronesis (2007). Dennick reflects on 25 years of being a medical educator and concludes, *"constructivism holds the promise of providing some unity to the practice of education and learning"*. He goes on to suggest that constructivism offers some connection between epistemological and pedagogical theories (Dennick, 2016). The challenge remains that the medical profession still sees positivist research as the gold standard (Greenhalgh, Thorne and Malterud, 2018), but a positivist framework would exclude the very elements we wish to explore.

Conducting this research required some anti-positivist reprogramming. One could argue there are elements of *Critical Theory* in the motivation behind this work (e.g., medicine being ontologically understood in terms of dominant positivist thought). This work aims to challenge that positivist stronghold. The GMC Generic Professional Capability framework's introductory domain focusses on '*values and behaviours'* (GMC, 2017), which has been translated into the RCGP curriculum as *'knowing yourself and relating to others'*. Positivism is not the correct instrument for delivering these goals.

Greenhalgh, Howick and Maskrey lay out a cogent argument for why Evidence-Based Medicine, scientifically grounded in positivism, no longer serves us well (2014). They speak of the need for a new movement which puts ethical care of the patient as top priority using decision making that is contextualised to the patient,

rooted in meaningful interpersonal skills. They stipulate an education that should hone expert judgement. Unfortunately, not much progress has been made since the call was made. This thesis aims to make a novel contribution to meeting those important goals.

3.3 Research Questions

This research seeks to elicit the constituents of practical wisdom in a population of General Practitioners. It does not lend itself to the use of a specific hypothesis, but rather a more analytical journey of asking and answering questions reflexively (Lynch, 2014). The research questions were introduced in section 1.3:

The overarching question

Q1. What constitutes enacted phronesis in a population of general practitioners?

The over-arching question fulfilled the FINER (feasible, interesting, novel, ethical and relevant) criterion test (Hulley and Cummings, 2007). It also satisfied Robson's criteria where the purpose, the theory, the methods (yet to be outlined), and the sampling strategy work synergistically with the research questions (Robson, 2011). Although the research is qualitatively orientated, with an overriding goal of exploring and coming to a better understanding of enacted phronesis, it became clear that identification of the exemplar group would be a challenge.

This builds in the assumption that it was exemplars who were the main interest of study, having drawn from similar research in different fields (Plews-Ogan, Owens and May, 2012; Krafcik, 2015; Weststrate, Ferrari and Ardelt, 2016; Massingham,

2019; Mishchinski and Jayawickreme, 2019). This thesis was also keen to shift the focus in contemporary medicine from observing poor performance in medical practice to observing excellence and wellbeing in relation to professionalism.

This led to the first methodological question; How best (pragmatically and academically) can you identify phronesis exemplars? O'Brien, Ruddick and Young describe research questions as evolving entities (2016), particularly in qualitative research where new questions reveal themselves as part of an iterative process. They describe the components of research coming together in a reflexive process where the research questions and components interact with each other simultaneously. This led to subordinate questions being generated when the most appropriate research methods were being discovered.

Q2. What characteristics are common to GP phronimoi? How does this differ from GP peers?
Q3. Is phronesis in general practitioners a transient or stable state? Can phronesis consistently be demonstrated?
Q4. What do GP phronimoi do differently in their approach to practice?
Q5. Does enacted phronesis result in better doctor-patient relationships?
Q6. Does enacted phronesis result in a sense of greater personal wellbeing?
Q7. What motivates phronetic GPs?

3.4 Research Methodology - Mixed methods

With a strong sense of what the research was about, and the hermeneutic and ontological way in which it should be studied, the research design drew from

instruments which best aligned with the research questions. Qualitative methods are the best experimental tool when using a constructivist theoretical framework, though quantitative methods can be used (Illing, 2007).

Symonds and Gorard provide an interesting critique on how we perceive research in relation to the real world (2010). They explain how the labels of qualitative, quantitative, and mixed methods can help us understand phenomena, but that they can also act as limiting descriptors. Illing also suggests that mixed methods seem hermeneutically in opposition (2007).

The research question involves identifying a research population and then conducting research to capture descriptions of enacted and embodied phronesis. The research design actually arose quite intuitively, without any preconception of what should or could be used. With the freedom of design creativity, I set to think about the best way to understand the minds and lives of wisdom exemplars. Klein and Bloom offer a clue:

> *"Practice wisdom has its traditional roots in a qualitative understanding of practice. However, if it is truly wise, practice wisdom incorporates information from a wide variety of sources, including those that are empirically based."*
> (Klein and Bloom, 1995)

The two phases of the research acted on different contextual levels. Mixed methods offered a solution in addressing the two phases. The timing of the stages would be sequential as opposed to simultaneous. The exemplar population needed to be identified at the outset. The study design results in the latter phase (part two) being dependant on the first phase (concurrent nested design). The quantitative results from part one are independently useful for understanding wisdom score trends on a

population of General Practitioners. The quantitative data was assembled and sifted critically (Silverman, 2006). The formal structure of the quantitative work does not make it more important, or a dominant paradigm within the research.

The qualitative research aimed to capture the lived life of the exemplar, a position between reality and representation (Silverman, 2006). The thesis intended an exploration of the values, decisions, and motivators of wisdom exemplars with the goal of understanding phronesis better. I therefore put more weight on Part 2 yet acknowledging the exemplars could not have been identified without part one. Silverman endorses the use of mixed methods where the quantitative method establishes broad contours and then the qualitative method enables a more in depth exploration (2006). This is the approach I took.

The mixed methods approach not only appealed to seeking an authentic representation of the research questions, but it also aligned well with the work of a generalist medical practitioner and the spirit of phronesis. The holism of general practice work involves assimilating the scientific evidence base and deciding how (and if) to apply it to the contextual narratives of patients. Appleby, Swinton, and Wilson describe this as critical realism and suggests how it is necessary in general practice. Critical realism seeks to challenge the unquestionable objectivity and dogma in the scientific way, whilst putting the patient and their story central to the problem (Appleby, Swinton and Wilson, 2017). The mixed methods approach used in this PhD aligns with the principles of critical realism.

3.5 Research Design

Outlined previously, the concept of constructivism is presented as the most aligned educational theoretical framework to study phronesis. Mixed methods are not meant to be a compromise but instead considered an integrative force that is more faithful than positivist research alone to the social world (Symonds and Gorard, 2010). The goal of the research is to construct knowledge about how exemplars assimilate knowledge and subsequently act. The journey to that goal involves administering a (positivist) psychologically based wisdom questionnaire. Those approaches appear to be at odds with each other, but for the purposes of this research, they are not, as this chapter will explain.

A wisdom scale questionnaire aims to operationalise wisdom as a measurable latent variable (Ardelt, 2003), whilst biographic narrative interviews aim to interpret the told story and the lived life (Wengraf, 2001). The two selected methods serve different purposes. The questionnaire phase allows for the identification of wisdom exemplars, in a manner that is pragmatic, whilst aspiring to meaningful *reliability*. I believed this may be a credible way to introduce the research to an audience familiar with more positivistic, quantitative, technical-rational approaches.

The narrative interviews aim to elicit how the exemplars extract morally salient features, how they practically reason, and their resulting actions.

This aligns with a well-accepted definition of mixed method research:

> *"Mixed methods research is the type of research in which a researcher or team of researchers combine elements of qualitative and quantitative research approaches (e.g., Use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purpose of breadth and depth of understanding and corroboration."*
>
> (Johnson, Onwuegbuzie and Turner, 2007 p118)

3.6 Theoretical Issues

Validity

Validity refers to how well an instrument measures what it is intended to measure. I will detail the rationale for each choice of specific method in Chapters 4 and 6 along with more detail on the validity and reliability of each method. The mixed method approach was selected as I felt that it would provide a better understanding of the research problem then either method alone (Symonds and Gorard, 2010). To measure wisdom in large samples, Ardelt argues it is necessary to develop standardised scales (Ardelt, 2003).

To use narrative interpretive methods alone restricts to less generalisable case studies. Using both methods enabled a large sample to be surveyed, with a special subgroup selected for a more in-depth understanding of the character behind the survey score (purposive sample). This is more aligned with Aristotelian phronesis and addresses the deficiencies noted by Sherman when she criticised current research on phronesis i.e. that most research fixates on the endpoint rather than the knowledge process and character of the agent (1989).

Each method has different strengths and weaknesses, but using them both enables a complimentary synergy, which is expansive rather than reductive (anti-positivist stance) and epistemologically/ontologically aligned with the multiple truths/value-pluralism that can exist when using constructivism as a theoretical framework.

Part 1 and Part 2 of the EPGPS research are self-reported, and therefore subject to self-reporting bias, this information was triangulated with third party feedback (Patient Satisfaction Questionnaire – PSQs, and colleague Multi-Source Feedback - MSFs) to negate this bias, this has been classed as being Part 3 (or sub session 3) within this thesis. This will be described further in Chapters 6 and 7, sections 6.7 and 7.6 respectively.

Representativeness

Mixed methods aspire to breadth and depth of data. The use of an appropriate wisdom questionnaire, on a large enough sample, ensures breadth is considered. With breadth comes the concept of *generalisability*. Established criterion is set within the wisdom questionnaire which enables a purposive sample to proceed to the interview stage. The interview goal is depth and hopefully saturation of themes (Palinkas *et al.*, 2015). Real generalisability often equates to reductionist maxims, and I remained mindful of this. An appreciation of the temporal and socio-political context are a critical and intentional component of this work.

3.7 Ethical considerations

Kara makes a plea to researchers to consider if the work is worth doing, just because funding is available does not automatically make the work ethical (2018). This PhD work was worth doing to highlight the importance of ethical grounding in the everyday work of a doctor. It is a lack of ethical grounding and a void in conversations about character in medical education that have driven this work, with passion and vigour.

No funding was made available when this work commenced. The topic was deemed so important a decision was made to self-fund. As momentum and interest grew, I was able to apply for educational bursaries from HEE (employer) which offset some costs. Philosophy, ethics, and professionalism do not generate the kudos that innovative, money-generating, life-prolonging pharmacological inventions achieve. This was an obstacle that I faced over many years, from many organisations. It was an example of internally motivated goods and externally motivated good enacted (MacIntyre, 1981; Toon, 2014).

Kara (2018) asks the researcher to consider; What is the researcher's intention, is it ethically correct? What is the point? Is it worthwhile? I have whole-heartedly directed my professional life to medical education and its improvement, having influence through roles that align with that goal, making the research worthwhile and operationalizable. The PhD on enacted phronesis feels very worthwhile.

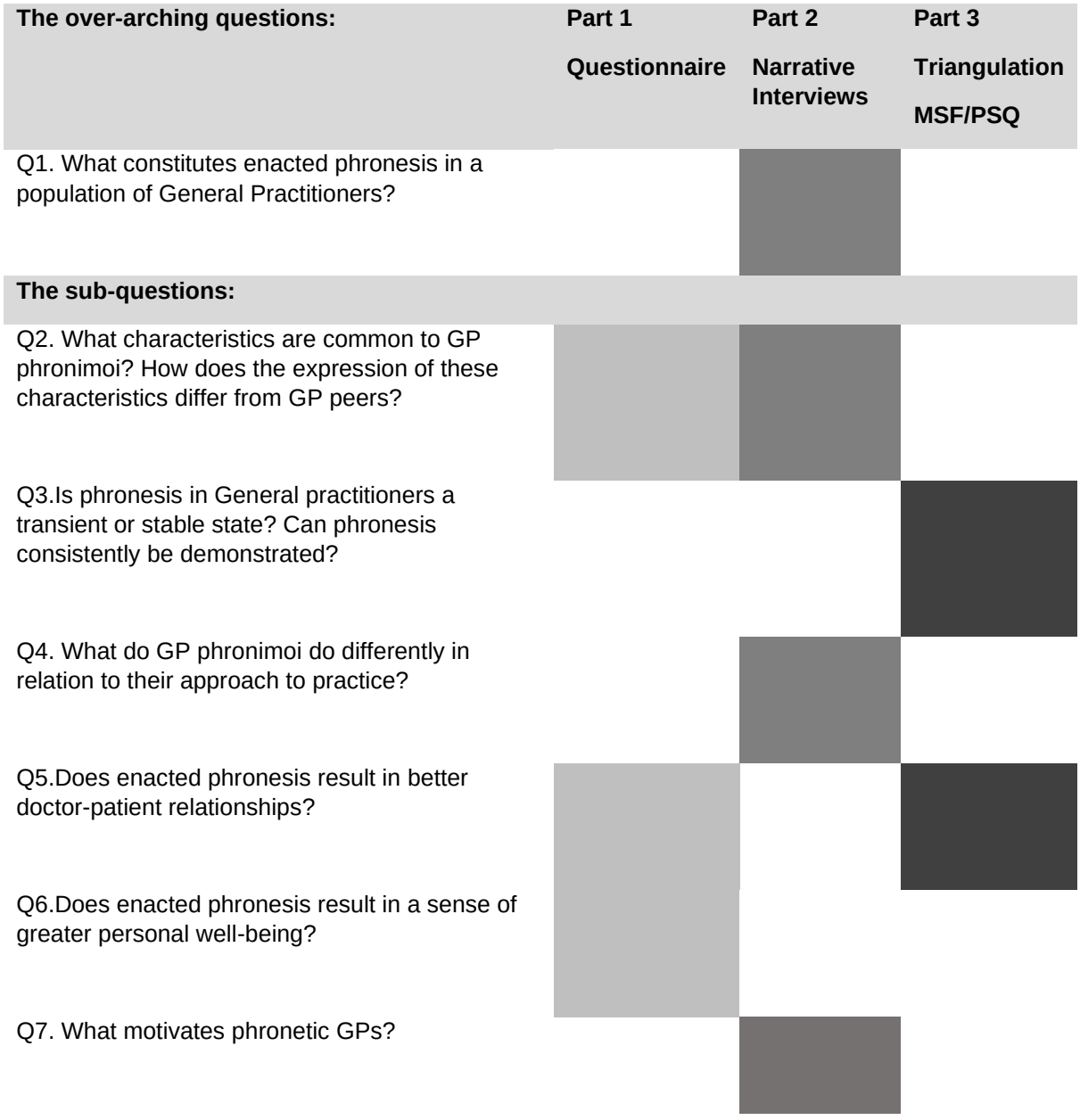
Regarding university regulations and ethical approval, ethics approval was sought at each stage of the research. Specific ethical issues will have been raised in the methods Chapters 4 and 6. The ethical approval process correspondence is included in the appendix (A3.1).

3.8 Chapter summary

The chapter outlined why mixed methods research was the optimal way to answer the research question. This chapter outlined the very conscious decision to choose a methodology that aligned with the moral and philosophical aspirations of wisdom in

relation to the purpose of the work which is to understand phronesis and ultimately to improve medical education. The research questions and the different methods suggested are summarised in Fig 3.2 overleaf.

Fig 3.2/7.1 The Original Research questions and the modalities of addressing the question.



4. METHODS PART 1

4.1 Introduction

The previous chapter justified why a mixed methods approach was the optimal way in which to answer the overarching research question. This chapter will outline the methods of the quantitative part of the EPGPS research (Part 1).

The quantitative part of the study was the way in which the purposive sample was obtained i.e., the wisdom exemplars were empirically identified. There is to date, no definitive measure of phronesis (Kristjánsson, 2020). This chapter will describe the process that was adopted in choosing a validated questionnaire that best represented phronesis in medical professional practice. From this, it will also provide justification for the choice of questionnaire used. The chapter will then go on to describe the practicalities of administering the questionnaire (sampling method, participants, data collection and an overview of the data processing procedures).

4.2 Justification of Wisdom Scale used

4.2.1 Measures of wisdom and measures of phronesis

Much of the empirical work on contemporary wisdom over the last 40 years has been performed by psychology academics (Bangen, Meeks and Jeste, 2013). Their scientific approaches contrast the parallel long-standing interest in wisdom (and phronesis) from a philosophical perspective. What is clear from the literature review is that wisdom is nebulous in nature and difficult to define. This complicates the ability to research it (Mishchinski and Jayawickreme, 2019; Sternberg and Glück, 2019). Without a clear and representative account of what successful wisdom or

phronesis looks like it cannot be studied effectively (Darnell *et al.*, 2019; Swartwood, 2020).

In 2013 when this PhD began, the majority of wisdom scales considered were from the psychological literature. The psychological research focussed on specific personality traits rather than wisdom as a unified construct (see table 4.1 for an illustration). To this day there is still no empirical measure of phronesis (Kristjánsson, 2020), though the Jubilee Centre for Character and Virtues feel they are close with their four component model which uses and inventory comprising of moral emotion, moral identity, moral adjudication and moral perception as the constructs for the tool (Darnell *et al*., 2019; Kristjánsson *et al.*, 2020). What is clear is that the last seven years have enabled the psychologists who are interested in lay constructs of wisdom, and the virtue ethicists/philosophers who are interested in promoting phronesis as an intellectual virtue with moral underpinnings, to come to some kind of consensus, particularly regarding the relationship of wisdom with context specificity (Brienza *et al.*, 2018). This brings the psychological constructs more in line with the remit of phronesis, which is to do the right thing, for the right person, at the right time for the right reason (Schwartz and Sharpe, 2010). Swartwood (a moral philosopher) argues that measuring wisdom is frivolous (2020) but the psychologists make the case that it would be frivolous not to, and that refining measurement of wisdom will be useful in fields such as public health, education, psychology, sociology, geriatrics and psychiatry (Ardelt, 2003; Bangen, Meeks and Jeste, 2013; Webster, 2019; Grossmann et al,. 2020a). Bangen, Meeks and Jeste suggest it would also facilitate wisdom based interventions which would be welcome in this climate where psychological research too often focuses on deficit models only (2013).

	Holiday and Chandler	Ardelt	Grossmann	Gluck and Bluck
Characteristic traits of wisdom	Exceptional understanding	Cognitive	Intellectual humility	Mastery
	Communication and Judgement skills	Reflective	Recognising uncertainty and change	Openness
		Affective		Reflectivity
	General competence	(See table 5.9 for expansion of terms)	Seeking out other perspectives	Emotional regulation
	Interpersonal skills			Empathy
	Social unobtrusiveness		Integrating other perspectives	
	(Holliday and Chandler, 1986)	(Ardelt, 2003)	(Grossmann, 2017a)	(Gluck and Bluck, 2014)

Table 4.1 The psychological research wisdom traits. Taken from (Mishchinski and Jayawickreme, 2019).

The EPGPS research needed to find a suitable quantitative tool to identify the wisdom conceptualisation relevant to medical practitioners and aligned with phronesis. This chapter will outline how literature on professional practice repeatedly draws upon the need for the practitioner to use their cognitive, affective, and reflective skills in an integrated way. Aristotle describes phronesis as the ability to deliberate with excellence about human action and its contribution to human flourishing. He himself was vague about the constituents of phronesis, apart from

stipulating that it is involved in ethical decision making (Kristjánsson, 2020). Aristotelian purists will want to ensure that any future phronesis scale will be confined to ethical decision making.

As this research is about practitioners, it will outline why the ArdeIt 3DWS was deemed to best suit the research aims to find wisdom exemplars. This work acknowledges that the 3DWS scale is not a specific measure of phronesis, but in the absence of any other tool, it is a good approximation. Swartwood argues that the psychological measures of wisdom are deficient in appreciating the philosophers definition of phronesis (2020). Swartwood states that the psychological measures may capture some practical wisdom relevant characteristics, but these will be incomplete and underspecified. Swartwood's observation can be suitably addressed by the fact that Part 2 of this research (biographic narratives) provides more complete and more specific detail in relation to phronesis and its embodiment, thus, satisfying his minimal philosophical conception of phronesis which is about what one ought to do, all things considered, in a specific context (Swartwood, 2020). Narrative methods have been appreciated in their ability to provide depth to the understanding of wisdom (Webster, 2019).

The literature review in Chapter 2 provided a justification for preferring a MacIntyrean understanding of the innate relationship between professional and ethical practice. This would make exploring a practitioners' lived life and narrated story (through biographic narrative), important in the quest to understand phronesis and eudaimonia. This work would provide insight into how wisdom enables good decision-making in the concrete circumstances of the wisdom exemplars lives. I

should also make clear that I do not agree that medical practice is simply techne, as described by Aristotle when he claims *health* is the product of the physician's intervention [NE I 1097b 10-15] (Aristotle, 2004). I prefer the progressive stance of Pelligrino and Thomasma, who describe medical practice as phronesis in their seminal text *Virtues in Medical Practice* (Pelligrino and Thomasma, 1993). It encompasses an appreciation for the conflicting agendas and the ethical deliberation required to practice modern medicine. This complexity in modern medical practice and the need for clinical decision-making to have accountable moral underpinnings has been discussed by various authors who position phronesis as the missing dimension in clinical practice (Kaldjian, 2019; Pitman and Kinsella, 2019; Rothwell, 2019; Mitchell, 2019).

Built into the research design is the assumption that practical wisdom is a state and trait. That is to say, it is both a relatively stable *trait* with a contextual quality (*state*). There is still much debate about this dichotomy (Grossmann, Kung and Santos, 2019). It is beyond the scope of this research to describe the background behind the difference in opinion. There are numerous academics who support it being both a state and trait (Grossmann, 2017b; Grossmann, Dorfman and Oakes, 2019). Part 1 of this research identifies the trait using the Ardelt 3DWS, and the narrative interviews of Part 2 expands on the state (contextual quality) and the moral motivations of the experienced lived life.

4.2.2 Professional practice and the 3DWS

This section will illustrate that professional practice has been described as consisting of cognitive, affective, and reflective elements. These are the exact components that the 3DWS focusses on, thus making it a suitable candidate for use in Part 1 of this study. Various authors have put forward a strong case for the relationship between professional practice and phronesis (Pitman and Kinsella, 2019; Kinsella and Pitman, 2012; Massingham, 2019). Higgs suggests that phronesis should be taken seriously as an organisational framework for professional knowledge (Higgs, 2012). Professional knowledge is defined by an integration of ways of knowing; propositional, experiential, and personal. Episteme and techne integrate with the oversight of phronesis.

> *"The hallmark of a professional is the capacity to make sound judgements in the absence of certainty."*
>
> (Higgs, 2012 p79)

Adjudicating in circumstances of uncertainty is an attribute of phronesis. Kinsella and Pitman argue that medical phronesis needs developing in order to resist the moral compromise that medical practice currently faces (2012). This is echoed by Frank who writes that doctors need to train themselves to have constant self-awareness in their role as moral actors. Phronesis develops by taking values through the trials of multiple actions then requiring reflection (Frank, 2004).

Higgs presents a model of knowledge generation from practice. In this model Higgs highlights the importance of cognitive, reflexive and communicative processes (2012). Reflection is central to phronesis (Frank 2004: Pitman and Kinsella, 2019). These facets have been emphasised in the literature review but is necessary to revisit this within this section in order to justify the use of the Ardelt 3-dimensional

wisdom scale, with reflection, compassion and cognition being the critical dimensions that will be measured.

Reflection is a continuum from reflection in action (embodied), reflection on action (intentional practical reflection, derived from Donald Schon), critical reflexivity and mindful/contemplative reflection (Higgs, 2012). In Massingham's research exploring wisdom in professionals, he explains that wise reasoning involves both cognitive and affective dimensions, where the cognitive dimension is knowing how to achieve eudaimonia (2019). Ardelt suggests in her work on older adults, that her wisdom construct aligns with wellbeing both physically and in relation to quality of life (Ardelt, 1997; Ardelt, 2000; Ardelt, 2011), this would align with Aristotle's proposal that phronesis facilitates eudaimonia.

The terminology used to define qualities of professional practice, and the wisdom construct as presented by Ardelt, converge. It is for this reason it was felt to be a good fit in seeking a purposive sample of wisdom exemplars to research within this study. After some deliberation, the Ardelt 3DWS was selected as being best aligned to phronesis in medical practice. Direct correspondence with Ardelt ensured her permission was received (appendix A4.1). Ardelt kindly provided detailed information on questionnaire analysis procedures (Chapter 5 and appendix A5.1).

4.2.3 The Ardelt 3DWS in comparison to other wisdom measures

The Ardelt 3DWS is a trait-focussed measure of personal wisdom. Personal wisdom is achieved through personal experience and insights concerning one's own life. This is in contrast to other psychological scales which look at generalised wisdom (Baltes

and Smith, 2008; Staudinger, 2019) or wise reasoning (Brienza et al., 2018; Grossmann, Dorfman and Oakes, 2019). Figure 4.1 gives an overview of published wisdom scales from the psychological field. Ardelt's scale was the first measure that included the emotional aspect of wisdom. Some of these scales were not accessible, or searchable for use by a third party, therefore many were ruled out early on. Kotzee, Paton and Conroy have concluded that the most prominent models of wisdom are far removed from the Aristotelian notion of phronesis as they lack an ethical perspective (2016).

Wisdom scales can be categorised into a couple of binaries (Fig 4.2). Self-reported measures (Webster, 2019) versus performance-based measures (Kunzmann, 2019) and generalised wisdom versus personalised wisdom (figure 4.2). Performance based measures assess wisdom from a person's verbal response to wisdom requiring problems. The Berlin Wisdom Paradigm (BWP) would fit in this category (Baltes and Staudinder, 2000). Bangen, Meeks and Jeste suggest the best measure of wisdom is a combination of self-reported and performance-based measures (2013). This PhD research uses a combination of methods.

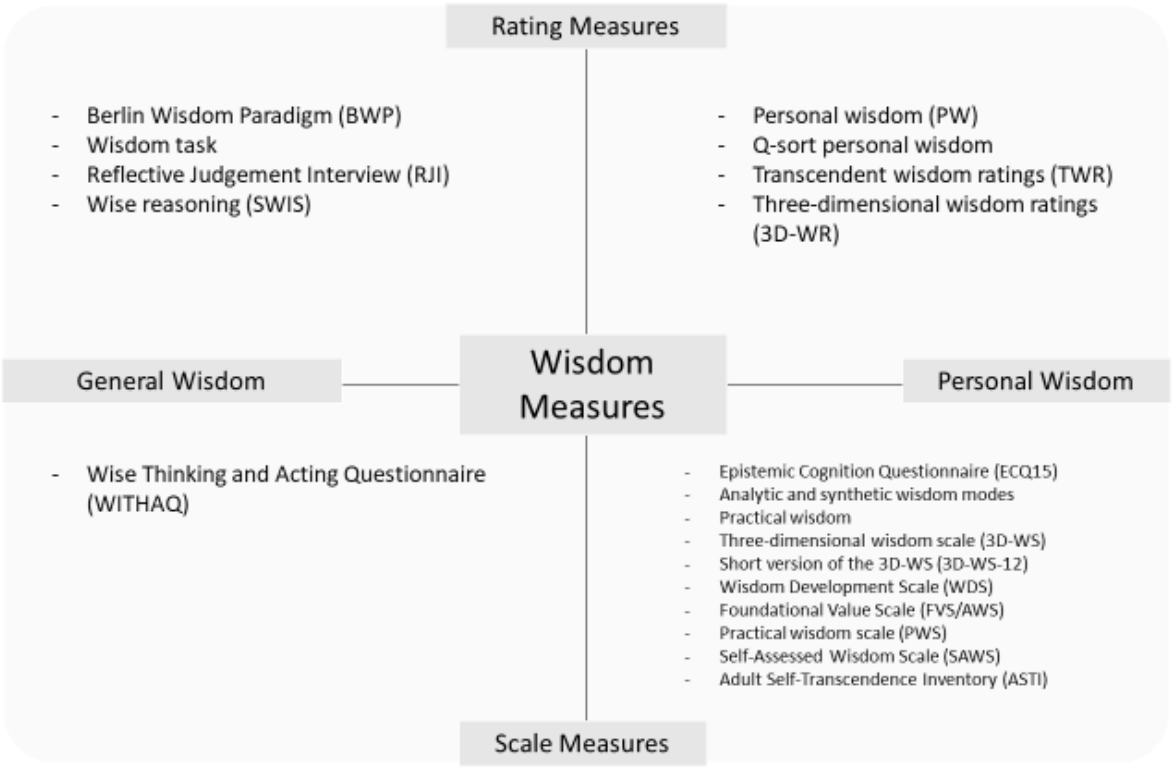


Fig 4.2 Psychological wisdom measures

(Slide courtesy of Monica Ardelt - presented at the Jubilee Centre for Character and Virtues 5th Oriel Conference 2017)

Generalised wisdom concerns the world in general and human life, but it is not specific to personal experience. A library would score highly on the Berlin Wisdom Scale, as it uses an inventory, and this was not the form of wisdom that best suited research observing medical practice. The BWP only looks at the cognitive aspects of wisdom and does not cover the reflective and affective aspects (Swartwood, 2020). These are considered important in professional practice as outlined in the previous section. Swartwood states that the BWP does not measure components of phronesis (2020).

In a paper comparing five wisdom scales (including the BWP and 3DWS), Gluck *et al.* suggests that researchers looking for a measure of wisdom should first decide

which type of wisdom is most central to their study, in this case it is personal wisdom (2013). Secondly, Gluck *et al.,* ask us to consider practicalities of using a self-reported measure versus a performance measure (which requires more time and effort) (2013). This research required a relatively quick self-reported tool to sample as many GPs as possible (aspiring to breadth), in line with the research goals to obtain a purposive sample for Part 2 (aspiring to depth). The 39-point 3DWS questionnaire takes about 15 minutes to complete and this was felt to be the right length for the doctors who were being asked to participate. Ardelt has subsequently collaborated with other researchers looking to abbreviate the original 39 question scale, because despite its rigorous development and good psychometric properties, they felt the length was an obstacle to use (Thomas *et al.*, 2017).

Gluck concluded that all the five scales were based on sound theoretical foundations and have been carefully designed and tested by their respective authors. The 3DWS performed the best when discerning other-related wisdom, it had the highest correlations to correlates of wisdom (Gluck *et al.*, 2013). In another paper comparing nine psychometric wisdom scales, the 3DWS was singled out as having significant strength with its rigorous theoretical underpinning and good psychometric properties (Bangen, Meeks and Jeste, 2013).

Regarding the possibility of using other scales, the psychometric work on wise reasoning could potentially align with the concept of medical phronesis. Kaldjian has often approached discussions of practical wisdom via wise clinical reasoning (Kaldjian, 2010; Kaldjian, 2019). A recent paper has suggested phronesis as a useful tool to assist in clinical reasoning when negotiating the pros and cons of starting a

new medication with patients (Nierenberg, 2020). If a scale were available that measured wise reasoning this would have been considered. The Situated Wise Reasoning Scale (SWIS) analyses wise reasoning, but it was not available at the time of conducting the research. SWIS is a state-focussed methods (as oppose to trait focussed), that involves the creation of qualitative and quantitative data based on questions relating to the reconstruction of a situation of conflict (Brienza *et al.*, 2018). The SWIS would be time-consuming to complete, administer and analyse for 200+ practitioners. I had to consider other factors such as ease of completion and administration (for busy GPs), process of analysis and relevance to the research question(s). In a critique of SWIS, Swartwood suggests that SWIS may measure phronesis relevant characteristics of wise reasoning. It has resulted in a useful metacognitive framework, but it does not measure the reasoning component of phronesis (Swartwood, 2020).

The 3DWS has been used to measure phronesis in previous research (Ferraria *et al.*, 2011). Ferraria *et al* justified using the 3DWS as an approximation for phronesis because its items concern day-to-day dealings with people, this justification would apply to the work of a general practitioner. Kaldjian and Plews-Ogan are both clinical academics, they conclude that Ardelt's conceptualisation of wisdom best describe the personal changes physicians go through towards aspiring to wisdom (Kaldjian, 2019). Plews-Ogan endorsed the use of the Ardelt 3DWS in her own research (2016). We have seen in section 4.2.2 how the 3DWS translates well in capturing important cognitive, affective, and reflective elements of professional practice. Swartwood takes a more cautious view in considering the 3DWS as a measure of phronesis.

> "We *can be confident the 3DWS measures the minimal philosophical conception of practical wisdom only if we have reason to think the scoring we are using correlates with a good grasp of what one ought to do, all-things-considered, in particular situations. Because we have no reason to think that we can't be confident the 3DWS measures practical wisdom or its components, even if it is perhaps measuring practical wisdom-relevant characteristics or wisdom on a different conception."*
>
> (Swartwood, 2020 p84)

I would agree with Swartwood, in that using the 3DWS in isolation would be an incomplete way of observing phronesis, which is why Part 2 of the study is so important, as argued in Chapter 6.

4.2.4 The Ardelt Three-Dimensional Wisdom Scale modifications

The Ardelt 3D 39-point wisdom questionnaire was slightly modified to include mandatory questions on the sex, experience, GP employment status and previous speciality training of the respondent (see appendix A4.3 for the questionnaire that was used). This was to elicit the demographics of the respondents and to review the relationship of phronesis with each attribute. One key question was added related to job satisfaction, this was built in to get some information relating to phronesis and its relationship to eudaimonia (flourishing), thus testing the Aristotelian postulation (Aristotle, 2004). Ardelt suggests that a high criterion for wisdom in her 3DWS would correlate with high subjective wellbeing (2019).

The end of the questionnaire included a voluntary submission of the respondent's name and email address. It was posed as a question if they were willing to proceed to Part 2 of the study (biographic narrative interview). This meant that there was an option to complete the questionnaire anonymously, which I felt was important to ensure breadth of data for part 1.

University ethical approval for Part 1 (Ref ERN_16-1320) was received in November 2016 (see appendix A4.2). The goal was to try and get over 200 responses in order to aspire to meaningful power of data. The power is dependent on the number of subjects sampled, and the demonstrable difference in outcomes. This was a similar sample size to that used by Ardelt in her initial work on devising a wisdom scale (n=180) (2003). It was important to estimate the sample sizes in order to ensure the research was possible. Even before administering the questionnaire it was felt that 20 narrative interviews were pragmatically manageable for Part 2 of the PhD research, thus focusing on about 10% of the respondents.

4.3 Sampling Method

The use of the 3DWS was to provide a purposive sample of exemplars that would proceed to the qualitative part of the research (narrative interviews). This was a non-probability sample. For practical reasons, the Part 1 stage (3DWS) consisted of a non-probability convenience sample of participants (attending GP training events), who were also a voluntary sample, (no compulsion or incentive to complete the questionnaire). No previous research observing wisdom in doctors has used a method like this. Plews-Ogan *et al* have used mixed methods involving Ardelt's 3DWS, but their focus was the development of wisdom after medical error. Their research obtained a snowball sample of physicians who admitted to error and then administered the 3DWS to determine their wisdom score (Plews-Ogan *et al.*, 2016). This has commonality with the work of Krafcik who performed mixed method research on wisdom exemplars (non-medical). Krafcik identified his wisdom exemplars through peer nomination, then performed the qualitative (semi-structured

interviews) and quantitative (psychological scales, including one wisdom scale) components (2015).

As mentioned in the literature review, there is very little empirical work on phronesis (as opposed to generalised wisdom). Two qualitative studies on phronesis include Massingham who chose retired professionals, justifying his sample by saying wisdom increases with age (2019), and Conroy *et al*, who used snowball sampling via academic and educational administrators (2018). Peer wisdom nomination was also considered, but this is fraught with bias and inequality. Webster describes how peer nomination has some strengths, but he fails to acknowledge the possible equality-and-diversity disparity that is introduced with peer nomination (2019). Krafcik justifies the use of peer nomination in his work (2015), he states peer nomination has value and the precedent has been termed the *exemplar and personological approach* (Orwoll and Perlmutter, 1990). Krafcik goes on to describe the demographic of his San Francisco wisdom exemplars; he describes them as predominantly Caucasian. This is not representative of the San Francisco population (46% Caucasian, Asian 34%, Hispanic 15% - U.S Census Bureau, 2019 data), this confirmed my apprehension. I felt this was an inequality bias from using peer nomination. Obtaining the purposive sample by using the 3DWS would provide a good sample which is representative subset of the GPs who are the focus of the study, with each participant having equal chance of being randomly selected into the study. This seemed inherently more equitable.

Ardelt kindly provided her 3DWS questionnaire template and guidance on how the questionnaire should be administered, and how the data should be cleaned and

analysed, along with recommendations on the best statistical tests to enable comparison to other studies that use the 3DWS (appendix A 5.1 and A5.2)

Previous experience on the use of questionnaires suggest that uptake is improved if done face to face as a paper questionnaire along with an outline of the purpose of the research (Yu and Cooper, 1983). I had used online questionnaires in previous postgraduate research and completion rate was suboptimal. The decision was made to distribute the questionnaire at routine, scheduled GP training events, thus negating the need to have additional Health Research Authority (HRA) ethical approval (appendix A3.1).

Ardelt advised that it is best to not use the word *wisdom* when administering the questionnaire. This proved challenging when composing the participant information leaflets, and in the brief address which introduced the research to the potential respondents. Phronesis is not a word/concept that most people are familiar with, and it was undesirable to alienate potential respondents at the outset. Ardelt suggests that using the word wisdom leads to some people answering what they think they should answer rather than being true to their authentic answer.

The original questionnaire includes some reverse coded questions; this meant it was quite difficult to second guess how to strategically convey increased wisdom. Paradoxically, there is some evidence to show that people with high wisdom scores may downplay their aptitude in self-assessments due to their intellectual humility (Jayawickreme and Blackie, 2016).

4.4 Participants

The participants needed to be General Practitioners in order to answer the research question – *What constitutes enacted phronesis in a population of GPs*?
It is important to note that the GPs who responded were all in some kind of training role (Educator/Supervisor/Appraiser), or training grade. This may differentiate them from GPs who are not in educational contexts. This will have to be a caveat if any generalisations are to be made about the collective wisdom of GPs. It is a limitation of this study.

Table 4.3 shows that 410 GPs had the opportunity to take part in the study and 212 chose to do so. There are 8500 GP trainers in the UK in 2020 (HEE data personal correspondence with Head of GP School). 990 GP trainers are in the Health Education England West Midlands area, where the research took place. For context there were 42,000 working GPs in England in 2016 (49% were female and 32% were from a BME background) (GMC, 2018). This means that GP trainers represent 20.2% of the whole GP population. I will return to this demographic as this data will be used in the discussion chapter.

At the time of collecting data, I had responsibilities for overseeing GP Education in Birmingham and Solihull and was employed by Health Education England (HEE). I was also a GP appraiser for NHS England (NHSE). I was keen to get GP trainees as part of the sample in order to widen the ages sampled. This potential conflict of interest was declared in the participant information leaflets (appendix A4.3, A6.2 and A6.3).

4.5 Data collection

Using existing local networks (Health Education England West Midlands and NHS England Appraisals team), an email was sent outlining the research, with a request to attend routine GP training update events that were scheduled within a six-month data collection period between November 2016 and April 2017. Invitations were accepted for five scheduled update events. No further event invitations were accepted when 200+ questionnaires were received. At each event, a short 5-minute presentation was given with a verbal request to recruit participants. A printed participant information leaflet was provided along with a printed questionnaire which had a consent form on the front page. Completed questionnaires were collected in a ‘post box’ on the day of the event. It relied on the delegate putting the completed questionnaire in the box.

	Event capacity (delegates)	Questionnaire Numbering (post collection of all data)	Number of returned questionnaires	Response rate
C&W GP Trainer Conference 16/02/2017	100	1-85	85	85.0%
SB GP Appraiser workshop 06/02/2017	40	86-101	16	40.0%
BSOL GP trainer conference 25/11/2016	140	102-155	54	38.5%
H&W GP trainer conference 01/12/2016	60	156-178	23	38.3%
SB GP trainee teaching session (VTS half day release) 23/03/2017	40	179-212	34	85.0%
Totals	410	0-212	**212**	**57.4%**

Table 4.3 Response rate from the five training events

The table above illustrates that the approximate average response rate was 57.4%. A register of delegates was not taken at the time of data collection as part of the research, but venue capacity information was available retrospectively. All events were at full capacity. There is consistency in the trends of response. There is clearly a non-response bias, potential reasons for this will be discussed in Chapter 8, thus addressing Cummings, Savitz and Konrad's criticism that only 44 percent of their

abstracted physician questionnaire articles reported a discussion of response bias (2001). The organisers of two of the events, the C&W event and the SB GP trainee event allocated dedicated time (15 mins) in the programme for the questionnaires to be completed. This may explain the marked increase in response rates (85%). Chapter 8 will readdress the issues of response rate and representativeness.

At the time of data collection, I had a respected senior position at Health Education England West Midlands (Associate Dean for GP Education). It is possible that many doctors completed the questionnaire as a sign of respect for their 'leader' (who had been in post for 4 years). I did not think this was an abuse of my position but felt it may have helped in achieving the desired response rate within 4 months, without needing any other incentives to encourage GPs to respond. With this potential conflict of interest, it was imperative that the option to remain anonymous was given to the questionnaire respondents.

4.6 Data Processing

212 questionnaires were collected from the 5 GP training events. The paper responses were kept in a secure lockable metal box at home, each questionnaire allocated a number. The raw data was put into an excel spreadsheet. Only one questionnaire was unfit for processing (no responses to any question). The questionnaire consists of 39 questions - 14 cognitive items, 13 affective items and 12 Reflective items. The wisdom scores were then calculated as per written instruction from Monika Ardelt (personal correspondence, appendix A5.2).

The raw data from the 211 responses was inputted into a large Excel spreadsheet (46 questions x 211 responses = 9706 data cells). The 8 reverse coded questions were unreversed for all 211 completed questionnaires. Ardelt then requires the cognitive, reflective, and affective questions to be separated out and the average for each respondent calculated for each domain. Another Excel spreadsheet was produced for this step. Calculation and counting functions were performed by Microsoft Excel and data was checked intermittently for accuracy.

It is from these scores that the GPs with a strong criterion for wisdom were identified. These scores were not a simple average from the three domains (cognitive, reflective, and affective). A score greater than 4 out of 5 in each of the three domains indicated a strong criterion for wisdom. This is how the purposive wisdom exemplar group was identified. The number of wisdom exemplars identified matched the estimation to the numbers that would pragmatically proceed to interview (20). The lowest decile was also analysed to identify doctors with the lowest wisdom scores. Figure 8.2 in chapter 8 summarises this process.

The excel data was converted to SPSS. The relevant validity information was extracted from the SPSS data. The three dimensions of the 3DWS are not unidimensional constructs but encompass several wisdom characteristics. Ardelt suggests that to test the psychometric properties of the 3DWS, Cronbach Alpha values for each of the three dimensions should be reasonably high to confirm their internal reliability. The three dimensions should significantly correlate with each other, with a Pearson's correlation of 0.30 or higher (see appendix A5.2). These calculations were performed, and the results are presented in Chapter 5.

4.7 Chapter summary

This chapter outlined some of the challenges of trying to choose a research method to measure phronesis empirically. To date, there is no validated empirical measure of phronesis available. Much work has been done in the last 40 years regarding measuring wisdom. This has come largely from psychology research. The psychological models of wisdom (and their empirical conceptualisations) are broad ranging. Many do not align with the concept of phronesis. One more general conceptual tool may be released in the near future (Kristjánsson *et al.*, 2020) but this will not undermine the value of this research, as the tool used here been clearly mapped to the concept of phronesis in medical practice and has been justified and described in this chapter. Psychometric measures tend to miss the ethical dimension of phronesis, but the narrative interviews are intended to explore this.

This chapter outlined the process in which a wisdom scale was chosen and how it was used, in comparison to similar research. The justification was on the basis of its alignment to aspects of professional practice, in addition to its relative coherence with phronesis. The chapter then summarised how the wisdom scale was administered, with details of the intended sample, participants, potential limitations, wisdom scale analysis and validation checks.

5. RESULTS - PART 1

The Ardelt 3-Dimensional Wisdom Scale

5.1 Introduction

The overarching question of this PhD asked, “What constitutes enacted phronesis in a population of general practitioners?” In order to answer this question, sub-questions were devised and mapped to the most appropriate research method. This required mixed methods as described in Chapter 3. Part 1 of the mixed methods research used a validated wisdom questionnaire; the Ardelt 3-dimensional wisdom scale (Ardelt 3DWS). Justification for choosing the Ardelt 3DWS was provided in Chapter 4. Ardelt sets quantitative limits to define a high criterion for wisdom, namely a score above 4 out of 5 in every individual wisdom domain (cognitive, reflective, and affective) (2003). This is not ‘perfect’ wisdom, Ardelt states that her wisdom questionnaire measures how wise individuals compare against an ‘integrative utopia’ i.e. they would score 5/5 in each domain (2004a). Phronesis is generally considered a ‘satis concept’ post-Aristotle, where you can be classed as wise, or wise enough, without being perfectly wise (Russell, 2009). This will be revisited in the concluding chapter because it deviates from Aristotle’s assertion that a phronimoi should have fully realised perfect wisdom. As the goal of Part 1 was to identify wise GPs, the use of the 3DWS questionnaire for this research suited the stated intention of the original questionnaire, to identify wise people, rather than their specific characteristics (Ardelt, 2004a).

This chapter will outline the results from the self-reported, three dimensional wisdom scale (Ardelt, 2003). The administration of the questionnaire resulted in the identification of 20 wisdom exemplars by selecting the highest scoring respondents, these are the doctors who met the specifications defined by Ardelt for having a high criterion for wisdom (20 wisdom exemplars out of 212 questionnaire respondents). The exemplar group characteristics were compared to the whole group by the use of demographic hypotheses.

5.2 Demographic hypotheses

In order to analyse the demographic characteristics and frequency information of the exemplar group compared to the rest of the group, the following hypotheses were integrated into the 3DWS questionnaire using specific additional questions (Appendix A4.3).

Hypothesis 1 – Wisdom scores increase with age

Hypothesis 2 – Male and female GPs are represented equally in the exemplar group

Hypothesis 3 – There is no difference in wisdom scores in relation to employment type (Salaried, Locum or GP Principal)

Hypothesis 4 – There is no difference in wisdom scores in relation to full time or part time employment.

Hypothesis 5 – Previous speciality training does not influence wisdom scores.

Hypothesis 6 – The wisdom exemplar group have high job satisfaction levels compared to the whole group.

