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Exploring unknowingness in the DBA programme: Possibilities for developing an 'attitude of wisdom'

ABSTRACT

Unknowingness is an integral aspect of organisational life. Yet simultaneously this is often marginalised and silenced leaving organisations and their managers unintentionally vulnerable. The cultivation of what Weick (2001a) terms an 'attitude of wisdom' whose essence lies in knowing that one does not know, provides one way forward. However, challenges remain as to how this might be achieved. I suggest that management education provides one promising but so far overlooked space where managers can be helped to recognise and explore their unknowingness. In this paper, I focus on the experiences of DBA students who were embarking on journeys to become 'researching professionals'. Drawing on an analysis of 30 students' reflective journals, I offer two contributions. First, I identify the ways in which learning to research in this context helps students to recognise and engage with their unknowingness: through understanding the limits of *what*, *how* and *when* they know. I therefore outline one proposal for developing Weick's (2001a) 'attitude of wisdom' and in so doing, also advance a more nuanced understanding of this concept. Second, I illustrate how this learning informs managers' everyday work by leveraging space for inquiry with others to present possibilities for more considered and inclusive action.

Keywords: attitude of wisdom; DBA; management education; reflective journals; research; unknowingness; doubt

INTRODUCTION

If we accept that our world is largely unknowable and unpredictable (Weick, 2001b), then unknowing and its embodied sensation of doubt become integral aspects of organisational life (French and Simpson, 1999, Weick, 2001a). Unknowing is understood as "a realisation of inadequacy to anything approaching full and comprehensive understanding" (Zembylas, 2005: 142). Yet at the same time unknowingness is often marginalised and silenced leaving organisations and their managers unintentionally vulnerable (Corlett et al., 2019; French, 2001; Hay, 2014). For example, the repression of unknowingness has been implicated in business scandals and crises where organisational members failed to attend to doubts about risky strategies, instead upholding a false, overconfident knowing (Knights and McCabe, 2015; Nonaka et al., 2014). The problems of avoiding unknowingness are thus significant and scholars have called for its urgent exploration (Allen, 2017; Crossman and Doshi, 2015).

The cultivation of what Weick (2001a) has termed an 'attitude of wisdom' whose essence lies in knowing that one does *not* know, provides one potential way forward. For Weick (2001a), the realisation of the limits of our knowing underscore the salience of a balancing of knowing *and* doubting to provide for wise action to enlarge future possibilities. Yet Weick (2001a) and the problems outlined above, suggest that such an attitude is rarely found. This implies that challenges remain as to how this might be developed.

In this paper, I suggest that management education offers one promising space where managers can explore their unknowingness to begin to develop Weick's 'attitude of wisdom'. This stands in contrast to educators' current collusion in the silencing of unknowingness (Hay, 2014; Raab, 1997). Here, I focus on a particular space - the Doctor of Business Administration (DBA) programme – which aims to develop 'researching professionals' (Bareham et al., 2000) and, which to date, has received scant empirical attention (Banerjee and Morley, 2013). I show that

it provides one important learning space where discussions of unknowingness are especially apposite. As we will see, DBA students are typically highly experienced and knowledgeable senior managers who come face to face with their unknowingness as they learn to research, since as Locke et al. (2008) contend, it is an essential part of the research process.

Drawing on an analysis of 30 DBA students' reflective journals submitted as part of the final assessment on a UK DBA programme which provides my focus, I offer two contributions. First, I contribute to understandings of management education by highlighting the often-overlooked ways in which learning to research in the DBA context presents opportunities to help managers to begin to recognise and to engage with their unknowingness: through understanding the limits of *what*, *how* and *when* they know. I therefore outline one proposal for developing Weick's (2001a) 'attitude of wisdom' and in doing so, also theoretically advance a more nuanced understanding of this concept. Second, I also then highlight the ways in which this learning informs managers' everyday work by leveraging space for inquiry with others to provide possibilities for more considered and inclusive action.

My paper is structured as follows. I begin by outlining how unknowing has been approached in management and organisation studies before exploring why this is an important but often neglected aspect of management practice. I then consider how management education at a general level provides opportunities to help managers to recognise and explore their unknowingness, before examining the special opportunities that learning to research in the DBA context provides. I next outline the context of this study- a UK DBA programme -before describing the diary method utilised. I then present my analysis to empirically illustrate the ways in which this DBA programme allows students to begin to recognise and engage with their unknowingness as they learn to research, along with the ways in which this informs their everyday management practice. Finally, I present my discussion and implications for management educators.

UNKNOWING IN MANAGEMENT AND ORGANISATION STUDIES

What we know is always in relation to what we do not know, yet our unknowingness has received limited attention in management and organisation studies (Allen, 2017; Bakken and Wiik, 2018). There are, however, pockets of work which engage with facets of our unknowingness including studies of not knowing (Crossman and Doshi, 2015; Raab. 1997); ignorance (Bakken and Wiik, 2018; Roberts, 2012; Schaefer, 2019); negative capability (French, 2001; Saggurthi and Thakur, 2016; Simpson and French, 2006) and unknowing (Allen, 2017). While there are overlaps in these areas, with terms sometimes being used interchangeably, my focus is on unknowing. A focus on unknowing explicitly recognises "the perpetual impossibility of individually knowing. This is distinctive from understanding a momentary state of *not-knowing*, or temporary ignorance, that can be overcome to achieve a *full* understanding of the situation or issue in focus" (Allen, 2017: 126). This stance foregrounds a dynamic understanding of knowing since an acceptance of the limits of individual knowing underlines the ongoing work involved in efforts to know. Living with the struggles of not knowing therefore becomes a permanent feature of existence.

The struggles of our individual knowing are consistent with a socially emergent ontological position. This recognises that we create our social and organisational realities in our everyday interactions and conversations *with others* on an *ongoing* basis (Chia, 1999; Cunliffe, 2008). The individual knower is decentred and knowing is understood as emerging collectively (Allen, 2017). Crucially, this highlights the limits of our knowing in three important ways. First, the decentring of the individual highlights that the perspective of the individual is necessarily partial since what one knows is not exhaustive of what could be known (Weick, 2001a). Indeed, notions of bounded rationality (Simon, 1972) underline that there is far more information available than one can ever know. Further, this limitation is amplified in the contemporary 'knowledge economy' where sources of information continue to expand (Roberts and

Armitage, 2008). This foregrounds the notion of 'extracted cues' (Weick, 1995) and hence the selectivity of our individual knowing, raising questions of "what do we see and not see?" (Bakken and Wiik, 2018: 1116). Second, understanding knowing as a relational endeavour necessarily means that we draw upon others' perspectives and understandings. For Weick (1995) this introduces ambiguity since multiple interpretations are possible causing confusion in how we know. Third, recognising the emergent and hence, uncertain nature of reality (Chia, 1999), highlights the limits of our ability to know the future in advance (McCabe, 2016). Given this understanding then, consistent with French and Simpson (1999: 218, their emphasis):

"If we are honest with ourselves, it really is true that much of the time *we actually do not know what we are doing"*.

