

The impact of the professional doctorate on managers' professional practice

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Data availability

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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Abstract

This paper contributes a new perspective on the impact of professional doctorates.

Professional doctorates offer a form of higher-level management education, which aims to contribute to professional practice as well as to academic knowledge. Although there is a growing literature identifying the personal benefits of undertaking a professional doctorate, the evidence of wider impact on the workplace remains limited. Drawing on interviews with 25 professional doctorate graduates working in managerial and professional roles in different parts of the criminal justice sector, this study explores the wider impact of the professional doctorate. The paper identifies impact dimensions, influencers and processes. It extends the processual approach by conceptualizing impact as an active and negotiated process operating over time and in changing contexts. The analysis shows impact construction to be a complex and nuanced process, involving interactions between graduates and significant others beyond the realm of the university. The analysis has important implications for the design and delivery of professional doctorate programmes in management and business and for extended engagement by educators, professional bodies and employers with the issues of impact.

Keywords – impact; professional doctorate; professional practice

The impact of the professional doctorate on managers' personal and professional practice

Within management and business, doctoral education has increasingly become established as a form of management education and development. The professional doctorate, which is the specific focus of this paper, represents an important 'new' form of doctoral education, offered

principally but not exclusively by universities in the UK, USA and Australia (Group of Eight 2013; Hawkes & Yerrabati, 2018). In the management and business field, the most recognized form of Professional Doctorate in Business and Management is the Doctorate in Business Administration (DBA) but, in addition to established programmes in education, health and social care, and psychology, the range of programmes and subject areas has proliferated (Mellors-Bourne, Robinson, & Metcalfe, 2016). Such doctoral programmes form an important feature of management education for professional practitioners in a range of different occupational contexts. In contrast to the traditional PhD, they are marketed at mid-career professionals rather than at aspiring academics. They encourage academically grounded professionally-based research, linked to both an academic discipline and a professional field and located within the candidate's profession or practice (Quality Assurance Agency, 2015).

The concept of impact is important in the management education field but it remains problematic. In the context of doctoral education, the term impact can refer to the effects on the student, on their immediate workplace or on the wider academic/professional context. Different stakeholders in the doctoral education process (for example, supervisors, doctoral students, employers, policy makers) may have different conceptions of desirable or noteworthy impact in the business and management professional education community. Therefore, we take a social constructivist stance, arguing that evaluations of impact are constructed socially and occur in specific contexts in which doctoral studies are undertaken.

Studies suggest that the potential professional practice impact of such programmes may be undervalued in comparison with the value attributed to contribution to theory and impact on scholarship (Hawkes and Yerrabati, 2018; Starkey, Hatchuel, & Tempest, 2009; Wellington and Sikes 2006, 733). Research into the provision of professional doctorates in

English HE institutions commissioned by the UK Higher Education Funding Council for England (HEFCE) (2016) also concluded that ‘there is little robust evidence of impact on professional practice and changes in the workplace’ (Mellors-Bourne, Robinson, and Metcalfe 2016, 67).

Where personal and professional practice impact is concerned, the student or doctoral graduate ‘voice’ and perspective is crucial (Burgess & Wellington, 2010). This study contributes important new knowledge about the impact of the professional doctorate from the graduates’ perspective by identifying and explaining impact arising from their personal and professional development. The principal question we address is: how is the professional and personal development impact of the professional doctorate articulated by doctoral graduates? We address this principal question through two research questions:

- (1) What personal development outcomes do students attribute to their professional doctorate studies and to what extent are they deployed in their professional practice?
- (2) What factors influence the impact of the professional doctorate on students’ personal and professional practice?

This paper makes two key contributions to the growing literature on professional doctorates. Empirically, it adds to knowledge in the doctoral education field by examining the important issue of the impact of the doctorate from the graduates’ perspective. It also adds to our knowledge of professional doctorate studies beyond the EdD and the DBA, which tend, because of their dominance in the market, to provide the source of much of the existing research about professional doctorates. Theoretically, it extends the processual approach to understanding the impact of doctoral education through analysis of the contextually located, interactive process of the construction of impact that results from the personal and

professional agency of graduates and significant others in their professional and organizational contexts.

The next section considers the development of the professional doctorate as a form of doctoral and management education and the relationship to the impact agenda in higher education policy. The semi structured interview design and the analysis process are discussed and the findings are presented. Analysis of the findings indicates important features of the social construction of impact. Specifically it identifies how impact construction processes occur as a result of interaction between impact dimensions and impact influencers. The paper concludes with a discussion of the implications for the field of management education.