These hypotheses will be addressed using the data from Part 1 towards the end of this chapter in section 5.6. Potential explanations for observed findings will be covered in Chapter 8.

Preliminary data considerations

Of the 212 returned questionnaires, 1 questionnaire was returned completely blank. It was therefore excluded from numerical calculations (by adding a comma before the word BLANK of the EXCEL spreadsheet). The response was still added on the main raw data spreadsheet as it was allocated a number, prior to knowing that the content was empty.

Data Gaps (46 items on each questionnaire)
32 responses were blank where a signature was required relating to consenting to complete the questionnaire. The respondents went on to complete the questionnaire, therefore consent was implied.
7 questionnaires contained one blank answer
1 questionnaire contained two blank answers
3 questionnaires contained 3+ blank answers
The blank answers were attributed a score of zero for wisdom scale calculation purposes and were recorded as BLANK.

Table 5.1 Data gaps from the 211 responses

Every completed questionnaire was attributed a number in order to maintain anonymity for as long as possible before the next stage of the research. 79% (167/211) gave consent to participate in the next stage of the research should they be invited. The consent form, questionnaire and participant information can be found in the Appendix (A4.3).

The Ardelt 3D wisdom scale is an established and validated 39 item questionnaire (2003). 7 additional questions were added to include demographic data, personal contact details and a specific question asking about job satisfaction. This question was added to test the hypothesis that there is a positive relationship between practical wisdom and wellbeing, as hypothesised by Aristotle and the focus of contemporary psychology research on wisdom (Grossmann *et al.*, 2013).

5.2 Demographic data from completed questionnaires

211 questionnaires were completed and analysed. The demographic data is presented below.

SEX

FEMALE	121/211 (57%)
MALE	89/211 (42%)
BLANK	1/211

Table 5.2

AGE CATEGORY

71+	1/211 (0.5%)
61-70	6/211 (3%)
51-60	58/211 (27%)
41-50	76/211 (36%)
31-40	50/211 (24%)
21-30	19/211 (9%)
BLANK	1/211 (0.5%)

Table 5.3

GP STATUS

GP PRINCIPAL	156/211 (74%)
SALARIED GP	18/211 (9%)
LOCUM GP	4/211 (2%)
GP TRAINEE	31/211 (15%)
OTHER	0/211
BLANK	2/211 (1%)*

Table 5.4 Rounding consequence leading to 101%

EMPLOYMENT

FULL TIME	109/211 (52%)
PART TIME	101/211 (48%)
BLANK	1/211 (0.5%)

Table 5.5 Rounding consequence leading to 100.5%

PREVIOUS SPECIALITY TRAINING

YES	68/211 (32%)
NO	142/211 (67%)
BLANK	1/211 (1%)

Table 5.6

SATISFACTION SCORES

GREAT	38/211 (18%)
GOOD	108/211 (51%)
OKAY	46/211 (22%)
POOR	10/211 (5%)
AWFUL	4/211 (2%)
BLANK	5/211 (2%)

Table 5.7

The data above illustrates that the greater proportion of doctors who completed the questionnaire were female (57%). The modal age category was 41-50 with 36% being from that age group. 9% of respondents were aged 21-30 and 3.5% were over 61 years of age. The majority of respondents were GP Principals (74%), working full time (52%). 15% of the respondents were GP trainees (who have not yet achieved their certificate of completion of GP training, but are GMC registered doctors). They were part of the 3-year GP vocational training scheme.

Some doctors do not go straight into general practice, they do other speciality training prior to doing GP training. The majority of respondents (67%) went straight into GP training without any prior speciality training. Regarding job satisfaction, the majority classified it as good (51%) and 18% claiming it is great. 2% felt job satisfaction was awful.

The demographic and frequency characteristic hypotheses described at the start of this chapter will enable the wisdom exemplar group to be compared with the whole group, with the hypotheses being confirmed or refuted.

5.4 Ardelt analysis processes

Through direct correspondence, Ardelt outlined how the scale should be decoded in order to obtain wisdom scores from the raw data (Appendix A5.1). The questionnaire contained 39 psychometric items (14 cognitive, 12 reflective and 13 affective/pertaining to compassion). These items are jumbled within the questionnaire

and 8 of the questions were reverse coded to prevent respondents from strategically gaming to gain a higher score. All responses were measured on a Likert scale.

The table 5.9 below is taken from Ardelt (2004b). It illustrates how the wisdom domain is operationalised as a questionnaire rating. This is important in order to understand what was being measured, so we can begin to contemplate why this would be useful for practising doctors, particularly general practitioners.

Dimension	**Definition**	**Operationalisation – Items or ratings assess:**
Cognitive	An understanding of life and a desire to know the truth i.e., to comprehend the significance and deeper meaning of phenomena and events, particularly with regard to intrapersonal and interpersonal matters. Includes knowledge and acceptance of the positive and negative aspects of human nature, the inherent limits of knowledge and of life's unpredictability and uncertainty.	• The ability and willingness to understand a situation or phenomenon thoroughly. • Knowledge of the positive and negative aspects of human nature • Acknowledgement of ambiguity and uncertainty in life. • Ability to make important decisions despite life's unpredictability and uncertainty.
Reflective	A perception of phenomenon and events from multiple perspectives which requires self-examination, self-awareness, and insight.	• The ability and willingness to look at things from different perspectives. • The absence of subjectivity and projections (blaming other people or circumstances for

		one's own situation)
Affective	Sympathetic and compassionate love for others	• The presences of positive, caring and nurturant emotions and behaviours towards others • The absence of indifferent or negative emotions towards others

Table 5.8 Ardelt's wisdom operationalisation within questionnaire

Ardelt stipulates a strong criterion for wisdom is achieving a score above 4 (out of 5) in every individual domain. A weaker criterion for wisdom is a score above 4 on the average of the three wisdom domains. Scores below 3 met the low criterion for wisdom. Doctors were identified that met both the strong and weak criteria for wisdom.

Of the 211 questionnaires 20 respondents met the strong criteria and an additional 25 met the weaker criteria for wisdom. The figure of 20 wisdom exemplars aligned well with the intended number of interviews that could be conducted for this PhD research from a practical perspective. The 25 respondents with a low criterion for wisdom were separated from the larger group along with the 20 wisdom exemplars. The goal was to interview about 20 exemplars, but if respondents declined from first invitee group (strong criteria for wisdom group), then the second invitee group (weak criterion for wisdom) would be invited to participate in the interviews.

The second invitee group were not required (for Part 2 narrative interviews) in the end. 16 out of the 20 respondents who had a high criterion for wisdom were interviewed. The success rate of conversion to interview was 80% (16/20). Of the 20 wisdom exemplars, one did not give their contact details and three respondents felt they were particularly busy and were unable to commit to partaking in an interview in the timescale of the interview data collection (May 2018 - October 2018). A conversion rate of 80% was deemed successful. I did not want to dilute any compelling findings from the strong criteria group by choosing a selection from the weak criteria group just for the sake of getting a total of 20 interviews.

Table 5.10 shows that the overall wisdom score for the group was 3.75 which is relatively high. This will be compared to previous research and Ardelt's own reflections on this data in Chapter 8. The data suggests that this group of GPs are a very reflective group with 45% (95/211) getting a score above 4, with an average score of 3.86 for the whole group. Scores for the cognitive domain are also high, with an average of 3.79 for the group. The highest score recorded for the whole study was a respondent with a score of 4.86 in the cognitive domain, this doctor was also captured in the wisdom exemplar group (pseudonym Alekhine). There were 10 respondents with a score above 4.5/5.0 in the cognitive domain (very high). 3 of these respondents were not in the list for the strong criteria for wisdom as they were not able to achieve a score above 4 in all domains. A dip in average appears in the affective domain (see table 5.9), suggestions as to why this is observed will be discussed in Chapter 8.

5/211 respondents had an average wisdom score below 3. This makes them the group furthest from wisdom. I was able to interview two of these respondents to learn more about them, but the others gave no contact information. Chapter 8 will begin to explore if medical education and continuing professional development should include formative and supportive interventions for low scorers, if the 3DWS is to be used more extensively. There are many different ways to analyse this data, which could test various tangential hypotheses. This would detract from the PhD research goal but is certainly a source for further exploration and interpretation.

N=211 GPs	**Cognitive**	**Affective**	**Reflective**	**3D amalgamated**
Average Score (out of 5)	3.79	3.58	3.86	3.75
N with score above 4 out of 5	70	38	95	N = 20 wisdom exemplar group average score 4.34
Highest Score	4.86	4.54	4.83	
Lowest Score	2.08	2.00	2.42	

Table 5.9 Ardelt 3DWS average results for group sampled

5.5 Validity Measures

The data was transferred to SPSS for statistical analysis of validity. The three domains (cognitive, reflective and affective) were isolated, as the reliability of each one separately was required, they were then correlated against each other. New variables needed to be calculated, such as total scores for each domain and overall scores. SPSS version 21 was used.

Reliability

Overall reliability (39 items) was 0.835 (excellent). There were no rogue questions.
Cognitive domain (14 items) was 0.663 (good). There were no rogue questions.
Reflective domain (12 items) was 0.762 (good). There were no rogue questions.
Affective domain (13 items) was 0.692 (good). There were no rogue questions.

Correlations

Correlations between the three domains were calculated using Pearson's Correlation and Spearman's correlation. Spearman's is more correct here as the Likert data is ordinal, not interval. In practice there is not much of a difference in results.

Cognitive versus Reflective	rho is 0.363	p is less than 0.001
Cognitive versus Affective	rho is 0.535	p is less than 0.001
Reflective versus Affective	rho is 0.456	p is less than 0.001

All correlations are highly significant, and all are above 0.30 as Ardelt (2003) indicates should be the case.

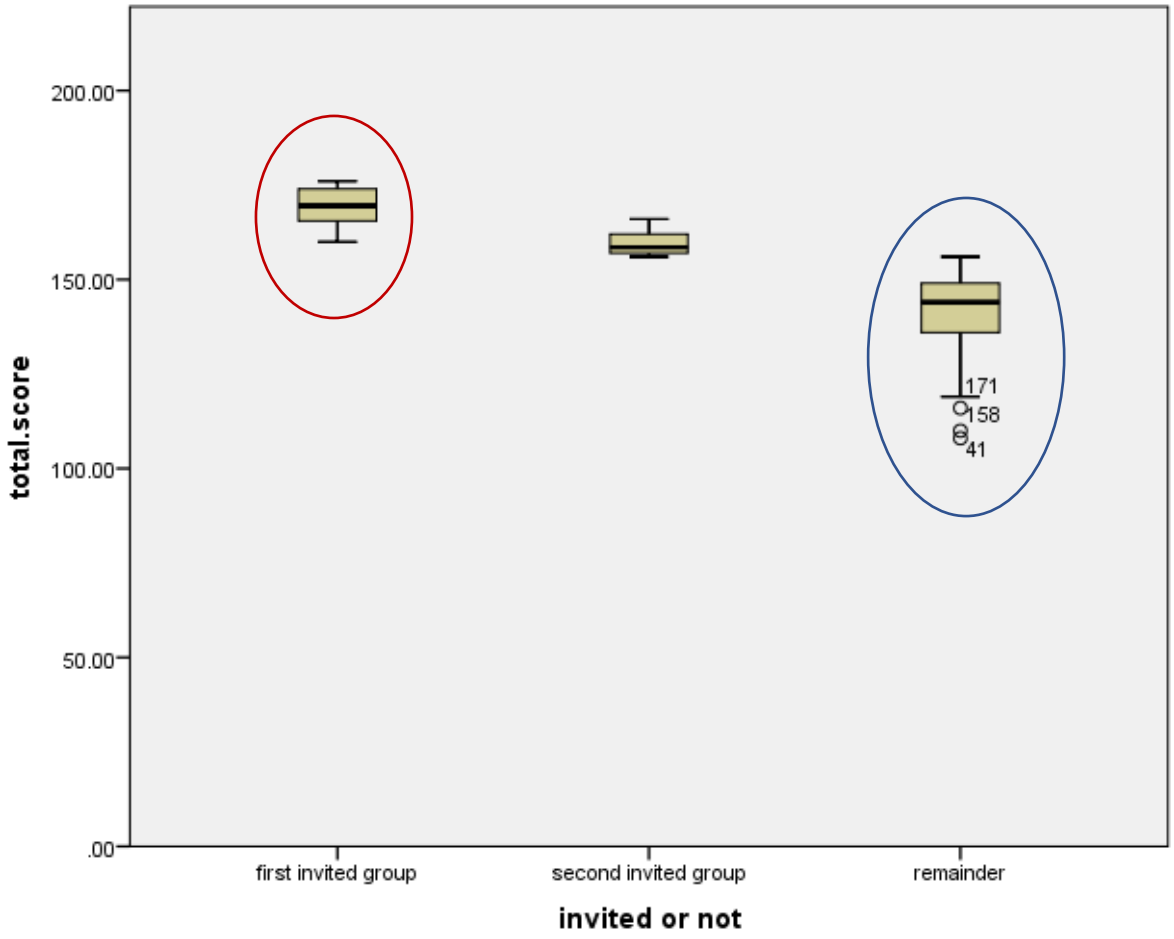
Comparative scores

Comparative scores for first invitees (high criterion for wisdom), second invitees (low criterion for wisdom) and the remainder of the group were analysed.
For each of the 39 individual question there are significant differences in all except question 4a ($p = 0.098$) and question 6b ($p= 0.055$) between first, second and remainder groups. Using total scores for each participant, there are striking

differences. P value is less than 0.001 so the differences are highly significant. This is illustrated in the box plot below (Fig 5.11).

First invitees (High criterion for wisdom)	3DWS score mean 169.2
Second invitees (Low criterion for wisdom)	3DWS score mean 159.6
Remainders	3DWS score mean 141.8

Box plots are a form of explanatory data analysis which visually shows the distribution of numerical data and skewness by displaying the data quartiles (or percentiles) and averages. From this data we can see that the respondent groups can be seen as discrete from each other with little overlap. The average 3DWS score of the 20 exemplars with a high criterion for wisdom (as defined by Ardelt) is 4.34/5.00. The average 3DWS score for the 5 doctors with an average low criterion for wisdom was 2.76/5.00.



Key =
Red : Wisdom Exemplar group.
Blue: Low scoring group.
Note there is no overlap between the groups.

Fig 5.10 Box Plot of Ardelt 3DWS results – total scores from 211 GPs.

Interviewing low scorers could be a very instructive exercise. Although the initial PhD goal was not to compare low scorers with high scorers, the biographic narrative interviews may illuminate why the high scoring exemplar group are different. Ardelt has compared high scoring and low scoring groups in her research (Ardelt, 2003; Ardelt, 2010). Plews-Ogan's team has also compared high and low scorers of the 3DWS in the context of their research on clinicians learning from error (2016) and her

work with Owens on the relationship between chronic pain and wisdom (Owens *et al.*, 2016).

Identifying the doctors in the low scoring group by name proved difficult. Only 2 respondents in the bottom ten questionnaire scores completed the section with contact details, which was to be completed if willing to participate in the next step. Contrast this with 19/20 who provided contact details in the top scoring respondents. This supports Arlin's and Owens et al. finding that openness to new experience is a predicting characteristic of the wise (Arlin, 1990; Owens *et al.*, 2016). This has been further researched and confirmed by Webster in his HEROES model (2003), which was derived from work by Staudinger, Lopez and Baltes (1997).

Factor Analysis

Ardelt suggests that part of assessing the validity of the data is to perform a principal component factor analysis. The KMO (Kaiser Meyer Olkin) measure of sampling adequacy and Bartlett's tests from the EPGPS Part 1 results are useful for this purpose. The KMO measure shows more than adequate data sampling at a value of 0.710 (it should be above 0.5). If the value is less than 0.5, the results of the factor analysis will not be useful. The Bartlett's test is significant as it should be. The Bartlett test of sphericity tests the hypothesis that the correlation matrix is an identity matrix. If it is an identity matrix, then it suggests the variables are unrelated and therefore unsuitable for comparison. The value needs to be small (less than 0.05) in order to show significance of the data (IBM, 2020)

The results for Part 1 show very good reliability using Cronbach's alpha. The correlations are all high between the three domains and all are highly significant. In addition, there are highly significant differences in the scores for first, second and remainder groups. Ardelt suggests these tests should be performed to determine the validity of the data collected (2003).

5.6 Characteristics of the wisdom exemplar group

There were 20 questionnaire responses that met the high criterion for wisdom as defined by Ardelt. The characteristics of the exemplar group are described in relation to the hypotheses set at the start of this chapter.

Hypothesis 1 – Wisdom scores increase with age

The 51- to 60-year-old age group were not the largest group when analysing the 211 respondents (27% of all respondents), yet this age group was better represented in the wisdom exemplar group (35%). This suggests that wisdom scores increase with age, but a linear correlation of all responses was not performed as the variables were configured in categories rather than being continuous. Figure 5.11 illustrates this trend. There is an interesting jump towards higher wisdom scores from the ages of 41-50 and 51-60. Chapter 8 will postulate what might be happening here, but it seems that this hypothesis can be confirmed.

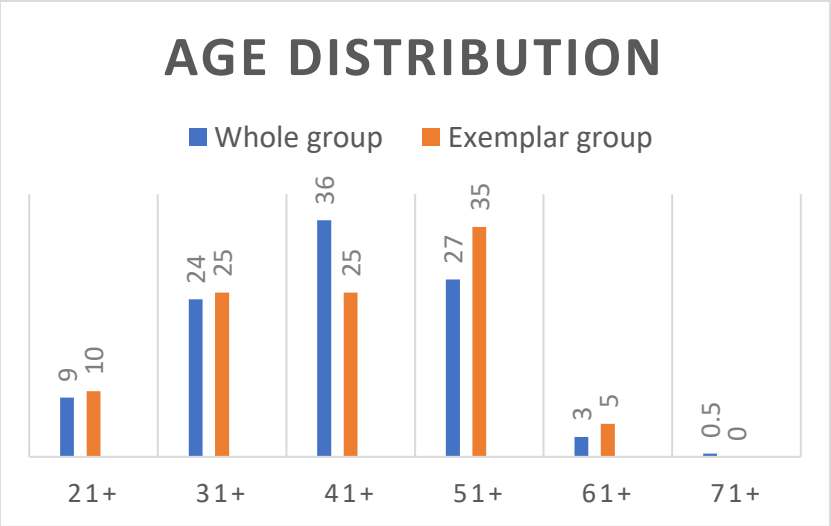


Fig 5.11 percentage distribution of age comparing the whole group (blue) to the exemplar group (orange)

Hypothesis 2 – Male and female GPs are represented equally in the exemplar group.

57% of the 211 respondents were female. 45% of the wisdom exemplar group were female. Female doctors were underrepresented in the exemplar group. Male and female GPs were not equally represented in the exemplar group when compared to the whole group. A GMC report from 2018 suggests 49% of GMC registered GPs are female. This suggests the actual group sampled for the research had more females than the national average (GMC, 2018). Hypothesis 2 has been disconfirmed.

Hypothesis 3 – There is no difference in wisdom scores in relation to employment type (salaried, locum or GP principal).

16/20 of the wisdom exemplars were self-employed GP Principals (80%) compared to 74% of the larger group. 10% of the exemplar group were salaried GPs (this figure was 9% for the whole group). 2% of the group identified as being a locum GP. Not many GP trainers are locums for logistical reasons, namely continuity of supervision. 10% of the wisdom exemplars were GP trainees this compared to 15% of all

respondents. Self-employed GP Principals are better represented in the wisdom exemplar group. Hypothesis 3 has been disconfirmed; the significant majority of the wisdom exemplars were GP principals.

Hypothesis 4 – There is no difference in wisdom scores in relation to full time or part time employment.

50% (10/20) of the wisdom exemplar group worked full time. This compared to 52% of all respondents. There is little difference in wisdom scores in relation to being a full time or part time worker. The breakdown of how many sessions worked was not asked in the questionnaire. Hypothesis 4 has been confirmed.

Hypothesis 5 – Previous speciality training does not influence wisdom scores.

35% (7/20) of the exemplar group had prior speciality training. 31% of all 211 respondents had prior speciality training. It would appear that previous speciality training does not influence wisdom scores. Hypothesis 5 has been confirmed.

Hypothesis 6 – The wisdom exemplar group have high job satisfaction levels compared to the whole group.

The wisdom exemplar group are happier and more satisfied; 30% (6/20) said their job satisfaction was great, compared to 18% who gave this response in the larger group. 60% of the wisdom exemplars said their job satisfaction was good, compared to 51% of all respondents. 90% of wisdom exemplars responses fell in the good to great categories. No wisdom exemplars used the term poor or awful, but this was

used by a few respondents in the whole group (figure 5.12). Hypothesis 6 has been confirmed.

Fig 5.12 Showing the responses or the wisdom exemplar group (orange) compared to the responses of the whole group when considering job satisfaction.

The correlations do not necessarily suggest a causal relationship, but Chapter 8 will outline the current literature suggesting that it is wisdom that informs wellbeing (and not the other way around).

The pre-determined hypotheses have been addressed, but something striking was also noted. Table 5.13 shows that geographically the most wisdom exemplars were located in the Hereford and Worcester region. It is interesting to reflect on the potential relationship between wisdom and rurality. Rural medical practice may have its own special requirements that lends itself to either attracting or creating wiser doctors e.g., dealing with uncertainty when the local A&E is two hours away; decision

making has to be more carefully deliberated. Rural areas have smaller, more connected communities and therefore challenging boundaries between personal/professional interactions. This came through in the biographic narratives (Chapter 7).

Event	Ratio of exemplars: respondents	Frequency of wisdom
Birmingham (trainer conference, trainee teaching session and appraiser event)	8/104	7.6%
Coventry and Warwickshire trainer conference	6/85	7.0%
Hereford and Worcester trainer conference	6/23	26%

Table 5.13 Frequency and geographic locations of wisdom exemplars

It was also noted that 25% (4/16) of the high scoring wisdom exemplars were from a BAME background. None were international medical graduates (IMG), unless you include Scotland. One of the two low scoring participants was from a BAME background. Data was not requested regarding the ethnicity of the large cohort that participated in the Part 1 of the research but GMC data suggests that 32% of all registered GPs in 2016 were from a BAME background (GMC, 2018). It would be interesting to compare this figure of 25% BAME with high criterion for wisdom with GMC differential attainment data, from Woolf *et al*, when knowledge measures (rather than wisdom measures) are the outcome parameter (2016).

5.7 Chapter summary

This chapter has outlined the main findings from Part 1 of the enacted phronesis in General Practitioners study. The main goal was to enable selection of a wisdom exemplar group, which was achieved. 20 GPs out of 211 GPs (completed questionnaires) met the high criterion for wisdom threshold. These doctors were

invited to participate in the next stage of the research, the methods of which are described next, in Chapter 6, with the results in Chapter 7.

Secondary hypotheses relating to demographic and frequency information were also confirmed or disconfirmed, enabling a better understanding of selected characteristics of the wise group in comparison to the whole population studied. The process involved in obtaining a purposive sample is summarised in a flowchart (figure 8.2 in Chapter 8). Chapter 8 will interpret these findings in the context of previous research and reflect on the meaning of these results.

6. METHODOLOGY PART 2

6.1 Introduction

Wisdom exemplars have been empirically identified through the methods described in Chapter 4, and the exemplar characteristics as compared to the larger group, outlined in Chapter 5. This chapter will explain how the high scoring exemplars have been used to gain an understanding of what constitutes enacted phronesis in a population of general practitioners by the use of qualitative research methods. This chapter will justify why the biographic narrative interpretive method (BNIM) was best suited to understanding enacted phronesis. The chapter goes on to outline some ethical considerations and explain how the interviews were conducted and analysed. With such a large volume of qualitative material, corpus linguistic analysis was performed in addition to the creation of BNIM summary statements. The purpose was to derive the common themes in order to formulate a theoretical framework in which to juxtapose the results. The chapter will also explain why further information (part 3) was required to triangulate the participant self-reported findings from Part 1 and Part 2 of the study.

6.2 Justification of the Biographic Narrative Method (BNIM)

Chapter 3 outlined why a mixed methods approach was adopted in answering the global research question. This section will explain why narrative research, in particular biographic narrative, was felt to align with the aims and ethos of the research and its ability to preserve my philosophical stance.

Narratives as a way of knowing

Narrative is a way of knowing that has stood the test of time. Traditions, legends, myths, and fables have all been passed through generations by stories. Fables are known for conveying a moral, a learning point or maxim to be applied in new situations. Narrative was historically the chief means of moral education according to MacIntyre (MacIntyre, 1981, Czarniawska, 2004). Narrative is a complementary medium for the dissemination of virtue ethics. MacIntyre refers to the iterative formulation and reformulation of life goals as a 'narrative quest' (1981). According to MacIntyre, a virtuous life is a life dedicated to learning what it means to lead a good life. Rather than the good life being a specific definition at the outset, it gains a performative definition through a lived life. For MacIntyre, social life is narrative (1981). This conception provides a rich source of insight in informing this research. Narrative enables reason, intentions, and purpose to interplay with events and actions, something that is lacking in other forms of research based on empiricist sense-datum (Czarniawska, 2004). Narrative is primarily an act of the mind (Cortazzi, 1993). Narrative enables past actions to be reflected upon, understood and offered meaning in the context of the present moment (Reissman, 1993).

Purpose and intention are critical aspects of Aristotelian virtue ethics in their direct relationship to telos and eudaimonia. Aristotle dedicates his work *'Poetics'* to the study of story (literary theory), describing the importance of character and plot. It is from this work that the concepts of tragedy and comedy arose. These concepts have been embedded in narrative research with plot types varying from tragedy, comedy, romance and satire (Reissman, 1993). Aristotle also provided the term *Mimesis*,

which is commonly used in qualitative research. Mimesis is the creation or re-presentation of an original form, in other words an imitation. The EPGPS study aims to capture the intellectual virtue of phronesis by synthesising, generalising, and re-presenting the stories of phronimoi.

Narrative research

> *"All forms of human communication need to be seen fundamentally as stories."*
>
> Walter Fischer cited in (Czarniawska, 2004).

Narrative makes sense of social action. We use stories in every aspect of our daily lives: interpretation, leadership, teaching, learning, understanding, and simply navigating the day (Czarniawska, 2004). If we accept this is true, then narrative research could codify concepts that would be useful tools for educational purposes, thus fulfilling another research goal for the EPGPS, enabling enacted phronesis to be better understood by the medical community.

Narrative research focuses on the organisation of stories. It allows the systematic study of personal experience and meaning. It allows the understanding of how events have been construed by the active subjects (Silverman, 2006). Narratives have formal properties, and each has a purpose. A fully formed narrative will contain these six elements: an abstract summary, orientation, sequence of events, significance and meaning of the action along with the attitude of the narrator, resolution, and coda – returning the perspective to the present (Labov, 1972). This is exactly what is required when wanting to elicit the constituents of enacted phronesis. The EPGPS

study aims to know more about the reflective, affective, and cognitive aspects of the exemplars; how they think, how they reason, how they approach life (both in general and clinically), how they deal with challenge, how they motivate themselves, what they choose to tell and their current levels of contentment.

It was important to choose a narrative method that was holistic in its approach to addressing the above. Having explored a variety of suitable research methods for tackling the qualitative component of the research, it was felt that the *Biographic Narrative Interpretative Method* (BNIM) was the most aligned with the research question, the underlying philosophical approach considering character and virtue ethics and with my own desire for the most holistic, non-reductive way to capture phronesis in an informative way. The case vignette outputs will enable readers/learners to engage with their own imaginative and critical work, making their own inferences by drawing on their own life experiences, comparing and contrasting their story with the exemplars stories (Chamberlayne and King, 2000). The ability to be able to link meaning to action in context, may enable learners to use this biographical research to learn more about their own professional identity formation (Chamberlayne, Bornat and Apitzsch, 2004).

Doctors (and medical students) function in a medical culture where the dominant narrative is that of ‘scientific knowledge’, which tends to be prized and valued above all else. Human communication and psychosocial medicine tend to be considered mere ‘soft skills’, despite their obvious benefit in addressing whole-person medicine (Chamberlayne, Bornat and Apitzsch, 2004). General Practitioners work at the

interface of science and story. They need to interpret patient stories, sieve out medically important aspects, empathise and come to some mutual understanding with the patient about how to proceed. Auto/biographical research can illuminate more of what doctors need to know, including professional identity, psychosocial literacy and emotional understanding (West, 2004).

Biographic methods

West used biographical methods in a 2001 study exploring learning, role, and wellbeing in 25 General Practitioners in London. On reflecting on his work, he states that biographical methods provide:

> *"A powerful case for a new paradigm of health and learning in medicine was made in these stories, one that connects head and heart and the socio-cultural and the personal, the science and the subjective, one person and another. The dominant paradigm within medicine has been professional knowledge and technique derived from systematic enquiry. Such a story badly neglected the psychosocial, subjective, messy and indeterminate aspects of a doctor's work and has perpetuated a damaging split between psychological and physical medicine, the science from subjective insight."*
>
> (West, 2004 p309).

West suggests there is an epistemological crisis in the nature of the work of GPs. Some skills required to be a good GP have been neglected. He suggests that experiential, case-based forms of learning should be more predominant, which include focussing on the doctor's feelings (West, 2004). Balint groups are effective at addressing this but are only utilised by a few doctors. The psycho-analytic approach of Balint will be mentioned later when describing the interview analysis method.

West feels there is some resistance to engage with the subjective aspects of GP work as it goes against the dominant values within medical culture. This conflict of

purpose is deleterious for the GPs wellbeing, with GPs often considered as failed hospital doctors. A recent literature review demonstrated a crisis in a sense of meaning is resulting in low morale in the UK doctor workforce (Andah *et al.*, 2021). Andah *et al.,* came to their conclusions by performing a rapid literature review (between January 1990–March 2020). Morale was low even prior to the Covid19 pandemic.

In using biographic narrative for the EPGPS research, the subjective aspects will emerge as an accepted part of being wise. This may address West's concern about the resistance to engage. His argument for the use of biographic methods is compelling and supports the aims of discovering what phronesis really is, synthesising the affective, reflective, and cognitive faculties of the narrator.

Biographic research methods enable disciplines like sociology, psychology, and education to come out of their silos and convey a sense of holism within a socio-cultural milieu. Biographic methods illuminate the complex interplay of individual agency and social structure (Chamberlayne, Bornat and Apitzsch, 2004). The biographic approach will allow the understanding of the exemplars lives in narrative form, seeing how they make sense of their lives and their world. It works across the boundaries of personal, social, public and private aspects of caring (Chamberlayne and King, 2000).

6.3 Participants

20 doctors out of the original cohort of 211 GPs were found to have a high score on the Ardelt 3D wisdom questionnaire (see table 6.1, line 2 - high criterion for wisdom). The 211 GPs were given the questionnaire at GP trainer updates and an NHS appraiser workshop. This means the GPs sampled have an interest and level of expertise in educational processes in medical education. This may differentiate them slightly from GPs not engaged in appraisal and training.

According to Ardelt, a score greater than 4 out of 5 in every domain (cognitive, reflective, and affective) is a high criterion for wisdom. This is a stronger indicator than an average score above 4 across the three domains (table 6.1 line 3) which she classes as a weaker criterion for wisdom (Ardelt, 2003).

The wisdom exemplars amounted to approximately 10% of the total number of GPs who took part at the questionnaire stage. Interviewing 20 GPs was pragmatically achievable and would hopefully provide the broadness and richness of data required. In contrast to Wengraf's commentary, the exemplars in this research were also a statistically significant group in addition to being a desired sample to interview (Chapter 5).

> *"Design a 'desired sample' on the basis that the range of cases will never be 'statistically significant', but you want them to be together a 'convincing sample' for the type of argument you will eventually want to make and against the counterarguments you might expect to have to deal with."*
>
> (Wengraf, 2018 p20)

Lengthy deliberation was required in deciding if the lowest scoring GPs should be interviewed. The study was keen to highlight the biographic narrative features of the high scoring exemplars rather than it being a comparative study against the low scoring exemplars. A decision was made to include interviews with some of the lowest scoring GPs, because it would enable a contrast in characteristics that could help in providing a conceptual framework for what constitutes enacted phronesis.

Precedent has already been set with regard to interviewing high and low scorers from the 3DWS (Ardelt, 2003; Owens *et al.*, 2016). Ardelt's original work involved interviewing 40 low, median, and high scorers from a pool of 160 people who completed the 3-dimensional wisdom questionnaire. Her interviews were semi-structured qualitative interviews lasting 30-60mins (Ardelt, 2003). Her goal was to validate the 3D wisdom questionnaire as a tool for measuring wisdom, rather than compare groups.

The research goal was to explore the character of the exemplar, in line with the work of MacIntyre, where the concept of virtue ethics relates to the habits and knowledge of how to lead a good life, with good judgement emanating from good character (1981). This has been reinforced by Schwartz and Sharpe in their reflections on practical wisdom in healthcare (2010). MacIntyre was inspired by Aristotle, who described virtue rooted in character traits that human beings need in order to flourish, which is referred to as eudaimonia (Aristotle, 2004). Grossman has concluded that wise thinking shows convergent validity to eudaimonia (2017a). He goes on to say:

> *"Reflections on wisdom exemplars across such contexts can further promote ways of thinking that are characteristic of wisdom. Sensitivity to such contextual*

> *factors has a unique power for wisdom-enhancing interventions, with direct applicability in educational and workplace settings."*
>
> (Grossmann, 2017a p 233)

As this research is about the intellectual virtue of phronesis, it was felt that a biographic narrative would provide the material that closely approximated to exploring the lived live (of the exemplars). Getting to the core of 'lived life' is important because being wise is not simply a psychological or intellectual process, but one that is accompanied by 'doing', hence enacted (Mishchinski and Jayawickreme, 2019). It is hoped that the findings will be relevant in enhancing wisdom within the medical education settings.

6.4 Ethical considerations

University ethics approval for Part 2 was obtained in February 2018 (appendix A6.1), following the original approval for Part 1 in November 2016 (appendix A4.2). The ethical approval forms were submitted at different times, as the actual interview method for Part 2 qualitative work was not developed at the point of collection of empirical data for Part 1. The aim (and delay) was to find the most holistic, non-reductive way of conducting and analysing the qualitative interviews that stayed true to the concept of virtue ethics and character development.

Due consideration was made regarding my conflict of interest (being an Associate Dean with regional responsibility for GP training – Health Education England). Health Education England West Midlands had given permission for the research to be conducted, as did NHS England. The consent form (appendix A6.3) also outlined the right of the participant to discontinue, the escalation process in the event of serious

malpractice becoming known, the use of a transcriber and analysis panel, safe storage of data and interviewee anonymity (pseudonyms were selected by each interviewee). Ethical approval was gained, with the proviso that I would inform the supervisor of the location and date of each interview (lone work, interviewer safety).

Having decided the research would involve interviews with high and low scoring GPs, the ethical dilemma of *apparent deception* became troublesome. Approaching low scoring GPs for an interview, without telling them they had a low score, may lead them to believe they had a high score as a consequence of the title of the research. How would I skirt around the issue whilst still conducting the interview in a professional and ethical manner? It transpired that I was able to use the same language and phraseology in reintroducing the research goal to all the interviewees. This did not state if they were high or low scoring. The only thing I needed to say what that I was conducting research on enacted practical wisdom. All interviewees were forthcoming in their contributions and it did not pose a practical problem. Some reservations remain should the research become published in accessible journal articles, as the low scoring doctors would come to realise why they were selected.

Each interviewee was contacted shortly after the interview (same day or next day) and again two weeks after the interview by email. This was to check on their wellbeing and to request PSQ and MSF data if it had not been forwarded previously. It was possible that narrating their life story could have brought up some distress and I would have to signpost to resources such as GP Health counselling services. Most participants stated that telling their story was quite self-indulgent and cathartic.

6.5 Conducting the interviews

The interviews were conducted between May 2018 and November 2018. Of the 20-high scoring/high criterion for wisdom candidates 16 were interviewed. One of the 20 (5%) did not give any contact information to proceed to Part 2, (which was optional information to submit following completion of the questionnaire for Part 1, see appendix A 4.3). 3 of the 20 wisdom exemplars (15%) were emailed four times over a period of six months. They replied stating they were unable to participate in the interviews. The main reason being a busy schedule. This left 16 high scoring GPs to be interviewed (80% of all those with a high criterion for wisdom – Table 6.1, line 5).

The lowest 2 scorers with a high criterion for 'non-wisdom' were not contactable. A high criterion for non-wisdom is a score below 3 in every domain (cognitive, reflective, and affective. They chose not to complete the contact details section of the questionnaire (Table 6.1, line 6). This meant the low scoring contingency group was required where N=5. That is the group with an average score less than 3 across the three domains (cognitive, reflective, and affective Table 6.1, line 8). Of the lowest 5 scorers, only 2 had given contact details to progress to the next stage (Table 6.1, line 10). They were not the lowest scores from the study, but both were interviewed.

Interestingly, contactability of the high scoring versus the low scoring group concurs with evidence about important personality predictors of wisdom being related to openness to new experience (Staudinger *et al.*, 1997), as participating in the second stage of the research can be interpreted as a form of new experience. Compare the

19 of the 20 top scorers who gave their contact details (95%) to the 0 out of 2 bottom scorers who did not give permission to proceed. High scorers were almost all open to the new experience of an interview, and this level of openness was not seen in the low scorers. The 2 low scorers that were interviewed were not the lowest scorers. Of the top 5 high scorers, 4 were interviewed amongst the 16 wisdom exemplars.

16 high scoring doctors plus 2 low scoring doctors made a total of 18 interviews involved in the EPGPS study. This was a 72% uptake rate (18 out of 25) and a pragmatically manageable number to interview.

Ardelt 3D (Cognitive, reflective, affective) Wisdom Questionnaire results – EPGPS	Number of participants	%
1. Total number of questionnaires completed	211	
2. Number of questionnaires that met the 'high criterion for wisdom' (score above 4 in all three wisdom domains).	20/211	9.5%
3. Number of questionnaires that met the weak criteria for wisdom (average score above 4). *Contingency group.*	45/211	21.3%
4. Number of high criterion wise GPs who gave contact details	19/20	95%
5. Number of high criterion wise GPs who agreed to be interviewed	16/20	80%
6. Number of questionnaires with a low score (below 3 in all three wisdom domains)	2/211	0.95%
7. Number of low scorers who gave contact details	0/2	0%
8. Number of questionnaires with a low criterion for wisdom (average score below 3). *Contingency group.*	5/211	2.4%
9. Number of low criterion average score GPs who gave contact details	2/5	40%

10. Number of low criterion average score GPs who agreed to be interviews	2/5	40%
11. Total number of Biographic narrative interviews	18/25	72%

Table 6.1 How the interview participants were derived.

Both the interview and analysis process were conducted in line with the BNIM - Biographic Narrative Interpretive Method (Wengraf, 2001). Direct communication with Wengraf about the research methods allowed for unpublished recent iterations of the BNIM method to be accessed. Wengraf acknowledges that not all BNIM steps need to be adopted, depending on the nature of the research.

In published research, Flynn, Holley, and Oliver have presented their BNIM findings in the form of individual case summaries (Flynn, 2019; Holley and Oliver, 2009). This is the conventional way and will follow in Chapter 7, section 7.2. Wengraf himself feels that full BNIM analysis should only be performed on a few narratives (2-4), which can then be compared and contrasted. Personal correspondence with Wengraf suggested performing BNIM analysis on 18 interviews was very ambitious and would be incredibly time consuming, especially for a panel to convene (panel analysis will be described in section 6.6). I was still keen to immerse in this level of detail for all 18 interviews. Wengraf also appreciates that the data collection is a separate process to the analysis, and many people who use the BNIM data collection methods revert to an amended form of data analysis, as appropriate for their study aims. This was the case for the use of BNIM in the research on virtue in social workers (Pawar *et al.*, 2017). Pawar states that, *"the BNIM interpretation method was not followed as it was not needed for the purpose of our study" (2017).*

Wengraf describes the importance of framing the interview, considering how much to tell the participant in advance, being mindful to maintain the improvised narrative. Wengraf states that giving participants the research question in advance can stifle the improvisation of the narrative. Participants were personally emailed after being identified as having an outlying score (appendix A6.2). The initial email was sent with a participant information leaflet and a consent form (appendix A6.3). The information leaflet outlined the purpose and nature of the PhD research (appendix A4.3). The information leaflet did not reveal the questions that would be asked. A section of the pre-interview information is pasted below:

> **What will happen to me?**
>
> You indicated in the questionnaire (EPGPS Part 1) that you were willing to be contacted again. As a result of your responses I would like you to progress to the next stage of the research. There is no compulsion to participate. The study will be explained, and you will have opportunity to ask for clarifications.
>
> If you decide to participate you will be asked to sign another consent form for EPGPS Part 2 and 3 (Interview and MSF/PSQ portfolio data submission).
>
> The interview should not exceed 2 hours but is guided by your own narrative. I will come to your preferred location, at a mutually convenient time to interview you. The interview will be audio recorded.
>
> At the end of the interview we can make time for a short debrief if required.
>
> I will contact you within two weeks of the interview to check if you are well, and if you are willing to share your latest PSQ and MSF results, this will be used to triangulate previously collected data.

Interviews were conducted in various locations including interviewees homes (5), quiet cafe (1), workplace during a break (9) and university premises (2), researcher's home (1). The interviewee was given the choice of their preferred venue. Wengraf urges the researcher to consider their own feelings before the interview and maybe

anticipate what the interviewee is going through. Some interviews required a car journey of four hours (return) to meet the exemplar. I kept a notebook with personal reflections on each interview (including pre/post interview thoughts) and the BNIM interview notes where sub session 1 emerging content informs sub session 2 questions, see summary below. Sub session 1 and 2 were done at the time of the face-to-face interview. The interview was recorded using a Zoom H2n digital voice recorder. Interviews were converted from WAV files to MP3 files for transcription.

Transcriptions were done by Lesley Osbiston of KT Typing services. This was a typing service recommended by a fellow PhD student. Deliberation was made whether to self-transcribe or use a professional transcriber. The volume of data and the time constraints meant that external transcription was the most pragmatic solution. An example of a transcript section can be found in the appendix (A7.3). Despite not self-transcribing, I was able to immerse in familiarity with the transcripts as every transcript was reviewed for accuracy once typed up, every transcript was hand prepared x3 for the panel analysis sessions, and at the point of mapping to the conceptual framework for the purpose of comparison, all transcripts were studied in depth in order to locate supporting quotes.

The text box outlines the important stepwise process in the BNIM interview process as described by Wengraf. A systematic approach was taken during the narrative interview and this method was adopted for all 18 interviews.

BNIM interview stages

1) Sub session 1 - Single question aimed at inducing narrative (SQUIN)
2) Sub session 2 - Particular incident narratives (PINs)
3) Sub session 3 - Supporting data

Steps 1 and 2 occurred together during the interview. Step 3 is sometime later.

Sub session 1: SQUIN

Single question used in the EPGPS narrative interview:

"You know that I am doing this work on enacted practical wisdom in general practitioners. I am interested in your experience in the things/events and influences that have made you the doctor you are now. I'd like you to tell me all about it, in your own way. Tell me what has been important for you. I won't interrupt. I'll just take some notes, so please do begin"

Sub session 2 (PINs - Particular incident narratives)

Immediately following on from the response to the SQUIN, the task was to draw out narratives relating to particular incidents, adhering to a strict chronological order (gestalt), and referring to terminology used by the participant. Wengraf describes this part of the interview as drawing out the detail of *turning points*. Notes were taken during the SQUIN reply, these notes were used to inform the PIN questions. These commonly took the form of *"You said X, what do you remember of that time? Any more details of how it all happened?"* (Wengraf, 2018b).

Sub session 3 (Part 3)

Wengraf has left this part optional and very flexible, suggesting it can be a follow up interview or collection of supporting data. This happens some point after sub session 1 and 2. The EPGPS used sub session 3 to obtain colleague multisource feedback (MSF) and patient satisfaction questionnaire (PSQ) data from the

interviewees. This information is routinely collected at least every 5 years for the purpose of GMC revalidation and appraisal. It was collected as a means of triangulation with the self-reported data.

I favoured this open question method (SQUIN) as it is similar to my initial approach to the GP consultation. As a GP and advocate of narrative medicine I embed this into daily GP consultations (Launer, 2003; Zaharias, 2018; Launer, 2021). The BNIM interview technique ensued intuitively. There was some caution from supervisors about how to probe the interviewee if participants ran out of material. This did not seem to happen, and any hesitancy was overcome with a few reiterations of the SQUIN. One interesting observation was that some exemplars were in their 20's. This meant their narration was shorter, possibly by virtue of their shorter lifespan. All interview responses were recorded, along with the generation of handwritten notes. The longest interview took 120 minutes and the shortest interview 30 minutes.

6.6 The Interview analysis method and the use of a panel

The BNIM interpretative analysis is a lengthy process that involves the assembly of a panel to interpret the biographic narrative transcript, individually and collectively in a prescribed fashion. It aims to explore the 'lived life' and the 'told story' of the interviewee. The analysis aims to reconstruct the participant's self-theorising in an interpretive but objective way (Chamberlayne and King, 2000). Wengraf refers to the analysis as a two-track, future-blind interpretative method (2018b). The panel progress through a process of sequential hypothesising regarding what is happening, in order to broaden the spectrum of interpretations, these are accepted or dismissed

during the course of the analysis. Much attention is paid to the time perspective of the narration (past, present, future). The original narrative is deconstructed then a new narrative reconstructed. The output for each exemplar is a case account statement.

Table 6.2 and Figure 6.3 outline the main steps of the analysis using the biographic interpretative analysis method. Table 6.4 illustrates a panel member's analysis page, as mapped to the main steps of BNIM analysis, using the template suggested by Wengraf.

	Five stages of BNIM (Biographic Narrative Interpretative Method) Analysis
1	The analysis of biographic data (BDA), addressing the chronology of experience in the lived life, lived through the past.
2	The analysis of the interview text in a thematic field analysis (TFA), aiming to reconstruct the structuring principles of the story as told; it's gestalt.
3	The construction of a case history based on 1 & 2, addressing how events have been experienced in the past, and how patterns of orientation, interpretation and self-presentation developed.
4	Micro-analysis of small, selected pieces of text aiming to analyse in depth the inter-relation between past experience and their presentation.
5	Amalgamation of the 4 steps above, a discussion about the inter-relation between lived life and told story, contrasting the two, forming a structural hypothesis about the connection.