Furthermore, living with our pervasive unknowingness is a disturbing and uncomfortable challenge (Allen, 2017). This is to recognise the embodied aspects of unknowing- the associated sensations felt in our bodies. The literature consistently highlights that the living sensation of doubt is an integral felt aspect of unknowing (French, 2001; Locke et al., 2008; Saggurthi and Thakur, 2016; Weick, 2001b). Doubt is experienced as an uneasiness and unsettledness (Locke et al., 2008) which potentially also invites allied feelings of anxiety (Allen, 2017; Raab, 1997), confusion (French and Simpson, 2003; Weick, 2001a) and uncertainty (Saggurthi and Thakur, 2016; Simpson and French, 2006) that the literature also associates with unknowingness. Yet while doubt and its allied feelings of disturbance are potentially threatening, crucially, they are also simultaneously generative as they signal a need to reconsider our ways of understanding and therefore stimulate inquiry (Locke et al., 2008).

It is therefore important that in living with the enduring impossibility of individually knowing, serious attention is given to doubting. The importance of doubting in our efforts to know, is a central facet of Weick's (2001a) notion of an 'attitude of wisdom'. For Weick (2001a: 365)

drawing on Meacham (1990), the essence of wisdom is precisely in "knowing that one does not know, in the appreciation that knowledge is fallible, in the balance between knowing and doubting". In this scheme, wisdom is therefore not associated with specific knowledge but rather an attitude towards knowing. In recognising that much remains unknown and attending to doubts, an overconfident knowing is avoided. However, simultaneously, to avoid an overly cautious knowing, it is also important that attention to doubting does not become overwhelming. In light of unknowing, to be wise then, is an effort "to know without excessive confidence or excessive cautiousness" (Weick, 2001a: 365). An attitude of wisdom then provides a lens which speaks to the dynamics of living with our unknowingness, and as we will shortly see, is consistent with managers' accounts presented later. However, as Weick (2001a) contends, this attitude is nevertheless rarely found in management practice and instead, an overconfident knowing persists.

UNKNOWING IN MANAGEMENT PRACTICE

The rarity of an attitude of wisdom relates to organisation structures and cultures which make it difficult to acknowledge unknowing and doubt. Structurally, organisational designs work to privilege action over reflection and serve to reinforce existing management perspectives (Weick, 2001a). Culturally, there is an assumption that there is something wrong with admitting the limits of our knowing (Simpson and French, 2006). This relates to expectations that those in positions of authority should know everything (Goffman, 1967) and as such, where managers admit to the limits of their knowing and attend to their doubts, they are likely to be labelled as incompetent (Roberts, 2012). Unknowing "becomes not only unacceptable, but also shameful" (Saggurthi and Thakur, 2016: 185). It is understandable then that managers may well be unable and reluctant to engage with their unknowingness (Crossman and Doshi, 2015).

However, this type of response is problematic because it promotes an overconfident knowing which offers a false sense of mastery that is out of touch with the complexities of lived realities. Ultimately this can result in 'self-reinforcing stupidity' (Alvesson and Spicer, 2012) that leaves no space for inquiry and improvements (Saggurthi and Thakur, 2016). As Weick (2001a: 371) suggests, a response which ignores unknowingness 'mistakes arrogance for good management' and leaves organisations and their managers *unintentionally* vulnerable since they are open to attack. Paradoxically, embracing unknowingness leaves organisations and their managers *intentionally* vulnerable, yet simultaneously capable. As Cortlett et al. (2019) contend, vulnerability takes on a different meaning when it is recognised, since it provides strength through an openness to inquiry. It is therefore important that unknowing is accorded a legitimate place in organisations where "one acknowledges its significance for social and individual action" (Bakken and Wiik, 2018:1111). Given the difficulties of doing so in the organisational context, I suggest that management education provides one place where managers can be helped to begin to recognise and explore their unknowingness to provide possibilities for developing an attitude of wisdom.

UNKNOWING IN MANAGEMENT EDUCATION

Management education provides an appropriate place where unknowingness can be recognised and explored since as French and Simpson (1999) argue, learning happens when we work on the edge between knowing and not knowing. Indeed, Raab (1997:171) contends that "learning and growth occur more in an acknowledgement of not knowing than knowing" and suggests learning can be conceptualised as 'the struggle of not knowing'. Consistent with the focus on unknowing, not knowing is then a perpetual feature of the management classroom. Crucially, it is suggested that the management classroom provides a relatively 'safe' space (Petriglieri and Petriglieri, 2010) where this unknowingness can be explicitly explored. As Ford et al.

(2010: 75) observe, the management classroom offers a space where "super-human façade" associated with the all-knowing manager "is allowed to slip".

Yet as Hay (2014) and Raab (1997) have argued, management education has often tended to collude in the silencing of managers' unknowingness. Traditional pedagogies which encompass a banking approach to learning where the student is thought of as an empty vessel waiting to be filled with the tutor's knowledge (Raelin, 2009), downplay students' unknowingness since "all intelligence and responsibility is projected on to the teacher… whose *job* it is to know" (Raab, 1997:167). Moreover, they also downplay faculty's unknowingness too since there is an assumption that faculty can somehow escape the systemic reality of unknowing described earlier. In traditional approaches then, Raab (1997) contends that students' and faculty's unknowingness is handled through the teacher assuming an illusory role of an 'expert in knowing' which allows both to avoid the discomfort that unknowing unleashes. Moreover, she suggests that this limits possibilities for learning.

To enlarge possibilities for learning and recognising the perpetual impossibility of the teacher's knowing, Raab (1997:162) advocates a move towards the teacher assuming a role as 'an expert in not knowing'. The teacher's role is "not 'to know' but to help [students] confront and explore their not knowing about a particular problem or situation, so as to learn afresh". She argues that teaching "is not about reassurance" but rather "about helping the…student face the deeper and seemingly irrational fears not knowing can generate" (Raab, 1997: 168). Ultimately, this works to advance "a different kind of expertise, an expertise in not knowing" (p.175). This 'expertise', which on one level appears oxymoronic, resonates with Weick's (2001a) attitude of wisdom as it relates to the capacity to live with unknowingness, including its uncomfortable embodied aspects, to enhance students' ability "to make wise and courageous choices" (Raab, 1997: 166).

While accepting the inevitability of some power imbalance (Ford and Harding, 2007), this move implies less dependency of students on faculty alongside a 'decentring of the classroom'. This underlines that "faculty and student stand on the same epistemologic ground" (Dehler et al., 2001: 502) and together embark on journeys toward joint exploration and learning (Lips-Wiersma and Allen, 2018). Yet the challenges of this move have also been noted, for example, Iszatt-White et al. (2017) and Sinclair, (2007) highlight the considerable discomfort experienced by both students and faculty. This suggests the need to carefully identify spaces in management education where students and faculty may be more receptive to this approach.

