FOCUS ON METHODOLOGY

Developing your philosophical stance as a PhD student: A case study

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Abstract

Developing your philosophical stance can be daunting for new PhD candidates in health professional education. Contemplating the diversity of worldviews in the social sciences may be confronting for those of us from a biomedical background who are unfamiliar with the concepts and unused to metaphysical reflection. However, we need to explore the literature and reflect on our own underlying beliefs to maintain the cohesion of our research. Philosophical stance is generally taken to mean ontology and epistemology, or "what is real" and "how we know what we know", so developing your philosophical stance involves clarifying your beliefs about the nature of reality and knowledge. Our philosophical stance will influence our research design, practice and reporting. If we are unaware or uncertain of our philosophical stance, we risk misalignment, which will detract from our research claims and undermine their impact. Our philosophical stance is, thus, crucial for ourselves and our audience. This article presents a case study of how my philosophical stance developed over my candidature. I share it to provide insights for others contemplating the same journey. In particular, this paper acknowledges and normalises how understanding and articulating that stance evolved over time.

Keywords: knowledge; research design; education; methods; trends

Introduction

"What's your philosophical stance?" "What's your ontology? Your epistemology?"

Since I did not know the answers, these are some of the more frightening questions I was asked by my new and curious colleagues when I started my PhD in health professional education (HPE). I swiftly discovered one of the confronting aspects of beginning PhD research in HPE: that you are expected to explore your own beliefs, experiences and values to come to understand yourself and your own position as a researcher. Like many HPE scholars, my biomedical background had not prepared me with answers or how to look for them. I was ignorant of such terms and unaccustomed to reflecting on

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the underlying issues. I was also curious why this was such an important question. I wondered why, as a researcher, you need to be able to describe your worldview. Why are others so interested? In this article, I outline my approach to developing the philosophical stance underlying my PhD research in the hope that such an account might help others on the same journey. I offer this exposition not as an expert but as a peer who is further along the road.

What is a philosophical stance?

Philosophical stance is generally taken to mean ontology and epistemology (Tai & Ajjawi, 2016). Researchers sometimes use the terms "worldview" (McMillan, 2023) or "paradigm" (Varpio & MacLeod, 2020) to encompass similar concepts. Ontology is the study of being and is generally thought of as the study of the nature of reality or "what is" (Crotty, 1998, p. 10). Ontology concerns our beliefs about the objects we research and the extent to which we believe the truth of perceived reality, or the nature of an object, resides in the object or viewer (Brown & Duenas, 2020). Object implies something of a physical nature, however facts or concepts may also be objects. Our ontological beliefs will colour our approach to our research and the claims we make from it.

Epistemology is the study of knowledge, or "how we know what we know" (Crotty, 1998, p. 8). It reflects our understanding of what we can know about an object or reality and how we may generate that knowledge, or "the relationship between the knower and the knowable" (Lincoln & Guba, 2013, p. 37). As such, our epistemology is pivotal in determining what research methods and data we value and how we interpret information. At first glance, what we think is real and how we can know about it seem to be basic assumptions about the world and how it works. However, they are so fundamental that I, like most people, seldom consider them in my non-academic life.

Why is your philosophical stance important?

In the biomedical sciences, where I and many other health professional educators "grew up", it is taken for granted that reality is consistent, discoverable and the same for everyone, hence research can seek universally applicable truths (McMillan, 2023; Schwandt, 2015). These beliefs reflect a positivist or post-positivist philosophical stance. Both positivists and post-positivists share a belief in a single objective reality, known as objectivism (Crotty, 1998), although they differ on how accurately we can come to know reality (Young & Ryan, 2020). Positivism holds that through theorising and testing hypotheses in rigorous ways, we can accurately know the world (Bunniss & Kelly, 2010; Park et al., 2020). Post-positivists see our understanding of the world as always incomplete but progressing incrementally as we accumulate further evidence (Young & Ryan, 2020). In the biomedical sciences, this objectivist worldview is so taken for granted that it can appear to be the only one and, thus, requires no explanation (McMillan, 2023). I can see in hindsight that I had tacitly accepted the post-positivist worldview of continual refinement of knowledge about an objective reality through null hypothesis testing.