The impact potential of the professional doctorate

Doctoral education has undergone substantial changes since the late 20th century (c.f. Scott et al. 2004; Kehm 2007; Trafford and Leshem 2009; Wellington 2013; Baschung 2016; Loxley and Kearns, 2018). During this time, there has also been a marked increase in the number of doctoral students and graduates. As this has occurred, professional doctorate programmes have been developed alongside other doctoral education programmes associated with the award of the Doctorate (Clarke, 2013; Green, 2012; QAA, 2011). A simple definition of a Professional Doctorate is elusive but the UK Council for Graduate Education (UKCGE) defines it as: ‘A programme of advanced study and research which...is designed to meet the specific needs of a professional group external to the university, and which develops the capability of individuals to work within a professional context’ (UK Council for Graduate Education, 2002). The professional doctorate reflects a shift in expectations associated with doctoral education, with the anticipation that, in addition to contributions to theory and scholarship, programmes will deliver impact in personal and professional practice through

applied research and development in the workplace (Boud et al., 2018; Mellors-Bourne, Robinson, and Metcalfe, 2016).

A concern about the impact of doctoral education programmes, and in particular, professional doctorate programmes, is increasingly evident in higher education policy in the UK and elsewhere (European Commission, 2011). Drawing on assumptions of Human Capital Theory (Becker, 1964), doctoral research is understood as an important feature of the development of new knowledge and knowledge-making practices to support organizational, professional, social and economic development (Yang 2012; Bansel 2011; Green 2012; Lee and Danby 2012). As a feature of increased policy interest in the ‘return on investment’ of research and doctoral education, funding sponsors and bodies increasingly expect research to have an impact beyond the academic environment, particularly in applied academic disciplines. Impact and application are also fundamental features of management education (Anderson, Ellwood, & Coleman, 2017; Chia, 2017) and professional doctorates are expected to deliver an impact beyond the academic environment (Watermeyer 2016; Watermeyer and Chubb 2018).

With regards to doctoral education, most studies into its impact adopt a process approach. Attention focuses on students’ motivations and learning practices, curricula and pedagogic ‘inputs’ and doctoral supervision practices. Such an approach understands impact as a change in the student between their entry onto a doctoral programme, and their achievements by the time of their graduation. From this stance, research and policy focuses attention on the student experience of interactions within the doctoral education system and evidence of the development of students’ general and transferable skills that they can ‘carry forward’ into employment. For example, the UK Vitae organisation’s Researcher Development Framework emphasises the development of transferable employability skills

and attributes such as career management, responsiveness to opportunities, networking and building reputation and esteem (Vitae, 2019). Some studies assess impact beyond graduation through scholarly knowledge generation outcomes such as publications and research funding. However, less attention is paid to the practical and applied impact of doctoral studies as it is deployed in personal and professional practice in organizational contexts (Anderson, 2019; Costley and Lester 2012; Loxley and Kearns, 2018).

Impact beyond the doctoral programme

Studies into the personal and professional skill outcomes of doctoral education in general, and professional doctorate studies specifically have identified the importance of doctoral studies for individuals' self-actualisation, self-construction and increased capacity for self-reflection on existing professional practice. Research has also suggested that changes at the individual level are influenced by different motivations for undertaking doctoral study and students' personal and contextual backgrounds (Scott et al., 2004; Wellington and Sikes, 2006; Burgess and Wellington, 2010; Burgess et al. 2013). However, these approaches confine attention to entry and process within the doctoral education 'life-cycle. This focuses attention on graduates' agency and assumes that the student is the main actor with causal power to bring about change in their organizational or professional context through an unproblematic process of leveraging their reflective capacity in organizational or professional practice settings (Lundgren- Resenterra & Khan, 2019; 2004; Burnard, et al., 2018).