Learning to research on the DBA: possibilities for developing an attitude of wisdom

I propose that DBA programmes with their focus on developing 'researching professionals' provide one such space. Firstly, learning to research in the DBA context resonates strongly with notions of joint exploration described above since a central aspect is the bringing together of academic *and* practitioner perspectives in a process of social inquiry (Van de Ven, 2007). This potentially then mitigates some issues of power imbalance providing space to explore unknowingness. Secondly, research is one area where faculty are likely to have already developed their own expertise in unknowingness. As Humphreys (2008:1) observes, research is fraught with unknowing since it is rarely linear or straightforward and involves numerous "false starts and fruitless investigative paths which continue to frustrate *all* of us". Yet, this is typically downplayed. For example, Locke et al. (2008: 916) highlight that faculty's embodied experiences with unknowingness in the form of doubt are relegated "to the crevices of our papers, saving [their] fuller articulation for only the most informal tellings". Voicing these struggles then might facilitate faculty's shift towards assuming roles of 'experts in not knowing'. Moreover, I suggest that this provides opportunities to develop Weick's (2001a) attitude of wisdom in our students, by granting them permission to likewise engage with their

unknowingness as they learn to research. As we will shortly see, the research process offers rich but so far overlooked opportunities for learning through the experience of unknowingness.

Against this background, I provide an empirical account of the experiences of senior managers who were learning to research on a UK DBA programme. I empirically illustrate the ways in which students come face to face with their unknowingness as they engage with the research process and highlight the ways in which this also informs their everyday work as managers. I now turn to describe the wider DBA context alongside the specific facets of the DBA programme which provides my focus before outlining my research approach.

DBA PROGRAMMES

DBA programmes notably emerged in Australia and the UK in the 1990s but are also found in the US and across Europe (Banerjee and Morley, 2013). In the UK, they have grown steadily since (Mellors-Bourne et al., 2016) and are offered by 37% of universities (Banerjee and Morley, 2013). The DBA was one of several Professional Doctorates which developed in response to a need to provide an alternative to the PhD and to serve careers outside of academia (Bareham et al., 2000). Indeed, Bareham et al (2000) suggests that DBAs provide research-based career development for senior professionals in management. Students typically possess significant managerial experience as well as holding a Masters qualification. In contrast to the PhD with its focus on developing 'professional researchers', the DBA aims to develop 'researching professionals' (Bareham et al., 2000), and emphasizes the enhancement of professional practice by promoting reflection alongside developing knowledge contributions.

The DBA is typically a part time offering, completed over 3-6 years (Bourner et al., 2001). While some variance is found, training in areas such as research design skills, research philosophy and methodology is provided alongside the appointment of a supervisory team.

Assessment usually occurs throughout the programme via specific documents with later documents assessed through a viva voce examination (Ruggeri-Stevens et al., 2001).

The DBA Programme of focus here

The DBA programme of focus here was developed in 1998 and now has over 170 graduates. It is a part-time offering, typically completed in 3-4 years but can be extended up to 8 years to accommodate varying circumstances. Students are highly experienced senior practitioners working in a variety of occupational areas across the globe. The DBA is structured around six documents, submitted at spaced intervals over the programme's duration. The documents consist of a research proposal (Document 1), literature review (Document 2), two empirical studies, (Documents 3 and 4, one qualitative and one quantitative study which serve as 'apprentice' pieces of research), and a final thesis (Document 5, informed by the first four documents and utilising a research approach of the students' own choice), together with a reflective piece on personal and professional development (Document 6) which draws upon a diary which students are required to begin at the programme's outset. The first four documents are assessed internally, and the final two are assessed externally via a viva voce examination.

Each document is supported by a 2-4 days' workshop which is led by research active faculty who are qualified to doctoral level. The entire cohort, typically around 10-15 students are invited to attend. The workshops are loosely structured and highly interactive where the delivered content stimulates student questions, comments and discussions in relation to their own areas of research. The workshops are thus consistent with the notion of the decentred classroom where faculty and student perspectives are equally regarded. The content provided relates to processes involved in the various stages of undertaking research allied to the six documents but is always informed by faculty's own experiences of undertaking research. This has a particular emphasis on taking students 'behind the scenes' and sharing their own research

struggles which facilitates an ‘expert in not knowing’ stance (Raab, 1997). The workshops also include numerous opportunities for informal conversations between faculty and students at lunch and coffee breaks. In addition to these workshops, students are allocated 2 academic supervisors and self-assign to an action learning set comprising approximately 4-6 students usually dictated by geographical considerations. These learning sets meet in person while attending workshops and virtually, outside of the workshops, to suit set demands.

RESEARCH APPROACH

Empirical Materials and Research Participants

I draw upon the experiences of students enrolled on the DBA programme detailed above. I have been heavily involved with teaching, supervision and examination on the programme for many years and have repeatedly observed examples of students grappling with their unknowingness and, in particular, as reported by students’ reflective accounts (Document 6) submitted as part of their final assessment. I was therefore aware of the richness of these accounts and hence, sought to systematically analyse these. With the permission of the students, the study draws upon 30 reflective accounts selected at random but also ensuring the inclusion of graduates across a nine-year period to capture student experiences of the programme over time. The sample was comprised of 23 males and 7 females from a variety of countries including the UK, Republic of Ireland, USA, South Africa, Greece and Portugal. This composition reflects the student mix that is typically found, and indeed continues to be found on the current programme. The students were all highly experienced practitioners holding senior management positions in private and public sector organisations, spanning sectors such as banking and finance, retail, information technology and education. They are broadly noted as being over 30 years old and are simply referred to by a number later when offering illustrative quotes, in order to preserve the anonymity that was promised to them.

Diary Method

The final reflective account submitted for assessment 'rested' on a diary that students begin at the start of their DBA. Consistent with methodological understandings of diaries, a regular record of personal observations and experiences relating to their progress throughout their studies is kept (Travers, 2011). Students are instructed to record events, thoughts and incidents that appear important to them, and as close to the time that they occur as possible (Denzin, 1989). Further guidance from faculty is minimal. Hence, they maintain qualitative forms of diaries which are of an open and unstructured nature and which privilege their own words (Ohly et al., 2010). At the end of the programme, students review and draw on these diaries to produce the final critical reflection of their development. Indeed, they often reproduced quotes from their original diaries in their final reflective piece. On one broad level then, such diaries can be seen to meet the interpretivist position which seeks "to understand the complex world of lived experience from the point of view of those who live it" (Schwandt, 1994: 118).

However, I also recognise that the use of diaries potentially raises several issues. First, while students' diaries record events as close to the time of occurrence as possible, they still report experiences after the event. Second, and as has been observed by others (Balogun et al., 2003), students were often initially uncomfortable in their role as diarists. This leads to questions such as: how open and engaged were they in producing their accounts? Linked to this, I also acknowledge that students may inadvertently self-censor material and this is further complicated given that the final reflective piece is subject to formal assessment. Yet, my experience suggests that any initial discomfort faded as students became used to keeping a diary and I was often heartened by the level of self-disclosure offered. Third, in the production of their final reflections, students select according to what they deem important at the end of the journey. This post-event rationalising process may also potentially distort the account.

However, while acknowledging these issues, the students' reflective pieces provided extremely rich material which *they* deemed important, leading to their selection of key DBA experiences.