Table 6.2 The 5 stages of BNIM Interview interpretation. (Wengraf, 2001 p234)

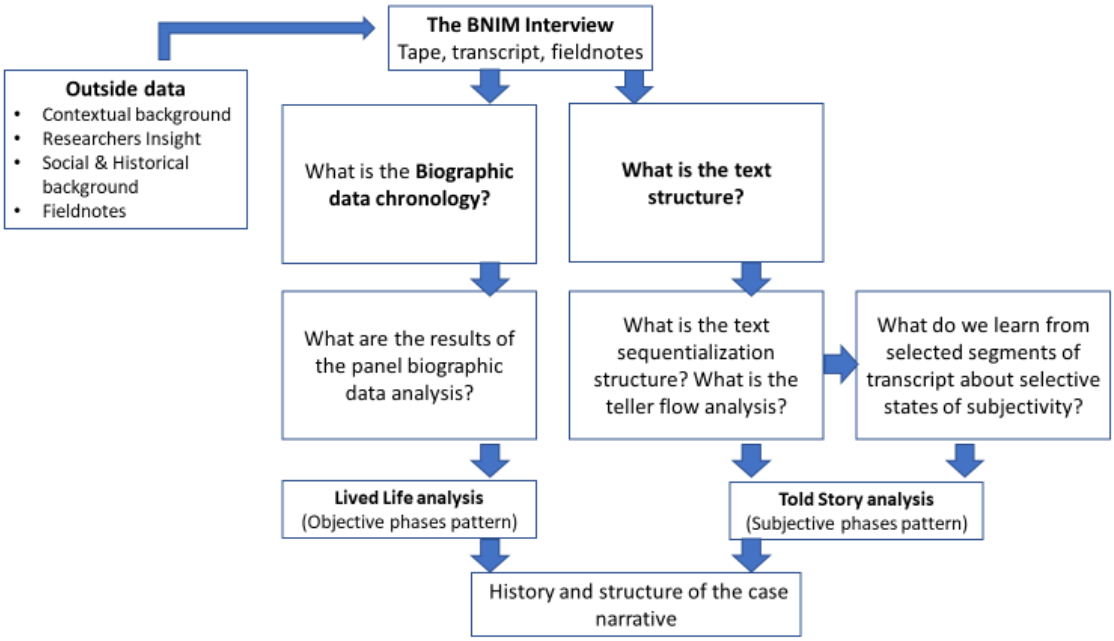


Figure 6.3 derived from Wengraf (2018) p242 – Twin track interpretative method.

EPGPS Panel analysis proforma example. **Transcript Exemplar's pseudonym**: Billy **Page number** 1. **Date** 14/01/2019

Lived Life Phase (Biographical data analysis)	**Successive states of subjectivity phases over life periods (phases of mutating subjectivity)**	**Teller flow phase over the course of the interview telling period (thematic flow analysis).**
Childhood	Loner, didn't get on with people. Struggling academically, "he's really thick", saw Ed psychologist who helped get into prep school (assisted place). Parents belief NOT to label him dyslexic, "This is not the child we are seeing at home".	Didn't like state school. Parents protected him from dyslexia diagnosis. Credits parents for getting him where he is now 537, 544. "What if I stayed in the state system?" It would have been a different journey.
Squint – lots of operations	"Geeky looking" 295	Awkward child.
State boarding school aged 13	Poor kid in school, other kids cruel (assisted place). Developed good group of friends. I enjoyed having friends, "No bad thing". We looked after each other, they would come to me for advice. Met inspiring old doctor at a careers event. He had lots of interesting things to say. "I always enjoyed sciences".	Parents gave me a choice about secondary school. Events led me to think about being a doctor. Enjoyed helping people and giving counsel. Fascinated by the interesting things doctors do. There is stability in Medicine 528.
Parents got divorced (17)	Dad affair, mum told Billy.	
Mum got anxiety & depression, formal carer for mum		Mum's depression influenced my decision to be a doctor 213, 220, 234, 235. Supporting mum became an obsession 329.

Table 6.4 An example of the panel analysis template used for every BNIM panel session by each panel member.

The use of a BNIM analysis panel

The panel analysis concept appealed for a number of reasons. Firstly, the capacity to remove researcher bias, especially when dealing with narrative. The benefit of using a panel was to introduce different perspectives and ways of interpreting and judging. It enabled a breadth of critical thinking that may not be achieved alone. Secondly, I was very familiar with Balint groups (psychoanalytical support groups that facilitate practitioner development) where different interpretations are beneficial in coming to understand a situation. There were parallels in the way BNIM analysis was prescribed by Wengraf and the Balint method (Balint, 1957). The parallels between the development of phronesis and the use of Balint groups was also identified in the literature review (Muench, 2018).

Wengraf suggests the panel should consist of people from different backgrounds. He recommends the panel consists of between two to six people. The EPGPS BNIM panel consisted of three members, these people were interested in the study and were able to give their time without charge:

Panel member 1 (PM1)	PhD Researcher. General Practitioner and Medical Educator.
Panel member 2 (PM2)	Honorary Biomedical Lecturer. Palliative Medicine Clinician.
Panel member 3 (PM3)	Senior Lecturer in Biomedical Ethics and Law. Nursing background.

Wengraf suggests that the greater difference between panel members, the more ‘objective’ the subjective interpretations will be (2001). Wengraf states one function of the panel is to generate counterhypotheses to expand one’s sociological imagination (2001). He suggested that different people could be used for different parts of the

analysis, but it was felt that it would be wiser to use the same panel members because explaining the BNIM analysis method is quite time consuming. A memorandum of understanding was established prior to the analysis process (appendix A7.2).

The panel convened over three whole days between January and February 2019. The panel were given copies of each transcript along with blank BNIM analysis note-taking templates (see Table 6.2 and appendix A7.3). The process was explained to each panel member, describing how the lived life, successive states of subjectivity over the life period and thematic field analysis (the told story), were documented as individual transcript readers. The panel members read sections of the transcripts individually (in the same room). They completed their own analysis templates and formulated their own case summary. Panel discussion was commenced focussing specifically on areas of agreement and disagreement. Hypotheses and counterhypotheses were negotiated. At the point of analysis panel members 2 & 3 were blinded to the low scoring GP transcripts.

Wengraf encourages the transcript to be analysed in chunks, this usually equates to a period in the exemplar's life e.g. childhood. This is illustrated in figure 6.4. Wengraf advises this in an attempt to guard against being seduced by the propaganda of the story (Wengraf, 2018b). The final step results in a case synthesis of the history and the structure of the biography. The key over-arching concept each panel member had to consider for the synthesis statement was:

"Why did the person who lived their life like this…come eventually, (at least on that day), to tell their story like that? Wengraf 2018

The case account is a new narrative which is a synthesis of the lived life and told story. This can be presented in a number of different ways depending on the research audience. Wengraf suggest that if the audience need to relate to practice (rather than policy), then the use of a vignette is a powerful means of (re)presenting a narrative and invoking significance (2018b). This is an increasingly valuable tool especially in fields like public health (Thompson and Kreuter, 2014). A vignette style lends itself to future educational activities. The BNIM results in section 7.2 will be presented in this way.

Unfortunately, not all of the 18 transcripts could be analysed by the panel. The reasons for this are discussed below. The analysis process was time consuming, and two panel members were giving their time voluntarily. The six remaining transcripts were not analysed as a panel, but strictly followed the BNIM analysis procedures.

Lone analysis for 6 transcripts

One major short-coming of this research is that analysis of case narratives 13 to 18 were not conducted as a panel. This disparity in the proposed systematic interpretive process could be seen as a flaw in the trustworthiness of the work. The issue arose due to a number of reasons; close family bereavement (PM1) and permanent relocation (PM3). Wengraf cautioned against the use of BNIM analysis on more than

about 4 interviews. Wengraf considers lone analysis acceptable, but not ideal. Having gone through 12 transcripts as a panel, I became aware of my own subjective bias. This was helpful insight for the remaining 6 transcripts. It was felt that the 6 transcripts were very important when answering the question of what constitutes enacted phronesis and they should be included in the totality of the results, despite the lack of panel analysis. On writing specifically on BNIM analysis, Jones acknowledges that size of the text and number of colleagues and their time available mean that analysis may need to be fluid and adaptive (2003). The BNIM process was adhered to during the lone analysis, as it had been for cases 1-12. The subsequent narrative outputs were comparable to other summaries, though the multiple perspective angle was missing.

Organising and presenting the results

Embarking on organising, indexing, analysing and interpreting material from 18 biographic narrative interviews was a daunting task. Johnson, Dunlap and Benoit refer to qualitative research as creating a 'mountain of words', which is exactly what resulted. They used their collective experience to suggest how to organise and move forward with qualitative data (Johnson, Dunlap and Benoit, 2010) and this was used as a guide for the EPGPS work. Wengraf writes about the importance of a conceptual framework to underpin the (re)presentation of results for writing up (2001).

The case narratives would be difficult to compare and contrast without a conceptual framework. A derived theoretical framework was established and the method for this is described below, with the results presented in Chapter 7, section 7.1.

Keyword analysis in establishing a conceptual framework

Keyword analysis is one of the important methods used in corpus linguistics (Al-Rawi, 2017). One of the most powerful types of corpus analysis is comparing two different types of corpus (Froehlich, 2015). Keyword content analysis is able to analyse texts in terms of statistical significance. Using keyword analysis brings a quantitative dimension to strengthen the arguments used in the BNIM qualitative analysis. Keywords are the units that carry meaning, words have special status in conveying important evaluative social and cultural meaning.

This research used the keywords to construct a meaningful conceptual framework in which to shape the presentation of data in Chapter 7. The quantitative keyword analysis was performed using Laurence Anthony's AntConc concordance software (Anthony, 2019). It was used on the smaller corpus first (the two low scoring doctors). It was felt that dealing with a smaller amount of data at the outset would enable an initial framework to be established, which could be expanded and amended when comparing it to the larger corpus (16 high scoring wisdom exemplars). Vaismoradi, Turunen and Bondas caveat the use of content analysis by saying the themes and patterns which are found should be used with caution as a proxy for significance (2013). The EPGPS used corpus linguistic analysis as a screening tool which

allowed for the sentence and context to be explored, thus addressing Vaismoradi's warning.

The keyword analysis was performed on the smaller corpus (2 low scoring doctors transcripts amalgamated). 1256-word types were found from 18 pages of transcript. 168 words were used more than 10 times. At this threshold, these words were arbitrarily considered the most significant. A comparative threshold was used for the larger corpus (results in section 7.4), which allowed the 18 case accounts to be contrasted and compared, generalising/codifying whilst appreciating contextual particulars (section 7.5).

6.7 Further data collection (MSF and PSQ)

A potential weakness of this study is that both parts of the mixed methods study were self-reported. It is therefore susceptible to self-reporting bias. Wengraf describes a very flexible, optional third step to his BNIM research method. He calls this sub-session 3 (Wengraf, 2018b). It is less prescriptive than the previous two steps and can fulfil whatever gap requires addressing by the researcher. Wengraf writes that sub-session 3 can include all further questions relevant to the interest and theories of the researcher. It may arise from sub-session 1 and 2, but it does not have to. It is always performed after sub-session 1 and 2. It does not need to be narrative at all (Wengraf, 2018b). This led to an idea regarding sub-session 3 and is described in the text that follows.

As an established GP Appraiser for NHS England I have performed over 100 GP appraisals in the last 6 years. General Practitioners annually submit evidence in a portfolio that is reviewed by the appraiser. This evidence consists of reflections on professionally related learning, quality improvement activity, knowledge updates and patient/peer feedback. A series of successful annual appraisals (usually 5) result in revalidation with the General Medical Council. This is a compulsory activity if the doctor is to maintain a licence to practise. The process for collecting patient and peer feedback is quite standardised. At least once during every revalidation cycle, the doctor is required to collect feedback from 15+ colleagues (Multi Source Feedback questionnaire, MSF) and 30+ patients (Patient Satisfaction Questionnaire, PSQ). These are collected, analysed, and collated by an external agency that then produce a report for the clinician. These reports are then entered into the appraisal portfolio for the doctor to reflect on and for the appraiser to review. Examples of these standardised reports can be found in the appendix (A6.4).

The option to request and include MSF and PSQ data provided an opportunity to strengthen the EPGPS research. It allowed triangulation of analysed self-reported results with patient and peer opinion. It ensured there were no major oversights when reviewing the medical practise of the wisdom exemplars. Following the exemplar interviews, each participant was emailed within 2 weeks. They were asked if any issues or feelings arose after the interview (wellbeing check), and a request was made for their latest MSF and PSQ reports. 14/18 exemplars provided this data, and it included the two low scoring exemplars. The reflections on the data from sub-session 3 will be provided in Chapter 7, section 7.6. This aspect of the research was

included in the ethical approval submission and was termed part 3 of the EPGPS work (Appendix A6.1 and A6.2).

6.8 Chapter summary

This chapter has described the rationale for using the biographic narrative interpretive methods for the qualitative part of the EPGPS research. It justified the use of BNIM in terms of coherence with the research aim to capture what constitutes enacted phronesis by using rich contextual data, alignment with virtue theory and its ability to remain a non-reductive and relatively holistic research method. The BNIM outputs lend themselves to teaching, reflection, and professional identity exercises. The case summaries allow the link between clinician character and phronesis to be made. The case narratives have been positively evaluated by speciality trainees during a teaching session, as noted in the published article (Jameel, 2021) (appendix A7.1).

In order to present the qualitative data in a way which can be compared and contrasted, a conceptual framework was derived from corpus linguistic analysis. The method for this has been described in this chapter; this is in addition to the BNIM process which was described in terms of the participant selection, the interview process, and the analytic process. The BNIM results are presented in the next chapter

7. RESULTS - PART 2

Biographic Narrative Interviews

Part 1 of this research provided a purposive sample of doctor wisdom exemplars as empirically derived from the Ardelt 3-Dimensional Wisdom Scale. Broader characteristics of the exemplar group have been described in Chapter 5 along with the results of the wisdom questionnaire. Chapter 6 justified and explained the methodology used for the interview stage of the research. This chapter presents the results of the analysis of the biographic narrative interviews. The results are presented in two ways, as BNIM case summaries and as verbatim quotes which are compared and contrasted in themes which were derived from a corpus linguistic conceptual framework. The subheadings 7.1-7.6 provide navigation to the reader in presenting the large body of qualitative results. The content of each section is summarised below.

Section 7.1 is the prima facie starting point. It aims to outline and justify the derivation of the narrative conceptual framework originating from linguistic coding. The framework is aligned to the central research goal. This framework will form the basis of the organisation within this chapter, comparing the results from the BNIM analysis summary statements and enabling the use of quotes directly from the corpora.

Section 7.2 presents the results of the Biographic Narrative Interpretative Method (BNIM) panel analysis. This section focuses on the lived life (biography) and told

story (narrative) of the 18 doctors interviewed. The BNIM outputs are psycho-societal and relate to how the exemplars construct meaning in their lives through contextual narrative. The BNIM outputs were presented as case narratives, similar to character statements. During the analysis process there was an unintended deviation from the original Wengraf analysis methodology (Wengraf, 2001); justification for this will be offered.

Section 7.3 presents the conceptual narrative framework as applied to the lower scoring doctors. It will generate questions, gaps and problems that can be considered when analysing the larger group of high scoring exemplar narratives. The lower scoring doctors amalgamated transcript formed the basis for the conceptual framework from which this chapter discussion is structured.

In Section 7.4 the conceptual narrative framework is applied to the high scoring wisdom exemplars. This section will address the question **“**What are the narrative themes of the high scoring wisdom exemplars?” It will consider the BNIM case summaries along with verbatim quotes.

Section 7.5 compares and contrasts the results from low scoring and high scoring groups. This section aims to answer emerging theoretical questions and work towards answering the central research question and its sub-themes. It will look for similarities, differences, and contradictions.

Section 7.6 offers critical reflection on external validity referring to EPGPS part 3. This final section offers a brief summary on BNIM sub session 3 as a form of external validity. BNIM sub-session 3 (described in Chapter 6 section 7, and also referred to as part 3 of the EPGPS), involved collecting data in the form of 360 feedback - colleague multisource feedback (MSF) and patient satisfaction questionnaire (PSQ), from the doctors who were interviewed. 14 out of 18 doctors provided this information. The purpose of obtaining this information was to triangulate the self-reported findings from Part 1 and Part 2 of the EPGPS study and ensure there were no major oversights.

7.1 The conceptual narrative framework

Chapter 6 justified why BNIM was considered the most holistic, non-reductive means of obtaining biographic narratives from wisdom exemplars. It also outlined its important function in capturing the psycho-societal context of the exemplars' biographies; context being an important component of phronesis. These remain fundamentally important aspects of the choice of methodology.

The EPGPS research was quite faithful to BNIM data collection and analysis (as described in Chapter 6), but the BNIM end products were discrete case summaries that did not contain verbatim quotes. This rich contextual narrative in the form of quotes was felt to be important in supporting the discussion arguments. This meant that an additional dimension was added to the interview results. Verbatim quotes were accessed by using panel members handwritten notes from the BNIM structured

analysis template and cross-referenced by using the corpus linguistic coding tool (Ant Conc) and by revisiting all the transcripts directly.

Figure 7.1 illustrates the main research questions along with the modality used to address those questions. What was not appreciated at the outset was the time it would take to complete the panel analysis, and a consideration of the best way to present the results in relation to the questions. The narrative interviews contain the answers to the questions, but with the volume of interview transcribed material there was an opportunity for quantifying themes. The strength of a theme can be considered a more robust way of devising a conceptual framework in which to structure the discussion. That is why the qualitative data has been analysed and presented in two ways:- semi-coded linguistic content analysis (Johnson, Onwuegbuzie and Turner, 2007; Vaismoradi, Turunen and Bondas, 2013) and BNIM analysis (Wengraf, 2001). Wengraf has recognised that this is a perfectly appropriate thing to do. He writes:

> *"Many researchers use their BNIM interview material only as a basis for some form or other of conventional or unconventional textual analysis of 'themes'; others explore the 'structure(s) of discourse involved. These may be perfectly appropriate and sufficient for what you want. If you are not interested in why and when people say what they say, but only in the fact that they've said it, then cherry-picking from the ''rich texts' that BNIM interviews provide will be quite enough".*
>
> (Wengraf, 2016 p27)

This research has done both. A summary flowchart can be found in Chapter 8 (Fig 8.3). Figure 3.2/7.1 below is a reminder of the original research questions. They will be explicitly answered in Chapter 8 (interpretation and discussion section), but it is important to keep these in mind when being presented with the qualitative data.

Fig 7.1 The Original Research questions and the modalities of addressing the question.

The over-arching questions:	Part 1 3DWS Questionnaire	Part 2 BNIM Narrative Interviews	Part 3 Triangulation MSF/PSQ
Q1. What constitutes enacted phronesis in a population of General Practitioners?			
The sub-questions:			
Q2. What characteristics are common to GP phronimoi? How does the expression of these characteristics differ from GP peers?			
Q3.Is phronesis in General practitioners a transient or stable state? Can phronesis consistently be demonstrated?			
Q4. What do GP phronimoi do differently in relation to their approach to practice?			
Q5.Does enacted phronesis result in better doctor-patient relationships?			
Q6.Does enacted phronesis result in a sense of greater personal well-being?			
Q7. What motivates phronetic GPs?			

Keyword analysis and the conceptual framework

The method for the corpus linguistic keyword analysis resulting in the conceptual framework has been described in Chapter 6, section 6.6. The keyword analysis was performed on the smaller corpus (low scoring doctors transcripts amalgamated). 1256-word types were found from 18 pages of transcript. 168 words were used more

than 10 times. At this threshold, these words were arbitrarily considered the most significant. A comparative threshold was used for the larger corpus in section 7.3. The data was displayed in the form of ranking based on frequency. For the purpose of creating a conceptual framework, some words used less than 10 times were also documented as they were either a variation of a word in the top 168 ranked words or they were deemed directly important to the study of phronesis.

Table A7.5 in the appendix depicts the second order keywords that have been allocated to broader keyword themes. Some of these categorisations were obvious due to their high rank, others required discernment within the text to see the context of the use of language. This was done by using the concordance tab on AntConc which gave the word used in context within the body of the corpus. The categories of ‘feelings’ and ‘learning’ capture a bulk of second order keywords without actually being major keywords in themselves. The mind map (figure 7.2) shows the main themes followed by the ranking number.

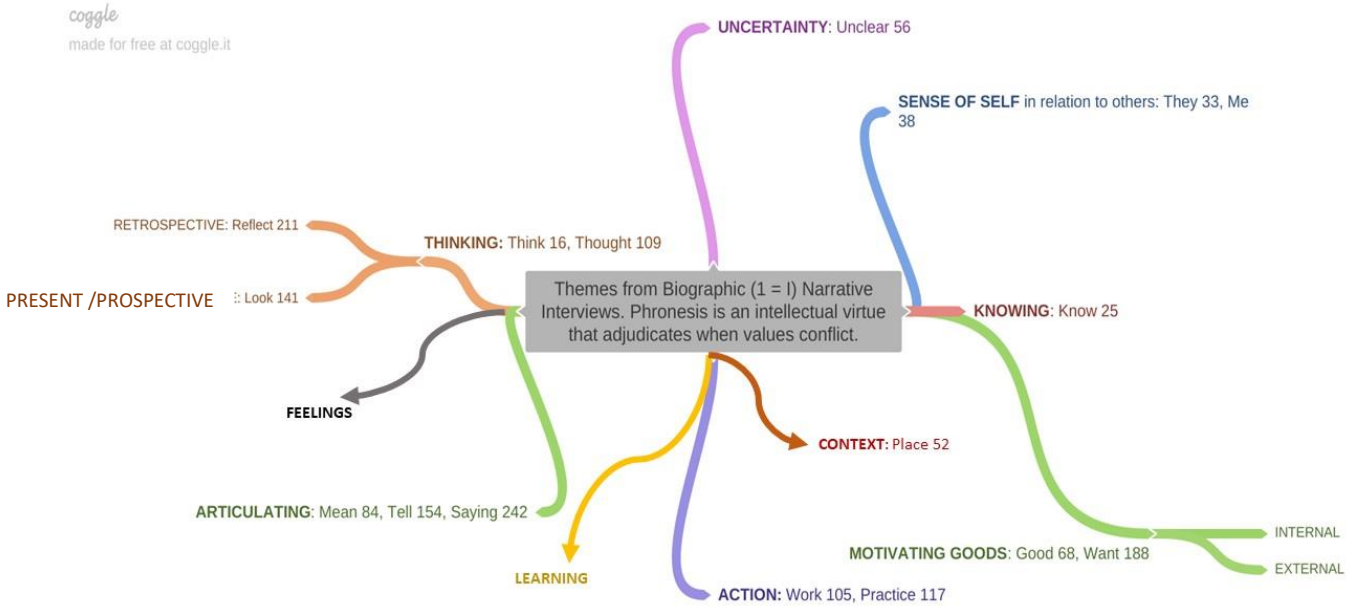


Fig 7.2 Mind map of themes derived from AntConc keyword analysis on the two low scoring doctor's transcripts amalgamated. The adjacent numbers are frequency ranking scores.

Unsurprisingly, considering these were from biographic narratives, the most frequently used word was 'I', ranked number 1. '*My'* ranked 15th. This also confirmed that the author/researcher was generally absent from the text, 'you' was not mentioned at all (referring to the researcher). The bulk of the high-ranking words were functional, grammatical words like *'and, to, the, it, a'*. The first important word to feature was *'think'* which was ranked 16th and was used 114 times. The next word, that was not a filler word, was *'know'* ranked 25th and used 76 times. Thinking and knowing became the most important concepts to explore in the task to elicit what enacted phronesis looks like.

These ten broad themes (in figure 7.2), namely, thinking, knowing, uncertainty, sense-of-self, articulating, action, context, learning, feeling and motivating-goods form the basis of the discussion for the rest of this chapter. In a chapter on conceptual frameworks for studying and (re)presenting qualitative data, Wengraf suggests that there are two major kinds of cognitive structuring; paradigmatic and narrative (2001). Narrative structuring shows how the new knowledge interacts with other parts, thus contributing to a whole. Wengraf promotes the preservation of gestalt in his BNIM interview process and analysis procedures (2001). The BNIM method remains faithful to the gestalt of the narrative and the holism of gestalt theory generally (Gundlach, 2020). These ten inter-connected categories are shown in Fig 7.3, they influence each other and are much more than just a mind map. This diagram was derived from the key word analysis. Within the figure I postulate how the categories interact with each other in both a feedforward and feedback manner. These inter-related categories will be applied to the interpretation of the BNIM analysis summaries (section 7.2) as well as providing headings for illustrative quotations from the exemplars (sections 7.3, 7.4, 7.5).

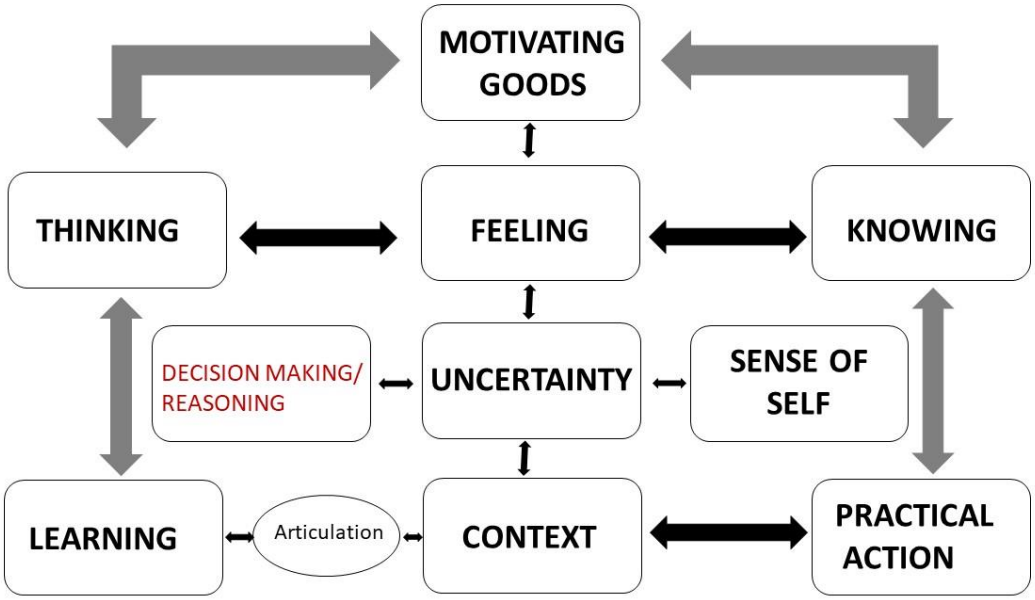


***Fig 7.3 Showing the inter-relationship between the derived conceptual framework themes from the corpus linguistic analysis seen in fig 7.2.** The term in red was not derived from the text but explains the process at that stage.

7.2 Presenting the results of the Biographic Narrative Interpretative Method (BNIM) panel analysis

When reviewing the BNIM summary statements that follow, it is important to be reminded of the SQUIN – Single Question aimed at Inducing Narrative, and the panel members remit when synthesising the case summary. This will put the BNIM Case summaries in context.

SQUIN

"You know that I am doing this work on enacted practical wisdom in general practitioners. I am interested in your experience in the things events and influences that have made you the doctor you are now. I would like you to tell me about it, in your own way. Tell me what has been important for you. I will not interrupt. I will just take some notes, so please do begin".

Synthesis remit

To offer the best sense of a historically evolving situation, addressing inner and outer world dynamics and considering the question 'Why did the person who lived their life like this tell their story like that?' (Wengraf, 2018b)

A single summary statement is presented in each case. When reviewing the use of BNIM in published research only one consensus summary statement is presented (Flynn, 2019; Chamberlayne and King, 2000). Additional synthesis statements from panel members can be found in Appendix 7.6.

Case Narrative Output 1: Academik

Academik has lived a life marked by personal tragedy and loss. And yet she has channelled the pain of these experiences into the pursuit of excellence for the sake of others, seeking to prevent pain and preserve happiness for her patients. In this way Academik has attempted to redeem the story of her [redacted] giving their suffering a healing purpose, which benefits people they would never have dreamed of influencing. Academik appears emotionally led and somewhat reactive in her decision making. Nevertheless, she has consistently lived by the mission to love others practically by developing her medical skills and knowledge. This has often come at significant personal cost and resulted in some experiences of personal failure. Academik has resolved to see such failure as opportunity to learn and not a cause of self-reproach. Academik loves her job and greatly appreciates the benefits of working in a healthcare system which is free at the point of access, since it enables love to drive her practice and not concerns over finances.
PM2

Pseudonym - Academik named herself after her favourite movie.

Case Narrative Output 2: Robbie

Robbie clearly enjoys partnership with patients and the joy that comes from longitudinal care in the community. He demonstrates high levels of gratitude and kindness (moral virtues). His wife has been a key support and guide. Overarching this is a life led by luck (an external locus of control), this then leading to worry and doubt in his abilities. These factors make decision making (more of an intellectual virtue), therefore commitment harder. This leads to regret. Robbie is conflicted but can reduce this by remaining in a comfort zone. He seeks affirmation and validation to guide him. He sees his roles as separate, like acting, rather than a unified whole.
PM1

Pseudonym – Robbie named himself after a Rockstar

Case Narrative Output 3: Alekhine

Alekhine is an authentic person that has a strong sense of community. He draws strength from relationships. He is an explorer of "life". He is very optimistic and relishes challenges. For things less desirable (like bureaucracy), he finds a way to reconcile the necessity by changing its intention and making it more relationship centred.
PM1

Pseudonym – Alekhine named himself after a Russian chess master

Case Narrative Output 4: Barnabas

Barnabas is an encourager who has learnt the skill through profound role-modelling and facing barriers which she realised could not hold her back. She is an experiential learner, a pragmatist who uses personal experiences to challenge herself and others. She is a storyteller, who reflects deeply on thoughts, motives, and attitudes to bring maturity. She trusts in God to guide her and sees value and meaning in opportunity. She uses her ability to give freely and derives validation from respected colleagues who inspire her and trust her.
PM3

Pseudonym – Barnabas named herself after a lesser-known Christian disciple

Case Narrative Output 5: Mr Bean

Mr Bean lives with a conscious sense of gratitude towards people who have been influential in his life and who have made sacrifices for him, including parents and teachers. He displays great humility in understanding his own limitations, valuing the input of others, and learning from 'near misses' in the past. He understands that pure intellect is different from common sense, and places great value on the latter. He is motivated by the avoidance of guilt, having a strong sense of responsibility to his patients and those whose sacrifices he has benefitted from (especially parents). He has been profoundly impacted by spending time in palliative care, which reinforced to him that human connection and good communication are more important that cold professionalism. An experience of powerlessness when attending a hospitalised environment as a relative has further motivated Mr Bean to keep an open mind, see the big picture and meet patients at a human level rather than missing them in medical activity.
PM2

Pseudonym – Mr Bean chose his own nickname.

Case Narrative Output 6: Billy

*Billy relates a life that started with an apparent failure, being labelled a "thick, hyperactive loner" in childhood. Key figures believed in him and empowered him, putting him in a more favourable environment for growth and development. He thrived, despite some challenges in his childhood and teenage years. He was able to filter the negative perceptions and work with the positive comments and his own reflective thought processes and cognitive reasoning about life and purpose. He finds a strong sense of achievement in making connections and understanding others. He found the caring role rewarding even from a young age. He loves breadth of intellectual stimulation. He remains indebted to his own parents and reflects on this through his own journey of being a parent. **
PM1*

Pseudonym – Billy chose his own nickname.

Case Narrative Output 7: Dolan

*Dolan has learnt to transcend and observe experiences of failure and injustice by adopting a very philosophical view of medical systems. He is very self-assured, dissociating experience of failure from his own scope of competence and value. He values human connection and is cynical towards developments and attitude that prize abstract knowledge and technique over connection. He is both philosophically combative and practically realistic, keen to be true to himself and rejecting imposed views that may be limiting. He sees the system as a challenge to navigate but impossible to change. **
PM2*

Pseudonym – Dolan named himself after a character from Homer's Illiad. Dolan was a Trojan who disguised himself as a wolf and was discovered.

Case Narrative Output 8: Egeria

*Egeria's life is grounded in giving and receiving love. Her initial response to the challenges of medicine was one of uncertainty in her own ability, but she sought experiences which would prove her resilience. She is keenly aware of injustice and the value people should be shown, regardless of their economic and social status. She has been formed in the crucible of a life-threatening injury, which has taught her the value of life, leaving her with a sense of priority and the need to make encounters meaningful. She reflects on her own loving upbringing in the way in which she embraces her patients. She is reflective about the nuanced ways her persona affects patient interaction. She welcomes the possibility of change and improved care, creating an environment where people can be honest about their experiences.
PM3*

Pseudonym – Egeria is a Greek mythological nymph who was a female advisor and counsellor.

Case Narrative Output 9: Godiva

As a child Godiva was an astute observer. She learnt from the positive actions of her mother, and she witnessed medical professionals care and intervention. She knew she wanted to make a positive difference in people's lives. She is motivated by connection to people, caring and kindness. 'Treat others as you wish to be treated' is a motto that drives her practise. The conflict between kindness and guidelines/process is an easy one for her to reconcile. She speaks of being 'alongside patients and their families'. Godiva knew she was well suited to general practice; she demonstrates high levels of self-awareness and self-knowing. Her feelings matter and she responds. High levels of self-awareness have enabled Godiva to establish professional boundaries that protect her from feeling overwhelmed. She is acutely aware of context influencing decisions she makes for patients.
PM1

Pseudonym – Godiva chose this name due to its geographical significance. Godiva was a noblewoman who campaigned against oppressive taxes.

Case Narrative Output 10: Mary

Mary is a 'big picture' person driven by a sense of vision, possibility, and optimism. Mary has encountered several manifestations of gender inequality in her career and yet has avoided bitterness, embracing opportunities to experience each stage of life as it comes. With courage and initiative, she has sought to find and preserve joy in medicine, whilst acknowledging the parts she finds hard. She is deeply compassionate towards patients and trainees, drawing upon her own life experiences and to find connection and empathy with others. Mary has embraced times of challenge and personal stretching as opportunities for growth and learnt that every season in life comes and goes, and so should be lived and embraced, not wished away. Mary's own experience as a patient have enabled her to gain insight into vulnerability, shaping her desire to be the kind of doctor she would want for herself.
PM2

Pseudonym – Mary chose the name of her grandmother.

Case Narrative Output 11: Scrabble

Dr Scrabble demonstrates high levels of self-awareness and knowledge of her own deep-rooted values. These have guided her in her choice of profession and the way she aspires to act. Along the way she has noted role models and cultures that she knew she did not want to emulate. She also found role models with characteristics she wanted to develop in herself. She made life choices that aligned with her enduring values, so that she could develop into the person she wanted to be. Her narrative is well thought through, as if she contemplated and reflected on her position many times before. Many of her life lessons are from patients and students, even from the most challenging and threatening situations. She chooses understanding over defensiveness. She demonstrates intellectual humility. Her love for the arts and literature may also be a defining feature in understanding what it is to be humane and compassionate.
PM1

Pseudonym - Scrabble chose her name as she loves words.

Case Narrative Output 12: Yoda

Yoda is a healer. He has been fascinated by healing since he was a small child seeing spiritual work for his grandmother. He has devoted his life to healing, being the source of clarity for others to receive what is in them. He has been inspired by mystical healing and healing avenues which sit alongside but separate to traditional western medicine. He has become comfortable and competent wherever healing is to be found, in whatever way it is achieved. His role models are those whose lives are long and devoted to healing and helping others. His marriage to his wife and to medicine enable him to stay connected to the source and witness all the things working together for good. He rejects concepts of failure, judgement, and productivity – preferring to centre his life on serving others in ways that produce freedom and health. He is passionate about inspiring trainees and is compassionate towards them as they navigate a system he is uncomfortable with. He will remain a healer until the end, seeking new ways and expressions to see patients released into health.
PM3

Pseudonym – Workplace colleagues use Yoda as his nickname.

The remaining 6 transcripts were analysed alone (no panel), using the BNIM analysis method.

Case Narrative Output 13: Excalibur

Excalibur's values seem to have been embedded at an early age, evolving from an awareness of generational history (African Origins), and an appreciation of where education can take you. He learnt strong professional ethics from his father. His childhood travels and education have culminated in a sense of gratitude for the opportunities. Excalibur has a strong desire to help people and give something back. This is juxtaposed against a strong sense that knowledge offers self-assurance, thus power. He went from disliking the NHS Appraisal process to learning that he too could share knowledge and teach, promoting critical discourse, nurturing curiosity in a safe space. Excalibur has gone a step further by embracing technological ways of disseminating pearls of wisdom. Excalibur describes a strong pivotal moment of exam failure in medical school. He describes this as a timely life changing moment that enabled him to reappraise his behaviours and motivations, bringing context to the state he is in now.
PM1

Pseudonym – Excalibur chose this name as he felt it symbolised power and justice.

Case Narrative Output 14: Kindling

Kindling is a GP of retirement age who has some entertaining yarns to tell. Kindling reached some lofty heights in NHS leadership. Kindling grew up in a working-class family, a loving household but with fierce sibling rivalry. Despite naysayers in the form of schoolteachers, Kindling grew up with a lot of self-belief, reinforced by his father's

belief in him. His dad spoke highly of GPs and Kindling knew that is what he wanted to be. Throughout his youth he was spotted as someone who would 'get things done'. His scoutmaster was the first to pick up on his leadership potential and charm that enabled him to get others to follow and act. This trend continued throughout his working life. Despite Kindling's career achievements, he considers himself average at everything. He claims he blundered through Med School. Family life has been immensely challenging with four family members having serious life limiting illnesses. Kindling relates how he was attracted to a pioneering forward-thinking practice. His innovation, creativity and courage punctuated his leadership roles. He attributes his leadership skills to empowering others to understand context and coming to a shared understanding. Diverse networks are essential. Respect and understanding are key aspects of the legacy he aspires to leave behind. Kindling thinks of himself as a likable rogue, where the right thing to do is not always what it says in the textbook.
PM1

Pseudonym –kindling are the small sticks that start a fire, as an analogy to starting the passion in others through leadership. It also has origins in the concept of kin and kindness.

Case Narrative Output 15: Lulu

Lulu's journey to phronesis has involved aligning her acute awareness of self and understanding herself with the boundaries and infrastructures that needed to be put in place to bring her to a point of joy and happiness in her work as a GP.
*This journey has involved quite intense and painful experiences as a carer for her mother and her own child. She is also a patient with two life changing diagnoses and has experiences being an unsupported junior doctor who required time out for perceived burnout. She navigates through these events with insight, knowing what she did not want to be like and working towards being the doctor she wanted to always become. Parents, spouse, pets, and colleagues now strengthen her, like the armour she needed to enhance her own abilities. Her experiences have taught her a lot, though she would not re-live them. Lulu has demonstrated humble resilience and continues to practise medicine in a humane way, knowing how much it has taken for patients to open up to her. That privilege is something she values and drives her to do onto others as she would want for herself – kindness, compassion, and connection.**
PM1

Pseudonym – Lulu chose her own nickname.

Case Narrative Output 16: Samphire

Samphire grew up in a tense household describing parental aggression and neglect. Success at comprehensive school meant she escaped home, enjoying medical school and university life. Her natural curiosity for people led her to general practice. Continuity of care and the prospect of a better work-life balance were key factors. The entirety of Samphire's working life has been marred by episodes of sexism, initially whilst looking for GP partnerships in the 1990's, right up to the bullish management boards she sits on now. Her husband too was met with disdain when he chose to be a house husband. Samphire spent a sabbatical with her family abroad, this was an interesting adventure. Samphire values her primary care team; they have been through difficult times together. Samphire learnt to trust herself gaining confidence in her own

*abilities. She is acutely aware and conscious about giving patients the ability to speak and be heard. This is a trait she transfers to her family too. Samphire feels that a person's behaviour can affect the feelings of others. She knows how she would like to impact others. She enjoys delivering practical teaching to trainees, focussing on process, and planning rather than the fixation on diagnoses. Her role as a carer for her mum (RIP) and her children has enhanced her ability to be a better doctor.**
PM1

Pseudonym – Samphire was chosen because she likes the fact it is by the sea; it is visually interesting and has a nice smell.

Case Narrative Output 17: ThymeorSage

Thymeorsage pushed back against his comfortable middle-class upbringing. He proactively sought experiences that would broaden his perspective and understanding of the world and its people. In seeking worth and meaning as a teenager he also tapped into his activist and strategist side, this also brought out his enduring skills to oversee, organise and design processes to ensure quality and fairness. Thymeorsage studied social and political science as well as medicine. He relishes the different perspectives and enjoys the way logical thought combines with the subjectiveness of dealing with people. Thymeorsage loves science but has a healthy scepticism of linear thought. He is an ecologist at heart, he feels that represents the connectedness that gardens, families, and people all interdepend.
Thymeorsage feels he has been depressed, never treated. Experience of pain and sadness have made him a better doctor. Thymeorsage believes everyone should live the life they say they believe in. He is a true believer that his role is to find solutions, there may be multiple, a solution may even be more questions.
PM1

Pseudonym – Thymeorsage chose this name as he loves gardening and is very ecologically orientated. It is a play on words.

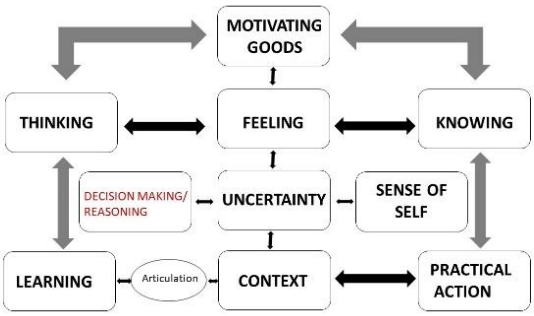
Case Narrative Output 18: Vintage

Vintage grew up in a very intellectual household. He was surrounded by books, and parents who facilitated enriching life experiences, enabling him to spend prolonged periods abroad learning about people and cultures and sometimes volunteering – often out of his comfort zone. He found these adventures great fun and exciting. He married during medical school. He switched career paths during his post graduate training. He describes a lightbulb moment which, in summary, was an intuitive voice that allowed him to navigate what he really wanted in life, rather than following the crowd. This guide has been a source of good counsel and remains so in the twilight of his career. Allowing him to step back and be honest with himself and his thinking. Vintage has a huge sense of adventure and loves learning, sometimes he feels anxious and scared, but he does it anyway, often with great personal fulfilment. Vintage has no regrets. He has been innovative in his career, favouring a route that promoted forward thinking. Vintage reiterates the importance of learning how to learn. He feels being willing to learn is more important than the knowledge, which will expire.
PM1

Pseudonym – Vintage chose this name as he likes vintage clothes and antiques.

7.3 The conceptual narrative framework as applied to the lower scoring doctors.

This section will consider two BNIM case summaries and provide some quotes from the lower scoring GPs using headings from the framework that have been generated by content analysis of their transcripts (small version below). By considering their data, questions were generated that were reconsidered when reviewing the higher scoring exemplar results (section 7.4). Some elements of the text have been redacted in order to protect the anonymity of the participants, who gave the time and candid narrative generously, in the spirit of medical education advancement.



Thinking

Narratives lend themselves to an individual interpretation loaded with context and meaning. It is what the interviewee chooses to tell and what they choose to omit. Although spontaneous, it is a thinking-aloud process. Any individual may narrate the story with a slightly different emphasis if they were to do it again. The content analysis was able to identify words which related to retrospective and current thinking. The bulk of the narrative obviously referred to the past. The term *think* (and variations of that word) came through as a strong theme. The SQUIN lent itself to responses that started with ‘I think’, which is essentially the interviewee reflecting and

summating what has happened in their life and suggesting why. It interconnects with the other key themes, about how that makes them *feel*, and what they *know*. It informs what they learn and apply in context, that is *practical action*.

Reflection can be used synonymously with thinking, being either in action, or on action. Reflection can be ruminative, focussing on blame leading to anguish, rather than learning and development. The quote below expresses the latter:

> *"Some situations come from left of field…you think, oh where did that come from, and you think, well I misjudged that, I've done something wrong with that consultation, and you analyse it, you try and think where did I go wrong? You can't always put your finger on it."*

This interviewee relates how they came to medicine. This conveys a sense of projection of what they think others think and, many years on, puzzlement of purpose:

> *"I think you are lucky if you know what profession you want to go into when you are younger. I think a million kids are not sure, they're in a terrible quandary. If you know, and can put your finger on it, and you know what you want to do, you are a very lucky person because you can strive for it and nothing really gets in the way. And for no good reason, I have no family medics, I just wanted to do medicine."*

Another interviewee had a clearer sense of purpose from primary school age. They demonstrate internal motivation but also an appreciation of what their father valued:

> *"I used to go with him (dad) in the doctor's surgery…I was thinking how this doctor is very important to my dad's health…and when he comes out, he always says 'Oh bless him'…I thought this doctor is doing a wonderful job. So even in pre-school when I started to think I have to be a doctor. I have to help people to go to work and get money for their children."*

This interviewee valued reflection for its ability to develop oneself, rather than its ruminative side:

"Just sit back, reflect, see what was done wrong, and try to amend it next time…so it's not about failing, its about taking a step and go back to reflect, and to take a listen, to improve your life. So, this is how I will always take it."

We will revisit these ideas in section 7.4.

Knowing

[redacted] was relating their med school admission interview experience. They felt that something guided what he said. They attributed this to their [redacted] faith. Later, they spoke about conscience and intuition. They related how doing challenging volunteer work did not suit their personality.