Less attention has thus far been given to their workplace or professional practice contexts in which personal and professional practice impact will be deployed. Recent studies have identified the effects of the doctorate has on graduates' personal practice but there is little evidence of a wider impact on practice or at the organisational level (Boud et al, 2018). An important challenge for studies into the impact of the doctorate is the limited evidence

base for examining the effect of qualities such as self-reflection and self-construction on professional practice in professional or organizational settings (Burnard et al., 2018; Hawkes and Yerrabati , 2018). Boud et al's (2020) study into the impact of professional doctorate studies concluded that the capacity-building effects of the doctorate were more evident than specific application of work based research in professional practice settings. A UK-based study by Lundgren-Resenterra and Kahn (2019), focused on EdD students, suggested that reflexive outcomes are substantially influenced by students' organizational roles and other organizational factors highlighting the necessity for professional doctorate students to master "a discourse that crosses both research and professional practice and developing the capacity to draw others into that discourse in an organisationally relevant and yet critical fashion" (p.407).

With regard to the impact on graduates' wider professional practice, Fox and Slade (2014) highlight the complex relationships between the doctorate and professional practice impact which are dynamically interrelated with situated professional learning processes and engagement with professional networks. Fulton et al (2012) also indicate the important effect of territorialized knowledge and professional identity for professional practice outcomes of doctoral studies. These findings accord with Taylor's (2007: 156) assertion that professional doctorate students must balance 'on the cusp' between the university, the work context and the profession.

To summarise, professional doctorate students are often mid-career, advanced professionals whose practice is situated in a codified knowledge base or an established organizational 'mind-set'. Therefore, undertaking a professional doctorate places the student at a potentially uncomfortable intersection of their organizational context, professional development, and personal development change process. In addition, different organizational

or professional contexts, such as promotion structures and career pathways may influence the extent to which graduates are able to deploy personal and professional outcomes of their doctoral education in an impactful way.

Our research questions address this gap in knowledge. From the graduates' perspective, the first question examines the professional development outcomes of the professional doctorate education process. The second question explores the under-researched process of impact construction in professional and organizational contexts, and seeks to identify the factors that influence impact generation. These research questions provide the basis from which this article contributes to knowledge and theory of the impact of the professional doctorate. Theoretically, we extend the process approach to explaining impact through our conceptualization of the contextually situated and negotiated process of impact construction. Empirically our analytical focus contributes important new knowledge about the interplay between graduates' personal and professional agency and the professional or organizational context in which their professional practice takes place.

Methodology

The research context

The focus of this study is two professional doctorate programmes at a UK University focused specifically on the emergent professional fields of criminal justice and security risk management. These professional doctorate programmes are appropriate for examination of the impact of the professional doctorate in business and management education as their focus is on professional education in emerging professional fields that operate in corporate and operational contexts (Muzio, Hodgson, Faulconbridge, Beaverstock, and Hall 2011; Wilkinson, Hislop & Coupland, 2016). Professional education pathways are central to the professionalization process and the development of distinctive competence for those who

fulfil expert roles within management and organizational contexts (Hughes and Hughes 2013; Trede 2012). In this respect, a focus on professional doctorates in the risk, security and criminal justice field represents what Yin (2009) describes as a ‘revelatory case’ as findings and analysis can generate transferable insights into the construction of professional practice impact in other fields and expert occupations in business and management contexts (Paton, Hodgson, and Muzio, 2013).

In common with most other UK professional doctorate programmes, the course recruited mid-career professionals and involved part-time study and work-based research. The pedagogic model involved a two-year taught phase focused on professional development and review, advanced research techniques, publication and dissemination and the development of a work-based research project proposal. As with traditional PhD programmes, students were then supported during their research phase, which lasted for 2-4 years, by a doctoral supervisory team. Assessment of the professional doctorate was through the submission and defence of a research thesis. These professional doctorate programmes were launched in 2007 and at the point that the research commenced in 2018, there were 79 registered students and 43 graduates.

Sample and data

The data for this project were collected in 2018, following ethical approval. The research population was all graduates from the programme who had completed their studies between 2011 and December 2017 (n=43). Twenty five graduates agreed to participate in semi-structured interviews (see Table 1). Although the course was offered by a UK University, it was undertaken by those who work in different countries. Police officers represent the largest occupation group (n=12) and the sample included those with differing rank and employed by different regional police forces. Security specialists (n=5) are also represented

in the sample and, in contrast to police officers, fulfilled roles in many private sector contexts (self-employed consultant, employee of large multinationals). Other participants worked in a range of roles connected to criminal justice, mainly within public sector organizations. The sample is reflective of the gender composition of the risk, criminal justice and security fields which is male dominated (approximately 70% of police officers in England and Wales are male (Home Office, 2019) and it is estimated (Martinez, 2017) that the overall percentage of men employed in the investigations and security services sector is about 75%). The sample also reflects the range of roles within the hierarchical structure of the criminal justice and security sector. Five of the participants could be defined as holding middle or senior management positions, several were self employed or consultants, and the others held a range of operational roles.