Data analysis

My analysis was informed by Strauss and Corbin's (1998) grounded theory approach where themes emerged from the students' reflective accounts. This meant that the analysis consisted of three broad stages. However, given this paper's sentiment, it is important to highlight that while these stages convey a sense of order and definitiveness, they also mask the messiness of the theorising process. As Chia (1996: 54) observes the "theorizing process is always necessarily precarious, incomplete and fragmented. We are not all-seeing gods which stand outside of what we observe so as to be able to devise a grand scheme of things." Noting this caveat then, first, I familiarised myself with the data by reading and re-reading the students' accounts. I was particularly struck by students' doubts expressed through statements of uneasiness which were interpreted as struggles with unknowingness. Inevitably but rarely acknowledged, what we notice and theorise is framed by what we bring to the materials before us (Samra-Fredericks, 2010). Here, it was the experiences of students noted earlier alongside a broad theoretical interest in unknowingness. I then began an open coding process to identify initial categories or first-order codes which captured a) the specific nature of these struggles such as the volume of literature, discussions of research philosophy and accepting flow; b) permissions of unknowing such as the research context and tutors; c) forms of learning which emerged such as recognising unknowing and valuing others' contributions. At this stage, NVivo software was used to formalise and organise the analysis. Second, I then engaged in axial or pattern coding (Strauss and Corbin, 1998) which focused on looking for relationships between the first-order codes which allowed me to assemble them into higher order themes. Informed by the structure of many of the reflective accounts which presented variations of a journey through the six DBA documents, I eventually settled on a scheme which centred on

understanding the limits of what, how and when we know. This encapsulated the key ways in which various aspects of the programme offered opportunities to learn through experiences of unknowingness. Themes of legitimising unknowing and the creation of space for inquiry with others brought together the other key aspects of the analysis.

Once initial codes and themes were in place, I turned to successive student accounts and analysed each of these to extend and confirm the emergent structure. After analysing 30 accounts, while accepting that further variation is always likely, it was felt that additional accounts would fail to add anything significantly to the current understanding. Third, as the analysis progressed, I integrated themes into overarching dimensions which when taken together, helped to deepen understandings of students' experiences (Bansal and Corley, 2012). Here, there was an explicit focus on comparing emerging themes against the literature (Alvesson and Skoldberg, 2000). For me, the students' accounts of grappling with the limits of their knowing on the DBA resonated strongly with Weick's (2001a) attitude of wisdom which foregrounds a realisation that one does not know. Weick's stance nevertheless does not abandon attempts to know but instead suggests the importance of attending to and legitimising doubts that our unknowing inevitably evokes. This more dynamic understanding of knowing was felt to capture students' subsequent discussions of how they engaged with their unknowingness in their everyday practice by working to leverage space for inquiry with others. Of course, given my own unknowing, this scheme necessarily provides a partial understanding but nevertheless when shared with current DBA students, has been found to help them make sense of their experiences. It is important to note that the detailed analysis which follows, highlights themes that were evidenced across all accounts, while also recognising that such themes were inevitably at times more detailed in some accounts.

FINDINGS

THE DBA AS A SPACE TO EXPLORE UNKNOWINGNESS

The analysis of students' accounts suggested that the DBA could be understood as a space to explore their unknowingness, as we begin to see below:

"I have accomplished a piece of research, and in the process have integrated the difficult professional experience that led to the research….My route into the DBA was charged with emotion. Confused and frustrated that no one seemed to know what they were doing (least of all me)…I took it upon myself to find some answers… 'On the one hand [the pupil's] shame at not knowing is the spur that drives her on to want to transcend her limitations and the feelings of inadequacy of ignorance threaten her. On the other hand, the only way she can overcome her state of ignorance and free herself from the shame that threatens her is by revealing her ignorance and thereby making herself vulnerable to the very feelings of shame that will attend this disclosure' (Aultman Moore, 1998, Shane, 1980). Viewed from this perspective my DBA project can be seen as a way of creating a safe space for the exploration of my ignorance, to bolster my own self efficacy." (Student 24)

This example illustrates that for some, embodied encounters with unknowingness in their everyday work provided a catalyst to enrol on the DBA, at least as made sense of retrospectively, as this student later acknowledged. Consistent with Saggurthi and Thakur (2016), a sense of shame in unknowingness is also underlined here. Yet, supporting Corlett et al. (2019), this manager acknowledges how working with this makes her intentionally vulnerable but simultaneously capable. Crucially, as she suggests, the DBA provides a space where managers might be permitted to safely engage with their unknowingness. While for others, the DBA was not necessarily originally viewed in such terms, their accounts were littered with referrals to grapples with their unknowingness. In contrast to the above example,

the analysis highlighted that at the DBA's outset, informed by previous educational and work achievements, (as well as positivist worldviews which are discussed later), most students typically reported positions of over-confident knowing, as illustrated below:

"*A strong academic record at undergraduate level and a distinction in my postgraduate diploma gave me confidence that whatever lay ahead, I could comfortably take in my stride and deliver results….Imagine my horror when I realised how different the doctoral experience would be….With my positivist hat still firmly in place, I made the assumption that questions around '[referral to subject area]' were all answerable and didn't yet anticipate what a rich and satisfying research endeavour the DBA would become.*" (Student 1)

"Somehow, over the years of building up professional and personal armour I had forgotten what it felt like to be young and uncertain. This DBA has catapulted me firmly back there, anxious, unsure of my footing and some of the time, completely convinced that I wasn't good enough to do doctoral research anyway." (Student 26)

Both comments point to the unsettling nature of the doctoral experience which strips back 'professional and personal armour' and invites students to engage with their unknowingness. For example, Student 1 notes an eventual realisation that not all questions are answerable, minimally indicating a move away from an overconfident knowing. This kind of move was further glimpsed in students' descriptions of developing their research proposals for Document 1 where they were clearly unsettled by the task that lay ahead:

"*In the beginning, my DBA felt daunting by the sheer scale of work I was undertaking. Tackling a major piece of research, for which you are solely responsible, is undeniably intimidating. Questions zipped through my mind: Where should I begin? How would I know when I had done enough? Would I ever settle on a suitable research question*?" (Student 13)

This example begins to illustrate how even in the early stages of the programme, the limits of individual knowing were exposed which invited students to work with doubt inherent to the research process (Locke et al., 2008). Initially, this was experienced as threatening but as we will see shortly, as the programme progressed, students began to recognise its generative capacity. Following on from these early encounters as the students learnt to research, there were ongoing opportunities for them to realise the inevitable limits of their knowing and to rebalance attention to doubting. In these ways, possibilities to begin to develop Weick's (2001a) rarely found attitude of wisdom were offered. As we will see next, the analysis identified three main ways in which learning to research on the DBA enabled students to explore their unknowingness: through recognising the limits of *what*, *how* and *when* we know. It is however important to acknowledge that while these categories provide a necessary analytical clarity, they are dynamic and interwoven facets of the student accounts.