However, like many others before me, I discovered on reading more broadly in HPE that this represents but one way of viewing the world. In the social sciences, researchers can and do have vastly different worldviews, and they can co-exist. In my prior research on assessment, I had found a mismatch between the results of my psychometric studies (Castanelli et al., 2019) and my interview studies (Castanelli et al., 2016). In trying to understand learners' and teachers' perceptions and experiences, I had begun to doubt the universality of reality in the social world.

Despite recognising this turbulence, I had yet to reflect on the change in my underlying worldview that this represented. Nevertheless, different worldviews prompt different research questions and rely on different methods to produce different data (McMillan, 2023). Whether stated or not, our underlying assumptions about reality and knowledge will impact our interpretations (Tai & Ajjawi, 2016). Also, where the researcher does not examine their philosophical stance, they may make research design choices that result in misalignment of research questions, methods and claims. Research reports, in essence, present claims based on reasoning and evidence, and the reader then evaluates the veracity of the claims based on the quality of the reasoning and evidence and, hence, determines the research's significance for them (Booth, 2008). As a reader, I was learning to judge research from different worldviews. I realised that my evaluation unconsciously included judging the congruence of the author's philosophical stance with the basis for their claims. Further, I was comparing that to my own philosophical stance, even if I could not explain what mine was. So, as a researcher, I could see that I needed to articulate my underlying philosophical stance to align the elements of my research design and make my claims coherent and convincing to my audience.

Getting started

Encouraged by my supervisors, I started reading broadly. Aside from my inexperience in contemplating metaphysics, I quickly discovered a further problem. Researchers use many terms for the various aspects of the research process—approaches, paradigms, methodologies, methods, theoretical perspectives, etc.—and each author organises them in a unique way. It can be challenging to know when people are talking about ontology and epistemology, or how all these terms relate to one another. So, coming to understand one's ontology and epistemology is not just an exercise in self-reflection. It also involves navigating a confusing terrain of terms, classifications and hierarchies.

On reflection, I think there is a risk that this combination of complex ideas and confusing terminology may be daunting and put students off early in their candidature. However, I was not put off, as I knew that I wanted to engage as fully as possible in the medical education research community. I reminded myself that being a learner is part of the deal in doing a PhD—if I already knew how, I would not need to learn. That there was so much to learn was a reassurance that embarking on the PhD journey was going to be worthwhile. Like a swimmer facing icy water, I grasped the necessity to get wet, so I dived

in. I was further reassured when I found myself confused to find that others had already noted that the many ways of "doing" research present the novice with a bewildering array of choices: "In the face of so many schools and traditions of research, how is the novice researcher to position his or her own work?" (Edge & Richards, 1998, p. 340).

In this article, I outline the journey of my evolving answer to this question.

Philosophical stance 1.0

As foreshadowed above, developing my initial philosophical stance required personal reflection and navigating confusing terminologies. Recognising myself as a novice, I sought rules to follow (Dreyfus & Dreyfus, 1986). I found what I was looking for in Crotty's (1998) book, *The Foundations of Social Research: Meaning and Perspective in the Research Process*, which describes a hierarchical structure from epistemology through theoretical perspective and methodology to methods. This framework adds a third layer to the philosophical stance, a theoretical perspective. Crotty also argues ontology can be determined with epistemology, and I followed this advice. In hindsight, I think it would be preferable to use a schema incorporating ontology, since in recent years, more classifications have become available, see Box 1 (Brown & Duenas, 2020; Kinnear et al., 2024; McMillan, 2023).

Box 1

Guides for Selecting a Philosophical Stance in Health Professional Education Research

Brown, M. E. L., & Duenas, A. N. (2020). A medical science educator's guide to selecting a research paradigm: Building a basis for better research. *Medical Science Educator*, 30(1), 545–553. https://doi.org/10.1007/s40670-019-00898-9

Crotty, M. (1998). The foundations of social research: Meaning and perspective in the research process. Allen & Unwin.