All but three interviews were conducted online or by phone, because many interviewees were located outside the UK and/or were fulfilling busy professional working schedules. Interviews lasted between 30 and 45 minutes, comprising a number of key prompts and questions which were sent to interviewees in advance. Questions focused on: the relationship between the doctoral research project and the workplace, the involvement of the employer, impacts on the workplace arising from the research, impact on professional practice and career trajectory since completing the doctorate.

Data and analysis

Interviews were audio recorded and transcribed to facilitate qualitative analysis with NVivo. An iterative thematic analysis was undertaken. In the first stage, the data was analysed inductively, with the first author coding key themes in the data which related to any outcome or impact of the professional doctorate identified by participants.

PD1*	Male	Police
PD2	Male	Security
PD3	Female	Police
PD4	Male	Other
PD5*	Male	Police
PD6*	Male	Other
PD7*	Female	Police
PD8	Female	Other
PD9	Male	Security
PD10*	Male	Other
PD11*	Male	Police
PD12	Male	Security
PD13*	Male	Other
PD14	Male	Security
PD15*	Male	Police
PD16*	Male	Police
PD17	Male	Security
PD18	Male	Police
PD19*	Female	Other
PD20*	Male	Other
PD21*	Male	Other
PD22*	Male	Police
PD23*	Male	Police
PD24*	Male	Police
PD25	Male	Police

Table 1 - Sample composition

Notes: (1) Other roles not shown for purposes of respondent anonymity. Such roles in the criminal justice sector include: intelligence analyst, probation officer, prison officer, scenes of crime officer, youth offending team officer and so on. (2) asterisk indicates that the respondent had completed at least one prior professional education course at the same university.

In the second stage, both authors separately undertook additional coding cycles to explore data relating to impacts on personal and professional practice which had been suggested by the existing research and which were underpinned by the research questions: (1) what personal development outcomes do students attribute to their professional doctorate studies and to what extent are these deployed in their professional practice? (2) What professional, and organizational factors influence the impact of the professional doctorate on students' personal and professional practice?

Findings

The analysis described in the previous section led to the identification of personal impact dimensions arising from doctoral education, professional impact influencers and second order impact construction processes (see Figure 1).

Personal impact dimensions

The data indicate three interrelated personal impact dimensions that graduates attributed to their professional doctorate: professional skills and expertise, critical thinking and personal confidence / self efficacy.

Professional skills and expertise

Interview questions invited specific discussion of the use made by the organization of skills and knowledge generated through the professional doctorate. A small number of respondents indicated that subject based knowledge acquired through their research project had been applied, for example in understanding the criminological theory underpinning offending behaviour or in having a broad understanding of the relevant academic thinkers in their professional field, for example, *"I knew exactly what I wanted to do with it, I knew exactly what the objective was...I did the professional doctorate around that, I've developed a*

number of training programmes and consultancy strands” (PD12). However, the data also suggest a more prominent level of organizational apathy towards the application of subject based expertise generated through the professional doctorate. One interview reflected that “I think there’s, sort of, an elephants’ graveyard of academic research created by police officer that’s just lost in the ether” (PD5).

In the main, interviewees identified that the key personal development outcomes related to research based and dissemination skills. Almost all interviewees described how the practical, research oriented skills had made an impact to their performance in their current role or had been useful in enabling a change of role or in applying for other jobs. These included specific research skills relating to doing qualitative and quantitative research (surveys, questionnaires, statistics, interviews, thematic analysis, literature reviews, rapid evidence assessments, ethics). Perhaps even more significant were the skills acquired from the process of doing a doctorate: managing a large and complex project, working to deadlines, finding, assimilating and evaluating information. Respondents also indicated that they were better placed to undertake research, evaluate evidence. One interviewee identified the impact of the doctorate on their ‘high level’ confidence, *“Not in investigative work, but certainly around strategy. It has given me more confidence, particularly around snowballing of articles and getting a sense, reasonably quickly, of what the different viewpoints are. Also, not being worried about not reaching a certain conclusion. I guess better at assimilating, or finding information, and then detailing it in a way, I guess it’s difficult to be neutral, but in a way without having to come down on a certain viewpoint, or not.” (PD25).* A further impact of the doctorate was described as a substantial enhancement on their skills at presenting written arguments and dissemination in different formats and to different audiences, including report writing, presentations and even emails, for example *“I’ve never before created a document that was as long as my doctorate project. And I suppose because of the*

length of it, it definitely did improve my skills in segmenting out, if you like, and in structuring things” (PD7).