Recognising the limits of *what* we know

Following the completion of the research proposal, students were challenged to produce a literature review for Document 2 which notably offered opportunities for recognising the limits of what could be known. Students often described the literature review as a 'voyage into the unknown' where materials available to them were far more expansive than they ever imagined:

"*With regard to….the Literature Review…I learnt… that there were many more sources of management theory than I ever [even as a professional] imagined…..Having access to a large number of papers in journals- through which I navigated, jumping from the correspondent references in those I'd read- opened up to me a whole new world of knowledge. It was during this voyage into the unknown that I encountered [referral to disciplinary area]. This is a relatively new discipline…[and allowed] a crucial change on my view of the world [making me less info-parochial]."* (Student 23)

We see the ways in which the student became aware of the vastness of literature available to him, particularly when engaging with journal articles. For many, these provided additional sources of knowledge which highlighted a depth and complexity of knowing that had not been encountered in their previous education. This acutely demonstrated that what one knows, even as a senior manager, is not exhaustive of what could be known (Weick, 2001a). This ostensibly gave permission to explore unknowingness, opening new avenues for exploration and which provided new ways of seeing the world. Yet at the same time, supporting Kiley and Wisker's (2009) observation, the volume of literature could also often be unsettling as illustrated below:

"*The results of the literature review were overwhelming and I soon realised that I would have to streamline the search process and sift through the results to identify the most relevant literature*." (Student 13)

Consistent with Simon's (1972) notion of bounded rationality, we see how the students' engagement with academic literature, also facilitated an awareness that there is far more information available than they could ever know, highlighting the limits of what can be known by one individual. This draws students' attention to the importance of extracted cues (Weick, 1995) and that inevitably, they make choices as to what will be deemed as 'relevant' or not, underlining the impossibility of a complete understanding. So too, as the next quote suggests, the volume of literature encountered also highlighted the precariousness of what is known:

"*I found that undertaking the literature searches could be very much a journey into uncharted territory, and sometimes the unknown, often frustrating from encounters with blind alleys, dead ends and other obstructions whilst at other times delightful, full of pleasant revelations, wonder and surprises.…As with many researchers, the more I researched and learned the more I found there was to learn and the knowledge horizon receded further and further into the distance with new research.*" (Student 20)

As concisely illustrated by Student 20, the literature search process developed an awareness of the often overlooked "dialectic in which the more one knows, the more one realises the extent of what one does not know" (Weick, 2001a: 365). Here, we sense an emerging understanding that "knowledge can be compared to the elusiveness of the White Rabbit [in Alice in Wonderland], for as we attempt to explain or control it…. it scurries away and is 'no longer to be seen' (Carroll, 2008:5)" (McCabe, 2016:963). This elusive knowing is underlined in this DBA context as students are required to update literature searches for Documents 3, 4, and 5, highlighting the ever shifting and expanding nature of knowledge. Crucially, too, through Student 20's referral to 'as with many researchers', we also glimpse that the research context permits this slipperiness of knowing.

Recognising the limits of *how* we know

Discussions of research philosophy

The slipperiness of what we know highlighted in literature searches, was further amplified for many students in their encounters with research philosophy as they prepared to embark on their empirical work for Documents 3, 4 and 5. One important aspect of this was students' consideration of epistemology- the study of knowledge and knowing- which ironically exposed students' unknowing, as seen below:

"*In approaching the documents, I always struggled to come to terms with the different methodological positions that could be applied. Especially given that the more you seemed to look, the more possible positions there were. It was comforting to hear that my supervisors, and other tutors on the DBA, had also wrestled with their own methodological positions over the years and that over time I would reach a conclusion as to what it was all about [but that this might change again later on]*." (Student 25)

This example captures the unease most students faced when exploring how we know. Here, once again there is a sense of knowing proving evasive as he explores a multitude of methodological stances. We also see the value of faculty assuming the position of Raab's (1997) 'expert in not knowing' which granted permission for students to likewise explore their unknowingness. In addition, such permission, for some, was further consolidated through discussions with peers in learning sets:

"*Our learning group had many vigorous arguments about competing positions and I find it reassuring to know that discussions about ontology go back thousands of years to Socrates and Aristotle and are likely to continue well into the future*." (Student 9)

Notably, the analysis identified that it was discussions of social constructionism, central to Document 3, which played a pivotal role in unsettling assumptions that it was possible to know the world objectively. This further foregrounded the limits of how we know:

"Changing my beliefs about reality and what there is to know caused an upset which still remains. My understanding went to a flux, when I was trying to get the picture of the role of [referral to organisational context] management activity in organisations, in relation to policies, procedures and the outcomes of this activity for learning. Having grown up with an educational system which emphasized logical positivism, my work experiences have been adherently evaluated from a similar perspective. Very fast it became clear to me that….it was not possible to know about the world objectively." (Student 10)

As illustrated above, and reflected repeatedly across the accounts, students invariably held taken for granted positivist worldviews which contend that reality is 'out there' and can be unproblematically known. Exposure to social constructionism invited a more fallible knowing and allied ongoing unease for students as they grappled with an understanding of the

significance of different perspectives in efforts to know and in so doing, were inevitably confronted with the ambiguity of their knowing:

"*[I] like things to be clear and unambiguous, for there to be no room for doubt, for the amounts presented to be clearly verifiable. In the literature review and throughout Documents 3 and 4, I followed a reflective journey concerned with the need to be more flexible, more willing to embrace new sources of data from qualitative sources*." (Student 17)

As glimpsed above, while students reported a retreat from an overconfident knowing by balancing attention to doubt, here, allied to the ambiguity of 'qualitative sources', they also sometimes reported struggles of achieving this balance and sought to minimise ambiguity:

"It was ironic that despite this [social constructionist] approach, I still ultimately sought one 'truth' for my framework- a collating of all current thinking to produce one definitive version [which.. later proved to be wrong as new information became available!]." (Student 1)

Qualitative Interviewing and Analysis

However, this confrontation with ambiguity was amplified as students collected their research data, particularly when using qualitative interviewing formats as seen next:

"*I discovered that an explanation does not only have one location, one perspective, one reality. There were multiple perspectives and multiple realities, and the positioning of the interviewee cannot be limited. I found [then] I was limited by my experience and knowledge*." (Student 13)

Interviewing, which was often a novel experience, called for students to handle multiple perspectives which allowed them to further underline the limits of how they had previously known. As outlined in this typical comment, students were challenged to question the surety of their singular understandings of their worlds and to instead cope with a plurality of views, typically drawn from others in their own organisations who often comprised the interview

sample. Crucially, this also highlighted the value of others' contributions to their knowing. Yet, we also see how students struggled to deal with the ensuing ambiguity and complexity in their collected data:

"*The closing stages of Document 5 were fraught with anxiety about what to make of the interview with the CEO…. Retrospectively (and after intense reflection), I realise that coping with complexity generated by this interview was a powerful experience that I think has lessened my fear of qualitative analysis.*" (Student 9)

Supporting Cassell (2018) who has also noted the challenges students face in managing complexity in the analytic process, this student details her intense emotional struggles of working with different interpretations of qualitative data. We see how the student, like many, was challenged by the complexity of the data which generated considerable anxiety as she came to terms with a less certain form of knowing evoked by the contributions of others. Of interest, students also reported the difficulties of capturing these struggles in their writing:

"Many times, I fell into the novice researcher's trap of getting so excited about writing that I selected data which gave a neat picture of things and ignored anything which tended to make it messy….Now I can see this was a contradiction in terms for any qualitative researcher, because the reality I was investigating was messy, and it was not my job to explain away that messiness but to attempt to present it." (Student 13)

Here, we glimpse students' challenges in resisting a simplistic knowing to instead balance attention to the ambiguity or messiness of qualitative data which foregrounds a necessarily fallible knowing. His referral to this acceptance for '*any* qualitative researcher' again underlines how the research context legitimises the limits of how one knows.