Kinnear, B., Beck, J., Schumacher, D. J., Zhou, C., & Balmer, D. (2024). Building a solid house of scholarship: The importance of foundational worldviews. *Hospital Pediatrics*, 14(3), e189–e193. https://doi.org/10.1542/hpeds.2023-007515

McMillan, W. (2023). Theory in health professions education research: The importance of worldview. In J. Cleland & S. J. Durning (Eds.), *Researching medical education* (pp. 15–23). Wiley. https://doi.org/10.1002/9781119839446.ch2

Applying Crotty's definitions and reflecting on his descriptions, I found I ascribed to a mixed realist/relativist ontology. As I described above, I had unconsciously adopted the prevailing post-positivist scientific worldview—that a consistent objective reality exists and can be discovered, with scope for refinement of what we know as new evidence comes to light (Young & Ryan, 2020). I recognised that I still sympathised with this view, in that there is a "world always already there" (Heidegger, 1962, as cited in Crotty, 1998, p. 10), and objects in it have a "being independent of our own volition" (Berger & Luckmann, 1966, p. 13). In a social sense, however, I realised that we each perceive this consistent reality differently and that our perception is constructed based on our engagement with the world. We ascribe meaning to the objects we interact with.

Moreover, our social world encompasses more than our interpretations of physical objects. Social "objects", or constructs, such as love and marriage, or supervision and wellbeing, have no physical form, yet they exist. Constructs have cultural and historical determinants and characteristics, and our previous experiences and our interactions with those around us influence our individual interpretations of them. They are, on the one hand, personal, and on the other, shared: "In the human sciences, entities are matters of definition and convention; they exist only in the minds of the persons contemplating them" (Lincoln & Guba, 2013, p. 39).

When I reflected on my epistemological beliefs, I realised they had shifted with my experience as a teacher. My own medical education had reinforced my belief that knowledge was a constant—that there are "facts" that you learn, which are the same for everyone. Through empirical research, we ascertained these facts as a community, generating and testing hypotheses to build an ever-improving description of the world. However, as a teacher, I had come to appreciate that each learner makes their own sense of what I teach or what they experience. Knowledge is not the same for everyone. I had come to believe that learners incorporate new learning that is idiosyncratic, based on their prior experience and cultural context. This understanding aligned with Crotty's (1998) description of constructionist epistemology. My reflection on my own learning as a researcher reinforced these views. I could see that I was constantly making meaning of what I experienced myself and that my embeddedness in the social world influenced my research practice.

In describing theoretical perspectives, Crotty (1998) says there are "different ways of viewing the world ... [that] shape different ways of researching the world" (p. 66). These perspectives sit below epistemology in Crotty's framework. My research outlook aligned with the interpretivist perspective. Interpretivist research "looks for culturally derived and historically situated interpretations of the social life-world" (Crotty, 1998, p. 67). The aim is increased understanding and "deconstructions of the way in which we construct realities" (Charmaz, 2014, p. 232). Interpretivism aligns with constructionist epistemology and allows for multiple viewpoints, with the researcher seeking the participants' perspectives and co-construction of meaning in the analysis (Crotty, 1998). The researcher, thus, has the dual task of viewing the phenomenon from the participants' viewpoint and interpreting why they acted as they did. Additionally, the researcher is the data collection instrument in the research, responsible for developing relationships, gaining trust and accessing information from participants (Bhattacherjee, 2012). The researcher is, thus, central to the research process, necessitating reflexivity, or consideration of how your own views and sociocultural context interact with your data gathering and interpretation (Denniston, 2023). In interpretivism, the dialogue between our preconceptions and prejudices and the novel interpretations we make produces new understandings (Schwandt, 2000).

So, I discovered I had a realist/relativist ontology, a constructionist epistemology and an interpretivist theoretical perspective. I now had an answer to those annoying questions, a way to frame my confirmation document and a better understanding of my own positioning and how I might go about my research.

How did my position evolve?

Putting it into practice

I found this initial philosophical positioning helpful. It provided a structure to align my initial research approach. I started my research by formulating research questions and making methodological choices for my initial empirical work that aligned with this philosophical stance. My research questions were open and exploratory—"How?" questions, looking to understand what was happening in context. My methodological choices reflected my constructionist epistemology and interpretivist theoretical perspective, viewing participants as co-creators of data with the researcher and the knowledge produced as specific to the people involved and the context in which the research takes place. In my confirmation documents, I described how I aimed to incorporate the "complexity and subjectivity of lived experience" (Ravitch & Carl, 2016, Situating qualitative research, para. 4) and present multiple perspectives, while acknowledging the sociocultural values and voices of both the researcher and participants (Crotty, 1998; Schwandt, 2000).