This was an example of internal knowing, but also a wrestle with that knowing. The concept of conscience relates to their sense of self:

"I actually did try to ease my conscience. I used to volunteer to look after a hostel because y'know it was something a bit more challenging. I wasn't any good at it, I got frustrated. And so I did it for a couple of years and in the end, I had to….It just wasn't doing me any good. So, I don't think it eased my conscience too much."

They also reflected:

"This place (GP surgery) suits what I can do….I would think I would struggle in other environments. I don't know this to be true, but I think it would."

They acknowledged their knowing could be flawed, which could be interpreted as humility or self-doubt. Regarding intuition they said:

"Just seeing patients for many years, I'm not sure. I suspect that's part of it….so you learn what works without realising it, you're reading the patient and the situation all the while. I don't think I'm deliberately thinking things through. I think it happens; it just happens. Probably because you've done it so many times. Also, the intuition, I think it comes from experience, doesn't it?"

Another interviewee also spoke of faith as a form of knowing:

"I always believe in God and I believe I will be strong to pass this difficult time."

Need is a word also associated with knowing. [redacted] refers to this time prior to their mother's [redacted] diagnosis, when they came to a realisation*:*

> *"Going back, my mum had [redacted], which if you think about it was early metastasis".* They go on to reflect*, "Is this the way I need to work (in a speciality field?) No, I need to work more broad (and become a generalist)."*

[redacted] then retrained to become a GP. They knew that is what they had to do. Knowing requires self-awareness that can lead to practical action. These quotes begin to introduce us to this concept and map to the conceptual framework. This will be explored further in the next section (7.4).

Uncertainty

Knowing and uncertainty seem like contrasting terms. We see from section 7.2 that the BNIM summary statements refer to a strong sense of intuitive knowing in the wisdom exemplars. This can sit comfortably with the uncertainty of adjudicating other forms of knowledge and a sense of control. Luck would suggest an external locus of control.

Within the first sentence of the interview, one participant attributed where they were in life to luck. They used the term, (and modifications of it) 28 times in the interview:

> *"Luck is the first thing, luck by a long way. Lucky, yeah it was lucky: Lucky to…first of all I think you're lucky if you know what profession you want to do when you are younger".* They goes on to say, *"So, lucky in the first place, lucky to have the ability to do it (medicine) basically…Lucky to have family and opportunity."*
>
> They attributed luck to various stages of their life, like getting through medical school, *"lucky to survive the course".* Luck bumping into their future spouse, *"lucky the person I eventually married came back on the scene"*. Luck in passing the Royal College GP exam , *"It was luck that I was able to do the college exam before it became difficult"* , to finding a GP practice for partnership, *"and the biggest luck was coming here… And the luck really is*

that this is the place that suits what I can do. I think I would struggle in other environments."

Luck's relationship to uncertainty is fascinating. This dissertation will not explore the extensive philosophical and psychological discourse on the relationship. The immediate impression from the narrative, is that the locus of control is external and that they a product of good fortune. Interestingly, this interviewee chose their pseudonym because, *"You have these adoring fans".* This may also signify a tendency towards seeking external validation. Their outlook is endearingly innocent and conveys a sense of humility and gratitude:

"If you look around and compare yourself with most parts of the world…I don't know there's been anybody luckier than us around here."

They come out with an interesting statement when speaking, with high regard, about their spouse:

"*My fate is probably determined by my [spouse]."*

Another key theme in this narrative that relates to uncertainty, is their reluctance to commit to decisions. This has punctuated their life at various points:

"*It's like wavering, it's just like we [referring to spouse] waver on every decision we make."*
"I don't think I really knew where I wanted to live really…(I was) uncertain about how far to be away…"

They related how they were offered a GP job that was highly competitive. This is what happened:

"I came here for an interview; in those days it was really difficult to get GP posts…there was 100 people applying for this post. I can remember coming to the interview and being offered the job, and I turned it down. It was really odd, because I couldn't bring myself to commit, because it seemed such a big commitment to do GP for 40 years. The next day I said I am ever so sorry, but I just cannot commit to it". They went on, *"The next day I rang back (again) because I changed my mind and said Is the job still available?"*

This state of indecision leads to significant worry and this will be discussed in the 'feelings' section. It also seems to lead on to feelings of regret:

"In retrospect, I probably would have done something differently, actually."

They qualify this general statement by saying:

"But I never regret my decision to be a (GP) partner and to help people."

The narrative provided by [redacted] has a different feel. Whereas [redacted] was self-effacing, [redacted] was very self-assured. They were a highly motivated A star student. They were nationally revered for academic excellence:

"I went for my 11 plus exam, which I scored number one, all over the [redacted]."

They go on to say:

> *"All the newspapers came to my house to take photos and to see what was inspiring me. I said I would like, not only to be a doctor, I would like to be a brilliant doctor, and intelligent one,"* and a little later in life they narrates*:*
> *"I was nominated number one all over [place], and I got A stars in all subjects, and outstanding."*

This tremendous start in life was challenged by a chain of family medical tragedies. This created an indignation and deep desire to help people, and that shaped their medical career choices. These feelings were strong motivators and will be discussed in section 9. [redacted] trained as a hospital specialist before they came to general practice. This was in response to the tragedy that preceded the career choice (family member's death). Their career choice changed again in response to a new medical tragedy in the family. She decided on a new career path, after a period of reflection, a career which would serve a different purpose:

> *"Then in [redacted] my [redacted] passed away. I decided to be a GP to look after people in palliative care. Not to put anyone in pain at all and to do my best to help people and treat them from my heart"*. They later say, *"Oh, I really can reflect now how could I have helped my [redacted] if I'd been a GP at that point."*

These quotes convey a deeply rooted passion to help people. This drive and passion are emotionally rooted, but may also convey elements of regret and penance, attributing some blame for the death of close family members on themselves for not having the right medical knowledge at the right time:

> *"I felt missing my [redacted] [family member's] diagnosis was really breaking my heart."*

Regarding regret, later in the interview they said:

> *"I never had the regret at all, I am quite happy with my career and progress…I love my job, though it is very hard, and even it's not the money."*

This highlights a paradox of narrative truth.

Sense of Self

[redacted] begins to allow us to see the connections between their sense of self, reluctance to experience challenge (preferring to be in a comfort zone), and the experience of feeling good and motivated because of external validation, in the following passage:

> *"We have very nice patients, and the challenges aren't the same as in other places. That allows us to practise nice general practice. The good thing from that is you get a lot of positive feedback, and there is nothing like positive feedback to enjoy your job you know."*

In relation to their sense of self in comparison to others they say:

> "*I do get envious, and I am a bit competitive. I wish I was more that way, like my spouse, they are one of the least envious people I know, which is amazing."*

They also used the saying below, in the context of wanting the admiration like that of a celebrity.

> *"The grass is always greener, isn't it?"*

[redacted] quotes about school performance also implied a strong competitive nature. Both [redacted] have come to know themselves better in the course of their career, both seem content with who they are now.

They summarise:

> *"I am quite happy with my career and my progress…I love my job."*

[redacted] explained what they feared and why they no longer fear coming to work:

> *"Just not being able to cope, someone who comes through the door that you couldn't cope with academically. You know missing something, getting something wrong. Yeah, it took a long while (10 years) before I stopped worrying about it. I mean I would lay awake at night, it's not that, but I would always have that edge coming and thinking, oh my goodness. Then I suddenly realised that it had gone away, which was rather nice actually."*

Feelings

The predominant feeling expressed by one interviewee was the feeling of worry.

They used this term in all its different tenses: Worry, worries, worrying and worried.

This term encapsulates the themes of *uncertainty* and *sense of self*. They use the term in many contexts:

> *"I used to worry about coming to work, about worrying about not being able to cope actually."*

> *"I started worrying about it again because I am getting old and losing touch a bit, I think. Particularly with say, ill children. That worries me, but missing things you know. I think we all worry about that."*

> *"I don't think it hurts to worry, actually. I think we should all be a little edgy about ourselves, otherwise you get complacent."*

Self-doubt and worry presented in other ways, even when they were alluding to the contextual nature of phronesis. would often refer to himself as *winging it.*

> *"I think we are actors because you have to adapt to the person in front of you, don't you?* He goes on to say *"You've got to be the right person for the person in front of you. So, for the same person you might be different with them on different occasions. I worry that might come across as falseness."*

[redacted] predominant narrative in relation to feelings starts with feelings of accomplishment, but turns to feelings of grief and loss, this in turn resulted in regret. The regret motivated them enough to change path through practical action. They now speak of love. Throughout their narrative is the feeling of altruism, to serve others and to strive to deliver the best care they can:

> *"I really love my job."*
> *"I really love the system…I think the NHS system here is a most brilliant system."*
> *"I really love to come to this place (surgery)."*
> *"I am really very pleased, and glad that I am choosing GP."*
> *"I want my patients to live a pain free and blissful life."*

[redacted] also relates an instance where they felt they were not coping (after a family bereavement). They proactively sought help by receiving counselling. They related that they told her own GP:

> *"I'm trying to cope, but I don't know how long I will be strong to cope."*

They went on to say the counselling helped a lot. This showed high levels of self-awareness and open-mindedness.

Both interviewees spoke about failure and how it made them feel. [redacted] was in relation to his fear of not performing, (though they often would perform very well). A previous quote showed that [redacted] linked 'not easing their conscience' with failure. They also appear to protect them self from failure by staying in a comfort zone.

[redacted] speaks of failure in terms of their first marriage ending in divorce. They say:

> *"It's a failing, yeah. It ended in divorce after [redacted] years. So, this is failure, but it has never put me off to start again. I said, okay, just sit back and reflect, see what was done wrong and try to amend it next time."*

We will compare this to concepts of failure with the wisdom exemplars in section 7.4.

Motivating goods

Quotes were presented relating to [redacted] desire for external validation and approval. This is an external motivating good. In the amalgamated transcripts 'money' was mentioned 15 times. It was one interviewee that raised this matter every time. They used it in relation to speak about how their family struggled with money when they were a child. They were orphaned at a young age. As a child [redacted] saved up money to use for study material with the goal of being a doctor:

> *"When I got money, which usually took eight days, and I bought some stethoscope."*

[redacted] did relate an interesting quote relating to money*:*

> *"I've got much more wrapped into the politics and structure of general practice…which I, if I'm brutally honest, I loathe it, but someone's got to do it, partly because they've tied our income into being part of it, and we have to have the income."*

When the two interviewees speak of 'want' it often relates to wanting the best for patients and the satisfaction that results. This is a prevailing internal good:

> *"So, if you enjoy your job and your patients, you just do more of it."*

> *"You cannot imagine when a patient comes here and says, every day in the morning, you are the first person I pray for…This is really true. (The patient relates), 'You cannot imagine how you helped me [redacted] I really love to come to this place…although it is very deprived here it is very rewarding."*

> *"The reward is happy people."*

> *"Happy on their (patient) face. This reward is more than money."*

> *"If you enjoy your job, you probably do it better."*

One interviewee speaks of a driving mission and a target:

> *"If you put that target in, you need to hit that target in front of you and you need to be brilliant."*

"This is what I always tell my [child], you have to have a mission in your life. I think GP is one of the most rewarding jobs. Not at all money wise, but regarding satisfaction in your career."

The derived conceptual framework has been used to map themes to the lower wisdom scoring GPs' narratives. The lower scoring doctors' narratives have been anonymised to a greater depth than the higher scoring GPs, as not to cause psychological harm. The conceptual framework has been adopted to structure the presentation of quotes relating to the way they both think and feel, how they deal with uncertainty and what motivates them. This will be discussed further in Chapter 8. Regarding the lower scoring GPs, their passion for general practice is evident. Their contribution to this research is highly valued. If anything, these doctors deserve the most respect. One in particular has lived a life where worry and doubt have prevailed, yet they still manage to be a good GP (as demonstrated in MSF and PSQ – Section 7.6). They persevered for decades, despite the stress and worry. This is an important observation when considering the relationship between wellbeing and wisdom.

7.4 The conceptual narrative framework as applied to the high scoring wisdom exemplars

Thinking

The previous section references 'thinking' in terms of reflection and purpose. Purpose points to considering 'Why?' All the wisdom exemplars achieved a high score in the reflective aspects of the 3-dimensional wisdom scale. Scrabble summarises her approach to thinking:

"*You shouldn't react immediately to somebody or something that you see that you find difficult or unpleasant. It taught me to try and look at everybody's point of view. It made me think about the fact that the person who was doing something which I didn't enjoy, didn't approve of, may well have had a good reason that they were doing that. So, I didn't know what had gone on in their life that morning, the minutes before, what attentions were that they were currently, you know, suffering from. So, it made me begin to think about, look at everybody's hinterlands and don't just see them for face value. And even in those people that evoke really strong emotions in you, try to just take a step backwards and see from their point of view if you can. And also think about; What am I doing? Is there something that I'm doing which actually is making them behave in the way that they are? So, consider that as well. It also taught me to help… try, and… this sounds very selfish but use colleagues to help you understand this. So you know, band together with your colleagues, talk to your colleagues. So things like Balint groups I find incredibly helpful as I've got older, and I've discovered what they are and what they mean." Scrabble*

Scrabble covers a lot of ground in this monologue. It provides a series of statements that help understand how empathy and multiple perspectives are woven into her own thinking. Balint groups are psycho-analytic safe spaces where clinicians analyse the relationship aspect of a difficult clinical encounter. They offer their perspectives to the case presenter, on which to reflect upon.

Thymeorsage also values different perspectives, in his life he actively sought new experiences to broaden his thinking, and he stepped out of his medical degree to complete a degree in sociology, politics and social psychology. He enjoyed the different world and different thoughts:

"It was very much looking at the world through a different lens…that was fascinating because all of those lenses were different lenses to use and to be part of and affecting who I am." Thymeorsage

Regarding the dominant perspective in medicine he says:

"I got quite frustrated with the pure evidence-based people who were always trying to tell us; well this is what the evidence says. But the evidence only says

> *'that in white men in America, who whatever whatever'….So I am fascinated by evidence, because it's really useful to know it, but I'm also cynical about evidence because if you look at the reality and what we've done with linear evidence. It's too complicated to do but we need to look at the system and the fact things interact."* Later in the interview his critique explains, *" I don't want to go down the route of suggesting we should be un-evidence based, we should be evidence-informed, evidence-aware um, guideline-reflective. That is where a lot of scepticism also comes in for me, in a healthy way, it's also quite messy." Thymeorsage*

Thymeorsage is demonstrating critical thinking by challenging the dominant narrative. This was also evident in Dolan's biography. Dolan was the most sceptical of all the wisdom exemplars. His scepticism contradicted the optimism that was evident in all other exemplars. Dolan does not think the system will ever change. Dolan's critical thinking took on a philosophical nature in trying to understand the prejudice he had faced through his career. Dolan is of Indian ethnic origin from a working-class background, he was a very bright student. At an interview aged 17 he could not answer a question on what an audit was but began to use first principles about its linguistic origin, suggesting it related to hearing or the ear. The interview panel laughed at him. He left feeling humiliated. He knew other wealthier kids would have been tutored to formulate an answer. He did not have the networks or resources, (he also mentioned there were cultural obstacles in Arts attainment at school). He became aware of the injustice of the system and learnt to play the game. He narrates:

> *"This is the way real life is, and regardless of how much you want to change it, it won't. Not at that stage, I mean it might never. I mean this is something that has been going on since humanity, humans existed. And it's about learning that system and how to navigate it because cronyism and all that will always exist." Dolan*

He goes on to say:

> *"Should you be able to challenge someone? I think you should, and I suppose that's a big issue in medicine, isn't it? It's a very perverse system where I have*

had colleagues who challenge their seniors and ended up having to leave speciality training. And other colleagues who would be too afraid to challenge their seniors because they would get a bad reference and won't progress." Dolan

Dolan stated he wanted to do medicine because he wanted to do himself justice, he later realised the system is not just. This section has covered thinking in terms of mental processes and perspective taking, it touched upon critical thinking. Another theme related to this category is the forward-thinking and innovation orientated nature of many of the exemplars. This will be covered in the practical action section.

Knowing

According to Fish and de Cossart there are 14 ways of knowing within their map of practice knowledge (Fish and de Cossart, 2013). They state that these ways of knowing are shaped by values and are context specific. These ways of knowing include procedural knowledge, procedural improvisation knowledge, propositional adaptation knowledge, propositional knowledge, evidence-based knowledge, metacognitive knowledge, professional knowledge and conduct, experiential knowledge, practice generated knowledge, ethical knowledge, sensory knowledge, self-knowledge, intuitive knowledge, and insight/imagination. As I was also a GP like the interviewees, some forms of knowledge were assumed, so were not discussed. Evidence-based knowledge was acknowledged by many exemplars to merely inform their decision, rather than dictate a course of action. To others EBM guidelines are a nuisance. All were aware of the limitations of guidelines in their specific contexts:

"The artistry of general practice…I think that is what we are losing with this guideline nonsense. You know that's what worries me. Not everyone fits in the same box." Yoda

I find the guidelines, the dictatorial facets of GP frustrating. The QoF, the CQC…I think the regulatory stuff, and the computer and the digital interrogation of your work is something I don't really welcome." Alekhine

"I was too protocol driven…I was stopping us from being a holistic group of practitioners." Thymeorsage

"We need to be very logical and pull ourselves apart and have a reason to do things, and tag and code and link. But at the same time, we actually need to be asking different questions. 'How does this fit with you?', and 'How do you feel about this? And 'What are you scared about?'….so it's about living in two different worlds, urm being a GP." Thymeorsage

Self-knowledge and insight also came through in the narratives, as this is what enabled the GPs to reflect on their life:

"Sometimes you just have to accept prejudice (talking about sexism). In a way you have to accept that we are all prejudiced…and the more insight we have into that the more it allows us to accept lots of different people." Samphire

"None of us can experience everything. I'm a bit of a magpie in the way I sort of see these little jewels that patients sort of express or show." Scrabble

"Special things are happening all around us; you just don't see it. You don't know, a patient might come in and give you insight into something." Yoda

Intuition featured quite prominently, suggesting it has an important place in knowing. It was in the narratives where exemplars related 'just knowing', but not really understanding how they knew. Vintage describes an inner voice guiding him, Barnabas and Scrabble demonstrate this too. Robbie also mentioned intuition. Below is a quote where Mr Bean links intuition to conscience:

"Intuition is quite important I suppose…you have a gut feeling that something wasn't, y'know..I think intuition is for me rather than the patient. It's something that if you ignore, and something goes wrong, how will you cope with that, how will you sleep at night?" Mr Bean

The exemplars came to know by rational reasoning combined with an intuitive judgement. One of the youngest exemplars highlighted the importance of common sense:

"The common-sense part of things pulled my knowledge through." Mr Bean

Mary, Vintage and Mr Bean underpinned their knowing to a big picture idea of the world. Yoda provided the most esoteric comments on knowing:

"Obviously if you know that truths create feelings and then become reality, we start believing them. Nothing is real, it's all an illusion." Yoda.

Uncertainty

If we accept the assumption that uncertainty is a form of cognitive challenge, the wisdom exemplars convey an exhilaration in dealing with challenge, including uncertainty. Uncertainty and challenge are acknowledged as part of the job and as part of life. The following quotes illustrate the great satisfaction that can arise from dealing with uncertainty and facing challenge:

"It's not all about nice relationships with patients. It's trying to work out what's going on, it is a bit like trying to work out the next (chess) moves, the kind of diagnostic challenge of… it's very satisfying if you get a good diagnosis. I've tried to tell trainees; I think GPs are just as skilful as any hospital specialist. You've got to sift out the morass of vague symptoms and try and work out any clever diagnosis, it's very satisfying. Sometimes you don't get it right, you frequently don't get it right. But if you can… and that's great fun to share that." Alekhine

"It was quite challenging, but it was very satisfying. It was a hundred bed hospital about six hours drive from anywhere else, to be quite honest, there is no other doctors there. So, it fulfilled everything we wanted in that it was quite challenging." Alekhine

"Challenging situations are great fun. You see I think it's an attitude which is very important to capture….I just looked it up and did it." Mary

"So, I went off to [Place] and that was an incredible experience. Maoris are an incredible population, really, really lovely but so hardy… none of this negotiating type stuff you know, they just want… and they come to you half

dead, so you can't negotiate, it's like, you just need treatment. So that was an incredible experience. And I think working out in [Place] on your own for three months, there was nobody, there was me and there was nobody." Egeria

"And there was a locum, and the locum was pretty useless. And after a couple of days and a few near misses, the consultant said, "Will you just swap? Will you do the SHO job, and he can do the houseman job?" Well, he couldn't even do the houseman job properly. But I did the SHO job, and I ran the intensive care unit doing all the… in those days, we worked all the parental nutrition ourselves. And I did the CVP lines, did all the liver biopsies, I did the pacing… I did everything." Mary

"They had me in, I don't think this would happen these days, but they had me in A&E and within 24 hours I was suturing, with no qualifications at all, they taught me how to suture….I was assisting in operations and all sorts of stuff. It was that experience that made me realise this is something I really want to do…this is definitely the right career choice. Yes, it was great fun, it was quite exciting." Vintage

Decision making can be described as a process to reduce uncertainty. Wanting to reduce uncertainty is wanting to grasp more control of what is happening. A sense of control is related to a sense of self in context, resulting in knowing. The wisdom exemplars seem more content in their ability to tolerate, and even embrace uncertainty. Phronesis is, as explained numerous times, is a decision-making process which adjudicates conflicting values with moral orientation towards good. Kindling offers a quote that illustrates an example of decisions being made for an overall good, even at his expense. This refers to his leadership roles within the NHS:

"I hate to bring [President's name] up on this, but he clearly makes decisions, but I think he has no integrity…he makes decisions for the wrong reasons. And I will sometimes make decisions that actually disadvantage me personally, or I disadvantage my practice, because I know it is the right thing to do". He goes on to say*, "The right thing to do is not always what the textbooks say you should do." Kindling*

Kindling alludes to big picture thinking, towards good. This has been defined as wise judgement by de Cossart and Fish; they speak of where the doctor places

themselves in relation to the problem. They describe a spectrum, with lower classifications of judgement, being self-interest judgement, hasty/habitual judgement progressing to maturing judgement (2020).

Learning

Growth and learning are clear motivators in these medical educators. This was captured in the following quote:

> *"I mean, can you stop learning? You can't stop learning, so by definition if you have an experience, it's learning. So why state the obvious?" Dolan*

There is an intellectual humility which promotes development:

> *"I've never had a problem sort of admitting that I'm out of my depth and asking for help…I'm always willing to ask for help." Mr Bean*

Learning is linked to thinking. Learning could promote or inhibit practical action, depending on the feelings that result. The wisdom exemplars took the attitude that they could learn something about themselves from anything through this process. This fed positively into their sense of self.

Sense of Self

Self-belief came through strongly in the wisdom exemplars; they displayed a strong sense of identity and personal agency. Self-belief informed potential for action, if the action led to beneficial results and/or growth it further perpetuated belief in self:

> *"I can't do that, actually I can." Barnabas*

> *"I remember once being mistaken for a drug rep rather than a doctor. I was like, no, and he went, oh well you don't look like a doctor." Egeria*

> *"In [place] that was real…I think that made me really independent, it made me see me different you know." Egeria*

This self-belief overcame the negativity of naysayers; this was demonstrated in the stories of Mary, Samphire, Barnabas, Kindling and Egeria. They proved the naysayers wrong, and that was satisfying:

> *"At school I was frequently told that I was never going to make it through…My English teacher, who assumed that I would be lucky to even get the pass mark and told me that. And then I got top marks for it. He had the audacity to congratulate me." Kindling*

Key respected seniors were mentioned in a few narratives. These seniors showed positive regard, and a belief that the exemplars would achieve great things, even from a young age. This motivated and inspired the exemplars. Kindling described this senior as his scout master. For Dolan it was a sixth form teacher:

> *"My scoutmaster said, 'Oh people will always follow you'"…he knew we would get things done." Kindling*

> *"It was the deputy head from sixth form, from memory. I think we just developed a rapport. I went to a real failing school, but I did well….she said I would be a really good candidate to actually end up being in [auspicious university]." Dolan*

For many it was their family who believed in their potential, but there were exceptions.

Action

Practitioners, by virtue of their title, practice their profession. The output of their thinking is practical action. Actions proceeding from judgement are a more authentic form of human endeavour than rule following or rule generating (Grundy, 1987). When considering phronesis, the practitioner requires an appropriate frame of mind and acts with the right motivation. The theoretical framework in this chapter provides a heuristic for conceptualising the inter-relationship of the processes involved. The

nature of general practice is such that the clinician's decisions need to be clearly communicated, that is why articulation features in the conceptual framework. Their narratives expanded on how they do this. Each encounter has its contextual nuances. Practical action is the culmination of all the mental processes that we have previously explored. Practical action is how these practitioners create change. The wisdom exemplars tend towards activism, they are all medical educators and gained that position by wanting to influence the future of medical education. There are some clear narratives from Vintage, Kindling and Excalibur that demonstrate their forward-thinking nature:

> *"I joined a practice that was pretty forward thinking….the older partners gave us carte blanche to do things. I had this stupid idea that computers were going to be useful in general practice at some stage…we became the first computerised general practice." Kindling*

Samphire gave a valuable perspective of her role as a doctor, this summarised the need to be forward thinking in practical actions, whilst managing uncertainty:

> *"It doesn't really matter what the diagnosis is, as long as you can move the process forwards. Sometimes particularly registrars (trainees) can get hung up on making a diagnosis and having a definition. That is what we are encouraging them to do at med school isn't it? …To have a definitive outcome. And yet, very often, we can't have a definitive outcome, either because there isn't one or because you haven't got enough information." Samphire*

Sadly, many of the exemplars have had a very difficult time just trying to practise medicine and get on in life. Prejudice in the form of sexism, racism, and classism affected their experience of life. It has not made them bitter, but rather, it gave them a sense of the real world. The quotes below illustrate the range of difficulties:

"I got sent home from a ward round because I was wearing trousers, I didn't come back because I was embarrassed and the thought of coming back and coming back in a skirt. I didn't have many." Egeria

"I suppose it took me a while to realise, and it's probably years, it took me years to realise I was being bullied by one of the other partners…. I voted with my feet." Barnabas

"So, I graduated and experienced all sorts of things. I used to have a long beard in those days, and a turban. I won't go into the details of what happened, but that's just normal life." Yoda

"I wasn't quite sure what I wanted to do when the baby was born…. because as a female GP it's quite hard. He (baby son) came to the meetings too…. My husband became a house husband which was great…in those days people used to ask weird questions, as if they were saying 'has he (husband) recovered from his mental breakdown?" Samphire

"It would be a regular event, that people would wolf whistle at you. I remember a chap…he had renal colic and I gave him a voltarol injection. I was in his sitting room; he pulled his trousers down and started making all sorts of comments about undressing all the way." Samphire

"I went into hospital for hip operations, I was born with dislocated hips, when I was 12/13. Afterwards people said to me, 'Oh are you going to be a nurse now?', I thought, no, I really don't want to do that….my father said, ' why don't you go into pharmacy, I think that's a very good thing for a girl." Mary

"In those days they paid me a third of the male rate (for doing on-call). I know it doesn't happen now, but in those days, it was quite standard." Mary

"If I bring any ideas or I bring anything to the board, somebody else tends to take it off me and finish it off. Currently I feel like somebody's personal assistant, you know what I mean? It takes away all sense of empowerment." Samphire

"I was told I was in the top five cohorts [for the GP CSA exam]. That has always reaffirmed my own confidence that I've got the ability, but there are these other barriers that keep getting in the way, beyond my control. It might be the case of learning to live with those and navigate those barriers." Dolan

Feeling

Section 7.3 provided verbatim quotes from the low scoring GPs on worry, failure, and love. Worry did not feature as a predominant feeling in any of the high scoring exemplars. Challenge did not result in worry, but rather excitement, self-discovery

and growth as discussed previously, in the section on uncertainty. Dolan and Mary were forthcoming on how patients made them feel:

> *"Do you know what I take home at the end of the day? (It's the feeling of) the patients who've cheered me up, who've smiled, who've been grateful…I don't remember what their clinical problem was. I just remember thinking, 'some of these people are amazing people'. I'll go home with that feeling." Dolan*

> *"Seeing someone after they have died…I just feel for them so much, it hurts. It doesn't get easier. So many of these people I have known for so long…it's not always the right time for their families and there is nothing you can do. Just be there." Mary*

Love, empathy, and compassion were strong themes, along with a strong desire for human connection. Failure was also discussed. The strongest association with love came in Egeria's narrative. This not only related to her love for general practice and for patients and trainees but in living her whole life with love:

> *"But I love general practice, I love it. I have to say I love my job there. I never have a day where I think I hate being at work. You know, I would choose it all over again. I love my patients."*

> *"You get a really nice feeling when you say love, don't you?"*

> *"Love, well love. I have a lot of love because I think I'm lucky. I've got a very loving family. I come from a very loving family; we are very affectionate."*

> On talking about the NHS:

> *"I think we've lost that soul; I think we've lost that love."*

Egeria also referred to choosing her happiness by creating boundaries, this was a clear strategy following a life-threatening accident:

> *"When it comes to friends, we (referring to husband) would end up splitting ourselves in fifteen ways to appease everybody, and after the accident we just thought, we can't do that. We are important. You know, for resilience, you just can't do that, because we are actually never making anybody happy. And actually, we are going to choose who we make happy now." Egeria*

Godiva also has strong boundaries and relates her conception of happiness:

“I don’t want to see my patients every day in cafes and supermarkets and everything else.” Godiva

“Happiness is the absence of stress.” Godiva

This is in contrast to Alekhine and Yoda who appear to have more fluid boundaries. Godiva alluded to why this might be, when she suggests that working in the city and working rurally are different:

“We are fairly immersed in the social life of our patients as well; I think it gives us an easier chance to get to know people better.” Alekhine

“It is all very personal work. All your own on call, own palliative care, and almost completely rural, and that suited us.” Alekhine

“I think if you deal with a farmer, for instance…who rings up at 9pm about his elderly mother and only lives 2 miles away, it just seems the wrong thing to do to say no. And they have your home number, and they wouldn’t call unless it was really important…..and that is not a stressful thing. You do obviously have to have boundaries, strict boundaries with some patients that you know are more tricky.” Alekhine

“I think it’s probably reasonable to have softer boundaries when you are 50 miles from hospital.” Alekhine

“I’m married to medicine. Y’know I’m very lucky in that respect, that my wife, she’s very understanding, you know she’s supported me all the way through…I remember when, even when I was on call at the hospital, she would bring the girls (daughters) and come across and bring food, so we had a picnic.” Yoda

Empathy and compassion were strong themes; participants were, after all selected for their notably high score in this domain. All exemplars spoke about acting to alleviate difficulty for patients, sometimes relating it to their own past experience of pain and not being heard. Billy and Samphire came to this point from very difficult childhoods. Billy was labelled hyperactive, and Samphire described her childhood home as being tense, neglectful, and full of aggression. Mary, Samphire, Barnabas, Godiva, and Lulu all gave their various versions of ‘the golden rule’ as a driving force

behind their professional practice. Many of the exemplars are carers for relatives with illness:

> *"I've always treated people the way I would like to be treated." Mary*
>
> *"It's about realising that you can't imagine what it feels like to be the patient. So, its partly about putting me in their shoes, but also recognising the patient's experience is not yours." Samphire*
>
> *"The doctor's behaviour affects (patient) feelings." Samphire.*
>
> *"I appreciate how much it has taken for a patient to open up to me." Lulu.*
>
> *"But I learn so much from…that you can translate from your own experience of having a daughter with Aspergers. I had someone come in the other day for a neurodevelopmental assessment questionnaire…And she was (like) my daughter. I knew this young woman had Aspergers. It was not my place to do that, I don't make that diagnosis. There is a pathway for that, but personal experiences are so valuable." Barnabas.*
>
> *"My [relative] had Multiple Sclerosis, and so guess what, I looked after a home that exclusively was respite for MS. I learnt a lot about it as a consequence…I suppose you would call it experiential learning wouldn't you?" Kindling*
>
> *"Both (sons) have learning difficulties. I had the privilege of resuscitating one when he was 11, shortly after he lost most his bowel and was on a ventilator…and that was fairly character building." Kindling.*
>
> *"I'm a better doctor for having been a bit depressed. I'm a better doctor for having some pain in my life." Thymeorsage.*
>
> *"I suppose I always kind of think that I want patients to be treated the way that I'd want my mum, dad, my kids, whoever in my life to be treated…and almost probably more, like* ***not*** *doing things (over intervention)…I kind of think 'treat people as you would want to be treated really in life." Godiva.*

The golden rule is grounded in moral aspiration in particular socio-cultural contexts. When you make a moral judgement on what is good, you reveal what flourishing means to you and how you want it to be achieved.

Connectedness is another strong theme related to feelings. This came across strongly in the narratives:

> *"Just treating people as human beings I suppose, as opposed to being cogs in the machine." Godiva.*
>
> *"What makes a good doctor is the communication side of things. And maybe sort of not thinking of myself as the doctor so much as just another human being, another person…..I never think of the doctor/patient relationship formally in that way. It's just a conversation and you know, 'How can I help this person in front of me, in the best way?'" Mr Bean*
>
> *It's just lovely knowing how people interlink. And you think, oh now I know why you're like that, I know your grandma. I just love that, knowing that…linking everyone together within it." Godiva*
>
> *"I really like the breadth of general practice…actually understanding why people get ill and what drives illness kind of patterns. You know every so often you make these breakthroughs with patients don't you, where actually you just say, I understand you now." Billy*
>
> *"Big ecology is all about interaction….if you change one thing in a system, you've changed the relationship with everything else, to everything in the system. So, you can't change, you can't make a single change because everything interacts." Thymeorsage*
>
> *"I really love the human interaction. I quite often take black and white photos of my nice old patients sometimes. I sometimes write down little quotes they give me. I revel in telling and listening to the stories they've got." Alekhine*
>
> *"I think connection with people is the best part of the job…you know you can feel that spark, and when you know you've said something that's clicked." Mr Bean*

The ability to accept failure is likely to be related to effective reflection and orientated towards growth and learning. The most transcendent ideas on failure came from Yoda, in that failure does not exist. Excalibur, Vintage and Dolan also expressed the positive benefits of failure on the course of their lives:

> *"You know obviously my perspective of failure really has changed over a period of time to me, there are no failures….I've done a lot of soul searching and development work, so like the mind/body connection. We have three principles: mind, thought, consciousness. I use this with patients as well and*

led to tremendous transformations in people. It's the thought, that's what drives it. Obviously if you know truths create feelings and then become a reality, we start believing them, they're real. Nothing is real, you know it's all an illusion." Yoda

"Oddly, failure was the pivotal moment at medical school that kicked my backside into gear." Excalibur

"The experiences that have done me really well are the experiences of failure…I don't suppose you can become wise by just succeeding." Dolan

That was a time where I had such a tranche of rejections (job applications). But it didn't impact me negatively. I didn't take it personally." Vintage

Motivating goods

All the GPs who completed the Ardelt wisdom scale were medical educators. This creates bias when suggesting that one of the most important motivating goods for the wisdom exemplars is that they are growth orientated, learning from their mistakes and life-challenges in a positive, developmental way. In the corpus of the 16 interviews amalgamated, the word money was rarely used. Only once did it refer to an ongoing 'pressure':

"It's always been an issue for me, anxious about money, disproportionately. It's been part of my psyche; I suspect probably to do with my upbringing and childhood….It's my default when I'm anxious. I think, 'Well, can I afford this?' I am extremely fortunate; I have a nice pension." Vintage

When the exemplars mentioned it, they did so in the context of when they were younger and undergoing difficult financial times. It never came up as a motivating (external) good. Godiva speaks of her GP trainer in the next quote, but it captures how most the exemplars are:

> *"You just felt like his heart was in the right place, you know he had a lot to do with education too, and yeah, just kind of felt he really enjoyed what he did. He wasn't doing it for the money, you could tell he just loved his job." Godiva*

The exemplars do not seem to compete with others, but instead to strive to be the best version of themselves, guided by their values. Both positive and negative role models inform how to achieve the best version of themselves. Vintage describes a conversation in his head when he went for a job interview soon after qualifying as a doctor:

> *"I got an interview in [hospital], I took my wife with me. We went in and had a look around the hospital, and I thought, and I suddenly kind of thought, 'What are you doing?'. It was like a lightbulb moment. 'This is not what you want to do, y'know'. This sort of very aggressive, competitive environment, 'It doesn't suit you at all.'" Vintage*

Scrabble also came to a similar realisation; both seem to have an intuitive sense of self, a strong identity, that guided their choices to allow them to align more with who they wanted to be. This suggests a sense of personal agency, rather than attributing what has happened to luck. It also implies the aspiration to feel internally validated, rather than externally validated. Difficult choices were made that could result in 'unpopularity', but this was not a prevailing consideration:

> *"I became very aware of the political influence within the hospital, and the financial pressures as well as the political pressures that are placed on clinicians to achieve targets and see a certain number of people. I saw bed loss and (poor) nutrition. I saw clinicians literally have to fight for their corner. I thought, I actually don't want to do this. I made a decision to change my career and go into general practice." Scrabble*

Thymeorsage captures this succinctly with his statement:

> *"Live the life you say you believe in." Thymeorsage*

Relationships are very important in the lives of those interviewed, that extends to colleagues, family, patients and even pets. Interestingly one source of external motivation in the wisdom exemplars was fierce sibling rivalry, and a quest to be the best (Kindling and Thymeorsage). Connecting and helping patients is a source of joy and a strong motivator. Most exemplars conveyed a strong sense of gratitude for their families, this gave them the stability that enabled them to flourish. Reflecting on previous poor relationships informed the future conduct of the exemplar, (they did not want to be like, or make anyone feel like, they have been made to feel). The ability to flourish and promote flourishing in others is the goal of virtue ethics and character education initiatives (eudaimonia). The concept of flourishing aligns with the concept of healing. Many of these doctors allude to healing, rather than just treating disease. Healing requires a very holistic approach involving the mind, body, and spirit:

> *"I think there is this underlying need to heal, right. I mean my wife is even saying this to me now. She says, 'You just can't stop, even outside'. You know it's like second nature to me. The need to help. I probably think it goes even further back to my childhood." Yoda*

Yoda was a very accomplished post-doctoral cancer research scientist (PhD) before he became a medical doctor. He felt deprived of patient contact and of being able to heal people, despite the post-doctoral role being very auspicious. He studied medicine as a mature student in order to achieve the satisfaction of healing . He later became proficient at acupuncture, homeopathy, and Chinese medicine. He states he is willing to use any means that allows his patients to flourish.

Thymeorsage speaks, in admiration about one of the wisest GP's he has known:

> *"He was up to date, he was bright, he was clever, he could do medicine. He was incredibly person centred; he was a homeopath as well as an allopathic doctor. He knew he was finding a different way to connect with some people, and a different space and not being stuck in one set of thinking…He found different*

ways to 'be', and it was all about throwing it up and looking at it from different angles and seeing it and trying to feel it, as well as see it." Thymeorsage

Having presented verbatim quotes from both the low scoring and high scoring doctors, along with their BNIM synthesis statements, the next section will summarise the main themes, describing areas of alignment and contrast.

7.5 Comparing and contrasting the results from low scoring and high scoring groups.

In many respects, it is not fair to compare 2 low scoring narratives to 16 high scoring narratives. This remains a limitation of this work. Making generalisations from such a small sample of low scorers is neither equitable nor fair. It is, however, methodologically sound in that each group were identified by meeting the Ardelt criteria for low wisdom and high wisdom. There is still value in comparing the characteristics of the high and lower scoring doctors and their cognitive, reflective, and affective processes in relation to the enactment of phronesis. The conceptual framework provides a template for which to frame the argument. The contrast with the low scoring GP's enables the generation of reflective questions to consider (personally and academically), rather than offering a set of generalisations.

Motivating goods

Both the high scoring and low scoring GPs are strongly motivated by the relationship aspect between doctor and patient. This is enhanced by working in supportive environments and having family support. This was not always present at the outset, but the exemplars sought to find it. They find joy in their work and this in turn

motivates them further. This is an internal motivator. The desire to heal and help patients flourish in holistic ways comes out especially in the high scoring wisdom exemplar narratives. External motivations such as promotions, money and materialism do not really feature in any narratives, though the need for validation from others comes through strongly in one low scoring narrative.

The sense of achievement from successfully dealing with challenge also seems to be a strong motivator, especially for the high scoring exemplars. They actively seek adventure and challenge as they relate this to personal growth. They are not afraid to learn, and even to fail. Failure is inevitable, but there seems to be a spectrum from the low scorers to high scorers from *avoiding (staying in a comfort zone)-accepting-embracing-transcending* failure.

All the GP's aspired to doing what is right and good, and in doing so this enabled them to feel inspired, satisfied and fulfilled. This suggests a connection with moral virtues being a strong internal motivator. It is interesting how one low scoring narrative, revealed a struggle with dealing with uncertainty and with decision making. This would support the aim of the study which was to distinguish the intellectual virtue of phronesis (an adjudicator in decision making), as opposed to conflating it with moral virtues (Wilson, 2017).

All the GPs that were interviewed conveyed the moral virtues of honesty, altruism, and compassion. They were on the whole other-centred. Wilson suggests this may be a defining feature of moral virtues (Wilson, 2017). The quote below, from Wilson, will be discussed further in the discussion section on flourishing:

> *"Moral virtues produce benefits to others – in particular, they promote the wellbeing of others – while intellectual virtues produce epistemic good for the agent."*
>
> Wilson (2017)

By partaking in the study, they all revealed the intellectual virtue traits of open-mindedness, intellectual humility, and inquisitiveness.

Thinking

Optimism of thought predominates in the narratives, except in one low scoring exemplar and one high scoring exemplar. The idea that optimism is not necessary to be a phronimoi will be discussed in Chapter 8. The observed optimism is pragmatic with a sense that things will improve, especially if the difficulty can be alleviated by practical action. This has required courage at times e.g., walking away from toxic environments. Reflection is key when considering thinking. The wisdom exemplars score very highly in the reflective domain. The reflective processes are not ruminative but constructive and often critical, challenging the dominant narratives in society. Constructive reflection was also evident in one low scoring GP. Many wisdom exemplars spoke about reasoning and the importance of embracing different perspectives in coming to the best decision. This will be discussed further in Chapter 8.

Feeling

The exemplars described many feelings when describing the course of their lives. From love, to sadness, grief, fear, and failure. The GPs interviewed all enjoyed human connection. This connection is probably a manifestation of love. Love also

revealed itself in the form of passion; passion for learning and teaching, for positively influencing the future through education and ultimately to helping patients. Retrospectively, all phases and feelings were useful to who they have become now. Many apportion their own feelings of loss, pain and failure as helping them empathise with patients, and those feelings motivate them to alleviate the suffering, that is the nature of compassion. The golden rule*: "Do unto others as you would want for yourself"* was a strong moral imperative that guided clinical practice in the exemplars.

One low scoring GP was besieged with feelings worry and doubt. This fed into their capacity to make decisions and commit to them. This was not a feature of the other GPs interviewed.

Knowing

Explicit and taught ways of knowing were not discussed much, maybe because the interviewer was a doctor like the interviewees. Many said they enjoyed their undergraduate medical education, describing themselves as average ability, when it came to medical exams. One of the low scoring GPs was very insecure in their ability to know things. It was acknowledged that GPs cannot know everything, therefore deal with uncertainty, more so than speciality doctors. Evidence-based guidelines were taken lightly, as one of the many sources of knowledge that need to be integrated in the clinical decision-making setting. The wisdom exemplars did not necessarily know, at the outset, what they want in life, but they did seem to have the self-awareness to know their values and to act in line with them. Many referred to intuition as a source and a guide of knowing what to do.

Uncertainty

Dealing with uncertainty appears to be a defining feature in understanding enacted phronesis within this study, and the high scoring exemplars appeared to negotiate uncertainty with fortitude. It focusses attention on the ability to judge between conflicting agendas. There is a clear differential in the ability for the wisdom exemplars to embrace uncertainty compared to the low scoring GPs who seem more troubled by it, leading to feelings of worry and inadequacy. Uncertainty was mentioned 10 times by the 16 wisdom exemplars. The word *unclear* was mentioned 56 times by the two low scoring GPs. *Uncertain* and variations of that word were used just 11 times by 16 wisdom exemplars. This would suggest it does not weigh on their mind as much. Some wisdom exemplars find uncertainty fascinating, they see it as a strategic challenge to willingly accept. One wisdom exemplar called it *'enriching and painful'*, another said *'it's the hardest part of the job, but it's part of life'*. A few even suggested they share uncertainty with the patient.

Sense of self

The high scoring wisdom exemplars seem to display a strong sense of identity, be it formed already, or a sense of who they want to be. Role models (both good and bad) assist with this benchmarking. The high scoring wisdom exemplars have a strong self-belief in their own capabilities. Successfully overcoming obstacles and challenge feeds this belief, often surprising themselves on what they can do. Competing with themselves is more important than competing with others, though a couple of exemplars mentioned sibling rivalry. They have learnt to ignore naysayers, as their validation is of little importance. Key figures who showed belief in them from an early

age were a source of inspiration and motivation. External validation was very important for one of the lower scoring GPs.

Many relate an intuitive internal voice instructing them on how to align with what they value most. This is a form of knowing and has been discussed previously. For the high scoring exemplars, their sense of agency fuels their actions. An inclination towards activism combined with reflection and pragmatism result in practical action. Often addressing issues such as justice and innovation. Their outlook is optimistic, and this may relate to their role as medical educators.

Failure is considered part of the course. Their own pain, illness and tragedy informs their compassion for others. They aspire to relate to others on a very humane level. Most state they have no regrets about what they have been through and who they are now, though one exemplar would not re-live the ordeals she has been through. The low scoring GPs narratives revealed some regret and competitiveness. The high scoring exemplars did not mentioned competitiveness, suggesting they are not comparing themselves to others in this way.