Writing Reflexively

Further, the analysis revealed that writing also encouraged students to wrestle with their own role in working with different interpretations and hence, issues of reflexivity. This involves "questioning what we, and others, might be taking for granted - what is being said and not said - and examining the impact this has or might have" (Cunliffe, 2016: 741). While reflexivity was an integral aspect of the DBA, the accounts suggested that this proved deeply unsettling:

"This process of dealing with reflexivity was not a simple one to get to grips with, nor was it free from confusion and uncertainty. I do now however feel more confident in my ability to recognise my pre-held beliefs and their origins and to be able to approach the analysis of research findings in a more impartial and critical way." (Student 25)

Consistent with Allen (2017), we see how reflexivity invited opportunities to further acknowledge the limits of how we know, here by highlighting our own taken for granted active role in this process which foregrounds a more fallible knowing. Indeed, while being an explicit assessed aspect of all six documents, grappling with the ways in which personal circumstances shaped knowing was brought into acute focus in Document 6- the reflective journal:

*"I initially questioned the role of Document 6... In fact, the self-reflective nature made me less comfortable, not only due to the public nature of the DBA documents, but also because I had been able to progress professionally and academically throughout the years without the need to reflect on matters such as learning styles, cycles and outcomes." (*Student 22)

As illustrated here, placing the self on centre stage was uncomfortable for students as it was an unusual requirement, both 'professionally and academically'. Indeed, as Samra-Fredericks (2010) notes, even academically, the 'I' is typically silenced. This requirement left students feeling somewhat exposed since this inevitably illuminates not only less certainty in how we know but also the limits of what we know. It again acknowledges the selective nature of our

knowing and raises questions of what we see and what we do not see (Allen, 2017; Weick, 1995). Further, these concerns were amplified here, since this reflective journal was formally assessed in the viva voce where expectations of knowing are heightened. This meant students faced the difficult task of presenting a confident knowing which simultaneously acknowledged the inevitable limits of their knowing.

Recognising the limits of *when* we know

The analysis suggested that as students collected empirical materials for Documents 3, 4 and 5, further challenges to their ways of knowing emerged. Here, questions of when we know seemed especially salient:

"I thought of the research… as a linear approach- clean, predictable and sequential. However, what has been discovered is that research… is rather a dynamic, complex and apparently unpredictable process." (Student 12)

Echoing Humphrey's (2008) observation that research is rarely linear, this example provides one concise illustration of how students' engagement in research highlighted that knowing is emergent (Chia, 1999) and cannot always be set out in advance. For many, this was surprising and involved an uneasy acceptance of divergence from research plans outlined in Document 1. As we see next, this learning accentuated the limits of their ability to know the future (McCabe, 2016):

"*The DBA has allowed me to better understand that you sometimes have to let the flow do its work - there is no one single road to achieve the final outcome. Ideas come and go, you write them down, ideas start getting sharpened in discussion with supervisors and learning set members, interviews challenge or widen conceptual frameworks and slowly the roadmap gets clear*." (Student 22)

Above, we glimpse students' growing acceptance of the unfolding and unpredictable 'flow' of knowing which underscores that knowledge represents "configurations that have evolved as actualities out of an infinite number of possibilities" (Nayak and Chia, 2011: 282). This again not only reinforces the slipperiness of efforts to know but also the salience of others' contributions to our knowing. Implicitly too, a permission to work with unknowing is sensed and indeed, is also reinforced by assessment criteria which invite the modification of theorising over time. Others also reiterated that the DBA permitted working with an unfolding knowing:

"*I have found it useful to see myself and my DBA work as being in that constant state of "becoming". The pressure to complete seemed to lessen when I considered the DBA as a work in progress, something that would change and evolve with the ebb and flow of time. Framing the work in this way, I have learnt how to relax a little and allow myself the time and space to learn how to be of doctoral standard.*" (Student 26)

Notably, we glimpse how this provided a sense of relief to facilitate a more confident working with the unease that unknowing evokes. Recognising the emergent and unpredictable nature of research, students came to learn that flexibility and open-mindedness were important abilities to help them cope with their unknowingness. This is illustrated below and reflects a growing ease in dealing with the unexpected which was also identified as an important aspect of learning to undertake qualitative research by Cassell (2018). In these ways, the unexpected is ostensibly less threatening as it becomes an accepted aspect of an emergent knowing:

"*As far as the process of undertaking the research projects have been concerned, flexibility is the order qualifier which determines the researcher's ability to seek opportunities, explore avenues that may turn out to be blind alleys, and to be open-minded to whatever the research findings say – even though these may not be as expected*." (Student 21)

In sum, the analysis has identified three taken for granted ways in which managers began to develop a realisation that one does not know as they learnt to research on the DBA: recognising the limits of what, how and when we know. Recognising the limits of their knowing provided possibilities for beginning to cultivate an attitude of wisdom (Weick, 2001a) by re-balancing attention to doubt and crucially, legitimising this doubt in their efforts to know. As we will see next, this had important implications for their everyday practice, as managers began to engage with their unknowingness more constructively.

ENGAGING WITH UNKNOWINGNESS IN MANAGEMENT PRACTICE

Recognising unknowing

"*I have emerged as more knowledgeable, but importantly also more aware of the limits of my knowledge.*" (Student 30)

This comment concisely illustrates how at the end of the DBA, students became aware of the simultaneous importance of knowing and not knowing. Crucially, it was an awareness of the inability to achieve a full understanding that was an especially significant and somewhat unexpected learning outcome, which was reinforced in statements highlighting how research had often generated more questions than answers. In these ways we see how, consistent with Weick's (2001a) stance, the DBA generated a wisdom not necessarily associated with specific knowledge but rather in an attitude towards knowing- that one must live with the impossibility of achieving a full understanding. As the next example underlines, this attitude helped students to constructively work with the unknowingness inherent to their everyday practice by balancing attention to doubt:

"*If I had to choose the most important thing I learned… it would be the improvement of my capacity to deal with uncertainty… the challenge is on one hand, to manage the anxiety through the capacity to tolerate ambiguity, and on the other hand, to explore rather than suppress*

tensions. The major idea behind this concept is the conviction that the future could [to a] large extent [be] created by us. In the end, it is this belief that can sustain a positive view of life…. This attitude allowed me to learn more and be more attentive to face unexpected situations. This also made me more aware of the complexity of communications with others." (Student 4)

Here, we see how the student has learnt to embrace the unsettling, embodied aspects of unknowing, interpreting these as signals to explore further. Notably, students highlighted the value of mobilising newly acquired socially emergent understandings of reality, a key aspect of this DBA, to cope with unknowingness. For example, as Student 4 suggests, an acceptance that the future cannot be known in advance but is instead created by us together, provides optimism since it implicitly foregrounds a sense of collective agency and underlines attentiveness to our interactions with others. Further, understanding the future not only as socially constructed but as emergent also facilitated working with unknowingness. As Weick (2001b) has suggested, 'being in motion' allows people to stay in touch with developing circumstances and as seen above, be more attentive to the unexpected. In addition, as illustrated next, for some, this simultaneously provided a sense of relief since a future understood as unfolding slowly is seemingly less threatening for managers and their colleagues:

"*When I convey change as something which evolves and is ongoing, it is not perceived as radical and destabilising and my more risk adverse colleagues are prepared to embrace rather than reject change*." (Student 26)