My methods followed. For example, I chose to interview participants and adopted an understanding of interviewing as an active process of producing new knowledge based in the relationship between the interviewee and interviewer (Kvale & Brinkmann, 2009). The aim was to obtain detailed responses focused on exploring participants' actual experiences and situations in depth (Charmaz, 2014). I was not just concerned with unearthing facts but with interpreting meaning, and hence, I would summarise and ask questions to clarify, confirm, extend or occasionally challenge what was said (Kvale & Brinkmann, 2009).

An intriguing aspect of aligning my research practice with my philosophical stance was noting occasional "backsliding", where engrained positivist ideas might unconsciously seep into my work. For example, during analysis, I discovered that I was inclined to attend more to ideas based on frequency rather than salience. Similarly, I found I tended to look for commonalities rather than represent the diversity of participant perspectives. Instances like these emphasised to me the importance of reflection and collaboration in the research process.

Theoretical framing

My philosophical stance did not remain static though, as I continued to reflect as my research progressed. In parallel with my empirical work, I was developing my thesis' theoretical framing. I had selected sociocultural theories of learning to frame my analysis

and practically extend my philosophical stance. While at times I referred to sociocultural theories more broadly, Lave and Wenger's concepts of situated learning and communities of practice (Lave & Wenger, 1991; Wenger, 1998) and Billett's concepts of affordances and engagement (Billett, 1996, 2016) provided the primary theoretical framing for my thesis. As I explored these theories of learning, my thinking began to spill over into my thinking about my philosophical position. I came to reflect further on my philosophical stance and how it might interact with my theoretical framing.

To provide a base to illustrate how this interaction happened, I will summarise Lave and Wenger's contribution to my theoretical framing. They emphasise that learning is not an independent entity but is always integrated within a social context (Lave & Wenger, 1991). Moreover, learning is not one type of activity among many but an integral part of all activity. They view learning as an "evolving continuously renewed set of relations", in keeping with Bourdieu's work on social practice (Lave & Wenger, 1991, p. 50). Learning, in this sense, stems from ongoing interaction between the learner, the world and practice. It "involves the whole person" (Lave & Wenger, 1991, p. 53), intertwining multiple aspects of identity formation, growth in knowledge and social integration. They describe learning as a trajectory, or a "constant becoming" (Wenger, 1998, p. 154). In situated learning, knowledge is "located in relations among practitioners, their practice, and the social organisation and political economy of communities of practice" (Lave & Wenger, 1991, p. 122).

I noted that the nouns used in describing sociocultural learning—activity, interaction, participation—all emphasise the connectedness of the learner to the social world. I sensed an incongruence with the distinct separation of the person and the world that underpinned the discussions of ontology I have described above. Also, the concept that knowledge could reside in relations, or "between" people, rather than in the mind, was thought-provoking. I wondered what that meant for how we thought of knowledge and how we obtain it. The idea that learning involves the whole person and is integral to all activity gives learning both an epistemological and an ontological perspective—learning is how we come to know and to be who and what we are. I realised I was on my own learning trajectory in determining my philosophical stance and how to use it to guide my research. I decided to examine the work of writers whose theories I was using to frame my research to see if I could uncover their philosophical positioning from how they described their research and thinking. While there were instances where Lave, Wenger, Billett and others made statements or summarised their beliefs in their published works, I also reflected on what beliefs I thought their work exemplified. Through this process, I discovered what I considered to be a shared debt to the work of Vygotsky and began to explore his work.

Philosophical stance 2.0

The resulting ontological and epistemological stance underlying my thesis is, thus, primarily derived from Vygotsky's philosophy, supplemented by complementary work

from Billett, Lave & Wenger and others (Billett, 1996; Billett, 2010; Lave & Wenger, 1991; Liu & Matthews, 2005; Stetsenko, 2017; Vygotsky, 1978, 1997a, 1997b; Wenger, 1998). In the following paragraphs, I will elaborate my understanding of the underlying philosophical position I came to adopt.