There is varying use of boundaries in protecting the identity and wellbeing of the GPs. Some having very rigid boundaries and others seemingly having almost none. Secure family relationships are described as being very important in all the narratives. Religion and faith were important for many of the (low and high scoring) exemplars, though all of them were cautious of dogmatic practice. There were also some good examples of exemplars of no faith whose moral compass was strong and

rooted in humanism. Many faiths and ethnic origins were represented in the exemplars (Christian, Sikh, Hindu, Muslim/ English, Scottish, Welsh, South Asian, African). This contrasts with what is seen when knowledge is the focus of assessment in medicine (differential attainment). Physical disability was also represented within the wisdom exemplar group. A large proportion of the wisdom exemplars were carers (within their family), for someone with life-altering or life-limiting illness.

Learning

Learning closely relates to sense of self, feeling, knowing, and thinking. Learning is a motivational good in its own right. It can be both externally motivated and internally motivated. The wisdom exemplars enjoy learning and reflecting. Not only do they learn about themselves and their potential, but they also push themselves to learn more both academically and in understanding the world. One exemplar refers to this as common sense. When they feel closer to this, they feel rewarded. This can be contrasted with learning to achieve recognition and awards. This external motivation can lead to a fear of not performing, and ultimately a fear of failure. This strong feeling can inhibit the process of learning. Fear of failure is more evident in the low scoring GPs. All GPs in the study suggested they enjoy their patient interactions and learn from their patients.

Context

All the GPs interviewed mentioned their precarious position of having to follow generalised guidance on how to manage patients along with appreciating the

contextual nature of every encounter. Many found the adherence to guidance a nuisance. Many reiterated that no consultations are the same, irrespective of it being a similar diagnosis. The art is to do what is right for the patient in front of you. This requires being receptive and responsive to the situation.

Practical action

Practitioners tend to want to get on and do it. Activism is part of the role. Practical action is therefore an important end point of deliberation. The wisdom exemplars showed a particular orientation towards addressing injustice and leading on innovation initiatives. This suggests they do not fear change and in fact want to be a part of change. This again, may align with the fact they are all medical educators. In order to initiate change they need to be articulate in expressing what needs to happen and how it should happen. They need to be clear about the goal and how to get there. It is evident that many of the wisdom exemplars are ‘big picture’ thinkers with longitudinal vision. The low scoring GPs were less clear in this area, one being resistant to change and the other reflexively changing their direction based on a series of tragedies in their life. This concludes the discourse in comparing the interviewees narratives.

7.6 Critical reflection on external validity - EPGPS part 3

EPGPS part 3 translates to the optional dimension of the BNIM methodology. It was not deemed a major part of the EPGPS study but was considered important in acknowledging the presence of self-reporting bias. Wengraf describes sub-session 3 which can happen any time after the original narrative interview. Wengraf states its

purpose is to clear up any unresolved issues or to address, in a non-narrative way, questions that have emerged from the transcripts. It can take several forms such as a further semi-structured interview, focus group interviews. The concept is flexible and responsive to the needs of the research. Wengraf states that much BNIM research does not use a sub-session 3 (2018a).

As the Ardelt 3D wisdom scale and the biographic narrative interviews were self-reported, sub session 3 was used to collect 360-degree feedback from patients (N=30+) and colleagues (N=15+) that every doctor has to submit for their annual appraisal towards GMC revalidation (every 5 years). The data is collected on standardised question templates (appendix A 6.4). The clinician sends email invitations to 15 colleagues for completion. The patient data collection is usually sequential over a period of time, thus nonselective. Every participant will have collected this data within the last 5 years. Following the narrative interview, the MSF and PSQ information was requested. The purpose was to look for any glaring shortcomings within the clinician that did not align with their selection as an exemplar of phronesis. The paper review revealed that all the exemplars (low scoring and high scoring) were deemed capable and competent at their jobs, as evaluated by colleagues and patients.

This information was made available from 14 out of 18 exemplars and included the lower scoring exemplars. 4 of the 18 were reminded by email twice to forward the information but they stated they had technical problems accessing the old data from a previous revalidation submission, (or they were exhausted from the ongoing

requests to participate). It is not known if the lack of data from those participants indicates possible unfavourable 360-degree feedback.

Notable observations, which were not specific goals of this research, but maybe explored in subsequent research, include the strong alignment of character summaries from the BNIM process with the free text comments from colleagues and patients about the doctor's character attributes (especially for the high scoring exemplars). This suggests strong coherence of data. The two low scoring exemplars also got excellent patient and colleague feedback.

All the GPs who took part in sub session 3 do their GP job well, as represented by the 360-degree feedback.

Footnote:

Aspects of this chapter have been published in the Journal of Holistic Healthcare (Jameel, 2021). It was a special edition on flourishing in medicine. The article can be found in Appendix 7.1, along with a note from the editor confirming that the text remains the authors intellectual property and can be reproduced as required. The text that has been reproduced within this chapter is marked with an asterisk.

8.ANALYSIS, INTERPRETATION AND DISCUSSION

8.1 Introduction

The chapter has ten subsections. It will synthesise the work in all the previous chapters. It will briefly summarise what was done during the course of the thesis, explaining why it was done and how it was performed (8.2). The key research findings will then address the original research questions. The chapter will juxtapose the research findings with the published literature (8.3). It will explore areas of congruence and critically examined the findings in relation to previous knowledge as described in the literature review (8.4). The methodological limitations of the research will be outlined, as will the strengths that contributed to the validity of the work (8.5). Areas of discovery (both anticipated and unexpected) will be described. This research has resulted in the generation of a new theory (the *Fish School theory of practical wisdom*), which will be explained (8.6). Following this, research claims will be made (8.7). The implications for future research will be suggested (8.8), along with the possible implications for medical practice and medical education (8.9). Finally, the chapter will be summarised (8.10).

8.2 Summary of the EPGPS

8.2.1 The introduction

The thesis introduction set the scene for the context of this study. It described the historical background of virtue ethics and Aristotle's conceptions of the excellences of knowledge, phronesis being one of them. The introduction chapter outlined the more recent revival of virtue ethics and described its postulated relationship to professional

practice. This steered the discussion towards the ethics that underpin medical practice and how current ethical frameworks have failed to address issues such as inequality and dealing with complexity. This has led to significant discontent in both patients and the profession.

Phronesis is an adjudicative process that identifies salient issues and integrates many sources of knowledge to result in wise action. Aristotle suggests it informs the attainment of eudaimonia (flourishing of self and others). Wise action and flourishing are needed more than ever in modern medical practice, so phronesis offers a paradigm worthy of exploration. Phronesis bridges the theory-practice gap, but little empirical work has been done on ascertaining exactly what it is and how to promote it. Aristotle asserts it is an intellectual virtue that can be taught, but he was deficient in explaining how this should be tackled, despite his realist leanings and propensity for scientific method.

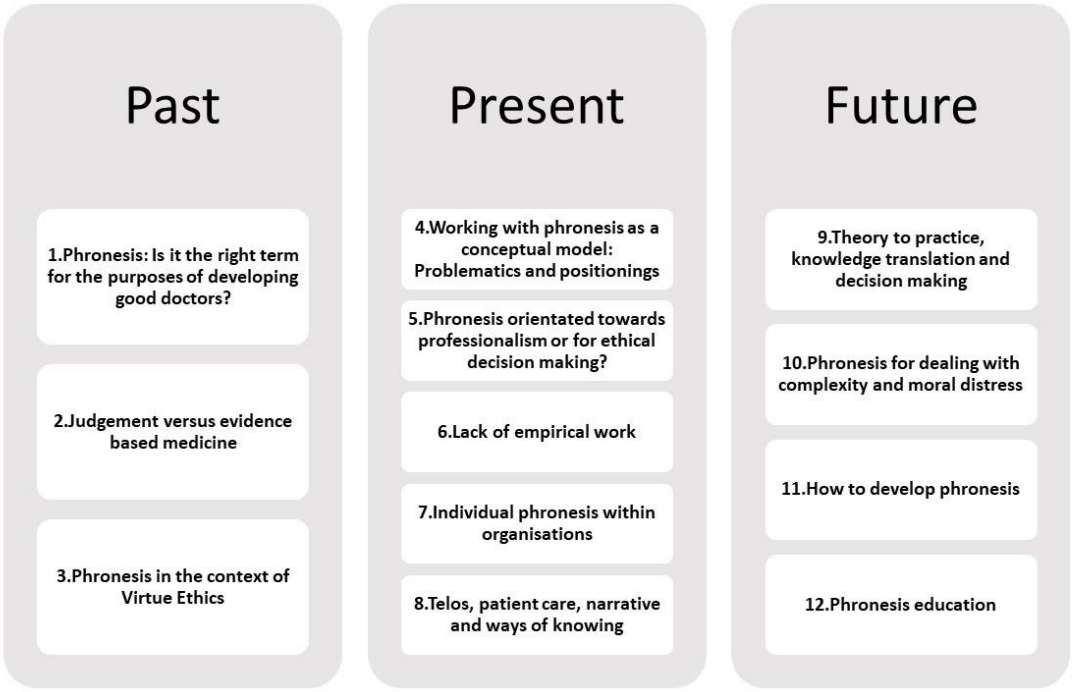
The chapter that precedes the introduction was an opportunity to describe my own context as a clinician who was UK trained and continues to work in the context of UK General Practice. I am also a medical educator with significant postgraduate and undergraduate experience. It is in this milieu that the research was conducted. The research questions relate to enacted phronesis in a population of GPs, it is in the introduction chapter that the research questions were initially described.

8.2.2 The literature review

A rigorous and reproducible way was sought when approaching the task of reviewing the literature on phronesis in medicine. Most published literature relating to the subject is theoretical (normative and evaluative), and largely found in bioethical forums. The theoretical concepts underpinning phronesis draw from across disciplines which include philosophy, psychology, and education. The breadth of literature could have been potentially overwhelming, so it was important to keep a tight focus. Traditional systematic review methods would not be appropriate for an exploration of phronesis in medicine, due to the lack of empirical research. The literature review scoped the published work using an established critical interpretative methodology described by McDougall (2015), with some additional guidance on scoping reviews by Arksey and O'Malley (2005).

The literature review stayed focussed by concentrating on three key questions: *What has been written about phronesis in medicine? What empirical research has been done on phronesis in medicine? What narrative commentary prevails in relation to phronesis and medicine?* The literature lent itself to being categorised into 12 themes relating to the past, present, and future conceptualisation of phronesis as applied to medicine (figure 8.1). Within the literature review themes the papers were compared and contrasted along with some critical commentary. The three key questions were answered, and the pursuit resulted in the conjecture of new questions. The 12 themes and 3 headings will be revisited later in this chapter when the new empirical findings will be compared to what is already known.

Figure 8.1 The literature review themes.



8.2.3 Methodological Chapters 3,4,6, and the empirical results Chapters 5 and 7

The three methodological chapters have invested in justifying the approach taken in this thesis (mixed methods – Chapter 3), and the specific methods (Chapter 4 and 6). The research questions are addressed in two main parts (Part 1 and Part 2 EPGPS). Part 1 was the quantitative research which was adopted to identify wisdom exemplars using a scale that best approximated to the wisdom required for medical practice and the concept of phronesis. This choice was justified by using the published literature. The results for Part 1 were presented in Chapter 5. For both parts of the EPGPS, I was fastidious in my necessity to choose methods that complemented the philosophy and ethos of wisdom.

In relation to Part 2, constructivist interpretative ways were sought, that permitted values, opinions, and feelings to become the focus of the enquiry. Positivist research methods have no capacity to embrace subjectivity; the methods impose structure and control that is intolerant of uncertainty. It was through narrative and biography that character, moral orientation, and identity could be explored. That is why biographic narrative interpretation was the preferred method for the qualitative work. Though complicated to decipher, BNIM offered a method that retained holism. The analysis of Part 2 also involved corpus linguistic analysis. This was an iterative decision, in order to compare and contrast the transcript quotes. This proved illuminating in that it also offered a conceptual framework to how the doctors were thinking and the inter-relationship of the main themes (figure 7.3). The results for Part 2 of the EPGPS can be found in Chapter 7.

Figure 8.2 is a flowchart that summarises the EPGPS data collection process. Figure 8.3 illustrates the data analysis and synthesis process which enabled the research questions to be answered. These flowcharts describe the procedures of this thesis.

Figure 8.2 The EPGPS data collection process

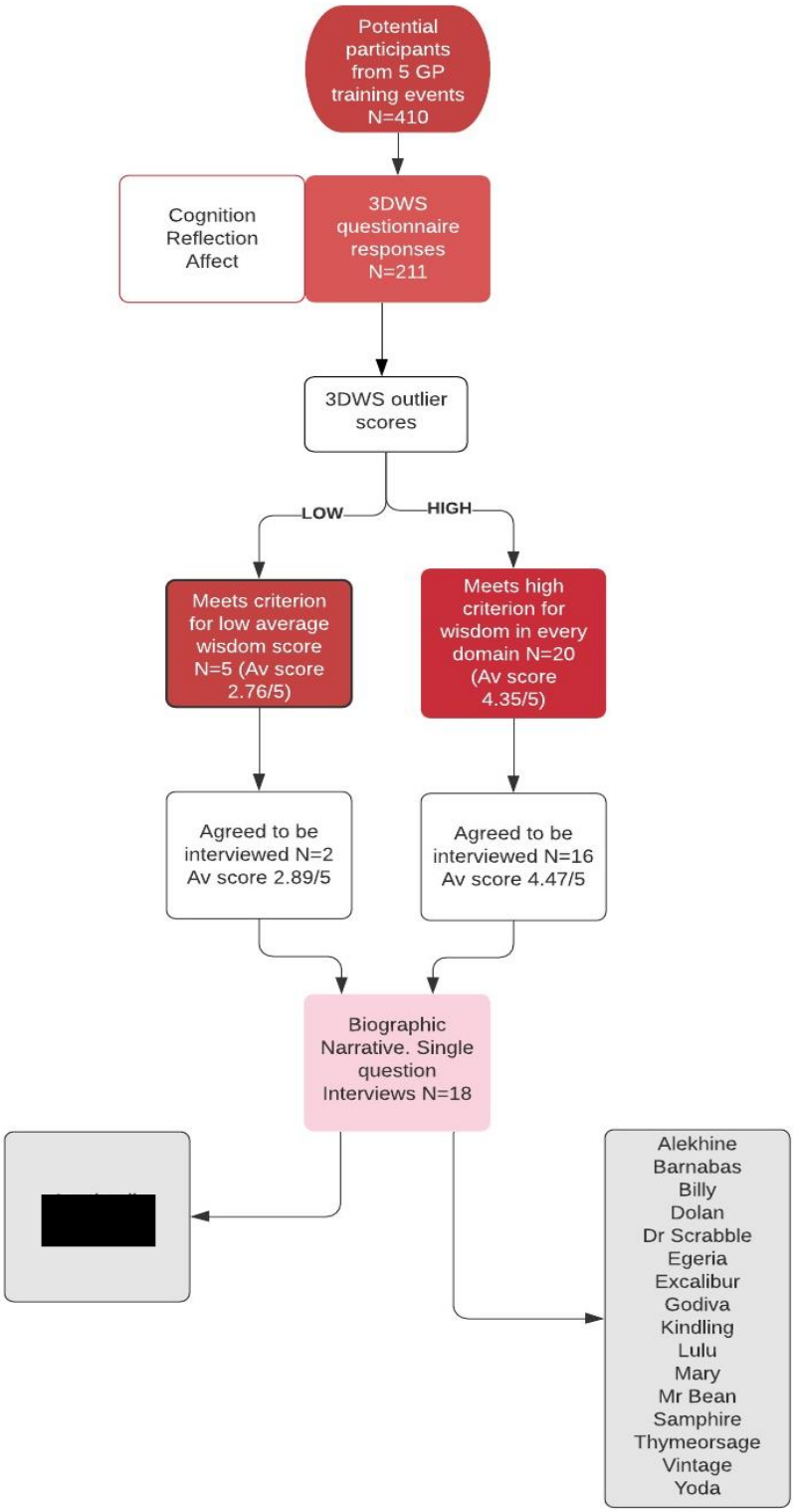
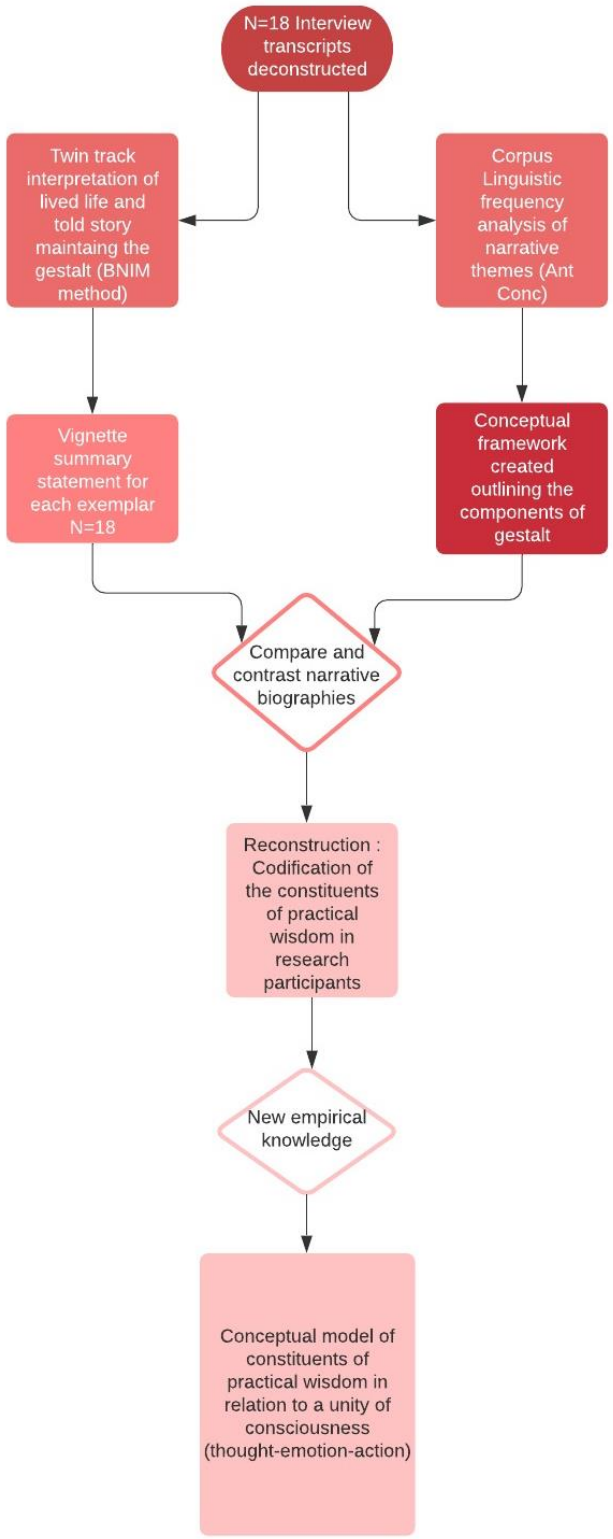


Figure 8.3 The EPGPS data analysis and synthesis



8.3 Addressing the research questions.

The section is divided into two subsections. The overarching question will be addressed by summarising an answer, derived from the thesis findings, this will be followed by a series of observations/ assertions. These observations will then be analysed in relation to the published literature (8.3.1). The six sub questions will then be addressed using observations from the EPGPS work; these observations will be analysed in relation to the published literature (8.3.2).

The overarching question

Q1. What constitutes enacted phronesis in a population of general practitioners?

Sub-questions

Q2. What characteristics are common to GP phronimoi? How does this differ from GP peers?

Q3. Is phronesis in general practitioners a transient or stable state? Can phronesis consistently be demonstrated?

Q4. What do GP phronimoi do differently in their approach to practice?

Q5. Does enacted phronesis result in better doctor-patient relationships?

Q6. Does enacted phronesis result in a sense of greater personal wellbeing?

Q7. What motivates phronetic GPs?

Figure 8.4 The empirically derived constituents of enacted phronesis

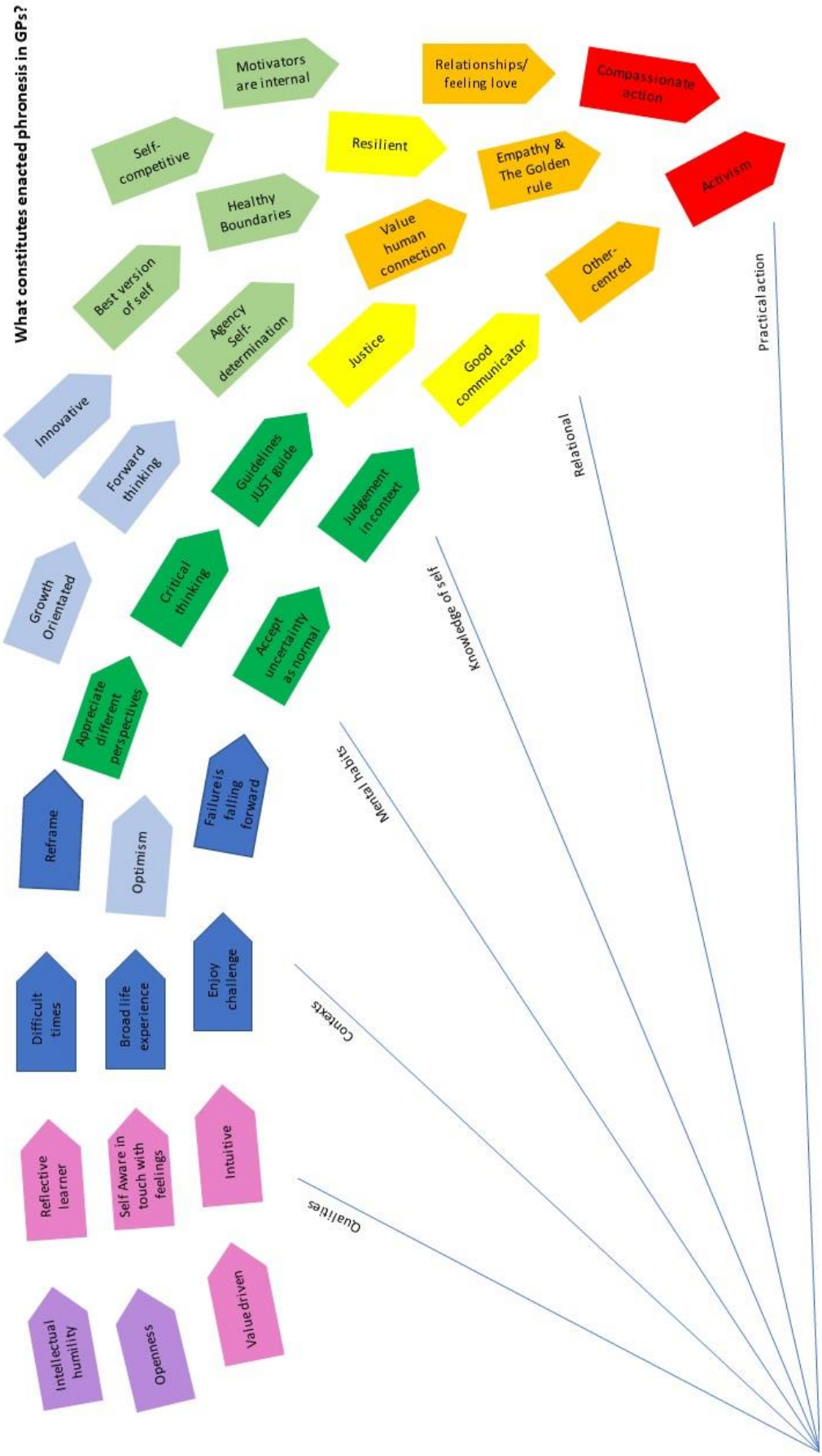


Figure 8.4 depicts the answer to the question, *"What are the constituents of phronesis in a population of general practitioners?"* It is a representation of what has been empirically demonstrated in this study. It shows that phronesis is a process that moves a person from thoughts and emotion to deliberation and action. It traverses personal qualities, situational contexts and the mental habits that process those contexts, perspectives, and uncertainties. It requires an intimate knowledge of self, with an orientation towards good, which in turn leads towards self-actualisation. These facets then bring wise action to bear. The process involves a strong desire for meaningful connection with others in a community. These constituents have a direction towards action. Phronesis can be considered a unity of consciousness as attested by this PhD research. The depiction in figure 8.4 directly corresponds to *the Fish School theory,* which is a more abstract analogy-based-theory describing the process of phronesis, this theory will be introduced shortly (section 8.6).

8.3.1 Observations section 1: In response to the overarching question

The observations and assertions are taken from the qualitative arm of the EPGPS research. Some of these statements can be directly deducted from figure 8.4, others are inferred from the qualitative results in Chapter 7. These statements will be judged in relation to the existing literature.

The constituents are very psychological in nature.

Lapsley has stated that phronesis is a very psychological concept in the first place and that psychologists have understood the developmental concepts of wisdom without making use of Aristotle's notion of phronesis (2019). This study reinforces the

idea that the constituents of phronesis are very psychological in nature. It is beyond the scope of this thesis to compare the constituents of enacted phronesis in GPs to the many behavioural and moral psychology theories of wisdom, performance, and self-development. Nor will this thesis untangle the complicated relationship between personality, behaviour, and virtue (Jayawickreme *et al.*, 2014). While Lapsley is right that it is, in principle, possible to discuss all the components of phronesis without ever invoking Aristotle's concept, it is moot why this would be a helpful strategy, as Aristotle's concept provides a helpful heuristic, as well as an overarching umbrella construct, within which to categorise the components and their inter-relationships.

Cursory evaluation of the 34 constituents reveals the prevalence of psychological/metacognitive themes. The use of the psychological 3DWS instrument to select the exemplars may explain the psychological emphasis, but the 34 constituents were taken from comparing and contrasting themes within the transcripts (Chapter 7 section 7.5), which were derived from a single question interview (BNIM SQUIN). Further research is required to check if the 34 constituents can be absorbed into other models such as the recent 4-component model (Darnell *et al.*, 2019) or the psychologists wisdom models named in Chapter 3 (Sternberg, 1990). Many of the features of figure 8.4 overlap with concepts suggested by various psychology researchers (Staudinger, Dörner and Mickler, 2005). One disadvantage of the 4-component model is that it considers phronesis only in the ethico-moral sphere, rather than broader conceptions of character/professionalism. The psychological models, on the other hand, often overlook the moral dimension.

Lapsley gives a psychologist's critique of the philosophically motivated 4-component model and suggests where psychological scales measure the same thing (2019).

The main conclusion from this reflection, is a reinforcement of the need for a close collaboration between psychology researchers and neo-Aristotelian virtue ethicists, if we are to come to a better understanding of phronesis. Precedence has now been set with the new Common Wisdom Model (Grossmann *et al.*, 2020a).

Cognition and emotion inform each other

Lapsley criticises the Darnell *et al.* 4-component model for separating emotion and reason (2019). On describing moral behaviour, De Caro and Marraffa write that emotions play a pivotal role in cognitive processing, suggesting that reason and emotion should never be thought of as separate or hierarchically ordered (De Caro and Marraffa, 2016). Self-awareness features frequently in the literature on moral behaviour in medicine (Abraham *et al.*, 2020; Frank, 2004).

Although not explicitly proven, the EPGPS work supports the notion that cognition and emotion do not occur in a linear, sequential way. In a clinical paper on morbidity and mortality, Abraham *et al*, outline eight considerations when taking a wisdom approach to teaching clinical reasoning. They recognise the dependency of emotional awareness and emotional regulation in the process of clinical decision making (Abraham *et al.*, 2020). This inter-dependant relationship between cognition and emotion will be postulated further in part 7.6 within the *Fish School theory*.

Not all constituents need to manifest to be considered a phronimos

Some constituents are more important than others. High scoring exemplars manage to recruit most of them much of the time. The 34 constituents are an aggregate representation from the wisdom exemplars; the frequency of the themes was part of the analysis, but it does not mean that all exemplars showed all constituents. The metacognitive constituents, synchronised in the process of phronesis, should be reproducible in most situations. Phronesis, in this population of GPs, is an integration process of the 34 constituents. Across professions and disciplines the constituents may vary, but the six categories should be broadly consistent (contexts, qualities, mental habits, knowledge of self, relational and practical action).

Dolan was the most sceptical of all the wisdom exemplars. His scepticism contradicted the optimism that was evident in all other exemplars. This indicates that phronesis may not be associated with emotional valence (negative or positive), but with emotional intelligence. This suggests that constituents such as optimism are not compulsory but are helpful for mental tasks like reframing. This finding reverts back to conversations on state, trait, personality, and wisdom (Jayawickreme and Fleeson, 2017; Jayawickreme *et al.*, 2014) which is beyond the scope of this work.

Aristotle stated habituation was a route to developing virtue, including intellectual virtue. Of the 34 constituents it would be useful to reflect on the components that could be nurtured with repetition and habituation. This is where the notion of teaching (intellectual) virtue comes in (literature review theme 12).

Eudaimonia: a concept of a universal good is not explicitly evident in this group of practitioners; flourishing is more proximal

Within the literature review section 2.12 Sextus Empiricus was mentioned. Empiricus was a Pyrrhonian Sceptic. One of his main criticisms of Aristotelian virtue ethics was regarding the concept of eudaimonia. He suggested that the good could not be known and paradoxically, seeking happiness, reduced happiness (Bett, 1999).
It was in the Nicomachean Ethics that Aristotle defined eudaimonia. Accounting for the error involved in using an English interpretation, Aristotle described eudaimonia as *living well or doing well* [NE1: 1095a, 15-22] (Aristotle, 2004). Aristotle suggested eudaimonia is achieved by activity exhibiting virtue in accordance with reason. Huta describes eudaimonia as authenticity, growth, meaning and excellence (Huta and Ryan 2010; Huta and Waterman, 2013). The wisdom exemplars have collectively rated their job satisfaction higher than the other 195 GPs (results from Chapter 5). This would imply that they are living well and doing well. Their transcripts certainly reflected authenticity, orientation towards growth and a search for meaning. The qualities identified, and the need for meaningful connection, concurred with Krafcik's work with non-medical wisdom exemplars (2015)

Within the transcripts there was no strong narrative of eudaimonia being an aspirational vision. The exemplars represented a variety of religious faiths and included doctors with no faith. The wisdom exemplars seem to recognise they are part of something bigger than themselves, though that vision was not explicitly articulated. For the wisdom exemplars, it appears that their role is in restoring justice by addressing inequality, creating a better future through innovation and leadership,

or fostering flourishing and healing one patient at a time. This aligns with their enduring values. Their eudaimonia is in seeking meaningful engagement with the world that surrounds them.

It would be difficult to teach some of these constituents.

It is evident from reviewing the constituents and reflecting on exemplar narratives, that much of their wisdom comes from (reflection on) their life experience e.g., personal illness, being a family carer, bereavement, trauma, international experience etc. Educators have little influence on whole life experience and often only influence education for a small fraction of an individual's life. Some aspects of character are deeply ingrained and difficult to influence. As phronesis is a metacognitive process with a moral orientation, education can increase awareness about the requirements for practical wisdom, and educational organisations can potentially create environments that promote wisdom. Educators will need to think creatively about how to teach things like empathy, healthy boundaries, intuition etc. This observation relates to the literature review themes 11 and 12 (on how to develop phronesis and phronesis education).

The contexts are often painful.

This research aligns with previous work that recognises painful life experience as an opportunity to develop wisdom (Tedeschi and Calhoun, 2004; Staudinger, Dörner and Mickler, 2005; Plews-Ogan *et al.*, 2016). It also empirically confirms a suggestion that phronesis is painful, rather than natural in evolution (Kristjánsson, 2015) (Chapter 2 theme 4). What is interesting regarding the wisdom exemplars is their

propensity to seek challenge and ‘pain’ in the form of new experience. The exemplars describe their greatest periods of growth being in times of greatest challenge (self-inflicted or imposed). In the case of the GP exemplars, self-infliction referred to the challenge from medical work abroad or an academic goal that seemed unattainable. One of the lower scoring doctors distinctly avoided challenge, preferring to be in a comfort zone. This assertion, that wisdom is painful, links to theme 10 in the literature review.

The exemplars stories embraced the whole of their life, not just clinical practice

The research participants were medical practitioners engaged in a particular professional practice. The single interview question asked how they came to be the doctor they are now. To them ‘being a doctor’ encompassed the whole of their life, not just clinical work.

Various authors have written about the value of exemplars in offering insight into moral behaviour (Carnevale, 2007; Kristjánsson, 2014; Kidd, 2017 Mishchinski and Jayawickreme, 2019). As this thesis sought to explore the moral orientation, metacognitive and cognitive aspects of wisdom exemplars, it was not confined to just one area of life (e.g., ethical decision making). The exemplars chose how to frame an answer to the single question. The narrative interviews spanned the whole of their life and how that has made them the doctor they are now. The narratives contained content relating to moral perception, how they came to make choices, and how they connected and collaborated over the years. Sherman describes this as the fabric of character (1989). She describes how character remains inseparable from the virtues

and she bemoans how most written work attends to the acquisition of virtue rather than character.

The exemplars invite a way to understand embodied phronesis. This resonates with broad concepts, such as medicine being a vocation involving volition, and phronesis being about the whole of professional practice rather than just one-dimension of medical practice (ethical decision making). It has the capacity to promote a character-based approach to understanding professionalism. This work, therefore, aligns better with the MacIntyrean conception of phronesis than of the Aristotelian conception (Chapter 2, theme 4).

Phronesis is an integrative process

Medicine has fragmented the education of clinical and moral decision making, professional character identity, the goals and purpose of medicine, dealing with complexity and social justice. The 34 constituents and the movement towards action illustrate that phronesis is an integrative process. Attending to individual components alone, as a focus of teaching, will not result in wisdom attainment. Medical education has compartmentalised the components and has not suggested a way in which these constituents should be integrated. Klein and Bloom capture this in their definition of practice wisdom:

> *"We propose that practice wisdom be defined as a system of personal and value-driven knowledge emerging out of the transaction between the phenomenological experience of the client situation and the use of scientific information."*
>
> (Klein and Bloom, 1995)

It was retrospectively noted that the corpus linguistic themes, as represented in the conceptual framework (Chapter 7), looked remarkably like the key elements of the *Unity of Consciousness* (Brook and Raymont, 2017), philosophers have been deliberating on this for centuries. Figure 8.4 and its progression, figure 8.4b the *Fish School theory*, attempts to reconstruct the process of phronesis. It is hoped this will prove useful in explicitly demonstrating that integration and synchrony of the constituents is needed, thus enabling a more holistic approach to medical education.

Managing the complexity, uncertainty and volume of information was a dominant feature, as opposed to just accumulation of medical knowledge

Higgs has defined professional knowledge as ways of knowing in the absence of certainty (2012). Meeks and Jeste also describe uncertainty management as one of the 6 major components of wisdom (2009). In the EPGPS work, dealing with uncertainty was also a central theme. Although only two low scoring participants were interviewed, it appeared that one of the biggest areas of divergence, as compared to the wisdom exemplars, was in the ability to deal with uncertainty.

A potential limitation of this research is that I had undergone the same medical training and I am in the same profession as the interviewees. This may have resulted in the detail about medical knowledge being omitted because it was assumed that I had insight into that aspect of wisdom. Phronesis in the context of dealing with uncertainty was identified within themes 1, 2, 7 and 10 within the literature review.

8.3.2 Observations Section 2 - In response to the research sub questions

These observations and assertions are taken from the results from Chapter 5 and 7, both the qualitative and quantitative arms of the study.

How do the GP Phronimoi differ from GP peers?

Lower scoring doctors appear to struggle with their mental habits in responding to contextual problems. They were less likely to be trust intuition (personal quality) and assert their agency/self-determination (knowledge of self). The lower scoring examples wavered in their decision-making, expressing more doubts and insecurities. Contrast this with the wisdom exemplars who had a strong sense of who they were and how they could work towards their goals. It may not have always been that way, but at some point in their lives there was a turning point that facilitated a wiser way of thinking. All the doctors (low and high scoring) demonstrated strong moral virtues (like kindness, gratitude, and altruism) this was triangulated with MSF and PSQ data. This suggests that moral virtues alone are not enough for phronesis.

Is phronesis in general practitioners a transient or stable state?

Can phronesis consistently be demonstrated?

The sub-question relates to the psychological terms state and trait, where wisdom can be viewed as a stable and unchanging quality (trait) or as an enduring process made up of instances of wise and less wise behaviour (state).

With practise and experience phronesis can become a stable process. It may not be demonstrated at all times, but it is reflective, and growth orientated. Stable does not

mean perfect. Here lies a conceptual problem. Aristotle considered phronesis as a fully realised state of perfection. This would mean it is virtually impossible to find true phronimoi, and therefore study them. Proponents of modern phronesis correct Aristotle and consider phronesis a satis concept. A satis concept, in this context, is when the person has *enough* wisdom to be considered wise.

This satis concept aligned with the way the exemplars were selected using the Ardelt 3DWS. Ardelt sets quantitative limits to define a high criterion for wisdom, namely a score above 4 out of 5 in every individual wisdom domain (cognitive, reflective, and affective) (2003). This is not 'perfect' wisdom, Ardelt states that her wisdom questionnaire measures how wise individuals compared to an integrative utopia. i.e., they would score 5/5 in each domain (2004a). This study selected participants on the basis that they can be classed as wise, or wise enough, without being perfectly wise (Russell, 2009).

If phronesis varied over time, domain, and context, it would be considered a scalar concept (Fowers *et al.*, 2020). This means that in this study, phronesis is a satis and possibly a scalar concept. As the research was cross-sectional and it only allowed for retrospective assessment from a questionnaire delivered at a point in time, it was difficult to ascertain the scalar nature of phronesis. The concepts of scalar and satis can also be applied to the medical decision-making diagram referred to in Chapter 2, (appendix A2.2) where getting a perfect decision every time is not possible. The goal is good enough.

The mixed methodology adopted in this study enabled examination of the trait (Ardelt 3DWS) and state (BNIM) of the participants interviewed. This was discussed in Chapter 3. Grossmann, Kung and Santos suggest this is the most robust way to conduct wisdom research, rather than considering either state or trait alone (2019). State and trait are issues frequently discussed in personality studies and behavioural psychology. Grossmann, Kung and Santos summarise the historic debate regarding wisdom perceived as state or trait in a chapter in the Cambridge Handbook of Wisdom (2019). In summary, they feel it is more helpful to consider what promotes wise action rather than debates about whether wisdom is a state or trait. The goal is to produce robust evidence driven educational interventions in professional practice with the view that wise action can be developed (Grossmann, Kung and Santos, 2019).

What do GP phronimoi do differently in their approach to practice?

GP phronimoi have well developed thinking habits on a foundation of sound moral virtues. Non phronimoi GP can have sound moral virtues, but that is not enough for phronesis to actualise. The most evident divergence regarding the exemplars approach to practice relates to the mental habit constituents (perspective appreciation, critical thinking, guidelines are just guiding, uncertainty is normal and contextual judgement). There are also some differences in relation to what motivates the GP (discussed later) and their approach to challenge.

Does enacted phronesis result in better doctor-patient relationships?

Moral (rather than intellectual) virtues seem more important in the context of relationships. All the doctors interviewed (lower and high scoring) seemed to have good relationships with their patients. These rewarding relationships motivate the doctor. All of the GPs who took part in sub session 3 do their GP job well, as represented by the 360-degree feedback from patients.

Does enacted phronesis result in a sense of greater personal wellbeing?

Grossmann has stated that in psychological research there is no accepted relationship between intelligence and wellbeing. His paper demonstrated that wisdom results in greater wellbeing (Grossmann *et al.*, 2013). The wisdom exemplars in this study quantitatively and qualitatively demonstrated a greater sense of personal wellbeing. This suggests that enacted phronesis *does* result in a greater sense of personal wellbeing. This is an important promotional point when considering advocating educational interventions for a wisdom approach to medical education.

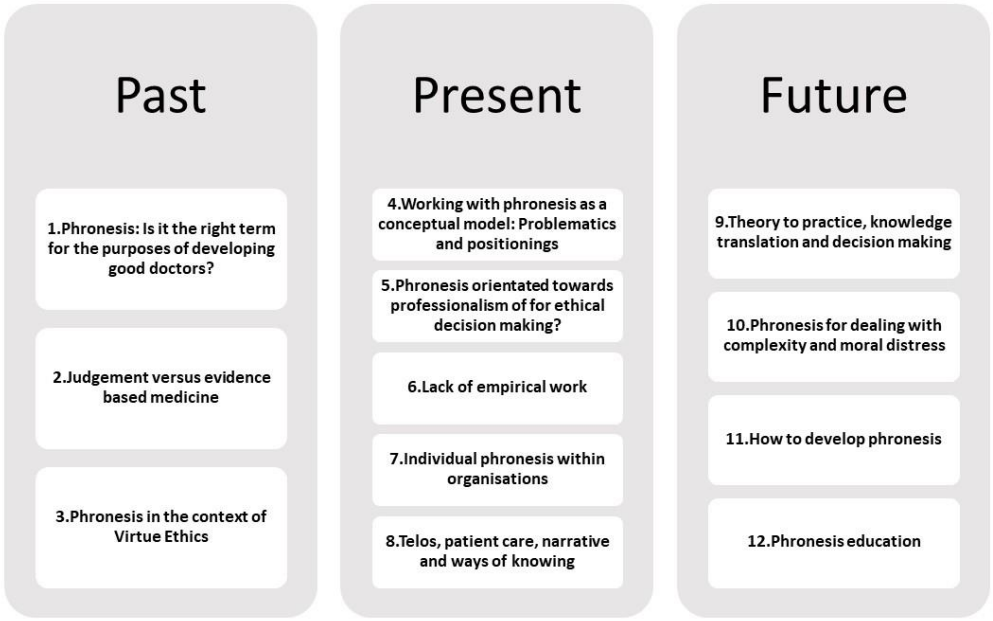
What motivates wise GPs?

Having corroborated that wisdom leads to wellbeing, there is an intermediate step which can be explained by Ryan and Deci's self-determination theory (SDT) (2017). As mentioned previously the wisdom exemplars in the EPGPS study demonstrated high levels of personal agency and autonomy. This supports the quote from Kumagai who links personal agency to phronesis (2014) (theme 7 literature review). The exemplars have a strong personal locus of control and internal motivation; this is in contrast to the lower scoring exemplars who seemed more influenced and affected

by external events, external validation and external motivators. SDT is a theory of human personality and motivation that concerns peoples' inherent orientation towards growth. The EPGPS wisdom exemplars exhibited the ability to pursue activities/challenge because it was edifying to do so and led to growth (intrinsic motivation). Ryan and Deci relate this ability to flourishing and wellbeing. They suggest that three basic psychological needs should be satisfied for flourishing to occur; these are autonomy, competence, and relatedness. This contrasts with external motivations which are the least autonomous. It is where activity is conducted because of an external demand, or the prospect of reward. These actions can be considered to have an external locus of control. The narratives from the lower scoring doctors in the EPGPS research would definitely substantiate that they are more externally motivated.

The wise GPs have strong internal motivation in comparison, and this aligns with the concept of internal goods (MacIntyre, 1981). Interestingly, on speaking about achieving eudaimonia in the Nicomachean Ethics, Aristotle writes about virtue being an activity in alignment with the rational part of the soul [NE I.7 1098a 16-17] (Aristotle, 2004), but he also speaks about human good coming from external goods, such as friends, wealth and power [NE 1.8 1099a 31-32] (Aristotle, 2004). His point was that resources are needed for happiness to materialise.

8.4 Relating the research findings to the literature review



Section 8.3 has already used the published literature to judge the claims and observations made in this work. This section will add to that, by positioning the EPGPS work in the context of what is known, as identified by the literature review. The past, present, and future headings will be used and have been explained in the literature review, the subsections are illustrated above.

Past

Regarding the three literature review themes that relate to the past, the EPGPS work has demonstrated that using phronesis as a research paradigm for considering medical practice is a useful and insightful thing to do. The literature review had already surmised that phronesis was the right term to use, and this research corroborates that conclusion. The research has also highlighted that the term

phronesis, in the Aristotelian sense, is not completely aligned with its application in medicine, the main differences are outlined in table 8.5 later in this chapter.

The EPGPS research brought to life the discourse in the literature review that referred to a need to amalgamate and integrate sources of knowledge that led to an appropriate decision being made in a particular context. Contextual judgement was respected, with guidelines being informative rather than instructive. The complexity of medicine, along with the inherent uncertainty meant that scientific technical rationality was deficient on its own, and well-developed clinical acumen and moral grounding was also essential.

The golden rule, "*Do unto others as you would have them do unto you",* was a very prominent feature in the narratives of the wisdom exemplars. This maxim gave a strong moral grounding. Virtues such as justice and compassion predominated and conveyed a sense of the virtues required to be an empathic patient-centred doctor. All the GP's aspired to doing what is right and good, in doing so this enabled them to feel inspired, satisfied and fulfilled. This suggests a connection with moral virtues being a strong internal motivator. It is interesting how one low scoring narrative in particular, revealed a struggle with dealing with uncertainty and with decision making. This would support the aim of the study, which was to distinguish the intellectual virtue of phronesis (an adjudicator in decision making), as opposed to conflating it with moral virtues (Wilson, 2017). This work therefore supports the suggestion by Wilson that phronesis is an intellectual virtue where the agent is the main benefactor with regard to wellbeing:

> *"Moral virtues produce benefits to others – in particular, they promote the wellbeing of others – while intellectual virtues produce epistemic good for the agent."*
>
> (Wilson, 2017)

All the doctors who were interviewed conveyed frustration with the compliance culture and regulatory requirements. This shows disdain for what Berwick describes as Era 2 (2016). The latter are a consequence of rules-based ethics. This research was unique in that it studied the character of the doctors and interpreted how virtue translated to action. This demonstrated an appreciation of the role of virtue ethics in medical practice.

Present

There were five themes categorised in this subsection. Theme 4 referred to the binaries that need to be considered when working with phronesis as a research paradigm. Kristjánsson called for researchers to consider their stance on whether their conception of phronesis was universalist or relativist, generalist or particularist, natural or painful, MacIntyrean or Aristotelian (2015). This thesis has confirmed that phronesis is painful and has taken a position where phronesis is not limited to moral decision making. It includes the whole of professional practice; it therefore has a MacIntyrean inclination (theme 5).