Confidence and Self Efficacy

A key theme emerging from the interviews is how the completion of the programme had impacted on graduates’ self-confidence and self-efficacy. There were two distinct elements to this. First, confidence came from the knowledge and skills acquired through the programme, for example, *“I was saying the other day, “I wish I could do the same thing again,” because of the fact that I ended up confident, and confident that I was as close to an expert as I could be in the topic, and now where I am is all new, and I miss having that level of expertise again...” (PD4).*

Linked with this, interviewees reported that the doctorate had impacted on ability to communicate confidently on matters relating to their doctorate and to research methods and skills. They derived confidence from knowing that they were in possession of the highest academic qualification that could be obtained in their field, for example, *“Well, certainly on me, I think it's made a very big change in terms of the way I go about my daily work. I used to fret sometimes over reports and now I'm very much more confident with my analysis” (PD8) and “just the inherent confidence of having achieved a new level of educational attainment. It gave me a sense of, okay, I’m confident here, I can do this. I can cut it.” (PD23) and “a bit of that is, I guess, if you know you’re writing better that, of itself, gives you confidence. If you know you’re communicating better ...then that gives you confidence” (PD23).*

A further prominent feature of the data set is the impact of the doctorate on participants’ confidence in bridging the academic and practitioner ‘worlds’, *“It’s had such an impact on my confidence. It’s given me such knowledge to navigate the professional world.*

It's given me confidence to navigate the academic world as well, and bridge the two – which I think is so important” (PD21). Another interviewee reflected that “I can actually go and do pieces of research on my own, which is what I really quite like to do. I can project manage, I can do stuff that I didn't think- or before that I hadn't even thought about. So, yes, I think that it's opened up - although I still want to be a practitioner, I think that I can do other things as well as that. And that's really quite exciting for me, I suppose” (PD8).

In policing, there has been an increasing emphasis on evidence based policing, defined by the College of Policing (2020) as an approach in which “police officers and staff create, review and use the best available evidence to inform and challenge policies, practices and decisions.” This approach encourages the use of research to understand problems but also to evaluate policing methods and interventions. For some of the interviewees, the emphasis on evidence based policing has been helpful in securing support from their organisations and providing evidence of effectiveness. The data also indicate that participants were more confident, as a result of their doctoral education, to engage and advance principles and practice of evidence -based management, for example, *“So, yes, absolutely, whereas, before I did it, I probably winged it a bit. Now, if somebody's asking me to design a programme, I'm designing it with a real solid evidence base about what people want. When I'm putting theories in....I actually go back to the source documents” (PD5).* Finally, several interviewees spoke of the confidence that came with having successfully gone through the process itself - and the qualities that had been needed - resilience, persistence, dedication, motivation - in order to do so. For example, *“I feel, professionally, that if I can achieve a doctorate in four years, to a standard that I am happy with personally, and obviously the university is happy with, whilst having two pregnancies and a toddler, and this, that and the other, then I feel the rest of it is a total piece of cake” (PD7).*

Respondents also referred to how the professional doctorate had given them the confidence in their current roles, the confidence to apply for other jobs, take on additional responsibilities, in writing reports, knowledge to navigate both professional and academic worlds, to interject in meetings, to influence people. For example, *“For me, it's not a direct link to that doctorate but I actually think that having that doctorate has given me the confidence to apply for those positions and take on those additional responsibilities. It's perhaps a soft outcome as opposed to something that can be measured but I think it's there.”* (PD6) and *“... the impact, I think for me, is it's given me more confidence in applying for those types of roles and taking on those responsibilities, albeit I was already qualified to do all those roles without the doctorate”* (PD6).

Taken as a whole the data indicate that interviewees recognized the added benefit of confidence in two domains - the academic and the professional. The expertise in the academic field gave existing practitioners additional confidence in their professional practice: *“So, okay, you might be senior to me in rank but I am at least your equal, or ordinarily I'm senior to you, in terms of educational attainment, and that just gave more confidence as well. So, I suddenly found that where I might have previously deferred to them on a matter, or not pursued a line of, probably, persuasive around a policy change, or it might have been something where I was thinking, ‘Actually, no, I know I'm right,’ or, ‘I do believe this,’ or, ‘Your view isn't wrong. My view isn't right or wrong but, actually, I can now persuade you and I'm more willing to engage in that’”* (PD23).