Vygotsky questioned how we come to be who we are. He believed that individuals both come to know and come to be through our relations with the world. In this view, our relationship with the world constitutes our very mode of existence, and the individual and the environment form a holistic whole. An individual is always a part of the social whole and cannot be separated from it. We do not begin as isolated entities that then interact, instead we only come to be from interacting (Vygotsky, 1997b; Wenger, 1998). We become both socialised individuals and autonomous selves through our interactions with others. In reading Vygotsky, I realised that my previous reading about ontology and epistemology had assumed a separation between me and the world; I had been seeking an answer to how I view and come to know reality as if I were outside it. Vygotsky saw this perspective as an unproven assumption of empiricism (Vygotsky, 1997a). Instead, his idea that our "being" is inextricably linked to the social world made sense, and this idea, referred to as "holism" (Stetsenko, 2017), changed my thinking on ontology and epistemology.

What about realism and the physical world? In emphasising his inherently social and relational ontology, Vygotsky still considered our biologically endowed potential and limitations. He saw biology as arising from prior environmental influences (Stetsenko, 2017). Rather than separate or interacting influences, Vygotsky saw the social and biological as "fused together" as parts of the same holistic whole (Vygotsky, 1997b, p. 26). I think the way Billett (2009) has articulated this is most salient. He expresses the need to account for the influence of biology and the natural world on the social through the notion of "brute facts" (p. 32). These brute facts include physical ones, such as time, distance and the natural environment, as well as biological facts, such as ageing, disability, hunger and the need for shelter. In keeping with Vygotsky's holism, these factors are inseparably enmeshed with the social world, providing the stimulus for developing cultural practices and tools that mitigate or manage their effects (Billett, 2009).

What about epistemology? Vygotsky also had a holistic view of the mind and the body, with thought and action inseparable: "Mind is just inhibited movement" (Vygotsky, 1997a, p. 39). This rejection of a separate mind was also at odds with my prior reading. In Vygotsky's way of thinking, psychological processes and knowledge construction arise directly from collaborative activity in practice rather than from perceptions or abstractions of reality (Vygotsky, 1978). Vygotsky believed our capacity to think and act emerges from our relationships with the social world; intra-psychological processes arise from the internalisation of inter-psychological processes (Billett, 1996; Vygotsky, 1978). That is, knowledge does not arise internally in the mind but from outside of us. This process of internalisation, whereby the inter-psychologic begets the intra-psychologic, is

viewed as more than a simple transfer, however. Knowledge is transformed through active participation in a unique collaborative interaction. In this sense, individual knowledge is a product of the learner's agency, idiosyncratic historical experiences and prior learning interacting with the particular social, cultural and historical circumstances of the moment (Billett, 1998). Knowledge is inherently personal, given the unique nature of any such interaction and the distinctiveness of an individual's history. Such interaction goes both ways; we share our ways of understanding the world with others. Shared understanding does not arise from internalising some singular "true" knowledge. Instead, shared understanding arises from further refinement of our initial idiosyncratic understanding via social interaction and shared experience in practice. Even in solitary reflection, we always draw upon resources derived from our historic and continuing interaction with the social and material world.

A key feature of Vygotsky's philosophy that linked my philosophical stance and theoretical framing to my research topic is the role that activity and practice play (Stetsenko, 2017). Rather than simply being in the world, it is through active engagement and participation in activity that we relate to the world. To act in the world is to effect change and be changed (Billett, 1996). Learning is thus reciprocal in that the learner and the environment are both subsequently different than before (Billett, 2001). Practices—culturally and historically evolved regularities of collaborative activity—are simultaneously continuous with previous history and yet potentially transformed as individuals enact them. The contrasting rigidity and permanence of practice, on the one hand, yet malleability and evolution on the other, played a fundamental role in my understanding of my research context.