This work suggested that the 34 constituents of enacted phronesis may differ for a different profession/discipline. This suggests a relativist conception of phronesis, where virtues are linked to cultures and traditions. This work has resulted in the PhD author re-evaluating her position from being universalist, at the time of the literature

review, to being more relativist now, or at least morally pluralist. I, along with the EPGPS study, remain particularist in understanding the dynamic contextual response required for phronesis.

Theme 6 within the literature review outlined the lack of empirical work on phronesis in medicine. The EPGPS hopes to make a significant contribution to new knowledge by addressing knowledge gaps. It is the first study to analyse empirically selected medical practitioner exemplars. The literature review highlighted the need to study exemplars and the need for the research to be rooted in praxis.

Theme 7 related to individual phronesis and the influence of organisations. The first section discussed terminology relating to if individual phronesis is enacted or embodied. The EPGPS work has resulted in the conclusion that phronesis is *embodied,* as it involves thinking, feeling, and knowing along with a motivation to act in a way to serve the moral good (Chapter 7, conceptual framework). It is a deeply embedded process that is not just an activity related output (as suggested by the word enacted). It is *being* rather than just *doing,* which aligns with Dunne's conception (2009).

It was originally Muench who suggested that context can affect the embodiment of phronesis (2018). Other authors have expressed the importance of an organisational approach to phronesis (Bontemps-Hommen, Baart and Vosman, 2019). Some authors described internal and external factors that influence the development of phronesis (Hilton and Slotnick, 2005; Paes, Leat and Stewart, 2019). This research

has highlighted that phronesis needs the right environment in which to flourish. This will be reflected in the *Fish School theory* that follows and is certainly an area that requires further exploration.

The final theme in this section of the literature review was theme 8 that dealt with questions of telos, patient care, narrative, and ways of knowing. The wisdom exemplars exhibited a holistic appreciation, suggesting that getting the diagnosis right is not the sole purpose of medicine. Healing involves so much more than just treatments. Although the intellectual challenge of getting a diagnosis correct and treating it effectively is rewarding, the greater reward comes from relationships and the quest to understand people. The literature review explored how the humanities and refined self-awareness skills help physicians know the world around them. The literature focussed on narrative as a means to understand. Central to the role of practising medicine is interpreting (patient) stories. This section presented theoretical perspectives on how the doctor needs to move from knowing-that to knowing-how (via knowing how it feels). The EPGPS interviews illuminated this process.

Future

Moving on to the final four themes from the literature review looking towards the future. Theme 9 dealt with the issue of translating theory to practice. Phronesis was considered to offer a solution to the technical rationalist approach to medicine as it inherently offers a rational orientation to clinical judgement. Some authors suggested recommendations to bridge the knowledge-action gap (Greenhalgh and Wieringa, 2011). These recommendations include the recognition that tacit ways of knowing

and context are very important. Organisations need to recognise and reflect on how they conflate knowledge with power, and finally, they call for greater collaboration between academics, practitioners, policy makers and those with commercial interests. They suggest strategic level approaches are required. The EPGPS work has highlighted the specific need for the psychology and philosophy researchers to work more closely together. It has also highlighted the involvement of medical education as a vehicle to convey an understanding about phronesis to medical students and established practitioners. Klein and Bloom suggest phronesis is the bridge between knowledge and practice (1995). Understanding phronesis can help to bridge the broad problem of the knowledge-practice gap, as well as the profession specific integration and adjudication that is required to be wise.

Theme 10 appraised phronesis in relation to dealing with complexity and moral distress, as it is in this area that ethical deliberation becomes more pronounced. The literature outlined how deontological ethics is inadequate for addressing these situations. Two studies outlined the steps involved in deliberation after moral injury/error (Plews-Ogan *et al.*, 2016; Ko *et al.*, 2020). It is evident that a growth response to trauma, pain and challenge can make a person wiser. This was evident when hearing the wisdom exemplars narratives and this echoes previous wisdom attainment research (Tedeschi and Calhoun, 2004). Self-awareness and reflective practice were identified as being very important in the literature review, and these were recognised as important constituents in the wisdom exemplars. The exemplars showed high levels of self-awareness and constructive reflection. The narrative also highlighted the importance of mentors and role models in the exemplars journey to

become who they are now. The literature review also identified the importance of apprenticeships, mentorship, and role-models.

Within the literature review, the themes with most papers were themes 11 - How to develop phronesis and theme 12 - Phronesis education. Most papers in theme 11 referred to individual phronesis development but recognised that its attainment is subject to erosive influences (often external), and it is important for these to be identified. Some authors commit themselves to asserting that phronesis is professional development (Hilton and Slotnick, 2005; Kinghorn, 2010), and this aligns with the MacIntyrean conception of phronesis. Many authors suggest that in order for phronesis to develop, the goals of medicine need to be made explicit in order for motivation and a sense of agency to develop (Frank, 2004; Baum-Baicker and Sisti, 2012; Kumagai, 2014); self-awareness and effective reflection is central to this. The wisdom exemplars had a strong sense of what the goals of medicine should be, they certainly demonstrate high levels of self-awareness, motivation, and effective reflection. These have been identified as 3 of the 34 constituents of enacted phronesis that were derived from transcript comparisons. The literature review identified the humanities as being very important in understanding people and their stories. Although not a distinct theme in the EPGPS, it was evident that the exemplars led very full lives with many hobbies and interests outside of medicine e.g., photography, wood carving, theatre, musical instruments, yoga, sport, motorsport, travel, literature, animal husbandry, fruit and vegetable growing. This enabled them to understand the world in different ways and to connect to people on a different level.

The erosive influences were mentioned in the interviews but were not seen as a major obstacle. The exemplars seemed to be able to find a path that enabled the development of their phronesis, some speak about walking away from environments that were not aligned with what they wanted in life. If we are to make phronesis accessible to more medics, then attention to erosive factors such as the hidden curriculum, harsh environments and unhelpful pedagogies need to be addressed at an organisational/institutional level.

Finally, we come to phronesis education, theme 12 in the literature review. The EPGPS research questions did not specifically seek to find out the best way to teach phronesis (and the assumption from the literature review is that there is a strong call for phronesis education). The work was more of a precursor to ensure enacted phronesis was better understood in a population of practitioners. The intellectual debate remains regarding whether phronesis can be taught. The literature review outlined that many feel it cannot be taught. Aristotle asserts that it can be taught, and Kinghorn is in agreement (2010). Other authors assert that phronesis provides a theoretical framework for embedding into medical curricula (Chiavaroli and Trumble, 2018). The 34 constituents that resulted from the EPGPS work would reinforce this assertion, though the hidden curriculum should also be factored into how people learn. Work has been conducted that demonstrate that character-based interventions are effective (Harrison and Khatoon, 2018), and now with some specific material for doctors from this work, the potential can be explored. This has already been piloted on a small scale (Jameel, 2021).

What is clear from the literature review is that ethics education is central to the understanding of phronesis. The ethical frameworks that underpin medical education and healthcare need to be explicitly defined through teaching. Virtue ethics needs to be presented and understood as a necessary adjunct to the current predominance of rules-based ethics. To conclude theme 12, questions were raised about the need to formally measure and assess phronesis if it is to be taken seriously. This is an area that requires serious deliberation. Formative (rather than summative) assessment may be more pedagogically aligned with respect to context and personal development. It is beyond the scope of this thesis to stipulate the ramifications of assessment.

Regarding measurement, Darnell ***et al's*** 4-dimensional conceptual model of phronesis is still under development (Darnell *et al.*, 2019; Kristjánsson *et al.*, 2020). The findings of this EPGPS demonstrate commonality with the ideas of moral identity, moral sensitivity, reason-infused emotion, and moral adjudication. There is scope for the framework to be applied to the 34-constituent model and the *Fish School theory*. The main area of contention is the Aristotelian adherence to phronesis being confined to moral decision making, whereas this thesis considers the entirety of medical practice having a moral dimension, thus easily mapping to broader discussions on professionalism (MacIntyrean). The common wisdom model has not yet become a measurement tool, but this too has aspects which are useful for mapping phronesis development (Grossmann *et al.*, 2020a).

Were the EPGPS findings congruent with the established literature?

In summary, the EPGPS findings were congruent with the prevailing discourse within the literature review. The thesis research was able to address gaps in the literature, validating many theoretical assertions. The research was also able to address areas which were under debate (themes 4 and 5). Unlike in many PhD's, the critical interpretive literature review was performed after the data collection, so it was not a case of the literature themes influencing the data collection and analysis.

Was anything surprising?

The overall wisdom score for the 211 GPs was 3.75 which seemed relatively high (table 5.10 Chapter 5). It would be intriguing to see what scores other medical specialities average. In previous research (on non-medics), Ardelt has outlined average scores for various groups. In previous work she has found that the college students she studied had an average score of 3.63, elders without a college degree 3.53 and elders with a college degree have a score of 3.75 (Ardelt, 2010).

What also came as a surprise was their levels of job contentment which was higher than anticipated. This may have been an outlier result as the medical educators may not have represented GP profession contentment as a whole. The GP press would have us believe GPs are very unhappy (PracticeNews, 2019).

It was also surprising to see the GP group average dropped in the affective/compassionate domain (table 5.9, Chapter 5). This was reflected back to Ardelt (personal correspondence). Ardelt suggested that this is not unusual in

western cultures. When the 3DWS has been administered in eastern cultures the affective score is higher in general. She attributes this to cultural differences such as nuclear family (western model) verses extended family living (eastern model) and the boundaries of compassion that come with each. This link between a strong sense of community and compassion may explain the fascinating EPGPS finding that the concentration of wisdom exemplars was higher in rural areas (Hereford).

Another interesting observation is that there was a flip in wisdom scores from the ages of 41-50 and 51-60. The explanation is not known, but a possible theory is that it coincides with a midlife re-evaluation, where people wish to align with their values and make the necessary changes in order for that to happen. They are more likely to have found this alignment between 51-60.

Finally, one of the most unexpected surprises was realising just how interesting and insightful the narrative interviews were. The stories were genuinely captivating and engaging. I felt incredibly privileged to have met all of these doctors.

8.5 Methodological limitations

A number of limitations of the EPGPS work need to be mentioned.

Cross-sectional

The questionnaire analysis was done at a point in time and was therefore cross sectional. A longitudinal design may have had benefits in determining if phronesis is a stable state or if it varies in time, especially with the advent of the covid19 pandemic (2020-21). During the pandemic General Practice rapidly converted to

remote consultations and it may have had ramifications on GP-patient relationships, medical care delivery and job satisfaction. It was not pragmatically possible to perform this as a longitudinal study, but the time taken from the start of the data collection to completion of the thesis was almost 5 years, so there is a longitudinal aspect to the work. I am still informally in touch with many of the wisdom exemplars.

Response bias

From a potential pool of 410 GP attendees at five events, 211 chose to complete the 3DSW questionnaire (fig 8.1). Participation in the study was completely voluntary and no incentives were built into the study design (intentionally). Almost 200 doctors chose not to complete the questionnaire. Non-response bias is important, and their responses could have resulted in a completely different set of results for Part 1 (particularly with regard to demographic data). There was no compulsion to complete a questionnaire. Time for completion may have been a factor in non-response. The questionnaire took about 15 minutes to complete if the GP wished to do so. Two of the training events allocated time in the programme to complete the questionnaire, this significantly improved the response rate to 85% (from 57%) of all the attendees at that event.

One could argue that non-responders were closed to experiencing something new, and this in itself could make them less wise (Meeks and Jeste, 2009). This factor could also explain why 3/5 of the lowest scoring doctors did not put their personal details at the end of the form, this was optional information. They were not prepared

to participate in the interview stage. This means that the very lowest scoring doctors were not interviewed.

In relation to Part 2 4/20 (20%) of high scoring doctors were not interviewed. 3 were contactable but busy and 1 did not provide any contact information. Only the doctors who were disposed favourably to the subject under study were interviewed. Losing the 4 wisdom exemplars actually raised the collective wisdom score average of those who were interviewed (fig 8.1). The research definitely interviewed the wisest doctors who completed the questionnaire.

Single professional speciality

Generalisations should be made very cautiously, and with the caveat that this thesis only studied family medicine practitioners. The context was limited and in a specific socio-cultural context (UK general practice). As I am a GP myself some things may not have been made explicit at the interview stage (e.g., specific conversations about the knowledge required to be a GP), it may be assumed and implicit, known amongst colleagues who do the same job. This is a potential source of omission in the collection of data.

Inconsistency

A panel was convened over 3 full days to undergo BNIM data analysis. It was not possible to complete the analysis of all 18 transcripts in this time. There was no capacity to add additional days. 12/18 transcripts were analysed as a panel. 6

transcripts were analysed in the BNIM fashion but not as a panel. This inconsistency could be seen as a flaw and limitation of the study.

Proxy measure

There is no measurement tool that measures phronesis, so a compromise was necessary, this has been justified in Chapter 4. Once a measurement tool for phronesis has been developed, answering the research question posed in this thesis will be more straightforward in the future. This research might even inform the development of that tool.

The use of exemplars

The literature review has identified the benefits of researching wisdom exemplars. Grossmann has stated that in order to teach wisdom we need to appreciate the context-dependency in intentions and actions in the narratives of wisdom exemplars (2017a). Carnevale recognises that there are clinical phronimoi out there and we need to carefully examine their practice, conduct and character (Carnevale, 2007). Kristjánsson describes how it can be motivating and edifying and that we must understand moral truths in the context of embodied lives (Kristjánsson, 2019). There is a pitfall in studying exemplars though. It could result in hero worship or even alienation, as the audience feels too distant from the vision of perfection (Weststrate, Ferrari and Ardelt, 2016). As this is the first research of its kind in medicine, the effect of these phronimoi prototypes will need to be evaluated.

Representativeness

The EPGPS participants were drawn from a large pool, this is in contrast to previous work on phronesis and wisdom exemplars which used adverts, snowball sampling or peer nomination (Krafcik, 2015; Plews-Ogan *et al.*, 2016; Massingham, 2019; Conroy *et al.*, 2021). The strength of using a questionnaire to obtain a purposive sample is in giving every participant an equal chance of being selected, reducing the bias inherent in peer nomination or snowball sampling.

Figure 8.1 showed that 410 GPs had the opportunity to take part in the study and 211 chose to do so. For context there were 42 000 working GPs in England in 2016 (49% were female and 32% were from a BME background) (GMC, 2018). GP trainers represent 20.2% of the whole GP population. The purposive sample obtained from Part 1 revealed the proportions were slightly lower, but comparable to the BAME and gender distribution of doctors on the GMC register. It is likely this would not have been the case with snowball sampling or peer nomination. 5/19 (25%) of the doctors interviewed were of a BAME background, and 8/19 (42%) were female. 1 doctor did not complete this section, so the denominator was 19 rather than 20. The limitation lies in the fact that GP trainers represent 20% of all GPs, but all the participants in the EPGPS study were trainers, who may have special qualities that were attributed to constituents of phronesis (e.g., orientation to growth, good communicator) that may not have predominated had the group been non-trainers.

Triangulation

Part 1 and Part 2 of the EPGPS were self-reported. This is a limitation of the study and a source of bias. That is why part 3 (also referred to as BNIM sub-session 3) was conducted. It was a means to triangulate what was found with objective peer and patient feedback.

8.6 Generation of new theory – The Fish School theory

The *Fish School theory* of practical wisdom evolved from an abstract appreciation of the 34 constituents' diagram (figure 8.4). The constituents were noted to be dynamic and move towards action. Practical wisdom is not an aggregate of the constituents alone, practical wisdom, or phronesis, is the *process* and what results from it.

The connection between phronesis and a school of fish is not accidental. Well before Aristotle produced his greatest metaphysical, ethical, and political works he was an ichthyologist, fascinated by the scientific study of fish (Ganias, Mezarli and Voultsiadou, 2017). This resulted in Aristotle being labelled the father of marine biology. In an article entitled '*Toward an Integrated Approach to Aristotle as a Biological Philosopher',* Connell states:

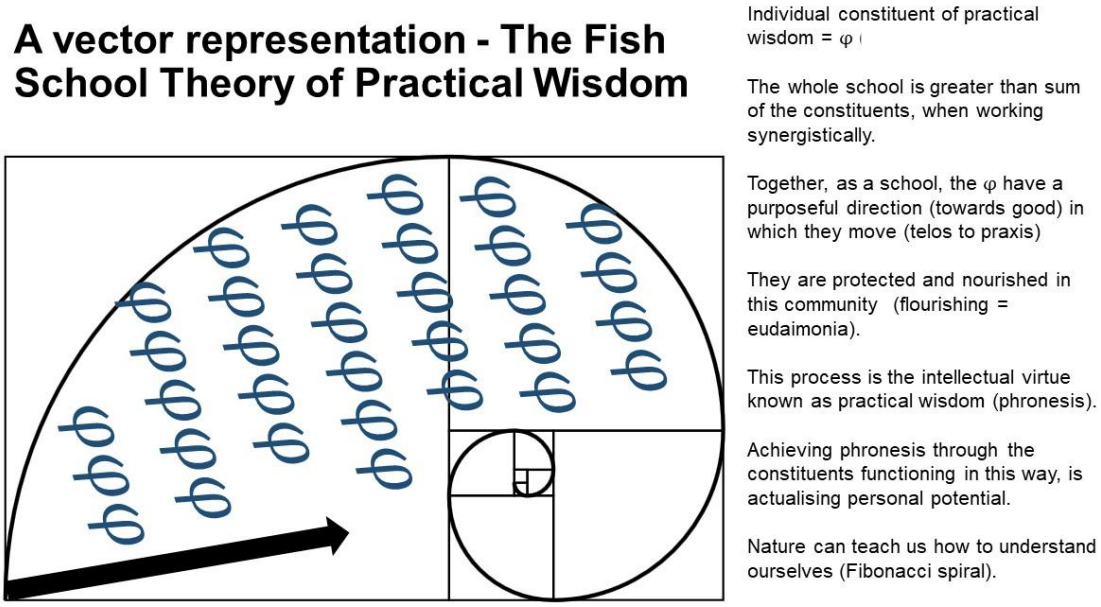
> *"Because Aristotle himself does not attempt to distinguish the biological from the philosophical, it makes sense to read all Aristotelian texts as potentially representative of the same philosophical outlook."*
>
> (Connell, 2001)

In a commentary on the wider scientific work of Aristotle on animals, Grummet makes some remarkable observations. He suggests that Aristotle's concepts of telos and

eudaimonia were inspired by studying animals (Grumett, 2019). Aristotle wrote that an animal's telos is identified by observing its function within its wider ecosystem. The *Fish School theory* of practical wisdom stays true to Aristotle's thinking and is inspired by the natural world. The *Fish School theory* reconstructs phronesis as a process, diverging from previous wisdom research that has not attempted this.

"*In all things of nature there is something of the marvellous."*
Aristotle. Parts of Animals.

Fig 8.4b Abstract representation of the Fish School Theory of practical wisdom.



Each of the phi symbols (φ) represent a constituent of enacted phronesis, (we will refer to them as phish). There are 34 phish in the figure above equating to the 34 constituents of enacted phronesis as empirically derived from the EPGPS work

(figure 8.4 in section 8.3). There may be more or less phish when phronesis is enacted in a different discipline/profession. Each of the phi represent a fish in a school. The fish school theory is an analogy-theory where the characteristics of the fish school are compared to the process of phronesis.

A fish school is a collection of fish who swim in the same direction in a co-ordinated manner. Figure 8.4b shows an arrow which indicates the collective direction of travel. The fish form an adaptive system. They have a purposeful direction, a telos. Compare this to phronesis which is orientated towards good, with moral grounding. The concept of moral grounding can be compared to a complex sensory system within a fish called a *lateral line*. It is thought to control behaviour and is particularly important for fish school synchrony (Popper and Higgs, 2009). This is analogous to the values (a collection of virtues) that a person brings to the process of phronesis; we can compare this to a moral compass.

The fish work together, sometimes behind, sometimes ahead of their neighbour, working in concert, co-ordinated but not fixed. If we note that some constituents of phronesis are cognitive and some are emotional, we can translate the positional flexibility as representing the concept of cognition creating feelings, as well as appreciating that feelings inform cognition. This interplay was suggested by Ardelt when she devised her wisdom scale. She states reflection, cognition and affect inform each other (Ardelt, 2003). Phronesis works through cognition and emotion in a way that cause and effect cannot be separated. For any particular profession, some virtues are exceptionally important, and not simply a part of baseline moral

grounding, they become a constituent (phish) on their own, this can be seen in the case of compassion and justice for the doctors studied (fig 8.4).

In the slip stream of another fish, some fish can function better (Marras *et al.*, 2015). This can be compared to the constituent phish that work synergistically in the six categories in figure 8.4 (qualities, contexts, mental habits, knowledge of self, relational aspects, and practical action). The fish school serves to efficiently protect the fish and ensure they are all nourished (Marras *et al.*, 2015; Pavlov and Kasumyan, 2000). This equates to eudaimonia, the goal of the fish school is flourishing.

There is unity and fluidity in the collective response of the school. This synchrony is the process of phronesis. The whole (school) is greater than the sum of its parts (fish). Phronesis is not simply its constituents. In Aristotle's time this was the study of merology. This also forms the basis of Gestalt theory which was integral to the BNIM data collection and analysis (Wengraf, 2001). The choice of research methods (3DWS and BNIM) has enabled the deconstruction and subsequent reconstruction of enacted phronesis.

Within this process is a prerequisite for intellectual humility because this process (phronesis) can alter long held beliefs. Openness is needed to accept that fact. The fish school theory recognises that a person brings their beliefs and values with them which in turn influence their perception. This can be seen in the starter constituents in

Fig 8.4 (Openness, Intellectual humility, and values). This resonates with a quote on wisdom by Chia and Holt:

> *"We develop the idea of wisdom as a form of learned ignorance—a cultivated humility, meekness of demeanour, and openness of mind that is distinct and different from the aggressive and relentless pursuit, acquisition, and exploitation of knowledge. Rather than associate wisdom with learning, we argue that it is ironically unlearning that is the path toward genuine wisdom and insight. The inability to attain wisdom arises, paradoxically, from a contemporary obsession with knowledge and information. Wisdom is not about having more information or constructing irrefutable propositions. True wisdom exceeds these quantifiable elements. It takes its cue from vagueness and ambiguity."*
>
> (Chia and Holt, 2007 p505)

If the social grouping of the fish is disrupted it can lead to stress, (the converse related to phronesis promoting wellbeing). Schools of fish rarely flourish in artificial environments. It has been observed that priorities change from the focus on swimming stamina to a focus on risk perception and (fear) behaviour (Lemasson, Haefner and Bowen, 2014). The school needs the right environment to work effectively. Phronesis needs a suitable environment to develop, this will be on a personal and organisational level.

Finally, this analogy refers to a school. A school is a mode of learning. Practical wisdom is a process to enhance personal and professional development. A person can actualise their potential if the process is optimised. The final element of figure 8.4b is the Fibonacci curve, it is repeated through nature from micro to macrolevels (Newton, 1987). We can learn so much from nature and the *Fish School theory* seeks to aid a greater understanding of phronesis as a process.

The analogy is a proposed heuristic for making an understanding of phronesis mentally accessible. This theory should undergo the usual academic critique. Gluck has suggested that any new wisdom model should undergo a comparative evaluation with, i) peoples' views of real-life wisdom, ii) consistency with expert conceptions of wisdom, iii) empirically testing the consistency of the model with theory-based prediction and iv) borrowing thought experiments from philosophers (Gluck, 2020). In regard to these points (especially point iii), this theory arose from empirical work, but it would be validating if patterns could be reproduced with similar methodologies to the EPGPS.

8.7 Generation of new knowledge/ research claims

Based on the research conducted, three new claims will be made in this section. Some of these claims intersect in serving more than one claim purpose (fact, value, solution/policy claims).

The first claim is that all previous empirical and theoretical research considering phronesis in medicine focussed on specific aspects of phronesis such as wise reasoning or motivation. This is comparable to having the ingredients, but not the recipe to create a culinary masterpiece. This is the first study that has considered the character of the doctor, as requested by Sherman (1989). This work offers a full reconstruction of the process of phronesis (the recipe). All previous research on generalised wisdom (psychological and philosophical), has various constituents/components (ingredients), without an attempt to reconstruct a picture of phronesis as a process.

The second claim is that young doctors (GPs) can be practically wise when they effectively embody the tenets of *Fish School theory*. It is commonly understood that practical wisdom is not guaranteed with increasing age and experience. This study confirms that young people can be phronimoi. From this, we can purport that medical educator and their organisations can raise awareness about the process of phronesis and assist with the development of many of the constituents of practical wisdom.

The third claim is that medical school training develops knowledge, not wisdom. It operates on a cognitive level at the expense of attending to metacognitive aspects. Most GP exemplars commented they were rated average at medical school. If we operationalise a wisdom curriculum happier doctors could result. We should make wisdom our true north (terminology from Prof Plews-Ogan). This needs to be a healthcare organisation aspiration too.

8.8 Implications for future research

With such a strong undercurrent of psychology in the EPGPS representation of the constituents of the phronesis process (evident in figure 8.4), greater comparative work needs to occur, ensuring the collective interdisciplinary wisdom is collegiately shared rather than competitively siloed; this way greater advances can be made.

Grossmann begins to broach this in his proposal to adopt a common wisdom model, noting that empirical enquiry from the different disciplines unite on the morally grounded application of metacognition to problem-solving and reasoning (2020a;

2020b). It would be interesting to see how the psychological models, named as competitors to phronesis by Lapsley, map to the constituents as derived from the wise GPs (2019).

In addition to mapping to psychological models, an academic exercise could be conducted to see if previous conceptualisations of phronesis (Russell, 2009; Higgs, 2012; Saraga, Boudreau and Fuks, 2019) cohere with the 34 constituents (fig 8.4). Gluck suggests this is an important part of validation (2020).

Healthy scepticism should be encouraged. I would like to see more neo-Aristotelean response to criticisms of phronesis. This will strengthen the ability to respond to challenge and enable iterative evaluation regarding the appropriateness of using phronesis as a paradigm for professional practice. When it comes to phronesis in medicine, there is little scepticism on display, as identified in the literature review. Not all the findings from the EPGPS work agree with the assertions of the Aristotelian virtue ethicists who promote phronesis. Table 8.5 illustrates some areas of divergence as elucidated by this EPGPS thesis. The numbering within table 8.5 refers to the literature that maps to the statement made in the table and shows how medicine has some exceptions to the Aristotelian notion of phronesis.

Table 8.5 Contemporary reimagining of phronesis in medicine

	Aristotelian phronesis	**Contemporary reimagining of phronesis in medicine**
Remit	Ethical decision making	Professionalism and professional practice (1)
Terminology	Phronesis	Practical Wisdom (2)
Goal	Medicine is a techne with *health* as the goal, but it is possibly phronesis.	Medicine is phronesis with *flourishing* as the goal (3)
On eudaimonia	Living well and universal good is known	Living well and universal good it not known at the outset (4) it can be understood retrospectively. It is also a current state of living well.
Completeness	Phronesis is a state of perfection	Phronesis is an evolving state (5) Continuing professional development (5b)
Teaching	Phronesis can be taught	The conditions that promote phronesis can be orchestrated. Some aspects can be taught (6)
Focus	Personal development	Personal and organisational approach (7)
Codifiable	No, according to Aristotle.	Possibility. Empirical work needs to back theory. McIntyre say no.
Basis for potential measurement model	Darnell *et al* 4-component model	Psychological scales with a moral dimension (Common Wisdom Model but it lacks emotion dimension). Fish School Theory (section 8.7) and 34 constituent model (fig 8.4).
Genre	Aristotelian/Neo Aristotelian phronesis	Aristo-MacIntyrean medical phronesis

1. MacIntyre, Kinghorn, Goodyear-Smith, Hilton and Slotnick, Higgs
2. Paes, Kaldjian
3. Pelligrino and Thomasma
4. Empiricus

5. Paes, Hilton and Slotnick.
6. Hovdenaka and Weisea, Harrison and Khatoon, Paes *et al*, Hilton and Slotnick
7. Plews-Ogan, Paes *et al*
8. Grossmann *et al*

Despite the divergence, there is broad consensus that phronesis is a morally guided constitutive, integrative, and adjudicative process. The findings from this study could help refine the conceptualisation of the 4-component model, and maybe even a phronesis instrument. It was Darnell *et al* (2019) who called for research that uncovers what phronimoi look like, in order to operationalise a realistic way forward. Further research is required comparing the 34 constituents to the 4-component model (moral perception, moral adjudication, moral emotion, and the blueprint which is moral ideals and identity – figure 2.3 Chapter 2).

In regard to phronesis in medicine, more research needs to be performed to explore the obstacles and enablers of the 34 constituents. How much is nature and how much is nurture? What can educational institutions and their respective learning cultures do to promote phronesis? Now that we have some insight into the process and its components. I would like to see different medical specialities conduct similar research to illuminate any difference.

Finally, Aristotelian virtue ethics should not be selectively removed from his broader, holistic way of thinking, as suggested in the introduction to part 8.6.

8.9 Implications for medical practice and medical education

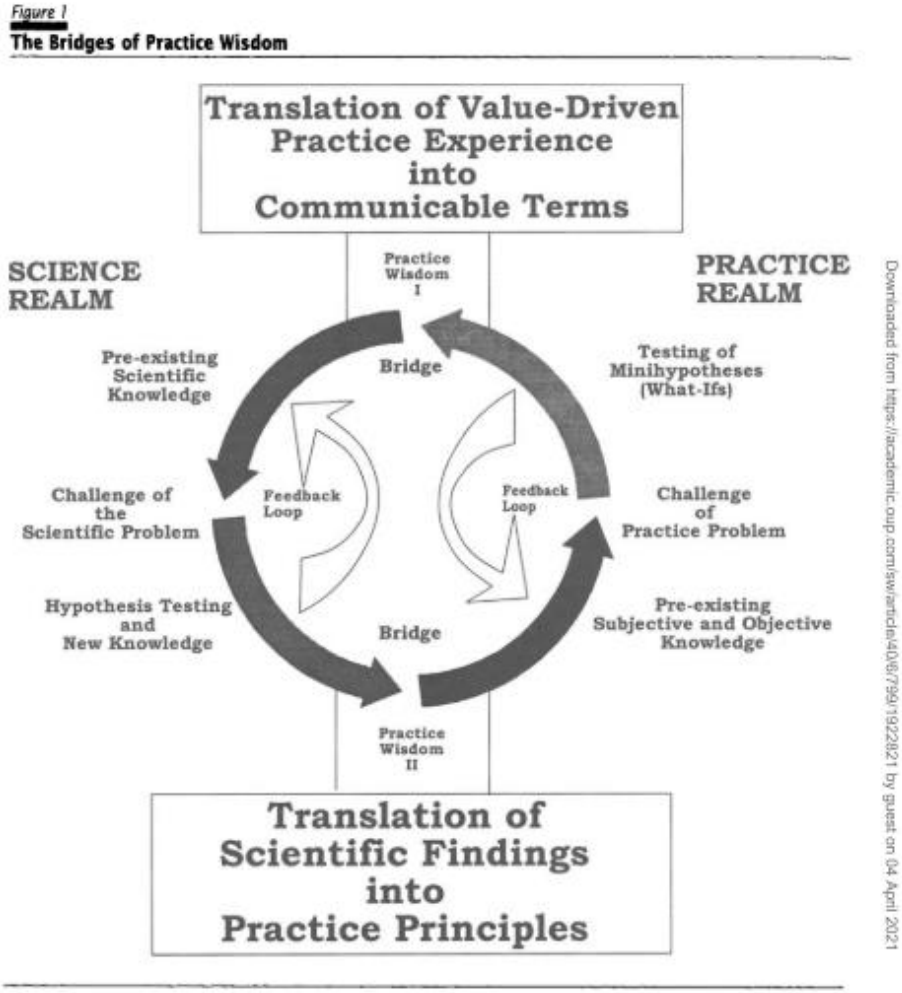
As a medical educator, I see ample opportunity for this work on phronesis to infiltrate undergraduate and post graduate curriculums. More importantly, research which identifies how these constituents of phronesis interplay with the hidden curriculum, where most values are learned, is necessary. It also has utility in the practitioner appraisal and revalidation settings, e.g., remediation.

The biographic narrative summaries offer an engaging starting point for discussion regarding the development of the 34 constituents identified and the process involved. The wisdom exemplars can act as aspirational role models. The diversity of the exemplars ensures that there will be some aspect of character that doctors can relate to. Pilot work in delivering GP vocational training education has already commenced and has been described in the recently published article in the Journal of Holistic Healthcare (Jameel, 2021), and can be found in appendix 7.1.

Promoting the concept of phronesis would provide well-needed holism to medical practice, giving interpretative phenomenological ways-of-knowing equal rank to technical rational ways-of-knowing. Appleby, Swinton and Wilson, describes this fusion as critical realism and suggest it is essential (2017). Understanding phronesis through aspects of this thesis can help bridge the theory-practice gap, this is diagrammatically illustrated in a paper by Klein and Bloom who write about practice wisdom in social worker practice (1995) (figure 8.5). This thesis bridges a theory-practice gap about the nature of phronesis, but it also raises awareness about the

theory-practice divide evident in professional practice and how we can integrate the ways-of-knowing using practical wisdom.

8.6 Klein and Bloom (1995). The bridges of practice wisdom.



The 34 constituents of enacted phronesis, along with their grouping categories (qualities, context, mental habits, knowledge of self, relationships, and practical action) can do the following:

i) Act as a self-reflective self-assessment tool for individual doctors, aiding a transformative approach to medical education, rather than just assimilating

knowledge. It can promote reflection on their values and the goals of medicine.

ii) Act as a guide as to what organisations can facilitate and orchestrate, including reflection on what erodes the development of these constituents.

iii) Benchmark remediation at all grades (undergraduate and postgraduate).

iv) Raise the profile of soft skills/metacognitive skills, as they are now empirically linked to a desirable goal (practical wisdom)

v) Highlight the importance of specific, underappreciated constituents such as the ability to accept different perspectives and healthy boundaries. Provide education on these aspects.

vi) Act as a process-guide to apply to supervisor discussions on medical decision making and professionalism approaches.

vii) Raise aspirations and make practical wisdom a more attainable concept. Diverting from the current pre-occupation with poor performance, deficit models and minimum competency.

Many of the constituents that have emerged from this thesis can be mapped to the theoretical suggestion of teaching clinical reasoning using a wisdom approach (Abraham *et al.*, 2020). Some of the suggestions above support the Aristotelian strategies of character development. Lamb, Brandt, and Brook describe seven strategies in relation of cultivating character in postgraduate education (2021). These are:

1. Habituation through practice
2. Reflection on personal experience

3. Engagement with virtuous exemplars
4. Dialogue that increases virtue literacy
5. Awareness of situational variables
6. Moral reminders
7. Friendship of mutual accountability

(Lamb, Brandt and Brooks, 2021)

The greatest challenge is where, in already congested curriculums, phronesis initiatives should be located. Current environments suffer from information overload and operate in a climate where assessment drives learning, so metacognitive aspects are neglected. It will be difficult to make time and space for phronesis. It should not be an additional ‘burden’, and ideally it should synergise with professionalism components that transcend subject disciplines. Phronesis initiatives could also be located in the context of clinician wellbeing (as piloted by Professor Plews-Ogan in the University of Virginia School of Medicine), but I feel coupling it with professionalism will convey greater importance, potentially having a more significant impact.

This work contributes to the promotion of a moral era in medicine as discussed in the introduction chapter (Berwick, 2016). Whether this will gain momentum in a climate of industrialisation, commercialisation, and digitalisation of medicine remains to be seen. The talk of flourishing, wellbeing and wisdom inspires doctors (and patients) and gives hope, but in the hands of the staunch positivist policymakers even this could end up being reduced, commodified, and used as a punitive (as opposed to developmental) assessment tool.

The content of this thesis is directly relevant to my daily work as a clinician, medical professionalism lead and clinical educator. This is a significant factor in this work having future impact.

8.10 Chapter summary

This chapter has drawn upon the published literature on phronesis in medicine, and on some wider literature relating to generalised wisdom, it has placed the EPGPS research findings within this context, describing areas of coherence and divergence. The empirical work has largely corroborated previous, mainly theoretical literature. The chapter then suggested what the implications of this work are, in both medical education and medical practice. It has highlighted areas for further research. The empirical findings have inspired the analogy-based *Fish School theory*, which seeks to illuminate phronesis as a process.

9. CONCLUSION

At the outset, this thesis had some specific objectives. I believe that all the research questions (Chapter 8) and all the objectives below have been met. By reviewing the literature and by performing mixed methods this research has:

I. Synthesised published findings on the literature to date on phronesis in Medicine, eliciting 12 key themes which describe what has already been written about. The literature review was also able to identify where research/knowledge/theory gaps exist (Chapter 2).

II. Provided baseline wisdom score data on a population of UK general practitioners (Chapter 5).

III. Provided descriptive accounts of what constitutes embodied phronesis in general practitioners, offering character insights into the attributes of these doctors (Chapter 7 and 8).

IV. Tested the relationship between phronesis and eudaimonia as suggested by Aristotle (Chapter 8).

V. Suggested areas for further research and proposes how medical education can support the development of wiser doctors using the new knowledge and theory generated from this research (Chapter 8).

9.1 Significance and meaning of this work

An outline on the significance of the work in this field of study

The EPGPS is the first and only study that has taken a statistically significant purposive sample of wise doctors and analysed their biographic narratives to elucidate the constituents of practical wisdom. When considering the study of

phronesis in medicine, it has drawn from the largest sample of practitioners to date. This work stands out in using methods that align with the holism of wisdom, making overt what is tacit/implicit in regard to what the process of phronesis entails. This thesis has used methods that have not been used together before, in the study of practical wisdom. It has addressed calls for empirical research on phronesis and the necessity to look at wisdom exemplars to inform the future direction of research, medical education, and professional practice.

When considering research on generalised wisdom, Gluck (who has 20 years of experience in wisdom research), recently called for research that looks at wisdom in the real world (2020). Gluck specifically suggested the need for exploratory models that look at how wise people arrive at their decisions. Gluck argues that the most recent attempt at synergising a unified psychological and philosophical concept of wisdom, the Common Wisdom Model (Grossmann *et al.*, 2020a), lacks consideration for the emotional aspects of wisdom. Within this thesis the conceptual framework derived from the corpus linguistic analysis addressed the call to analyse how wise practitioners think, the constituents of phronesis (figure 8.4) include the emotional, cognitive, and moral virtue aspects of enacted wisdom. Finally, the *Fish School theory* offers a descriptive analogy of how the process of phronesis works ecologically; no one has attempted this synthesis before. This suggests that this work, if disseminated through the right channels, can significantly contribute to advancement of phronesis research and understanding.

The meanings of the research findings

This research is a progressive step in understanding phronesis in professional practice. Future research can be directed at taking forward some ideas, including critical appraisal of the research and the theory generated. It provides proof of the importance of metacognitive functions required to practice successfully. It makes a clear connection between practical wisdom as enacted professional practice, paving the way for operationalising phronesis in medical training. This work provides materials, including engaging stories of exemplars, that can be used in in educational sessions.

This work reverts to Aristotle's original inspiration, the natural world (Ganias, Mezarli and Voultsiadou, 2017; Lennox, 2019), with the *Fish School theory* showing us that an understanding nature helps us understand ourselves, including the process of phronesis.

9.2 Methodological lessons

The methods adopted in this study were very ambitious for a lone, novice researcher. The volume of work was also large. I have no regret in the aspirational and organic alignment of the methods to the research question and philosophies that underpin the research. The methods felt quite intuitive in the search to understand phronesis. The resolve to find and justify appropriate methods has enabled a realisation that not all researchers make such a committed decision. They select a convenient methodological tool with limited consideration for philosophical alignment, applying

justifications retrospectively. A new appreciation of alignment has begun to influence the critique of other peoples' research.

The data collection stages were effective, and the uptake was as desired. It was at the analysis stage where compromise (or iterative reflexiveness) was inevitable. I had to change the pseudonyms of the two lower scoring doctors and eventually did not use them much at all. I did not want them to feel hurt or offended, should the work be published widely. They might eventually work it out, as they would recognise elements of their narrative. I am indebted to them, and I carry huge respect for their resilience and service to general practice.

There was not enough time for the panel to convene to analyse all 18 interviews. 6 were not done within a panel. This introduced an inconsistency that some will interpret as a weakness. The principles of BNIM were maintained and I had the insight of working with the two others panel members prior to the sole analysis. Their perspectives endured, despite their absence. Opportune strength came in the form of the necessity for a second transcript analysis method. The BNIM summary statements did not include the exemplars quotes verbatim, and I felt these were important in illustrating the themes. Corpus linguistic analysis enabled the creation of a conceptual framework that shed light on the gestalt of the exemplar's collective narrative. This led to an ability to compare transcript themes and locate supportive quotes. This was an extremely valuable exercise that got to the heart of the phronesis deliberative process. This dual method of transcript analysis reinforced validity of the resultant themes. I believe the methods to be reproducible as they

have been well defined. During the process of data analysis, the thrill of discovery and the creation of new knowledge was very motivating.

9.3 Contemplative questions

These questions were raised at the very start of the research at the time of formulating the research questions.

Would any strong themes be applicable to broader medical education or just GP education?

Having come to a conceptualisation of the constituents of phronesis, none are specific solely to the work of a family practitioner. Most of the themes would be applicable to broader medical education. Continuity of care in general practice lends itself to the relational aspects of the findings (yellow/gold tags fig 8.4), more so than medical specialities like emergency medicine.

Can these results be replicated in other areas of medical and surgical practice?

This is important work that needs to be done across various medical specialities (and professions). It would allow refinement of the constituents in general terms and find those specific to a profession/discipline. The literature review highlighted that surgeons are very interested in phronesis. This came as a surprise to me, as of all the specialities, surgery seemed the most techne-like. The literature review has enabled a change of position.

Can a phronesis approach to medical education improve patient outcomes and clinician job satisfaction (towards eudaimonia)?

This work suggested that GP phronimoi are happier than non-phronimoi. Happier doctors may provide a better service and in turn patients will benefit. Conversely, it seems current medical training has enabled even the low scoring doctors to *do the job* or possibly 'act' the job. Patients get the service they need and evaluate their doctors well. In the small milieu in which the research took place, it appears that the exemplars and their community are flourishing, this could be considered eudaimonia on a small scale. This work did not uncover any big horizon revelations on what eudaimonia is. Eudaimonia is not a destination, but a lens in which the exemplars create and view the world.

Can phronesis be taught as part of medical education? If so, how?

Despite the literature review giving a mixed picture, some aspects of phronesis can be taught. Reviewing the 34-constituent figure (fig 8.4), one can see which would be amenable to teaching. Raising awareness about the integrative function of phronesis, and understanding its role in processing emotion, cognition and action will help medics understand its purpose, hopefully making phronesis relevant to them. Habituation, the use of role-models, experience in concert with reflection and developmental feedback in a safe environment can all help in promoting the advancement of phronesis. The optimal conditions for the development of phronesis can be engineered in part, but this needs to be done at an organisational and institutional level if it is to have impact. Understanding the *Fish School theory* will offer context as to how all this fits together.

9.4 Next steps

I plan to operationalise a professionalism curriculum in which phronesis is a central concept. I will apply what I have learnt from my PhD to achieving this task in my role at Birmingham University Medical School.

- I will share my ideas on phronesis and professionalism with other medical schools, I would like to learn how they approach teaching professionalism.
- I will disseminate the key findings of the EPGPS research and the *Fish School theory* through published articles in journals that allow open access.
- I will deliver teaching sessions and talks on this work, reaching a broad audience, encouraging others to pursue research and discovery in this field.
- I will write a paper on the comparison of the PSQ and MSF multisource feedback on the wisdom exemplars to their narrative biographies, observing whether they are the person they say they want to be. I did not have time to scrutinise the multisource feedback data to this degree during the thesis period.
- The wisdom exemplar biographic narratives are inspiring, but the summary statements and selected quotes do not do the biographies justice. I intend to write a book "*The Rise of the Wise",* accessible to wide readership.

I am aware of Professor Plews-Ogan (USA) pursuing work on considering phronesis within organisations. I have highlighted the importance of the environment in developing practical wisdom. I am really interested in her work and would like to pursue a similar agenda in the UK. Professor Plews-Ogan has also posed an intriguing question, *"In medical education what if wisdom (instead of knowledge) was*

the true north"? (2021 Keynote speech *Virtues in the professions conference*). I would like to find out, experientially.

9.5 Personal reflections

The intention for this work was not about being absolutist in what should take centre-stage in medical decision-making processes. It was about calling for a balance in the approach taken to medical practice. In calling for a balance there was a need to address in imbalance. Positivism, empiricism, and technical rationality dominate formal channels of medical thought whilst interpretation, contextual phenomena and professional artistry are the informal, immeasurable remit of practitioners. This work is about appreciating the potential of the phronesis process to illuminate wisdom in practice, to bridge the gap and to unify the dichotomy. I am delighted in the synthesis of this thesis that has resulted in the *Fish School theory*. I genuinely feel this has coherence with what originally inspired Aristotle. It has been documented that his biological pursuits inspired his philosophical thinking. The *Fish School theory* is tribute to that, it is an appreciation of ecological systems and I think that is what wisdom is.

This research has been a personal labour of love, not driven by the desire to gain academic kudos, churn out research outputs at pace or gain another qualification. It has been about getting to the heart of what is important in medicine…for doctors to feel fulfilled and to provide tools to understand and re-engage with holism. It is a moral endeavour that will endure, and it gives me a strong sense of purpose. 7 years on I am not bored, I am excited about what is to come.

In this labour of love, I met kindred spirits who are also driven by *their* labour of love. The research participants are *my people*, maybe this is in fact ethnographic immersion?