Some of our sample group had also gone on to work in universities, and reflected that the professional doctorate had enriched their academic practice. For example, *“For me, I think it makes a really well-rounded academic. I feel very confident working with professionals, I feel confident working with academics, I feel confident writing for a*

professional audience, also I feel very confident supporting my students to go into the professional world and become YOT [Youth Offending Team] officers and this sort of thing. So, actually, I think Prof Docs are hugely valuable for academics” (PD21). Another participant reflected *“It [research methods] was probably the most enjoyable part of the programme, which I thought would be the driest and hardest. I thoroughly enjoyed it. So, as a result of that, when I now lecture, I feel really confident” (PD22).* Nevertheless, the primary motivation for some had not been for their employer or colleagues and described how their studies were intrinsically motivated and undertaken for personal development purposes. For example, *“I haven’t done it for anyone else” (PD7)* and *“I thought, ‘I didn’t do it for anything other than personal satisfaction’. That was the motivation, but I recognised that it would probably open the door, or doors, somewhere, somehow, and I wasn’t sure what they were going to be” (PD23).*

Critical Thinking

Analysis of the data set also suggests that a further impact of the skills and expertise outcomes, combined with a step-change in confidence and self-efficacy resulting from successful completion of doctoral studies led to impacts on critical thinking and questioning in relation to applied organizational and professional contexts. For example, *“But yes, I think very much because you know that you need to justify because you could be questioned about the comments that you write. I think that does teach you to seek evidence for what you're saying” (PD10).*

The increased significance of evidence based practice - both in terms of their commitment to it and to the impact that it had on their practice was mentioned by several respondents. One interviewee, who was employed in a senior organizational role expressed this as *“I’ve also been a bit of a champion around the evidence base, probably as a*

consequence of all the work I've done...As a senior leader in the organisation, what am I seen to drive? Innovation, bridging of academia, the evidence base, is probably what would go on my gravestone if they were talking about me now around stuff. ...Nowadays I do less doing and more setting the direction, which is reactive to getting more senior, isn't it? But one of my mantras, in effect which came from it, is I want to understand, 'Something that we are doing, is it working? What is the evidence base? Do it on a small scale first. If then proved effective do it on a large scale'. The other mantra is, 'I'd rather do something that I know works. I'd rather do three things that work as opposed to ten things, some of which work and some of which don't work' ” (PD15).

In addition, for those in more senior roles, an impact on their management approach was described during the interview, *“I think it's influenced my leadership approach around how I drive change, both in my command and in the organisation. I think that whole approach is gaining in traction across the organisation” (PD15).*

Professional impact influencers

The data also enable identification of factors that exerted important influence on the impact of the doctorate on participants' professional and organizational practice. At the individual level, graduates' career intentions, professional education trajectory, and professional status influenced the relationship between their professional doctorate studies and their professional and organizational practice. Organizational factors also act as impact influencers, specifically organizational culture and levels of role autonomy and status within the organizational hierarchy.

Professional education trajectory

An important finding from the analysis concerns the interrelationship between the development of professionals' skills and expertise achieved through professional doctorate education and prior professional education experiences, which our analysis identifies as an important pre-cursor to engagement with doctoral level studies. Whilst some interviewees were early career professionals, most were in a mid-career stage, having entered their specific field at an early stage of the emergent professionalization processes taking place in many management-related occupations and arenas. Therefore, many respondents considered themselves to be at the vanguard of emerging professional education and development processes in their fields. Almost half of the sample group had previously completed at least one prior professional education course at the same university prior to commencing the professional doctorate programme for example, foundation degree programmes or Masters level courses. The data suggest that participation in such programmes had a substantial influence on interviewees' sense of personal and professional identity. One interviewee expressed this in the following way. *"In terms of research, I've always wanted to do a doctorate since I finished my Masters degree about 10 years ago ...I've done three degrees now. I never went to university like proper people do. I did it all distance learning so I'm quite proud of that really, having done that"* (PD10). Another interviewee highlighted the personal enrichment that the trajectory had provided for them - *"As my studies started at the university...started with that process of self-initiation and on one else is interested, it's continued through to the doctorate ... I've just found it very personally enriching, and it's been really hard work. I've just had to be very dedicated to studying in my own time, and reading. It's been quite costly for me personally"* (PD11).