Practically, this understanding of practice helped me when I needed to expand my theoretical framing to incorporate power as my research progressed. I adopted a conception of power based on Foucault's (1982) view that power is relational and "rooted in the system of social networks" (p. 224). Foucault used the term "capillary power" to describe the concept of power as enacted in everyday social exchanges (Bleakley et al., 2011). Power at this level may be viewed as structural, or a property of a system, yet this structural power is "elaborated, transformed, (and) organized" as actors adjust to their specific situation (Foucault, 1982, p. 224). In this understanding, there is an obvious parallel with my underlying philosophical stance in the way actors are empowered or constrained by the roles they are playing, while this structural power relies on individuals enacting the social practices that establish those structures (Kemmis, 2019). Hence, in the face of many diverse understandings of power available in the literature, I could focus on those theories that aligned with my philosophical stance and maintain the congruence of my thesis.

Conclusion

Each PhD journey is unique. It is important to acknowledge that PhD studies and students are diverse and that my experience is one among many. When exposed to the diversity of worldviews within HPE, some students will have more discomfort reconciling their previous attachment to a positivist or post-positivist philosophical stance. I imagine others becoming frustrated with the uncertainty that the breadth of options and the confusing terminology present. I was fortunate that I was ready to change my thinking and embrace the challenge as an opportunity. I was also supported by my supervisors, who helped and encouraged me. However, some students will be less interested in exploring their philosophical stance in depth, preferring to take a more functional approach and only delineate their philosophical stance sufficiently to ensure their research elements align. The work developing my philosophical stance enhanced the coherence of my research design, practice and reporting and, hopefully, helps readers evaluate my work.

Postscript

When I reflect on coming to a philosophical stance, I view my learning of epistemology and ontology as growth arising from my participation in the world. Developing an internalised underlying ontology and epistemology for my research relied on my engagement with their conceptions in our shared socio-cultural milieu. Through direct interaction with other scholars or indirect access via published works, I have incorporated what I have read and learnt from others with my own experience and prior learning to develop a personal understanding. As can be seen from the description above, this development was an iterative part of the research process; engaging with my theoretical framing and applying it in my analysis prompted me to reflect further upon my positioning, which then continued to inform my research practice.

The stance I came to in my thesis will not be the final word, and my philosophical stance will continue to evolve as I develop further as a researcher. Also, I still have unresolved questions about how my philosophical stance relates to my research. Firstly, is this philosophical stance intrinsic to me or only to my current research? Sometimes researchers describe themselves by their philosophical stance. For example, in their guide to selecting a worldview, Brown and Duenas (2020) identify themselves as an "interpretivist" and "pragmatist". They imply that the underlying philosophical positions are intrinsic to them as persons. Alternatively, Varpio and Macleod (2020) acknowledge that researchers may be accustomed to a particular philosophical stance. However, they encourage HPE researchers to be "paradigmatically nimble" and use other paradigms to enrich research outcomes (p. 688). Moving further from the idea of an intrinsic worldview, other researchers talk of selecting a worldview based on alignment with the research topic or the question you want to answer (Chilisa & Kawulich, 2012). From this perspective, the worldview one adopts may be a situated response to address a particular problem in a particular context (Kinnear et al., 2024). For the moment, I feel attached to my

philosophical stance and anticipate I would feel inauthentic adopting another, but I will keep these differing views in mind.

My second unresolved question on how my philosophical stance relates to my research stems from my collaboration with others. We do not do research alone; it is a team effort. If my philosophical stance is so personal, how do I accommodate this in my research collaborations? Since everyone else in the research team will have their own worldview, this may be where I can develop my own "paradigmatic nimbleness" (Varpio & MacLeod, 2020, p. 688). Differing worldviews within a research team provide an opportunity for collective reflexivity (Denniston, 2023). At a minimum, discussing together what worldview will underpin a particular project would seem sensible to ensure cohesion in the research design and its application (Kinnear et al., 2024). Alternatively, just as we may emphasise the diversity of views and experiences in our sample, so I think we might choose to consider how different perspectives within the research team may enrich our analysis. Building on Varpio and Macleod's (2020) premise that diverse worldviews within the research team can be generative, the team could then go on to explain to readers how the different perspectives enhanced the research process and outcomes.

Despite any initial apprehension, I am now grateful for the opportunity my doctoral studies provided me to reflect on the diverse ways we may view the world, and my own worldview. The PhD experience is often called a journey, and the evolution of my philosophical stance was an integral part of mine.

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