'I am who I am, so I got what I got'. This seemingly hubristic positionality maxim of mine is in fact a very reflexive statement about the research results. Though I can assert that my methods are reproducible, I cannot assure that the results will be similar if performed on the same population by a different researcher. Every questionnaire respondent and every interviewee gave me a gift, they responded to a sincere request. I am touched by the levels of the intimacy that were achieved in some of the interviews, such candid and personal narrations. Nussbaum and Sen suggest that the virtues are the qualities we need to overcome challenge (1993), and the exemplars have illuminated their path for our benefit. Their wisdom will never leave me, and I am fortified for having met them. The lessons learnt need to be shared, though summarised and codified data is a poor substitute for the warmth and love from these real practitioners. I think these final quotes from two wise clinical thinkers capture this sentiment.

> *"The most beautiful people we have known are those who have known defeat, known suffering, known struggle, known loss, and have found their way out of the depths. These persons have an appreciation, a sensitivity and an understanding of life that fills them with compassions, gentleness, and a deep loving concern. Beautiful people do not just happen."*
>
> *(Kubler-Ross, 1975)*

> *"Change is likely to come from thousands of ordinary practitioners putting the cultivation of virtues at the heart of their practice."*
>
> (Toon, 2014)

I have come to a place where I am now a clinical academic leading on medical professionalism, straddling the gap between theory and practice. Am I in fact a means for phronesis to intuit itself? I have done something I never thought was possible: to empirically unpick practical wisdom. I sincerely hope this has tangible benefits for medical education and beyond. This work seems so important, to me at least.

Dr Sabena Jameel. May 2021

Postscript
Special permissions were required regarding the word limit and referencing style. The correspondence, including the reasons why this was necessary, can be found in appendix A9.1 and A9.2.

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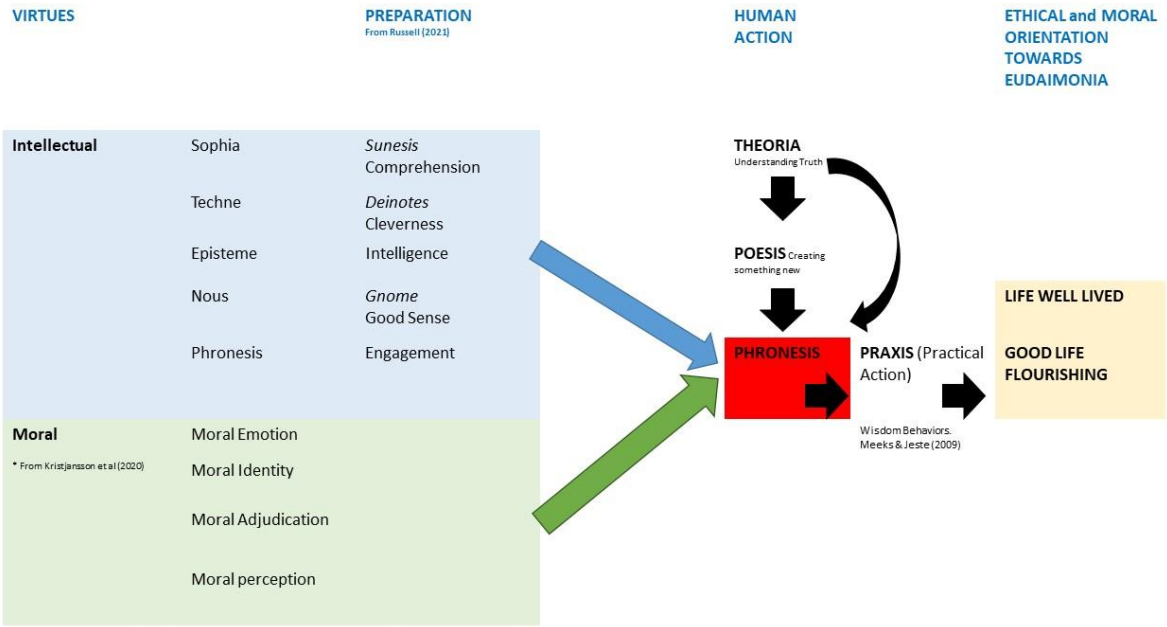
APPENDIX

Chapter 2

A2.1 An Evolving Heuristic towards understanding Phronesis and Praxis.



An Evolving Heuristic towards understanding Phronesis and Praxis – S Jameel 21/06/20

A2.2 Medical decision making and the overview of Phronesis.

Phronesis

SAFE	RIGHT	GOOD	BEST
Minimum standard	Evidence based medicine (EBM), Generalist principals PLUS moral reasoning	Contextual. Negotiated.	Contextual. Particularist. Negotiated. Shared-decision-making (SDM).
Do no harm Who defines harmRegulator? Patient? Profession?			May only known retrospectively
		Good enough? Good often?	Perfectionism? Flourishing?
Reflection IN action Undergrad/Cert of training goal	Reflection Continuing Zone	ON Professional of	Action Development Improvement

Feedback

Chapter 3

A3.1 Email trail confirming that HRA approval not required as participants recruited through medical education training events.

Ian Davison [redacted] Nov 23, 2016, 8:21 AM

Dear Sue,
Re **Application for Ethical Review ERN_16-1320S**
Thank you and the committee for reviewing this application in advance of Sabena's data collection opportunities this Thursday and next week.

Thank you for pointing out the inconsistency regarding withdrawal. In section 3 on the information sheet it already said: "You are free to withdraw up to two weeks after your involvement without giving reasons, and your contributions will be destroyed." We have changed the consent form to read: "I understand that my participation is voluntary and that I am free to withdraw up to two weeks after my involvement without giving reasons." (first attachment)

We understand that HRA research governance approval will not be required and hence sponsorship is not required either. This is because data collection for part one will be at training events which are NOT held on NHS premises. Sabena gained approval from Health Education West Midland School of General Practice as they oversee the GP training process. Dawn Jackson had this interpretation confirmed for her research that also is focussed on GPs; HRA said: "if you are recruiting them through the virtue that they are GP trainers/trainees (i.e. through HEE, a local university etc.) then I do not think we would expect HRA Approval to be needed." Please see attached for the full email thread and their final confirmation.

With the annual Birmingham GP trainer conference tomorrow, we would be delighted if you were able to consider, today, whether the committee's conditions have been met.

Ian Davison (PhD Supervisor)

---------- Forwarded message ----------
From: Dr Dawn Jackson [redacted]
To: Ian Davison [redacted]
Cc: Sabena Jameel [redacted]

Date: Tue, 22 Nov 2016 19:44
Subject: Enquiry relating to whether HRA approval is required for a study, and the correct form to use

Hi Ian,

Below is the e-mail chain from Paul Mills (the gentleman that I spoke to regarding my queries with the HRA). Hopefully, there's some info there that will help Sabena.

Dawn

Subject: RE: FW: Enquiry relating to whether HRA approval is required for a study, and the correct form to use
Date: 2016-09-26 10:42
From: [redacted]
To: [redacted]
Copy: "Queries HRA (HEALTH RESEARCH AUTHORITY)" <hra.queries@nhs.net>

Thanks Dawn for your response,

I can confirm that, from the information provided, this study would not need HRA Approval. As such, you would be able to begin when the university and HEE West Midlands are happy for you to begin this study.

If you have any further questions, please do let me know.

Kind regards

Paul

Dr Paul Mills | Research Management and Regulation Specialist
Health Research Authority
E: [redacted]

Chapter 4

A4.1 Permission to use Ardelt's 3-dimensional wisdom scale

Ardelt, Monika [redacted]
Tue 6/2/2015 20:43
Dear Sabena,
Your proposed research sounds very interesting. You certainly have my permission to use the 3D-WS in your research.
The Three-Dimensional Wisdom Scale (3D-WS), including instructions for using and scoring the scale, can be downloaded here (https://dl.dropboxusercontent.com/u/[redacted]Wisdom_questionnaire.docx), and the article that describes its development can be downloaded here (http://dl.dropbox.com/u[redacted]/Empirical_assessment_of_the_3D-WS.pdf). Other articles can be downloaded from my web page below. Please let me know if you have any questions, and please keep me informed about your research if you decide to use the 3D-WS.
I also found it helpful in my own research to compare the high wisdom scorers with the low wisdom scorers and to look at the differences between the two groups. If you only look at one extreme group, you don't know if a certain characteristic might really distinguish them from the lower scoring group. For example, you might find that the high scoring group is very spiritual. Yet, the low scoring group might also be spiritual, although the manifestations might be different.
Lastly, you might want to contact Dr. Margaret Plews-Ogan [redacted] who is an internist at the University of Virginia and who has started a wisdom curriculum for incoming medical students.
All the best,
Monika Ardelt

Monika Ardelt, Ph.D.
Associate Professor of Sociology
University of Florida
P.O. Box 117330
Gainesville, FL 32611-7330
Phone: 352-294-7166
Fax: 352-392-6568
Web Page: http://users.clas.ufl.edu/ardelt

Executive Secretary, Society for the Study of Human Development
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A4.2 University Ethical Approval ERN_16-1320 (Part 1) 2016

From: Susan Cottam
Sent: 24 November 2016 09:27
To: Ian Davison
Cc: Kristjan Kristjánsson; Sabena Jameel
Subject: Application for Ethical Review ERN_16-1320

Dear Dr Davison

Re: "Enacted Phronesis in General Practitioners Study (EPGPS)"
Application for Ethical Review ERN_16-1320

Thank you for your application for ethical review for the above project, which was reviewed by the Humanities and Social Sciences Ethical Review Committee.

On behalf of the Committee, I confirm that this study now has full ethical approval.

I would like to remind you that any substantive changes to the nature of the study as described in the Application for Ethical Review, and/or any adverse events occurring during the study should be promptly bought to the Committee's attention by the Principal Investigator and may necessitate further ethical review.

Please also ensure that the relevant requirements within the University's Code of Practice for Research and the information and guidance provided on the University's ethics webpages (available at https://intranet.birmingham.ac.uk/finance/accounting/Research-Support-Group/Research-Ethics/Links-and-Resources.aspx) are adhered to and referred to in any future applications for ethical review. It is now a requirement on the revised application form (https://intranet.birmingham.ac.uk/finance/accounting/Research-Support-Group/Research-Ethics/Ethical-Review-Forms.aspx) to confirm that this guidance has been consulted and is understood, and that it has been taken into account when completing your application for ethical review.

Please be aware that whilst Health and Safety (H&S) issues may be considered during the ethical review process, you are still required to follow the University's guidance on H&S and to ensure that H&S risk assessments have been carried out as appropriate. For further information about this, please contact your School H&S representative or the University's H&S Unit at healthandsafety@contacts.bham.ac.uk.

Kind regards

Susan Cottam
Research Ethics Officer
Research Support Group
C Block Dome
Aston Webb Building
University of Birmingham
Edgbaston B15 2TT
Tel:
Email:

A4.3 Part 1 Consent form, information sheet and questionnaire

UNIVERSITY OF BIRMINGHAM

Enacted Phronesis in General Practice Study – Questionnaire

The estimated time to complete this questionnaire is ten to fifteen minutes.

Consent

1. I confirm that I have read and understood the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw within two weeks of participation at any time without giving reason.

3. I understand that data collected during the study will be looked at solely for research purposes. Raw data will not be shared in whole or part.

4. I understand that my name will not be in any reports.

5. I agree to take part in the first part (questionnaire) of the above study. If I am subsequently requested to participate in part two and three of the study further consent will be obtained.

Signed

Date

The researcher is most grateful to Monika Ardelt for allowing her inventory to be used for part 1 of this study.

UNIVERSITY OF BIRMINGHAM

Enacted Phronesis in General Practice Study – Information Sheet

As a practising General Practitioner/GP trainee you are invited to participate in a PhD research study looking at the concept of Phronesis (Practical Wisdom). Before agreeing to participate in the study this form aims to help you understand the purpose, methods and level of participation required. Should you have any questions or require any clarification following reading this information leaflet please do not hesitate to contact me (details below).

1 What is this study about?

Medical Education to date emphasizes the importance of knowledge. Curriculums often refer to *competency* and more recently *capability* which alludes to applied knowledge. Phronesis is an interesting concept first described by the ancient Greeks. It is also known as "Practical Wisdom" and it is about doing the right thing, for the right person at the right time for the right reason. It operates on a level of context specificity rather than generalisations (like guidelines). It takes a more holistic approach to professional development which include other aspects of the practitioner's character. Phronesis lends itself well to the role of the General Practitioner, where uncertainty prevails. This study looks at the components of wisdom (using a virtue ethics framework) looking to explore enacted Phronesis in General Practitioners.

2 Why have I been asked to take part in the study?

Empirical studies looking at practical wisdom in professional practice are lacking. You have been identified as working as a General Practitioner (be it as a GP trainee or as an established practitioner). Your views and approach to professional practice would be a valuable contribution to work on enacted phronesis in General Practice.

3 Do I have to take part in the study?

It is entirely up to you to decide to join the study. There is no compulsion to participate. The study will be explained and further information is available on the information sheet. If you decide to participate you will be asked to sign a consent form. You are free to withdraw up to two weeks after your involvement without giving reasons, and your contributions will be destroyed. This study is independent to the researcher's other roles and a decision to not participate will not compromise your position.

4 What will happen to me?

If you are happy to participate in this study you will be asked to complete the consent form. The consent form is only for part 1 (Questionnaire). The questionnaire is a validated wisdom inventory. It will also contain some additional demographic questions.

About 20 questionnaire respondents will be invited to participate in parts 2 (Narrative Interview) and part 3 (Portfolio analysis). A further consent form will be presented at that stage. As a result of the need to move to Part 2 and 3 then contact details will be needed at the questionnaire stage. You have the right to decline to participate in parts 2 and 3 even if you are invited.
If you are NOT contacted after the questionnaire stage then that completes your valuable contribution to this study.

5 Are there any costs involved?

If you agree to participate in the study there is no cost to you other than time. You will not receive any payment for your participation. It is understood you will participate in good will and that is greatly appreciated.

6 Why should I take part in the study?

Learning more about the meaning and nature of enacted phronesis (practical wisdom) in professional practise may lead to further work which seeks to improve medical education. Embedded in the definition of phronesis is societal flourishing, personal wellbeing and purpose, this research may draw attention to these aspects of wisdom attainment.

7 Will the information I share be kept confidential?

Yes. I will follow ethical and legal practice and all information about you will be kept confidential to the research team.

8 Who will my information be shared with?

The data gathered will be kept and analysed by the PhD researcher who may require assistance in data management from PhD Supervisors and other University staff. Any distinguishing narratives or free text comments will only be used with participant permission.

In the unlikely event of new patient safety or malpractice issues be disclosed, sensitive escalation to the Postgraduate Dean or revalidation team may be necessary.

Anonymised data may be included in reports and subsequent publications.

9 What happens if I have a problem?

Please speak to Sabena Jameel or one of her PhD supervisors if you have any queries, hesitations or apprehensions. Your concerns are important and we will endeavour to clarify matters. Should you wish to withdraw from the study within two weeks of participation please let us know and the information collected will be destroyed.

10 Who is doing this work?

I am a PhD student at the University of Birmingham - School of Education. This PhD is independent to my educational quality management roles for HEE and NHS England.

I can be contact at the following email addresses:
Sabena.jameel@gmail.com or Sabena.jameel@nhs.net Mob: 07974 746755

PhD supervisors:
Dr Ian Davison i.w.davison@bham.ac.uk Tel:
Prof Kristjan Kristjansson k.kristjansson@bham.ac.uk Tel: 0121 414 4877

11 Who is funding this work?

This PhD is 50% self-funded, enhanced with educational bursaries awarded by Health Education England West Midlands.

12 Who has approved this work?

This research has been submitted to the University Research Ethics Committee.

Place a tick in the box most representative of your answer. Please answer all questions.

A. This section asks you about your opinion and feelings. How strongly do you agree or disagree with the following statements?

Please remember there are no right or wrong answers.

	Strongly Agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly Disagree (5)
1. In this complicated world of ours the only way we can know what's going on is to rely on leaders or experts who can be trusted.					
2. I am annoyed by unhappy people who just feel sorry for themselves.					
3. Life is basically the same most of the time.					
4. People make too much of the feelings and sensitivity of animals.					
5. You can classify almost all people as either honest or crooked.					
6. I would feel much better if my present circumstances changed.					
7. There is only one right way to do anything.					
8. There are some people I know I would never like.					
9. It is better not to know too much about things that cannot be changed.					
10. Things often go wrong for me by no fault of my own.					
11. Ignorance is bliss.					
12. I can be comfortable with all kinds of people.					
13. A person either knows the answer to a question or he/she doesn't.					
14. It's not really my problem if others are in trouble and need help.					
15. People are either good or bad.					

B. How much are the following statements true of yourself?

	Definitely true of myself (1)	Mostly true of myself (2)	About half-way true (3)	Rarely true of myself (4)	Not true of myself (5)
1. I try to look at everybody's side of a disagreement before I make a decision.					
2. If I see people in need, I try to help them one way or another.					
3. When I'm upset at someone, I usually try to "put myself in his or her shoes" for a while.					
4. There are certain people whom I dislike so much that I am inwardly pleased when they are caught and punished for something they have done.					
5. I always try to look at all sides of a problem.					
6. Sometimes I feel a real compassion for everyone.					
7. I try to anticipate and avoid situations where there is a likely chance I will have to think in depth about something.					
8. When I look back on what has happened to me, I can't help feeling resentful.					
9. I often have not comforted another when he or she needed it.					
10. A problem has little attraction for me if I don't think it has a solution.					
11. I either get very angry or depressed if things go wrong.					
12. Sometimes I don't feel very sorry for other people when they are having problems.					
13. I often do not understand people's behavior.					
14. Sometimes I get so charged up emotionally that I am unable to consider many ways of dealing with my problems.					
15. Sometimes when people are talking to me, I find myself wishing that they would leave.					

	Definitely true of myself (1)	Mostly true of myself (2)	About half-way true (3)	Rarely true of myself (4)	Not true of myself (5)
16. I prefer just to let things happen rather than try to understand why they turned out that way.					
17. When I am confused by a problem, one of the first things I do is survey the situation and consider all the relevant pieces of information.					
18. I don't like to get involved in listening to another person's troubles.					
19. I am hesitant about making important decisions after thinking about them.					
20. Before criticizing somebody, I try to imagine how *I* would feel if I were in their place.					
21. I'm easily irritated by people who argue with me.					
22. When I look back on what's happened to me, I feel cheated.					
23. Simply knowing the answer rather than understanding the reasons for the answer to a problem is fine with me.					
24. I sometimes find it difficult to see things from another person's point of view.					

C. Demographic and personal information (please circle most appropriate response)

25. Sex (circle)	Male	Female	Other (state)
26. Age Bracket (circle)	21-30	31-40	41-50
	51-60	61-70	71+
27. Year of **GP** Qualification/ CCT (free text)			
28. Did you undergo any other specialty training prior to becoming a GP?	Yes	No	
29. How would you describe your work pattern in General practice?	Full time	Part time	
30. How are you employed as a GP?	GP Principal	Salaried GP	Locum GP
	GP Trainee	Other (state)	

31. How would you currently describe your job satisfaction?	Great	Good	Okay
	Poor	Awful	

A cohort of respondents will be contacted and invited to participate in parts 2 & 3 of this research. There is no compulsion to proceed to parts 2 & 3, but it would be most useful to have contact details to send the invitation. Thank You.

Name

Email address

Location/Region

Contact telephone number

For further Information about this work please contact:

I can be contact at the following email addresses:

Sabena.jameel@nhs.net

PhD supervisors (School of Education):

Dr Ian Davison i.w.davison@bham.ac.uk

Prof Kristjan Kristjansson k.kristjansson@bham.ac.uk Tel: 0121 414 4877

Chapter 5

A5.1 Ardelt 3DWS Analysis guidance (direct correspondence)

Should anyone want to use the 3DWS in their own research, after reading this PhD, please seek permission from Monika Ardelt by emailing ardelt@ufl.edu

[Note for investigators: ***c = cognitive dimension; r = reflective dimension; a = affective (compassionate) dimension; rev = reversed***

Delete those abbreviations and the above title before administering the test. Respondents should not know that they fill out a "wisdom" scale.

All 14 items of the *cognitive dimension* assess the absence of cognitive wisdom characteristics, such as the (in)ability or (un)willingness to understand a situation or phenomenon thoroughly (A1, A9, A11, B7, B13, B16, B23), the (un)acknowledgement of ambiguity, complexity, and uncertainty in life (A3, A5, A7, A13, A15, B10), and the (in)ability to make important decisions despite life's unpredictability (B19). The *reflective dimension* contains 12 items, measuring the ability and willingness to look at phenomena and events from different perspectives (B1, B3, B5, B14, B17, B20, B24) and the absence of subjectivity and projections (A6, A10, B8, B11, B22). The 13 items of the *compassionate (affective) dimension* assess positive and caring emotions toward others (A12, B6), the motivation to nurture others' well-being (A14, B2, B9, B18), and the absence of indifferent or negative emotions toward others (A2, A4, A8, B4, B12, B15, B21).

After data have been collected, reverse the scales for all items that are labelled with a ***"rev"*** and then compute the average of the 14 cognitive items to get the score for the cognitive dimension, the average of the 12 reflective items to get the score for the reflective dimension, and the average of the 13 affective items to get the score for the affective dimension. A simple overall wisdom score can be obtained by calculating the average of the three dimensions of wisdom, that is, the average of the three averages, NOT the average of all 39 items. Wisdom can also be treated as a latent variable with the cognitive, reflective, and affective dimensions of wisdom as its effect indicators. A relatively high wisdom score is indicated by average scores of 4 or higher on *each* of the three wisdom dimensions (strong criterion) or a score of 4 or higher on the average of the three wisdom dimensions (weaker criterion). Conversely, a relatively low wisdom score is indicated by average scores below 3 on *each* of the three wisdom dimensions (strong criterion) or a score below 3 on the average of the three wisdom dimensions (weaker criterion).

To do a rough validity check of the data compute the following (in SPSS):

Compute validity = 1.

If (((b02r eq 5) and (a14 eq 1) and (b09 eq 1)) or ((b02r eq 1) and (a14 eq 5) and (b09 eq 5))) validity = 0.

I recommend excluding all cases with failed validity checks: select if (validity eq 1).

Please note that the 3D-WS was not developed through an exploratory or confirmatory factor analysis of all of its items. Hence, the three dimensions of the 3D-WS are not unidimensional constructs but encompass several wisdom characteristics within the cognitive, reflective, and affective wisdom domains. To test the psychometric properties of the 3D-WS, Cronbach's alpha values for each of the three wisdom dimensions should be reasonably high to confirm their internal reliability, and the three dimensions should significantly correlate with each other, with a Pearson's correlation coefficient of .30 or higher.]

A5.2 Ardelt suggested calculations on EPGPS Part 1 data

I started by sorting out the Excel spreadsheets for pasting into SPSS. I needed to isolate the three domains (Cognitive, Reflective and Affective) as we needed reliability of each one separately, and correlations of one against another. New variables needed to be calculated, such as total scores for each domain and overall. SPSS version 21 was used in the Centre for Medical Education.

Reliability

Overall reliability (31 items) was 0.835 (excellent). There were no rogue questions.
Cognitive domain (14 items) was 0.663 (good). There were no rogue questions.
Reflective domain (12 items) was 0.762 (good). There were no rogue questions.
Affective domain (13 items) was 0.692 (good). There were no rogue questions.

Correlations

Correlations between the three domains were calculated using Pearson's Correlation and Spearman's correlation. Spearman's is more correct here as the Likert data is ordinal. Not interval. But in practice there is not much of a difference in results.

Cognitive versus Reflective	rho is 0.363	p is less than 0.001
Cognitive versus Affective	rho is 0.535	p is less than 0.001
Reflective versus Affective	rho is 0.456	p is less than 0.001

So all correlations are highly significant, and all are above 0.30 as Ardelt (2003) indicates should be the case.

Scores for first invitees, second invitees and the remainder of the group.

For each of the 39 individual question there are significant differences in all except q4a (p = 0.098) and q6b (p= 0.055) between first, second and remainder groups.

Using total scores for each participant, again there are striking differences. P value is less than 0.001 so the differences are highly significant.

First invitees	mean 169.2
Second invitees	mean 159.6
Remainders	mean 141.8

A box plot has been created which shows this graphically.

Opinion

Your results show very good reliability using Cronbach's alpha. The correlations re all high between the three domains and all are highly significant. In addition there are highly significant differences in the scores for first, second and remainder groups.

Factor Analysis

I have also done a principal component factor analysis (referred to by Ardelt) which shows five factors. KMO and Bartlett's tests are good showing more than adequate data sampling at a value of 0.710 (it should be above 0.5) and Bartlett's test is significant (as it should be).

Five components were extracted using varimax rotation.

Factor 1 q22b, q8b, q14b, q11b and q6a (so almost all in the reflective domain)
Factor 2 q5b, q3b, q20b and q1b (all in the reflective domain)
Factor 3 q13a and q15a (all in the cognitive domain)
Factor 4 q13b, q15b and q12b (all in the reflective domain
Factor 5 q2a, q3a and q21b (so two in the cognitive domain and one in the reflective domain.

So the strongest two factors (factor 1 and factor 2) are largely reflective questions, as in factor 4.So the statistics using principal component factor analysis does not quite fit with the three domains but Ardelt states that this was not the method used to construct the questionnaire.
DW27072018.

Chapter 6

A6.1 University Ethical approval ERN_16-1320A (Part 2) 2018

(Amended original application for Part 1 to include Part 2 interviews)

From: **Samantha Waldron** [redacted]
Date: Fri, Apr 6, 2018 at 10:27 AM
Subject: Application for Ethical Review ERN_16-1320A
To: June Jones (Biomedical Ethics) [redacted] Kristjan Kristjánsson

Dear Dr June Jones & Professor Kristjan Kristjánsson

Re: "A Study looking at the enactment of Phronesis in General Practitioners (EPGPS)"

Application for Ethical Review ERN_16-1320A

Thank you for your application for ethical review for the above project, which was reviewed by the Humanities and Social Sciences Ethical Review Committee.

On behalf of the Committee, I confirm that this study now has full ethical approval.

I would like to remind you that any substantive changes to the nature of the study as described in the Application for Ethical Review, and/or any adverse events occurring during the study should be promptly bought to the Committee's attention by the Principal Investigator and may necessitate further ethical review.

Please also ensure that the relevant requirements within the University's Code of Practice for Research and the information and guidance provided on the University's ethics webpages (available at https://intranet.birmingham.ac.uk/finance/accounting/Research-Support-Group/Research-Ethics/Links-and-Resources.aspx) are adhered to and referred to in any future applications for ethical review. It is now a requirement on the revised application form (https://intranet.birmingham.ac.uk/finance/accounting/Research-Support-Group/Research-Ethics/Ethical-Review-Forms.aspx) to confirm that this guidance has been consulted and is understood, and that it has been taken into account when completing your application for ethical review.

Please be aware that whilst Health and Safety (H&S) issues may be considered during the ethical review process, you are still required to follow the University's guidance on H&S and to ensure that H&S risk assessments have been carried out as appropriate. For further information about this, please contact your School H&S representative or the University's H&S Unit at healthandsafety@contacts.bham.ac.uk.

Kind regards,

Ms Sam Waldron
Deputy Research Ethics Officer
Research Support Group
C Block Dome (room 132)
Aston Webb Building
University of Birmingham
Edgbaston B15 2TT
Tel: [redacted]
Email: [redacted]

6.2 Invitation for outlier 3DWS scores (exemplars) to take part in Part 2 Interviews

2nd May 2018

Dear Colleague

Re: Invitation to participate in parts 2&3 of EPGPS PhD research

You may recall completing a questionnaire for my Enacted Phronesis in General Practitioners Study (EPGPS): PhD research (Nov 2016 -March 2017). This questionnaire was administered to 211 General Practitioners. The analysis of the questionnaire has identified a 10% sample for further study.

You have been identified as a suitable candidate for the next stage of the research. Part 2 of the research involves an audio recorded, face to face interview. The interview should not exceed 90 mins. It is a narrative interview where your own *biographic story* is important. There are no challenging questions! I am willing to come to your preferred venue to perform this interview. I am aiming start the interviews in August 2018 and complete them by next February. Part 3 of the research involves the voluntary submission of your last MSF and PSQ as a downloadable PDF (from NHS appraisal/ NHS England revalidation portfolio).

It would be a great honour if you would allow me to come to meet you and interview you. The field of Phronesis in medical education is a developing area and your contribution would be greatly appreciated, potentially shaping the future of medical education.
If you can help me with the next steps, would you kindly contact me, details below:
[redacted]

Thank you

Yours Sincerely

Dr Sabena Y Jameel

FRCGP. M.Med.Ed

For more information on this research you can contact my PhD supervisors from The University of Birmingham:
Dr June Jones j.jones.1@bham.ac.uk Tel: [redacted] (Institute of Clinical Sciences)
Prof Kristján Kristjánsson k.kristjansson@bham.ac.uk Tel: 0121 414 4877 (The Jubilee Centre for character and virtues)

This research is 50% self-funded, with 50% being from educational bursaries from HEEWM. This research is independent to my educational quality management roles for Health Education England and NHS England.

Part 2 & 3 of this research has been submitted to the University Research Ethics Committee and have obtained ethics approval in April 2018. Ref ERN_16-1320A.

A6.3 Enacted Phronesis in General Practice Study Part 2/3: Consent Form

PhD Researcher: *Dr Sabena Jameel*

PhD Supervisors: *Dr Ian Davison and Professor Kristjan Kristjánsson*

Institution: *School of Education, University of Birmingham*.

Please initial box

1. I confirm that I have read and understood the information sheet dated XXXX (Version X) for the above study. I have had the opportunity to consider the information, ask questions and have these answered satisfactorily. ☐

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving reason. ☐

3. I understand that data collected during the study will be looked at solely for the purposes of PhD research. Raw data will not be shared in whole or part. ☐

4. I understand that my name will not be in any reports. Any distinguishing narratives or free text comments will only be used with participant permission. ☐

Name of Participant Date Signature

Dr Sabena Jameel

Name of Person taking Consent Date Signature

A6.4 Appraisal/Revalidation MSF and PSQ standardised report

Colleague Multisource Feedback (MSF) results example

Colleague and Patient Feedback

Summary of Colleague Feedback for [redacted]

[redacted]

Cycle completed: 18/02/2018

Supporting medical colleague: [redacted]

15 Required | 15 Received

About your colleagues

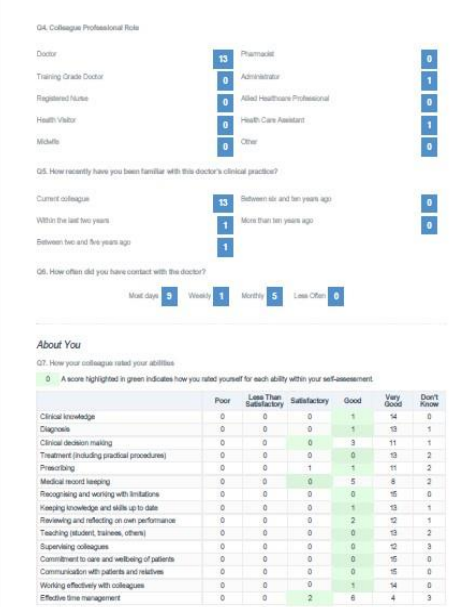
Q1. Colleague Gender

Male 8 | Female 7 | Not Answered 0

Q2. Colleague Age Group

16 - 19: 0 | 20 - 29: 1 | 30 - 39: 2 | 40 - 49: 2 | 50 - 59: 6 | Over 60: 3 | Not Answered: 1

Q3. Ethnicity



Q4. Colleague Professional Role

Doctor	13	Pharmacist	0
Training Grade Doctor	0	Administrator	1
Registered Nurse	0	Allied Healthcare Professional	0
Health Visitor	0	Health Care Assistant	1
Midwife	0	Other	0

Q5. How recently have you been familiar with this doctor's clinical practice?

Current colleague	13	Between six and ten years ago	0
Within the last two years	1	More than ten years ago	0
Between two and five years ago	1		

Q6. How often did you have contact with the doctor?

Most days 5 | Weekly 1 | Monthly 5 | Less Often 0

About You

Q7. How your colleague rated your abilities

0 A score highlighted in green indicates how you rated yourself for each ability within your self-assessment.

	Poor	Less Than Satisfactory	Satisfactory	Good	Very Good	Don't Know
Clinical knowledge	0	0	0	1	14	0
Diagnosis	0	0	0	1	13	1
Clinical decision making	0	0	0	3	11	1
Treatment (including practical procedures)	0	0	0	0	13	2
Prescribing	0	0	1	1	11	2
Medical record keeping	0	0	0	5	8	2
Recognising and working with limitations	0	0	0	0	15	0
Keeping knowledge and skills up to date	0	0	0	1	13	1
Reviewing and reflecting on own performance	0	0	0	2	12	1
Teaching (student, trainees, others)	0	0	0	0	13	2
Supervising colleagues	0	0	0	0	12	3
Commitment to care and wellbeing of patients	0	0	0	0	15	0
Communication with patients and relatives	0	0	0	0	15	0
Working effectively with colleagues	0	0	0	1	14	0
Effective time management	0	0	2	6	4	3

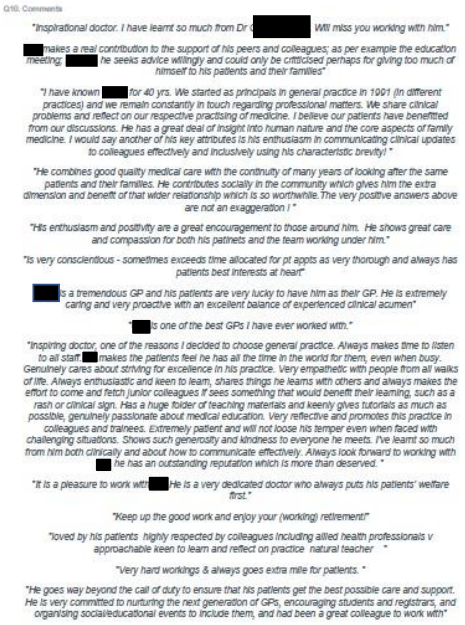
Q8. How strongly your colleague agreed or disagreed with the following statements

0 A score highlighted in green indicates how you rated yourself for each ability within your self-assessment.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't Know
I am confident that this doctor respects patient confidentiality	0	0	0	0	15	0
I am confident that this doctor is honest and trustworthy	0	0	0	0	15	0
I am confident that this doctor's performance is not impaired by ill health	0	0	0	0	15	0

Q9. Fit to practise medicine?

Yes 15 | No 0 | Don't Know 0



Q10. Comments

"Inspirational doctor. I have learnt so much from Dr [redacted] Will miss you working with him."

[redacted] makes a real contribution to the support of his peers and colleagues; as per example the education meeting; [redacted] he seeks advice willingly and could only be criticised perhaps for giving too much of himself to his patients and their families"

"I have known [redacted] for 40 yrs. We started as principals in general practice in 1991 (in different practices) and we remain constantly in touch regarding professional matters. We share clinical problems and reflect on our respective practising of medicine. I believe our patients have benefitted from our discussions. He has a great deal of insight into human nature and the core aspects of family medicine. I would say another of his key attributes is his enthusiasm in communicating clinical updates to colleagues effectively and inclusively using his characteristic brevity! "

"He combines good quality medical care with the continuity of many years of looking after the same patients and their families. He contributes socially in the community which gives him the extra dimension and benefit of that wider relationship which is so worthwhile.The very positive answers above are not an exaggeration ! "

"His enthusiasm and positivity are a great encouragement to those around him. He shows great care and compassion for both his patinets and the team working under him."

"Is very conscientious - sometimes exceeds time allocated for pt appts as very thorough and always has patients best interests at heart"

[redacted] is a tremendous GP and his patients are very lucky to have him as their GP. He is extremely caring and very proactive with an excellent balance of experienced clinical acumen"

"[redacted] is one of the best GPs I have ever worked with."

"Inspiring doctor, one of the reasons I decided to choose general practice. Always makes time to listen to all staff [redacted] makes the patients feel he has all the time in the world for them, even when busy. Genuinely cares about striving for excellence in his practice. Very empathetic with people from all walks of life. Always enthusiastic and keen to learn, shares things he learns with others and always makes the effort to come and fetch junior colleagues if sees something that would benefit their learning, such as a rash or clinical sign. Has a huge folder of teaching materials and keenly gives tutorials as much as possible, genuinely passionate about medical education. Very reflective and promotes this practice in colleagues and trainees. Extremely patient and will not loose his temper even when faced with challenging situations. Shows such generosity and kindness to everyone he meets. I've learnt so much from him both clinically and about how to communicate effectively. Always look forward to working with [redacted] he has an outstanding reputation which is more than deserved. "

"It is a pleasure to work with [redacted] He is a very dedicated doctor who always puts his patients' welfare first."

"Keep up the good work and enjoy your (working) retirement!"

"loved by his patients highly respected by colleagues including allied health professionals v approachable keen to learn and reflect on practice natural teacher "

"Very hard workings & always goes extra mile for patients. "

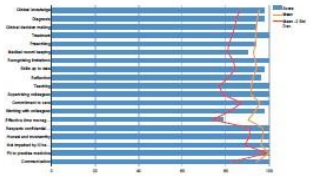
"He goes way beyond the call of duty to ensure that his patients get the best possible care and support. He is very committed to nurturing the next generation of GPs, encouraging students and registrars, and organising social/educational events to include them, and had been a great colleague to work with"

Results Against National Benchmark

This benchmark is a comparison of your scores against results collected nationally

This sample was taken on 15/02/2018 and is based on 33051 completed cycles.

Question	Score	Benchmark						
		Min	Lower Quartile	Mean	Median	Upper Quartile	Max	Standard Deviation
Clinical knowledge	98	50	93	95.4	96	98	100	4.4
Diagnosis	98	0	92	94.5	96	98	100	4.8
Clinical decision making	94	34	92	94.3	96	98	100	5.1
Treatment (including practical procedures)	100	0	91	93.8	95	98	100	5.5
Prescribing	94	0	91	93.7	95	98	100	6.1
Medical record keeping	90	30	90	92.8	94	97	100	6.0
Recognising and working with limitations	100	41	91	93.5	95	97	100	5
Keeping knowledge and skills up to date	98	44	92	94.1	95	98	100	4.9
Reviewing and reflecting on own performance	96	42	90	92.5	94	96	100	5.6
Teaching (student, trainees, others)	100	0	88	91.7	93	97	100	7.4
Supervising colleagues	100	0	88	91.6	93	96	100	6.5
Commitment to care and wellbeing of patients	100	47	94	95.9	97	100	100	4.3
Working effectively with colleagues	98	40	91	93.5	95	98	100	5.8
Effective time management	79	25	87	90.3	92	96	100	8.2
I am confident that this doctor respects patient confidentiality	100	58	96	97.1	98	100	100	3
I am confident that this doctor is honest and trustworthy	100	67	96	97.1	98	100	100	3.1
I am confident that this doctor's performance is not impaired by ill health	100	45	95	96.3	97	98	100	3.7
I am confident that this doctor is fit to practise medicine	100	50	100	100.0	100	100	100	0.6
Communication with patients and relatives	100	0	92	94.2	96	98	100	5.7

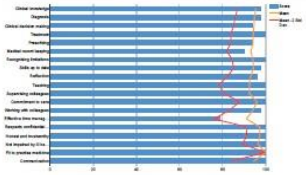


Results Against Area Team Benchmark

This benchmark is a comparison of your scores against Appraisees within the area team - NHS ENGLAND MIDLANDS AND EAST (WEST MIDLANDS)

This sample was taken on 15/02/2018 and is based on 2386 completed cycles.

Question	Score	Benchmark						
		Min	Lower Quartile	Mean	Median	Upper Quartile	Max	Standard Deviation
Clinical knowledge	98	73	93	95.5	96	98	100	4.2
Diagnosis	98	73	92	94.8	96	98	100	4.5
Clinical decision making	94	66	92	94.5	96	98	100	4.7
Treatment (including practical procedures)	100	0	92	94.1	95	98	100	5.2
Prescribing	94	0	92	94.2	95	98	100	5.1
Medical record keeping	90	40	91	93.2	95	98	100	5.7
Recognising and working with limitations	100	66	91	93.9	95	98	100	4.8
Keeping knowledge and skills up to date	98	64	92	94.4	95	98	100	4.6
Reviewing and reflecting on own performance	96	58	90	92.9	94	97	100	5.3
Teaching (student, trainees, others)	100	0	89	92.3	94	97	100	7.0
Supervising colleagues	100	65	89	92.4	93	97	100	5.9
Commitment to care and wellbeing of patients	100	70	94	96.0	97	100	100	4.1
Working effectively with colleagues	98	63	91	94.0	95	98	100	5.4
Effective time management	79	40	88	91.1	93	96	100	7.5
I am confident that this doctor respects patient confidentiality	100	91	96	97.2	98	100	100	2.9
I am confident that this doctor is honest and trustworthy	100	80	96	97.2	98	100	100	3
I am confident that this doctor's performance is not impaired by ill health	100	75	95	96.4	97	98	100	3.5
I am confident that this doctor is fit to practise medicine	100	90	100	100.0	100	100	100	0.3
Communication with patients and relatives	100	89	92	94.7	96	98	100	5.1



Results Against Organisation Benchmark

This benchmark is a comparison of your scores against Appraisees within the organisation - NHS HEREFORDSHIRE CCG

This sample was taken on 15/02/2018 and is based on 58 completed cycles.

Question	Score	Benchmark						
		Min	Lower Quartile	Mean	Median	Upper Quartile	Max	Standard Deviation
Clinical knowledge	98	87	95	96.5	98	100	100	3.5
Diagnosis	98	84	94	95.7	97	98	100	3.9
Clinical decision making	94	84	93.8	95.9	97	100	100	4.2
Treatment (including practical procedures)	100	84	93	95.3	96	98	100	3.9
Prescribing	94	82	92.8	94.9	96	98	100	4.2
Medical record keeping	90	79	91	94.1	95	98	100	4.6
Recognising and working with limitations	100	77	92	94.4	96	98	100	4.8
Keeping knowledge and skills up to date	98	86	93	95.2	96	98	100	3.6
Reviewing and reflecting on own performance	96	77	89	93.3	95	98	100	5.9
Teaching (student, trainees, others)	100	75	88.8	92.3	93	97	100	6.2
Supervising colleagues	100	65	89	92.1	93.5	98	100	7.1
Commitment to care and wellbeing of patients	100	82	95.8	96.9	98	100	100	3.8
Working effectively with colleagues	98	70	89.8	93.5	96	100	100	7.4
Effective time management	79	67	90	92.1	93	97	100	7.1
I am confident that this doctor respects patient confidentiality	100	91	98	98.5	100	100	100	2.2
I am confident that this doctor is honest and trustworthy	100	93	98	98.4	100	100	100	2.1
I am confident that this doctor's performance is not impaired by ill health	100	90	96	97.7	98	100	100	2.6
I am confident that this doctor is fit to practise medicine	100	100	100	100	100	100	100	0
Communication with patients and relatives	100	75	94	95.0	97	98.5	100	5.7

Patients Satisfaction Questionnaire (PSQ) results example

Reflection on this item

Reflection
No reflection has been entered

Summary of Patient Feedback for [redacted]

30 Requited | 33 Received

Personal information

Q1. Questionnaire completed by

Patient 30 | Spouse or Partner 0 | Parent or Guardian 2 | Relative or Friend 0 | Not Answered 0 | Spoilt 1

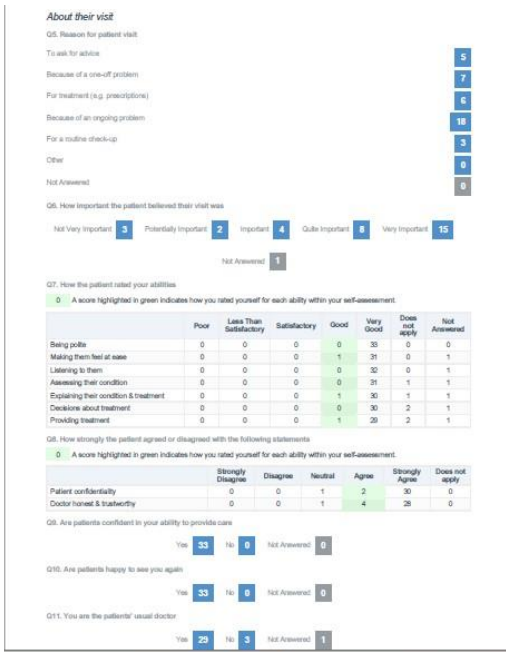
Q2. Patient Gender

Male 16 | Female 16 | Not Answered 1

Q3. Patient Age Group

Under 15 2 | 15 - 20 1 | 21 - 40 3 | 41 - 60 7 | Over 60 20 | Not Answered 0

Q4. Ethnicity



About their visit

Q5. Reason for patient visit

To ask for advice 5
Because of a one-off problem 7
For treatment (e.g. prescriptions) 6
Because of an ongoing problem 18
For a routine check-up 3
Other 0
Not Answered 0

Q6. How important the patient believed their visit was

Not Very Important 3 | Potentially Important 2 | Important 4 | Quite Important 8 | Very Important 15 | Not Answered 1

Q7. How the patient rated your abilities

0 A score highlighted in green indicates how you rated yourself for each ability within your self-assessment.

	Poor	Less Than Satisfactory	Satisfactory	Good	Very Good	Does not apply	Not Answered
Being polite	0	0	0	0	33	0	0
Making them feel at ease	0	0	0	1	31	0	1
Listening to them	0	0	0	0	32	0	1
Assessing their condition	0	0	0	0	31	1	1
Explaining their condition & treatment	0	0	0	1	30	1	1
Decisions about treatment	0	0	0	0	30	2	1
Providing treatment	0	0	0	1	29	2	1

Q8. How strongly the patient agreed or disagreed with the following statements

0 A score highlighted in green indicates how you rated yourself for each ability within your self-assessment.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Does not apply
Patient confidentiality	0	0	1	2	30	0
Doctor honest & trustworthy	0	0	1	4	28	0

Q9. Are patients confident in your ability to provide care

Yes 33 | No 0 | Not Answered 0

Q10. Are patients happy to see you again

Yes 33 | No 0 | Not Answered 0

Q11. You are the patients' usual doctor

Yes 29 | No 3 | Not Answered 1

"An excellent practitioner who will be sorely missed. His treatment & patients is exemplary & his "bedside manner" just he right mix of concern, professionalism & humour. In spite of his very busy schedule there is no feeling of being rushed through and his patients know that any follow-up will be thorough and efficient."