Creating space for inquiry with others

Moreover, the analysis identified specific changes to managers' behaviours arising from their revised understandings of reality, and which when taken together, leveraged space for inquiry with others 'in the face of unknowable conditions' as Student 4 begins to illustrate:

"…this requires discipline so that in the face of unknowable conditions, we do not rush into action, and conversely, as McKenzie et al. (2009, p. 219) suggested, remain openly attentive to new ideas, thoughts and possibilities without evaluation, keeping options open. We could do this if we can live out of our comfort zones. This requires also the capacity of controlling a defensive attitude, which is not easy, so that we can accept feedback, even when the remarks are not favourable. This is a precondition to learn… The challenge is to live with uncertainty but without too much stress because otherwise this is not sustainable." (Student 4)

The example is reproduced as it highlights three important facets of how students began to engage with their unknowingness in their everyday work following the DBA. Yet it is also important to state the difficulties that were faced in ensuring that this did not prove overwhelming, since as Weick (2001a) observes this results in an over cautious knowing which impedes action and is 'not sustainable' as this student notes. First, we glimpse how students facing unknowable futures, learnt the value of *pausing* and 'not rushing into action', as further underlined by Student 5:

"*Succeeding in the DBA required me to change my attitude and behaviour- to build analysis rather than react to a specific and to look for models and frameworks to assist analysis rather than seek instant solutions.*" (Student 5)

The comment suggests that students were now better able to resist the urge to react and avoid seeking 'instant solutions', thus providing space for inquiry to emerge.

Second, a related aspect of this less reactionary stance, was an *openness* to 'new ideas, thoughts and possibilities' which is important since as Weick (2001b) highlights, acknowledging unknowingness invites, rather than precludes, finding out more. As Student 6 notes below, this underscores the salience of listening and embracing multiple aspects, even though this may evoke unease from unfavourable views as Student 4 previously noted.

"*As a person, this process has absolutely changed me: now, I have learned to listen first and talk afterwards ...I now try to examine things holistically, taking into account as many aspects as possible."* (Student 6)

Third, and as implicitly glimpsed above, this openness also underscored the significance of *valuing the contributions of others* when the limits of personal knowing are acknowledged, as is further captured in the following excerpt:

"I am a lot more confident now in identifying possible approaches from my own experience (and there are more of them to choose from), but I also now recognise the need to ask others if there is another way that I am not aware of. At the start of the DBA this would have been a horrifying prospect, the fear being that I would not be able to comprehend or understand a new approach. Now, even though I know it will be difficult, I also know that I can take new thinking on board and adopt it within my own practice." (Student 25)

The example illustrates a recognition of the limits of this manager's knowing, here, that there may be other approaches that he is unaware of. Crucially, he is now able to attend to the discomfort of unknowing and ask others for help - something which he suggests would have earlier been a 'horrifying prospect'. Indeed, studies have shown that it is often difficult for managers to seek help from others when faced with their unknowingness (Hay, 2014). Yet, as the next example further highlights, the DBA encouraged managers to seek and value the support of others to deal with their unknowingness:

"*Nevertheless, the experience of doing the DBA has taught me an important lesson in humility: through it, I have learnt that conversations are not only occasions to sell things/ideas [a habit ingrained in one that has sold professional services for many years now]. Conversations, I have learnt, are also opportunities to [self-effacingly] listen to others and [humbly] allow them*

to drive the flow of ideas whenever this is likely to maximise the level of [grounded] knowledge-creation around the subject being discussed." (Student 23)

This example details how learning to research allowed managers to see how others could contribute to one's knowing in their everyday work. Notably, as illustrated earlier, the analysis suggested that undertaking qualitative interviewing helped managers to recognise the limits of their knowing, since they learnt that others could provide additional perspectives which had previously been unacknowledged. Here, we see the ways in which managers then learnt to prioritise the views of others in the flow of everyday work conversations. This not only further underlines the value of working with an emergent world framing but also explicitly suggests the benefit of mobilising a relational understanding (Cunliffe, 2008) to enlarge possibilities for knowing together. In sum, the analysis has illustrated the ways in which managers had begun to deploy an emergent attitude of wisdom (Weick, 2001a) in their everyday work. Framing the future as unfolding and as yet unknown but to be created by us together, ostensibly offered an embodied sense of relief which encouraged managers to be less reactive, more open to new possibilities, and respectful to the contributions of others. Taken together, this suggests that following their studies, managers learnt to face their unknowingness more confidently and constructively by creating space for collective inquiry.

SUMMARY DISCUSSION

My paper has sought to respond to calls for the urgent exploration of unknowing in management and organisation studies (Allen, 2017; Bakken and Wiik, 2018; Saggurthi and Thakur, 2016) which arise from the problems associated with its repression in contemporary organisational life. Against this background, I have suggested that it is now timely to provide serious attention to the cultivation of Weick's (2001a) rarely found attitude of wisdom whose essence lies in knowing that one does *not* know. Echoing Raab's (1997) proposal in this journal

which has largely been ignored, I have argued that management education provides one important space where managers can be helped to explore their unknowingness. My study has taken this proposal forward and offers an empirical consideration of the ways in which learning to research in the DBA context provides so far overlooked opportunities to help managers recognise and explore their unknowingness in the management classroom and in turn, in their everyday practice. These broad analytical points give rise to two specific contributions.

My first contribution centres on identifying three specific ways in which learning to research in the DBA context provides opportunities to develop Weick's (2001a) attitude of wisdom by re-balancing attention to doubting, foregrounding a more fallible knowing. First, the analysis has highlighted that engagement in the research process allowed opportunities for managers to recognise the limits of *what* can be known. Through engagement with the vastness of literature available to them, especially in the form of journal articles, students began to understand that even as senior managers, what one knows is not exhaustive of what could be known. This challenges the 'fallacy of centrality (if this existed I surely would have known about it, but since I don't know about it it doesn't exist)" (Weick, 2001a: 370) which contributes to the repression of doubt in organisations. Further, acknowledging that there is far more information available than was previously imagined, also helped managers to appreciate that knowing is both then selective (Simon, 1972) and precarious. Second, the analysis has also identified that learning to research also offered possibilities for managers to recognise the limits of *how* we know. Discussions of research philosophy, especially introductions to social constructionism, allied to its mobilisation in qualitative interviewing and analysis, sharpened students' attention to different interpretations of their worlds along with the significance of others' contributions to knowing. Crucially, this allowed managers to recognise the limits of an assured, solitary knowing. Moreover, wrestling with their own role in working with difference and otherness in their attempts to write reflexively further reinforced this recognition. As Richardson (1997)

notes, writing provides an important means to understand our learning. Third, the analysis draws attention to the opportunities that the research process provided for managers to acknowledge the limits of *when* we know. Engagement in the data collection and analysis process, so often unpredictable (Humphreys, 2008) helped managers to see the limits of their ability to know the future in advance and to instead develop attention to the emergent flow of knowing, accepting that oftentimes 'we know as we go'.