Taken as a whole, the data suggest that prior professional experiences represent an important 'push' factor that influence subsequent professional skills and expertise development processes provided by the doctoral education process.

Career Intentions

The data further indicate a two-way relationship between professional skills and knowledge impact and participants' career intentions. Some of the sample set described how their participation in the doctoral programme was motivated by the career advantages that would result from engagement with high-level study and professionally based research. For example, *"I was hoping my prof doc would make me my career but it hasn't, unfortunately, not yet anyway!"* (PD9) and *"I have found it very comforting that the doctorate has given me another potential option... I've found that very comforting, while I have been in a slight status period of my own development, in my own professional life"* (PD7).

Other interviewees had embarked on their professional doctorate studies without specific career expectations but described how, once achieved, the doctoral qualification had 'opened doors' and widened their career options. One respondent described how they had been successful in achieving a secondment normally reserved for people of higher rank within the organization - *"If you'd have asked me last week. I'd have said, 'It's had absolutely no benefit to anything whatsoever'. I've just applied for a secondment to the.....Not only have I got the secondment, but they've offered me a particular post in the xxxxxxxx ...predominantly because I've got a doctorate"* (PD3). Another reflected that *"My ambitions were more around my professional development, than it was around having a major impact in the organizations ...what actually happened, and attributed by me by having successfully completed the doctorate, was that I got another job just before I was awarded the doctorate, about a month before. The doctorate again was a pivotal part in me getting this new role"* This interviewee went on to reflect that, subsequent to their promotion *"the*

subject matter of the doctorate is rarely relevant to what I am doing now, but the skills are day-in, daily being used” (PD4). This comment by another interviewee reflects the experience described by many of the sample of the impact of possession of the doctoral qualification on their career options in their organizational contexts - *“I think for different roles I’ve applied for, and then taken on, I think it’s probably given me an edge, most definitely. And its made my application more interesting, and certainly unique, I imagine” (PD7).*

Organizational status

Whilst many interviewees reflected positively on the indirect impact of their doctoral qualification on their career options, another feature of the experiences described in the data set relate to the double-edged influence of position in the organizational status hierarchy as an important influencer on the extent of and nature of the impact of the doctorate on their professional practice.

One interviewee described their struggles to secure financial support from the organization for the considerable expense of the doctoral programme - *“They gave me 50% of my fees. I had to fight very hard for that, and in my experience, they throw money at Inspectors and above, and, as a Constable you have to really, really fight for it. That’s because they argue that its not directly relevant to my role” (PD7)* and in relation to opportunities to apply skills, expertise, knowledge and cognitive abilities developed through the doctorate *“I don’t think, necessarily, anyone would know to come to me, because they wouldn’t know, if you see what I mean? Whereas if I was at a different level then it would be on my list of specialisms, if you see what I mean” (PD7).*

A related feature of the data indicates that interviewees experienced a status-dominated approach within their organizations that inhibited any impact that their doctoral programme might have on professional practice. For example, *“There was almost, ‘What are you doing that for? What on earth would you want to do that for?’ A real questioning ... No one pays any attention. They seem to be in their own world of all rank based”* (PD11) and *“So I think that that’s one of the areas that I’ve tried to speak to senior managers to make them aware of my research, but they’re actually not interested at all!”* (PD8).

Further evidence emerged from the analysis of perceptions by some interviewees, especially those in roles with lower organizational status that participation in doctoral level education was considered a disadvantage to their organizational contribution. For example, *“On my latest application, which was for a training role, I had a big discussion with several people about whether to use ‘Dr’ as my title of ‘Mrs’...but I spent, probably two or three days deliberating over it, because the police, at that level, are still overly suspicious of academia”* (PD7) and *“There’s a lot of suspicion between police and academics” ... I found on the way a fair amount of opposition - not only just to academic pursuits but just to educational pursuits” ... my view was that the police were, sort of anti-intellectualism or anti-intellectual, and anti or ambivalent against academics”* (PD5).

In contrast, respondents who were more senior at the point at which they completed their doctoral studies were more positive about the impact it had on their professional practice. *“It’s been really positive in terms of my job. There have been some positive outcomes, so it’s not research for research’s sake”* (PD10) and *“Since I was awarded the doctorate, I’m using the title on purpose...It’s making a significant difference in the way I get responses...People who were previously bushing off security seem to take security a bit more*

seriously now. I link it to the title or to the doctorate because I have seen the same issues were brushed off the table and today they are suddenly of interest or relevance” (PD2).