"The doctor all way help about information what's going on with the treatment so you understand the tablets you are having out of 10. (15) He is going to be missed."

"Always accomodating and supportive."

"Sorry to see you leave"

"A wonderful thoughtfull caring Doctor."

"I have complete trust in [redacted]. He will be sorely missed by me when he leaves has been nothing but kind careing humuros at times. But always putting my health first one of the best doctor's I have had takeing care of me. Wish there were more like him. "

"I think he's the best GP I've ever seen. In the past I've always been discounted because I am a very obese lady. But since I've been wit Dr [redacted] he's taken me seriously and not brushed me aside. I shall be very sad when he leaves."

"My doctor is extremely good."

"Very helpful."

"Extremely understanding, allowed me to feel that feeling this way was OK - not been in this situation before. (Bereavement of spouse)"

"I have been seeing D[redacted]or years, I find him to be an excellent, and caring Dr."

"I always have excellent care here and from this Doctor"

"Very confident that Doctor has fully investigated my condition and has/is having it treated correctly"

"He is a brilliant doctor. The best doctor I have ever seen (at age 85)."

"Exceptional as always. We will miss him & is professionalism and total care in the community"

"Fantastic Doctor as always!"

[redacted]has always inspired confidence over many years and alway seems to "go the extra mile""

Results Against National Benchmark

This benchmark is a comparison of your scores against results collected nationally

This sample was taken on 15/06/2018 and is based on 25714 completed cycles.

Question	Score	Benchmark Min	Lower Quartile	Mean	Median	Upper Quartile	Max	Standard Deviation
Being polite	100	56	96	97.3	98	99	100	2.9
Making them feel at ease	99	58	95	96.5	97	99	100	3.3
Listening to them	100	56	95	96.5	97	99	100	3.3
Assessing their condition	100	59	94	95.8	97	98	100	3.5
Explaining their condition & treatment	99	58	94	95.2	96	98	100	3.8
Decisions about treatment	100	49	93	94.9	96	98	100	4.0
Providing treatment	99	54	95	95.9	97	98	100	3.6
Patient confidentiality	96	42	90	92.2	93	95	100	3.9
Doctor honest & trustworthy	95	43	91	93.2	94	96	100	3.9
Are you confident about this doctor's ability to provide care	100	70	100	99.5	100	100	100	1.5
Are you completely happy to see this doctor again	100	70	100	99.4	100	100	100	1.8

Results Against Area Team Benchmark

This benchmark is a comparison of your scores against Appraisees within the area team - NHS ENGLAND MIDLANDS AND EAST (WEST MIDLANDS)

This sample was taken on 15/06/2018 and is based on 2019 completed cycles.

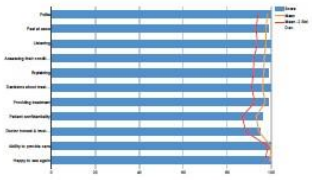
Question	Score	Benchmark						
		Min	Lower Quartile	Mean	Median	Upper Quartile	Max	Standard Deviation
Being polite	100	69	96	97.3	98	99	100	3.1
Making them feel at ease	99	67	95	96.6	97	99	100	3.3
Listening to them	100	67	96	96.7	97	99	100	3.4
Assessing their condition	100	62	95	96.0	97	98	100	3.6
Explaining their condition & treatment	99	59	94	95.5	96	98	100	3.8
Decisions about treatment	100	55	94	95.1	96	98	100	4
Providing treatment	99	58	95	96.1	97	98	100	3.7
Patient confidentiality	96	42	90	92.5	93	95	100	4.0
Doctor honest & trustworthy	95	43	91	93.4	94	96	100	4.0
Are you confident about this doctor's ability to provide care	100	85	100	99.6	100	100	100	1.4
Are you completely happy to see this doctor again	100	84	100	99.5	100	100	100	1.6

Results Against Organisation Benchmark

This benchmark is a comparison of your scores against Appraisees within the organisation - NHS HEREFORDSHIRE CCG

This sample was taken on 15/06/2018 and is based on 48 completed cycles.

Question	Score	Benchmark						
		Min	Lower Quartile	Mean	Median	Upper Quartile	Max	Standard Deviation
Being polite	100	90	98	98.2	99	100	100	2.1
Making them feel at ease	99	90	97	97.6	98	99	100	2.2
Listening to them	100	90	97	97.7	98	99	100	1.9
Assessing their condition	100	91	95	96.9	97	99	100	2.3
Explaining their condition & treatment	99	92	95	96.6	97	98	100	2.4
Decisions about treatment	100	90	95	96.1	96	98	100	2.4
Providing treatment	99	90	96	97.2	98	99	100	2.4
Patient confidentiality	96	87	90.3	93.2	93	96	99	3.2
Doctor honest & trustworthy	95	88	92	94.3	94.5	96.8	100	2.9
Are you confident about this doctor's ability to provide care	100	96	100	99.9	100	100	100	0.7
Are you completely happy to see this doctor again	100	96	100	99.6	100	100	100	1.2



Reflection on this item

Reflection

some lovely comments...I think it is very hard to get really good objective comments when you have been doing the job this long!

Reflection on Feedbacks section

poor time management...cannot argue with this.....I would rather take time than rush through patients .....I like to think that this is because as SP I get all the extra work.....

It will change a lot partly as my circumstances will change

Chapter 7

A7.1 Published article in Journal of Holistic Healthcare. Flourishing edition. April 2021. Included Editors permission (mitigate self-plagiarism)

David Peters [redacted]
Tue 23/02, 19:24
Sabena Jameel (Birmingham Medical School)

Dear Sabena
Yes, do please include the diagram in your most valuable and interesting article.
Yes JHH/BHMA recognises you as the originator of this article which we expect to be published in April 2021.
You definitely have permission from me as Editor in Chief to use the material as you see fit, and to re-use any or all of it in your thesis (with citation).
Many thanks once again for your article.
Best wishes
David

David Peters
Professor Emeritus
Westminster Centre for Resilience
College of Liberal Arts and Science
University of Westminster
http://www.centreforresilience.co.uk

[redacted]
Editor in Chief, Journal of Holistic Healthcare
https://bhma.org/item/journal/

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From: Sabena Jameel [redacted]
Date: Tuesday, 23 February 2021 at 15:33
To: Louise Younie [redacted] David Peters [redacted]
Subject: Please can I ask a favour? (Regarding JHH issue on flourishing)

Hello David and Louise

I have just attended a university session on “Preparing for your PhD viva”. I asked a specific question on self-plagiarism. In short, I will need the JHH permission to use any material that is verbatim published in your journal and used in my PhD submission. Please could you compose an email to that effect? I will have to add it to my PhD appendix in order to ensure I am not self-plagiarising.

As the BNIM interviews are panel synthesis statements (Lulu, Dolan, Samphire and Billy), these will be used in my PhD verbatim.

The conceptual framework diagram will also be used in my PhD write up. Previous emails alluded to whether we should put the diagram in or not. I have not yet heard from David on this.

I hope to hear from you soon. Thank you.

Sabena

Wise Doctors: What can the teach us about flourishing?

Jameel.S (2021) Journal of Holistic Health care. April 2021 p49-52.

In Nicomachean Ethics Aristotle asserts that there are five excellences of knowledge, sometimes called intellectual virtues (Aristotle, 2004). *Episteme* is scientific knowledge, *techne* is technical expertise, *sophia* is philosophical wisdom and *nous* is intellectual insight. The fifth is less well understood, although it has been suggested that this virtue is of particular use to those in medical practice (Pelligrino and Thomasma, 1993). This virtue is *phronesis* (practical wisdom). Over the last three decades theoretical musings suggest phronesis is synonymous with professionalism (Kinghorn, 2010; Hilton and Slotnick, 2005), emphasising a moral orientation towards good rather than reductive standards set by regulators with punitive consequences for non-adherence. On this basis alone it would be worthy of study, but what is even more appealing is the Aristotelian hypothesis suggests that developing phronesis is a step towards eudaimonia (flourishing of self and others). In this climate of burnout and demoralisation in clinical practice we owe it to ourselves to explore phronesis in Medicine.

Medicine is a natural science, rich in bioscientific experimentation leading to rules and laws that help is understand the world. It is also a human science full of constructed understandings of how and why things happen generating emotion and values. This has been captured nicely in the aphorism from Kaldjian (Kaldjian, 2019)

"Medicine is the most human of sciences and the most scientific of the humanities."

In order to perform well in medicine, the deductive aspects need to be paired with the interpretive aspects. Phronesis offers an appreciation of both aspects. The rational orientation of bioscience synthesised with the skill of contextual clinical judgment (Gatens-Robinson, 1986). Phronesis is rooted in virtue ethics as opposed to the rule-based ethics that dominate healthcare. Phronesis is a meta-virtue that adjudicates when values conflict, it is inherently practical. To date very little empirical work has been published about phronesis in medical practice (Kotzee, Paton and Conroy, 2016). This was the starting point for the PhD research on enacted phronesis in General Practitioners.

The research aspired to capture the lives, thinking habits and actions of wisdom exemplars. Too much of professionalism research focusses on bad behaviour and poor professionalism. When used in medical education, I hoped that the narratives from empirically derived wisdom exemplars would help clinicians understand something of themselves when reflecting on the narratives. My hope was that the exemplars could become role-models, raising aspirations towards excellence. These

stories are fascinating as standalone lessons, but the PhD research went on to look for common themes.

Between 2016-17 211 GP trainers completed a wisdom questionnaire at various GP training events. There was no compulsion to complete the questionnaire. The overall response rate from the training events was 57%. The wisdom questionnaire was a measure of wisdom that best approximated to phronesis (Ardelt, 2003) as there is, to date, no measurement tool to measure phronesis (Kristjánsson, 2020).

Ardelt (Ardelt, 2003) built a scale with the cognitive, reflective and compassionate indicators that measures the latent variable of wisdom in large standardised surveyed populations. I selected the highest scoring respondents with a strong criterion for wisdom in each of the three domains (approx. 10%) to participate in the second part of the study, the biographic narrative interviews. The interview technique and panel narrative synthesis followed the biographic narrative method (BNIM) described by Wengraf (Wengraf, 2001). The analysis focused on the *lived life* and the *told story* of the exemplar. Each interview resulted in a narrative output statement. This article presents four of these eighteen biographies.

Samphire

Samphire grew up in a tense household describing parental aggression and neglect. Success at comprehensive school meant she escaped home, enjoying medical school and university life. Her natural curiosity for people led her to general practice. Continuity of care and the prospect of a better work-life balance were key factors. The entirety of Samphire's working life has been marred by episodes of sexism, initially whilst looking for GP partnerships in the 1990's, right up to the bullish management boards she sits on now. Her husband too was met with disdain when he chose to be a house husband. Samphire spent a sabbatical with her family abroad, this was an interesting adventure. Samphire values her primary care team; they have been through difficult times together. Samphire learnt to trust herself gaining confidence in her own abilities. She is acutely aware and conscious about giving patients the ability to speak

and be heard. This is a trait she transfers to her family too. Samphire feels that a person's behaviour can affect the feelings of others. She knows how she would like to impact others. She enjoys delivering practical teaching to trainees, focussing on process, and planning rather than the fixation on diagnoses. Her role as a carer for her mum (RIP) and her children has enhanced her ability to be a better doctor.

Lulu

Lulu's journey to phronesis has involved aligning her acute awareness of self and understanding herself with the boundaries and infrastructures that needed to be put in place to bring her to a point of joy and happiness in her work as a GP.
This journey has involved quite intense and painful experiences as a carer for her mother and her own child. She is also a patient with two life changing diagnoses and has experiences being an unsupported junior doctor who required time out for perceived burnout. She navigates through these events with insight, knowing what she did not want to be like and working towards being the doctor she wanted to always become. Parents, spouse, pets, and colleagues now strengthen her, like the armour she needed to enhance her own abilities. Her experiences had taught her a lot, though she would not re-live them. Lulu has demonstrated humble resilience and continue to practise medicine in a humane way, knowing how much it has taken for patients to open up to her. That privilege is something she values and drives her to do onto others as she would want for herself – kindness, compassion, and connection.

Billy

Billy relates a life that started with an apparent failure, being labelled "thick, hyperactive loner" in childhood. Key figures believed in him and empowered him, putting him in a more favourable environment for growth and development. He thrived, despite some challenges in his childhood and teenage years. He was able to filter the negative perceptions and work with the positive comments and his own reflective thought processes and cognitive reasoning about life and purpose. He finds a strong sense of achievement in making connections and understanding others. He found the caring role rewarding even from a young age. He loves breadth of intellectual stimulation. He remains indebted to his own parents and reflects on this through his own journey of being a parent.

Dolan

Dolan's narrative illustrates a quest to transcend and understand the challenges he has faced through life. He adopts an external observer perspective, using philosophical concepts to help him reconcile challenges to his perception of what justice and fairness should be. He wants to do himself justice in a system that is not just. This understanding extends to patients too. His perception of injustice is from a long series of events that started in childhood. Dolan is deeply reflective and 'navigates' his way through with high levels of intelligence and as a tactician. He seeks meaning and purpose.

What do you feel as you read these statements? Can you relate to any of the narratives? What are your take home messages? What is striking is how each exemplar has faced challenge and difficulty, but they exhibit thoughtful resilience and an ability to learn and grow. Their reflection is not ruminative but proactive in improvement. They strive to be the best version of themselves, not showing much interest in competition with others. Contrast this to the award/prize/promotion rat-race culture that currently defines success in a medical career. Their motivation is internal, not external. They have learnt to ignore the naysayers and critics; this is particularly noticeable in the narratives of Billy and Samphire.

The exemplars have a strong sense of autonomy in directing who they want to be and how they would like that to play out. They are self-assured but humble, strong yet vulnerable. Wisdom does not mean perfection; it means *work-in-progress* with a humane love for others and an orientation towards good. The exemplars often disclose a personal close relationship and/or personal illness which seems to have shaped their own capacity for compassion. In the case of Samphire and Dolan it was as a result of experiencing harsh treatment themselves that they set out to consciously provide something better than they had endured.

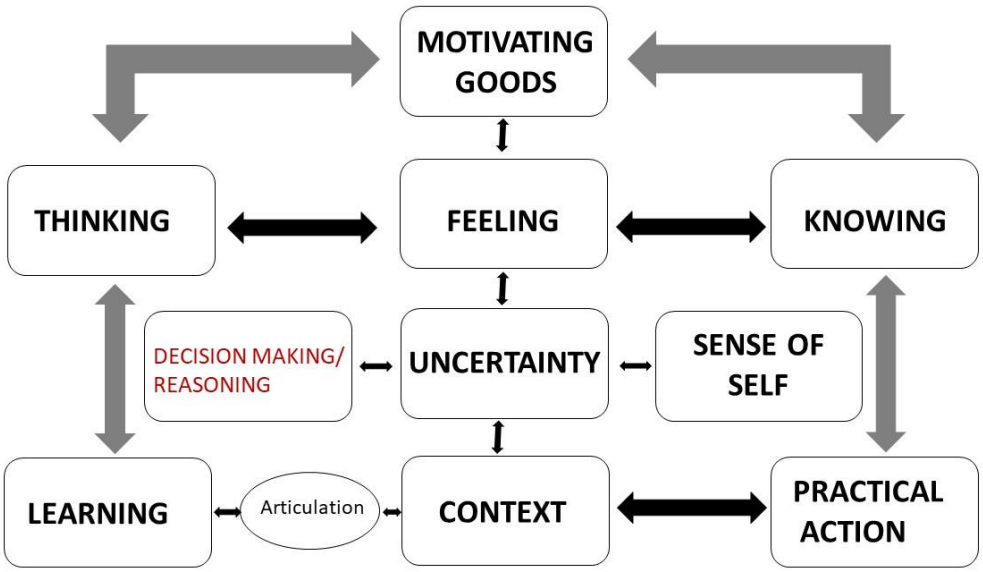
For Lulu it was her own medical diagnoses. Lulu learnt to use healthy boundaries and loved ones to strengthen her own compassion. Many exemplars tacitly follow the golden rule, *"do unto others as you would have them do unto you",* this guides their behaviour with patients. What is fascinating about the age range of the wisdom exemplars are that it included young people (late twenties), who were newly qualified

GPs. Lulu was one of those exemplars. Wisdom has been shown to increase with age, but it is not exclusively for the older age group… and not all old people are wise. High levels of self-awareness and constructive growth-orientated reflection are key, as opposed to ruminative, pessimistic reflection. This resonates with wisdom research by Meeks and Jeste (Meeks and Jeste, 2009).

Not immediately evident from the four narratives in this article, but as themes from all the exemplars narratives, is the ability to deal with uncertainty. This seems to be a defining feature of the wise. This research also involved interviewing a couple of low scoring GPs. Their indecision and torment in dealing with uncertainty was evident. Doubts and indecision came through repeatedly. One low scoring exemplar attributed much of his life to luck, using the word 28 times during the interview and suggesting an external locus of control. The high scoring exemplars gave the impression of personal agency and self-determination, often surprising themselves with their capabilities when they were put in situations of high challenge. Many of the wisdom exemplars described themselves as average at medical school. It begs the question as to whether we are measuring the right thing at medical school. Should we be looking are wisdom rather than knowledge? Analysing both low scoring and high scoring GPs brought the quote by Chia and Holt to life (Chia and Holt, 2007).

> *We develop the idea of wisdom as a form of learned ignorance—a cultivated humility, meekness of demeanour, and openness of mind that is distinct and different from the aggressive and relentless pursuit, acquisition, and exploitation of knowledge. Rather than associate wisdom with learning, we argue that it is ironically unlearning that is the path toward genuine wisdom and insight. The inability to attain wisdom arises, paradoxically, from a contemporary obsession with knowledge and information. Wisdom is not about having more information or constructing irrefutable propositions. True wisdom exceeds these quantifiable elements. It takes its cue from vagueness and ambiguity. p505.*

Corpus linguistic software was used on all 18 transcripts. This highlighted the main discussion themes (filler words excluded). It enabled a conceptual framework for wisdom in action to be developed. The inter relationships and feedback loops are illustrated in the diagram below. It shows how *thinking*, *feeling,* and *knowing* are influenced by *motivations*. Thinking, feeling, and knowing also determine the *perception of our self*, which in turn affects our reasoning/decision making ability and our ability to *deal with uncertainty*. Our thinking and subsequent reflection affect our ability to learn. All this happens in context, this is a defining feature of Phronesis. All these features together feed into practical action. Practical action (praxis) is the end point of how practical wisdom manifests.



Phronesis is about doing the right thing, at the right time, for the right reason (Schwartz and Sharpe, 2010). It is inherently contextual, and this is in contrast to the generalisable reductive rules, guidelines, and protocol-based approach to clinical medicine. This research was most fulfilling. The stories from the wisdom exemplars are memorable and engaging. It is about real clinicians who are flourishing. The exemplars were generous with their time and candid in their narrations. The icing on the cake was when the quantitative part of the study asked a specific question on satisfaction and contentment. There was a clear correlation between a high wisdom score and a sense of wellbeing. This supports Aristotle's theory that developing phronesis is a route to eudaimonia (flourishing). I hope that further work will allow an even more nuanced appreciation of phronesis and how to achieve it.

When I have used these biographic narratives in teaching sessions with GP trainers and trainees, their responses have included how despite challenge, the exemplars remain positive. Many could relate to the stories of the exemplars and as a result felt inspired.

"Sabena's teaching last week was really thought provoking, she is a charismatic speaker whose passion for the topic really engaged the audience. The other trainees also said they were impressed and were interested in the subject of phronesis which was explained very well. The case studies of each exemplar were insightful showing the common themes in their lives that have led to wisdom. It is interesting to note that wisdom seems to be correlated with job satisfaction; is there causality? Some questions raised included 'If phronesis could be taught would it make us better GPs? Does choosing a career in GP preselect predominantly wise doctors? I think the talk naturally inspired us to reflect on our own practice and lives in general."

"It was an incredible session on Phronesis. Definitely an amazing take on being a GP. I think every cohort at VTS training should hear this and be part of it and be inspired. Thanks for organising it. One of the best VTS session."

Their feedback speaks volumes. The time is right for understanding and teaching wisdom. We need to learn how to flourish, now more than ever.

A7.2 BNIM Panel Memorandum of Understanding

Researcher: *Dr Sabena Jameel*

Supervisors: *Dr June Jones and Professor Kristjan Kristjánsson*

Institution: *Institute of Clinical Sciences, University of Birmingham*.

The PhD researcher Dr Sabena Jameel requires assistance for the analysis of the biographic narrative interviews conducted for the above study. She has enlisted the help of [ ]. The researcher is very grateful for the assistance from [ ]. They will be referred to as the *collaborator*.

This document outlines some etiquette regarding the information that will be shared.

Confidentiality

The BNIM Interviews have been coded with Pseudonyms. The data contains sensitive personal information.
The collaborator agrees to abide by the usual NHS confidentiality guidance, respecting Chatham house rules:

"a rule or principle according to which information disclosed during a meeting may be reported by those present, but the source of that information may not be explicitly or implicitly identified".

The collaborator agrees to destroy the audio files/transcripts they have been asked to review, once the BNIM Analysis process is complete. They must not be stored on unencrypted computers. All documents should be read on secure connections.

BNIM Analysis

The collaborator will be given guidance on how the BNIM Analysis process will be conducted. The panel discourse will be recorded for the purposes of the PhD research. The collaborators will be acknowledged for their commitment and engagement in participating in the interview analysis. This will be acknowledged in the written PhD and any subsequent conference proceedings/publications. There will be no monetary payment for BNIM panel analysis participation.

Dissemination

The collaborator agrees that the data discussed belongs to the PhD Researcher for the purpose of completing their PhD thesis. Should any further collaborative work

(publications/presentation) ensue, this will be with the explicit permission of the PhD researcher.

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Name of BNIM Analysis Collaborator	Date	Signature
Dr Sabena Jameel		
PhD Researcher	Date	Signature

A7.3 Transcript example (Mary)

Int Hello today is 2nd August 2018, and I've come to [Place] to interview [Name] who's going to take on the pseudo name, Mary.

So thank you for allowing me to come and interview you today.

Res You're welcome.

Int I've already explained to you sort of how this interview will work, so I'm just going to go ahead and ask you the question really. It's quite a long question, so if you want me to repeat it that's absolutely fine.

You know that I'm doing this work in Enacted Practical Wisdom in General Practitioners, I'm interested in your experience, the things and events and influences that have made you the doctor you are now. I'd just like you to tell me all about it, in your own way. Tell me what's been important for you, I won't interrupt, and I'll just take some notes. So please do begin.

Res Gosh, where do I begin? Well I didn't go to medical school in this country; I went to medical school in [Place] at [Place] medical school. And I didn't want to be a doctor all my life; I didn't know what I wanted to do. But I went into hospital for hip operation's because I was born with dislocated hips, when in was 12 and 13. And afterwards, people always said to me, oh are you going to be a nurse now? I thought, no, I really don't want to do that.

And I was lucky enough; there were grammar schools in those days. Because we grew up on a Council Housing Estate, but I went to the grammar school and we had a very nice education. And I got very good results, I could have done anything I wanted.

The school kind of pushed people to medicine, law or perhaps accounting. And I thought, well I really don't want to do law, I might do medicine. And my father said why don't you do pharmacy I think is a very good thing for a girl? So I wasn't sure, but I applied to medicine and to pharmacy, and [Place] was my first choice for medicine. I got acceptances from every place except from

[Place] which was my second choice for medicine, they'll never accept you if [Place] is above you. In those days they got told which pecking order they were in. I don't think they are told nowadays.

So I thought, well I still don't know what I want to do, that hasn't settled it. And I rang up 'who's in charge of the medical school?' And the receptionist said, 'why it's the Dean of course'. I didn't know anything like that. So I said can you put me through to the Dean please? I was 18. And she did. I said to the Dean, you sent me an offer for your medical school, but I have a problem. He said, what's your problem? I said I don't know whether I want to do medicine or pharmacy, can I come and see you? He said, yes can you come this afternoon? Yes.

I got on the train, went to [Place], walked up to the medical school, found the Dean's office, had a little chat with him. He said I've got a friend who's a pharmacist. He said would you like me to give my friend a ring? He gave his friend a ring and I went off to this pharmacy, spent half an hour, an hour there, I can't really remember now. I rang the Dean back, said, I think medicine's more for me than that.

Then I accepted the [Place], and they gave me then an offer of direct entry into second year. So I started to… it was a six-year course in those days. So I started at second year and I had to do this month first where I met up with 50 or 49 other people who all had six A's, like I did. And I went from being the top… one of the top five in a selective school, to distinctly ordinary, everybody had six A's. Passed that, that's what you'd hope, but we were doing the whole

organic chemistry in one month, it was quite a lot of work. And then I went into second year, absolutely loved it.

(Mary page 1. Mary's full transcript is 17 pages)

A7.4 BNIM Panel recording sheet example

EPGPS Panel Analysis

Panel Member name Transcript Exemplar's pseudonym

Page Date

Lived life phase (over the life period) *Biographical data analysis*	**Successive states of Subjectivity phases over the life period** *Phases of mutating subjectivity*	**Teller Flow phases over the course of the interview telling period** *(thematic field analysis)*

A7.5 Keyword Analysis of the Low Scorers amalgamated corpus showing major themes and second level associated keywords.

The numbers below each word are their frequency ranking out of 1256 words in the corpus. Words ranked 168 and below have been used more than ten times. * means word appears twice in the table.

MOTIVATING GOODS	CONTEXT	LEARNING	ACTION	ARTICULATING	THINKING	UNCERTAINTY	KNOWING	SENSE OF SELF in relation to others	FEELINGS (Emotional Re-Action)
(EXTERNAL) Money 116 Want 166*	Place 52 Situation 131 Where 131*	Learn 543 Progress 586 Learning 919 Improve 876 Try 130 Trying 126 Tried 1212 Achievable 344 Achieved 445 Cope 222 Frustrated 126 Challenging 470 Challenges 706 Failure 258 Failing 508 Fail 509	Work 105 Actually 67 Acting 769 Job 76 Going 139 Doing 146 Practice 117 Career 159 Able 218 Experience 376	Mean 84 Tell 154 Talk 165 Saying 242	*(RETROSPECTIVE)* How 74 Why 168 Reflect 211 Reflection 1078 Reflective 1077 Analyse 658 Thoughts 1202 Years 101 Life 102 Went 110 Been 111 Did 112 Came 115 Would 58 Back 70 Where	Unclear 56 Probably 107 Lucky 90 Luck 237 Luckier 944 Fortunately 823 If 48 Would 56 Bit 120 Might 129 Could 133 Sort (of) 153 Wavering 1236 (Not) Sure 163 Although 251 Certainly 469	Know 25 Knew 539 Knowledge 540 Something 108 Need 114 Sense 422 Faith 510 Conscience 482 Guided 847 Intuition 897 Profession 1056	I 1 Me 38 Myself 407 They 33 Them 78 Am 169 Being 119 Doctors 135 Personality 272 Colleagues 361 Another 219 Compared 363 Competitive 478 Envious 499 Non-judgemental 538	Felt 514 Feelings 512 Worry 155 Worries 249 Worrying 250 Worried 1250 Great 230 Happy 231 Lovely 236 Love 266 Brilliant 252 Amazing 448 Regret 593 Enthusiasm 777
		Hard 140 Difficult 225 Pressure 584 Success 616 Easier 228			131* Done 136 After 156 Most (as a summation) 160 Decided 171 Retrospect 1089	Fundamentally 519 Misjudged 969		Grass-Greener 841	
(INTERNAL) Good 68 Right 124 Want 166* Important 233 Rewarding 276 Reward 596 Respect 418 Commit 475 Commitment 476 Fulfilling 827 Satisfaction 1100			*(INDIRECT)* Patients 91 Patient 97 Help 87 Helping 209 Helped 232 (Guidelines) Practical 1047		*(PRESENT/PROSPECTIVE)* Think 16 Going 139 Look 141 Take 164 Realise 589 Mindset 966 Intelligent 889 Predetermined 1051				

Inspired 886 Inspiring 887									

A7.5 Keyword Analysis of the Low Scorers amalgamated corpus showing major themes and second level associated keywords. The numbers below each word are their frequency ranking out of 1256 words in the corpus. Words ranked 168 and below have been used more than ten times. * means word appears twice in the table.

A7.6 Additional Exemplar synthesis statements (From BNIM Panel members)

Academik

Academik conveys a story of repeated consecutive family tragedy which has led her to be reactive and proactive in changing her professional course. She has felt empowered to address the tragedy and injustice with her strong, optimistic sense of mission, almost like professional atonement.
She demonstrated strongly altruistic ideation but came to a point where she knew her capacity to cope was being challenged, so she took action. Academik is deeply reflective in thought and sees failure as the first step to success. She thrives off the external validation of appreciation (from patients). She has found her peace as a GP and aims to help her patients flourish. PM1

Academik has been motivated by huge family tragedy, witnessing misdiagnosis, mismanagement, and lack of resources. Her desire to be the best doctor she can be and care for all patients is a reaction to what she has witnessed. Her mission to reduce the burden of suffering has led her through a number of crucial career decisions. She is deeply reflective and personally insightful. She is loved dearly by her patients and their happiness is her reward. She has been strongly influenced by the comparison between a poor healthcare system and the NHS, which she loves, as it enables her to reduce inequalities in healthcare in a meaningful way. PM3

Robbie

Robbie sees his life through the lens of fortune, expressing that good will has been the unifying principle behind all his successes. Robbie lives with high degrees of inner conflict and self-doubt, which he has learnt to manage over time. He has found his wife to be a very stable influence on him, enabling him to be grounded in the present and grateful for what he has. He talks of role-models in terms that seem to distance them from himself, rather than produce aspiration to imitate what he finds attractive. Robbie has found joy and progress through embracing expressions of partnership with patients, with colleagues and with his wife. He speaks of circumstances having an external locus of control and so finds decision making hard since it puts him under the spotlight. His self-doubt does enable him to meet others with a similar tendency in compassion and empathy. Robbie describes his own

resilience in terms that suggest a discomfort with change and a low view of his ability to meet change well. However, his track record tells a different story since he has managed to undertake a full career in Medicine. PM2

Robbie has been motivated to be a doctor from an early age. He started off being ambitious and highly motivated to enter medicine. His faith played a role in guiding him through the interview. His career has been filled with the unexpected, inspired by strong role models and a caring work environment. Robbie has overcome doubt, worry and anxiety to become a holistic doctor who puts the needs of the patient first. He has a keen sense of the multiple roles a doctor plays and is most capable of serving patients' needs in a holistic sense. He loves being a GP trainer. He has taken on roles outside of his comfort zone, motivated by guilt and a sense of needing to pull weight in the practice. He is aware of his own limitations and has chosen to work within them. His sense of fulfilment comes from good patient feedback, which drives his choices and decisions. He has been indecisive and lacking self-belief but has reached a point in his career where these take on a different nature due to the fast-paced change of evidence-based medicine. PM3

Alekhine

Alekhine is motivated and inspired by human connection. His professional life does not start or stop but is continuous throughout his existence, without any perceivable source of conflict. He loves the excitement, risk and connection that comes with being involved in the lives of people and thrives in community. He is very adaptive to preserve this community immersion in and increasingly technological and bureaucratic environment. PM2

Alekhine is a profoundly relationship orientated person who lives out his life through the service of healthcare. He is unified, his life is his calling. He is self-aware and ensures that he pursues what he needs to keep his life vitalised. PM3

Barnabas

Barnabas relates a narrative that portrays a life where happiness and contentment can be achieved by listening to her instincts and intuitions. Barnabas has shown courage and bravery in some life decisions. Barnabas remains humble and this is also exhibited by knowing her own vulnerabilities and empathising with potential sources of vulnerability in others. Barnabas is guided by her faith alongside being open-minded and generous. Barnabas displays common sense and pragmatic and practical problem solving. PM1

Barnabas lives with a strong sense of identity, grounded in her secure upbringing and strong faith. There is a clear humility, accompanied by evident courage, manifested in times of stress which have required Barnabas to face up to fears. This courage has at times involved conflict resolution and at times involved walking away from damaging environments. Barnabas is motivated by a sense of responsibility, vision,

and purpose in her working life and in life as a whole. She lives life as a story passed down from one generation to the next. PM2

Mr Bean

Mr Bean is a young doctor who is driven by connections with people as human beings. He seeks to understand others and help them using the common sense he has been endowed with. He feels it is experience rather than formal teaching that has helped his common sense develop. Common sense is useful in generalist medicine where uncertainty predominates. He has been inspired and encouraged by teachers and his parents. His gratitude is palpable and extends to them and patients who he has learnt from. He is an accidental reflector using his feelings to guide and understand himself better. Some early experience of poor medical care/communication meant he began his journey of looking at 'better ways' to communicate and care. PM1

Mr Bean's early experience of healthcare as an adolescent shaped his understanding of the importance of clinical communication. His desire to help patients is grounded in an understanding of relational complexities, being willing to admit uncertainty and by using common sense. He is grateful to parents and senior colleagues who have invested in him and has made the best of the opportunities he has been given. He reflects on the importance of relational boundaries and is aware of his tendency to be laid back, so compensates by maintaining vigilance. Witnessing his girlfriend's uncle's sudden death affected him deeply, being frustrated by the hospital reliance on protocol over the obvious need of the patient and relatives. PM3

Billy

Billy has managed to filter early negative childhood experiences in such a way that has turned the story into a very positive one. He shows a high degree of empathy and compassion towards his parents, assuming the best of them and recognising the sacrifices made for his sake. Early in life Billy experienced loneliness and some rejection. This has not made him bitter but has instead motivated him to seek connection and to do so in the context of caring for others. Human connection has been a driving principle in his career choices. He has also turned an early label of 'hyperactivity' into an advantage by seeking variety in his work and taking an activist approach towards potential challenges and a desire for change. Billy is 'other-person centred' in his outlook, such that his reflection does not become negative rumination. PM2

Billy is a deeply reflective and empathic person who has lived through some challenging experiences in his formative years. He rejected labels and cultivated an attitude of thankfulness for the sacrifices of his parents. He avoids negative descriptions and seeks to represent the reality of his lived experience without

emotional baggage which could lead to negative thinking. He appears to assume the best of others and seeks connection. He enjoys being good at caring and seeks to do this professionally and personally in ways that stimulate and reward him. PM3

Dolan

*Dolan's narrative illustrates a quest to transcend and understand the challenges he has faced through life. He adopts an external observer perspective, using philosophical concepts to help him reconcile challenges to his perception of what justice and fairness should be. He wants to do himself justice in a system that is not just. This understanding extends to patients too. His perception of injustice is from a long series of events that started in childhood. Dolan is deeply reflective and 'navigates' his way through with high levels of intelligence and as a tactician. He seeks meaning and purpose. *PM1*

Dolan is a person who has thrived in a system he has observed trying to thwart him. He has a strong sense of personal ability and integrity. He has used moral philosophy to see through the smoke screen which permeates the profession and professional education. Dolan is pragmatic, not idealistic, and sees general practice as the only true area of medicine which engages the values of the profession. He has a keenly analytical mind which dissects sources of language, social norms, and hierarchy. He has much to teach us as we encounter students from diverse backgrounds. His medical wisdom comes through excelling in a system which he doesn't necessarily identify with. PM3

Egeria

Egeria's life is punctuated with turning points that have developed her character and reinforced who she wants to be. With solid family foundations she found herself in medical training, which at times eroded her developing confidence. Working in high challenge environments in remote regions (abroad) allowed Egeria to see her own capabilities, much to her surprise. Egeria knows deeply what it is to feel vulnerable having had a life changing trauma give clarity to what is important in life. LOVE for others defines the joy she experiences (from pets, to patients, to life). She values the importance of attentive listening in seeking understanding. This has given her opportunity to demonstrate her intellectual humility when dealing with difficult situations. PM1

Egeria sees love as the supreme value and purpose in life. She is passionate about enjoying the experience of love wherever it is found – in work, in family, in crisis, in pets, in places. For Egeria, love is nurturing, in that it communicates value which is

both given and received. Egeria has experienced several traumas which have given her an appreciation of the fragility of life, the value of time and the need to establish clear boundaries in order to ensure energy is given to what really matters. Egeria has learnt that adopting a humble, listening and learning posture in favour of self-defence enables growth and development. Egeria has learnt from experience that some people drain confidence and life, while others have the opposite effect. She will not try to 'fix' the former, while staying open to them, but will ensure she has exposure to the latter as a means of giving and receiving love. PM2

Godiva

Godiva has found actions of kindness and generosity towards others attractive and compelling since childhood. Her mother has been a big role model of this nature, together with an early experience of the work of MacMillan nurses. Godiva seeks human connection and stories as a means of bringing context to medical knowledge and practice. This value enables her to hold guidelines lightly, preventing them from becoming oppressive and driving bad choices for policies. She enjoys inhabiting the surroundings and stories of patients, finding them fascinating and managing to engage with their sadness and without being overwhelmed. Godiva values heart and humility in medicine, which was modelled by her trainer in general practice. Godiva is very clear on her boundaries, having a clear separation between work and home life. As such, being a doctor is a role she undertakes in life but is not the primary identity that she carries. Medicine is something she does and not who she is. PM2

Godiva has a strong sense of personal boundaries which have enabled her to thrive in a caring holistic environment of general practice without getting burnt out. Seeing her mother's life of caring for others in an appropriate context provided a platform for her own expression of care through medicine. Role models who exemplify wisdom through humility played a key role in shaping her approach to her career and enabled her to remain in control. She will go the extra mile for patients but is also confident when her independence needs to be fostered. Her passion for caring is an achievable example for all trainees; being confident about contextualising guidance and treating others how they want to be treated, enabling agency, and protecting vulnerability. PM3

Mary

From an early age Mary demonstrated self-belief and self-knowledge that has led her to find paths that align with her goals. Her life has been overarched by what some may perceive as physical disability, but she has proven (with optimism, determination, loyalty, and love) that she can, and has, exceeded expectations of others and herself. She has two main themes that drive her actions. One is her ability

to do 'big picture thinking' aiming for overall good, accepting bad phases as steps towards an overall joy. She has accepted inequality and compromise in order to achieve this holistic goal. The second theme is 'the golden rule' – Do unto others as you would want for yourself. She is deeply empathic. Her moral compass is strong and secular in nature. She is open-minded and embraces broad experiences. Mary believes that people themselves hold the answers to the questions they seek answers for. PM1

Mary has profound insight into being a patient and carer. She is completely dedicated to living as a caring doctor throughout each aspect of her life. Coveting opportunities to practice for the wellbeing of her patients in intensely compassionate ways. She has achieved a work/life balance which is impressive during each phase of her life. She is an optimist, who relishes fresh challenges and opportunities to learn and grow. She treats others as she would want her and her family to be treated, feeling the pain of patients and their families as her own pain. What would be stumbling blocks for others are gateways for her. She has a strong intuition which guides her actions. She is grateful for the kindness of those who made her career possible and sees that all phases of life turn out ultimately for the good. PM3

Scrabble

Scrabble has been shaped by her Christian faith into a person who pursues practical, non-judgemental, self-sacrificial love in her work. She has an appreciation of the complexity of our humanity, understanding that people carry their stories around with them, which influences every interaction. She has an 'other-centred' approach to life, such that she is always looking to learn from others irrespective of age or background. Core values guide her decisions as she sees transcendent meaning in life. She observes others closely and so takes on the characteristics of positive role models and learns from negative influences, distancing virtues and vice from the individuals themselves. Scrabble has embraced her own personality and individuality throughout life, looking to find how that fits into a world full of others, rather than feeling a pressure to change to meet expectations. She sees being a doctor as a thoroughly humane endeavour, interacting with patient at a level of common experience. PM2

Scrabble is a deeply committed doctor and educationalist who is reflective and motivated by her love of people. Her deep faith has led her to see the best in people and choose role models who exemplify characteristics which are inherently self-sacrificial. She avoids judging colleagues and patients whose characteristics she wishes to avoid. She lives as Jesus did, seeing past the pain and hurt which cause people to present themselves in challenging ways; she looks for the cause in order to bring freedom and release through a professional relationship of truth and

compassion. She thrives on her love of arts, sharing through Balint groups and from teaching students. She shares with students her love of learning and practicing medicine. She sees patients as her teachers and sacrifices her time to learn deeply how to care for them and gain insight which will help her care for others. PM3

Yoda

From a very young age Yoda connected his feelings as a guide leading him to his purpose and informing him of his 'truths'. The path was not direct, but he learnt from each phase. Uncertainty seems to motivate him. Healing, compassion, and practical action feature strongly as a thread. Incredibly talented, but humble and self-effacing Yoda has learnt the artistry of healing, from modern medicine to complementary therapies. He has expertise in them all, he sincerely believes they all have a place in helping people heal. He is deeply spiritual, and his language conveys positivity and optimism. He does not dwell on negative life experiences - 'There are no failures' he suggests. He invests time in self-care via meditation, exercise, and a growth mindset. He is a deeply holistic thinker and has a clear love and curiosity for nature and human nature. PM1

From an early age Yoda has known himself to be a healer. He sees a transcendent movement of healing in the world and sees himself as being caught up in, and a conduit in that movement. He has managed to unite both academic science and the mystery of being human, arriving at a holistic view of medicine. He is so sure of his purpose that he talks in covenant terms about his role within medicine. Yoda has a deep confidence in the possibility that exists within every individual, rejecting the concept of 'failure' as an objective reality. Yoda is a deeply spiritual and relational person and has managed to thrive within varied cultures by extracting the good that can be found in each. Yoda has been nourished and sustained by his marriage, such that his sense of vocation has been adopted and owned by his family. For Yoda 'being human' is wonderful, and being a healer is about facilitating people to embrace their humanity. As such, medicine is more art form than prescribed courses of action, which is a source of ongoing joy and wonder for Yoda. PM2

Chapter 9

A9.1 Transfer of Schools mid PhD due to change of PhD Supervisor

During the course of this PhD I had three different primary supervisors.

1) June 2013 to Jan 2015. **Dr Ben Kotzee**, School of Education
2) Feb 2015 to Feb 2018. **Dr Ian Davison**, School of Education
3) March 2018 to completion. **Dr June Jones**, Medical and Dental School.

Professor **Kristjan Kristjánsson** remained my secondary supervisor throughout. He has read all my work and offered guidance where necessary.

Dr Kotzee enabled me to gain a foundation in moral philosophy and virtue ethics. I did a lot of reading under his supervision, writing summaries which I presented to him regularly.

Dr Davison assisted with refining the research methods and gaining the appropriate ethical approvals. He offered insight into university processes and procedures.

Dr Jones read all my PhD work, offering constructive feedback. She also encouraged me to submit my work for conference presentations. She was dedicated, supportive and helpful throughout.

The email below confirmed the transition to the Medical and Dental School 2018.

Lyn Hipwood [redacted] Wed, Apr 11, 2018, 2:14 PM

[redacted]

Dear Dr Jameel
I am writing to confirm the recommendation from your School that you be permitted to transfer from the **Part Time PhD in the School of Education** to the **Part Time PhD in the Institute of Clinical Sciences** with effect from **1 April 2018**.
You remain liable for tuition fees of [redacted] for the academic session 2017/18 for the period from 1 October 2017 to 30 September 2018 if you have not already paid them. For information regarding payment methods, please visit www.birmingham.ac.uk/student-fees.

You will require an amended ID card for the session 2017/18 but will first be required to return your old ID card. If you wish you can collect your new card from the Student Hub in the Aston Webb building when you are next on campus. If you have any queries about replacement ID cards, please see the Student Help web page.

Your period of registration remains as 6 November 2019 and assuming that you have made satisfactory progress, you will then proceed to thesis awaited status and your thesis will be due for submission by no later than 6 November 2021**.**
University Regulation 5.2.1(b) states that it is your responsibility to notify the University of any changes to your personal contact details (address, telephone and e-mail). You must therefore regularly check and update your contact details and you can do this at any time via the on-line registration facility at www.my.bham.ac.uk.

Lyn Hipwood
Assistant Manager
Research Student Administration Team
Registery
Academic Services

A9.2 Application for extension to word count

For PhD theses the School of Education word count was 80 000 and the School of Medicine and Dentistry is usually 50 000. I transferred Schools in 2018 due to a change in primary supervisor. I started PhD with Harvard referencing so continued that way. The emails below provide evidence for approval for using Harvard referencing and approval from the medical school for an increased word count of 80 000 words.

From: Karen Carter (MDS - Research and Knowledge Transfer)
Sent: 01 July 2020 10:38
To: Geoffrey Brown (Biomedical Sciences); Sabena Jameel (Birmingham Medical School)
Subject: RE: MDS PGR handbook - Referencing style change from COSS to MDS?

Dear Sabena,
Geoff is correct that Vancouver is used generally in MDS. However, MDS does not stipulate this as a requirement and your thesis would not be penalised for using another referencing style. Either Harvard or Vancouver can be used, but the key point is that you must use one referencing system consistently. You will need to speak to Dr Jones and confirm she is happy for you to continue to use Harvard and if the answer to that is yes, the matter is resolved.
Kind Regards,
Karen

Karen Carter
Research and Knowledge Transfer

Louise Field [redacted] Wed, Jun 13, 2018, 3:08 PM

[redacted]

Dear Dr Jameel,

I am writing in connection with your request for an extension to the word limit of your PhD thesis to 80,000 words. I am pleased to advise you that the University's Research Progress & Awards Sub Panel has approved your request.

Further information regarding the submission and examination process can be found at https://intranet.birmingham.ac.uk/as/studentservices/graduateschool/rsa/thesissubmission.aspx

Many thanks
Louise.

Louise Field
Research Student Administration Team
Registry, Academic Services
University of Birmingham
Edgbaston
Birmingham
B15 2TT