Taken together, the three ways in which the DBA develops a realisation that one does not know, reinforces Cassell's (2018: 119) observation that learning to research offers "additional benefits beyond the substantive content of the domain" and here, it was the research apprenticeship context that also crucially granted permission to attend to doubts that unknowing inevitably evokes. A dawning realisation that doubt was an inescapable part of the research process (Locke et al., 2008) worked to legitimise its centrality to efforts to know. This was reinforced by faculty's stance of an 'expert in not knowing' (Raab, 1997) as well as learning set discussions which offered a welcomed sense of relief for managers.

The ways in which learning to research on the DBA provides opportunities for managers to recognise and explore their unknowingness also theoretically adds to a more nuanced understanding of an attitude of wisdom. First, the work specifies three facets of its doubting dimension: doubting what, how and when. Doing so potentially enhances the mobilisation of this conceptual resource by both educators and practitioners. Second, the findings also develop a more complicated understanding of the routes towards an attitude of wisdom. Weick (2001a) suggests that routes towards an attitude of wisdom differ depending on whether one starts from a position of excess confidence or excess cautiousness. Here, managers started from positions of confidence which meant that admitting the limits of their knowing increased doubt and which as Weick suggests, moved them towards an attitude of wisdom. Yet, the speed with

which confidence was unsettled also indicates its superficiality and underlines the importance of simultaneous efforts to stabilise doubt to avoid an over cautious knowing.

My second and related contribution highlights how this nascent attitude of wisdom allowed managers to begin to confidently and constructively engage with unknowingness in their everyday work by leveraging space for inquiry with others. Notably, it was the mobilisation of a socially emergent understanding of reality which both recognises the limits of knowing alone and in advance which enabled managers to embrace "individual unknowing so that collective knowing about being together in a world [could] be fostered" (Allen, 2017:136). This framing encouraged them to "accept ignorance as an inevitable accompaniment of acting" (Weick, 2001a: 370) providing an embodied sense of relief which allowed them to continue to act *with others*. A confidence to work with unknowing shaped possibilities for collective acting in three ways. First, managers reported pausing and being less reactive allowing space for inquiry to emerge. Second, managers described an openness and curiosity to finding out more rather than closing possibilities. Third, managers also actively sought the contributions of others and worked to tolerate the tensions this also generated. In these ways, supporting Weick (2001a), we see how the deployment of an attitude of wisdom is fundamentally a social endeavour. Consistent with Allen (2017:129) then by accepting "unknowing as an ongoing quality of individual existence, new possibilities can emerge about how we can be and understand together". This also potentially reduces the 'self-reinforcing stupidity' described by Alvesson and Spicer (2012) to enlarge future possibilities by encouraging more considered and inclusive action.

IMPLICATIONS FOR MANAGEMENT EDUCATION

While recognising that this work is located in a particular DBA context, these findings have potential transferability to other contexts where experienced practitioners are learning to

research, such as other DBA programmes and Professional Doctorates, as well as PhD programmes. There are several ways in which educators working in these contexts can foreground the salience of unknowing in their programmes to begin to develop Weick's (2001a) attitude of wisdom. First, there is value in framing programmes as spaces to explore unknowingness. This legitimises unknowing and doubt from the outset and as has been found here, provides a welcome sense of relief for students, also potentially discouraging dropouts. Second, this framing can be reinforced by assessment criteria which explicitly value efforts to work with unknowing. For example, an assessment criterion of reflexivity might explicitly include referrals to unknowing as a central aspect of this. Third, attention might be drawn to the specific facets of this programme which facilitated a realisation that one does not know. For example, forcing students to work with different research philosophies can be pivotal in developing an awareness of unknowing. Such aspects might be obvious to educators but provide novel experiences for students.

These efforts can be further consolidated by educators taking seriously their roles as 'experts in not knowing' (Raab, 1997), both in the classroom and beyond. First, in the classroom, it is fundamental that educators' struggles with unknowing are shared with students. One way of doing so, which I and others who teach on the programme have used here, is to share drafts of published articles alongside reviewers' comments. This illustrates the limits of a) what we know- educators can, for example, highlight the choices that are made in terms of theoretical lenses which shape possibilities for what is seen and what is not seen; b) how we know- educators can also be explicit about their own methodological choices, indeed, these often have to be defended in the reviewing process; and c) when we know- that we often don't know from the start but rather "the final polished piece is often a highly crafted result of much soul searching and introspection" (Humphreys, 2008: 5). While acknowledging that this can make educators intentionally vulnerable (Cunliffe, 2018), especially in increasingly performative HE

contexts, it nevertheless places us on the same epistemologic ground as students (Dehler et al., 2001). As illustrated here, this provides much comfort for students as they struggle with their own unknowing. The challenge is then for educators and students to stay with the unease this inevitably generates, resisting pressures to retreat to the safety of knowing (Raab, 1997) and to instead trust that "sufficient and collective insights [will] emerge" (Sinclair, 2007: 464). For example, learning sets and team teaching can help as both mitigate understandings of unknowing as an individual failing.

Second, given that educators' articles are used as key resources by novice researchers, it is important that our encounters with unknowing are written into our published work. This can both leverage and legitimise doubt to enable students to work confidently with unknowing as well as encouraging them to capture this in their own writing which as we have seen earlier presents special difficulties (Weatherall, 2019). Yet, as my own efforts here have found, this also presents challenges of writing differently and doing so within prescribed word limits. It is also important that encounters with unknowingness are highlighted in research method textbooks which students rely on heavily during their studies. These often provide overly mechanical and sanitised accounts of the research process (Bell and Willmott, 2020) which limits opportunities for the kind of wider learning identified here. Instead, following Cassell (2018), texts may for example seek to prepare students for the unpredictable nature of research as well as providing reassurance of the inevitability of multiple interpretations of collected data.

More broadly, efforts to legitimise unknowing and doubt potentially advance Critical Management Education (CME). For example, a focus on unknowing challenges taken for granted understandings of how learning should proceed and provides a form of honesty called for by Grey (2004). This approach may also provide points of entry into engaging with wider

social and structural issues integral to CME, for instance, questions of privileging and silencing of particular views in our efforts to know.

Finally, of course, this paper is unable to offer a *full* understanding but has limitations which might generate further inquiry. First, the paper provides only initial indications of how learning to research across a DBA programme helped managers to explore their unknowingness, more in-depth study is needed which focuses on individual aspects. For example, efforts might explore the opportunities specific research methods provide as well as deepening understandings of the contributions of learning sets. Second, this work has been unable to explore how differences in the student cohort may influence unknowing. Future research might consider questions such as how this approach is received by students from different international contexts and the extent to which gender differences influence engagement with unknowing. Third, this work has focused on students' engagement with unknowingness, future research might also include faculty's perspectives when utilising this approach. Does it, for example, provide an entry point into engaging with wider social and structural issues integral to CME? Finally, further study utilising approaches such as shadowing is needed to follow students into their organisational settings to develop more textured understandings of how their engagement with unknowingness in the DBA informs their everyday work, especially its interactional accomplishment. Recognising organisational demands for knowing also raises questions of the extent to which this learning is sustained over time. For example, the Doctorate award may also serve to amplify rather than diminish expectations of knowingness which might constrain an ability to work with doubt. Yet simultaneously, there was a sense that the shifts reported by the students were often irreversible and unlikely to be easily unlearned, which provides promise for the continuing pursuit of wisdom which legitimises unknowingness.

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