In summary, the organizational status and contexts of the professional doctorate graduates in our sample was an important factor in the impact consequences for professional and applied practice. Those with an existing level of seniority, or who worked in an organizational environment, such as consultancy, with less reliance on hierarchies and procedures, were better able to make and embed changes in their organizational and professional practice. Those who were in less senior positions were much less able to do so. One respondent recounted that *“I met up with two sergeants a couple of days ago, and they [were] mercilessly mocking it [the doctoral qualification] (PD7).*

Professional status

In addition, the data also indicate that professional status acts as an impact influencer. Professional doctorate programmes are marketed to mid-career professionals whose identity is located within professional and organizational settings. The data indicate that those who successfully complete their programmes recognize the challenges of balancing their emergent academic identity, developed through engagement within doctoral level research programmes, with their professional context. For example, *“I would never describe myself as an academic really. I'm just a normal person who just happened to do a Prof Doc really. I tend to speak in fairly simple terms. I don't use bigger words or more complex words, I think just perhaps sentences constructed in a better way.” (PD10)* and *“I'm an experienced police officer with this extra string to my bow, rather than an academic who happens to also be a police officer” (PD3).*

The data also show that those who were less 'recognized' within their professional field, particularly in the institutional contexts of criminal justice, were aware that doctoral skills, qualities and academic credentials represent a negative feature in terms of their professional standing. For example, one interviewee reflected, "*The only place I've used it [the title Dr] is on LinkedIn. I don't use it at work*" (PD10). Another interviewee reflected, "*I think social workers in general are very anti-intellectualist. And I don't think they like somebody to come and tell them...it just seems as if they're not really that interested*" (PD8) and "*I think you can either be a practitioner or you can be an academic, and you cannot do both. And I guess that was the reason why I wanted to do the research, to prove that you can still do both*" (PD8).

In contrast, those whose professional reputation was already established described additional impacts that resulted from their doctoral studies. For example, one senior professional operating in a consultancy role within the risk and resilience sector described the positive impact of the doctorate, "*If you're an associate and you're a freelancer, it absolutely puts you to the top of the queue - especially with 30 years of police service, and especially with government agencies and civil service, because you've got academic credibility, and you've got experiential credibility as well*" (PD5). For this participant the impact of the doctorate was that "*I was picked up by some government agencies, some pretty high-hitting confidential agencies ...It's only because the doctorate opened these doors ...the work I am involved in now, the doctorate has increased by ability to do it well, and has opened doors dp it's realising, itself in some different ways I think*" (PD5). Another, in a similar context, described how "*I was approached by a European agency, who asked me to go on a consultative panel onand it was out of the blue. I took a little while to find out what had actually happened...a previous colleague had known about my research ...and recommended me as an expert inThey then contacted me and asked me to take on this role*" (PD4).

The data also indicate the differential opportunities of professional networking open to members of our sample. Some described the means through which the doctorate had enabled them to enhance the professional reputation and status. For example, *“I talk quite often at various events...There have been a lot of positive outcomes as a result of it” (PD10)* and *“I was heavily involved in training, education, trying to professionalize the industry. I worked quite a lot with the regulator. I did a lot of work in Europe and on various different projects, developing competencies for the private security sector. At that time...it would have been very high on my radar” ...“I’ve presented my research findings at various different conferences and every time I go to present them, people say to me ‘Fantastic, excellent, brilliant, it’s a great idea, we should be doing this” (PD9).*

Another respondent (PD6) described the way in which they had proactively used the outcomes of their doctorate to impact on their professional status, *“I’d say a mixture of social media but also academic journals and book chapters, attending conferences and presenting papers at academic conferences” ... I published several journal articles and I suppose through social media. A lot of networking goes on through social media engagement with people like... He’s contacted me before when there has been a review of ...going through parliament recently”*. This participant also reflected on the interrelationship between professional networking and reputation building opportunities and the process of completing a doctoral level qualification, *“I think that’s where probably I’ve had more impact. Indirect changes, I’ve mentioned about publishing academic papers and I’ve been invited to a number of meetings related to research and policy on ...(PD6)and “I think all of that has come from, or certainly an awful lot of that has come from the fact that I did the doctoral training and that my name is out there through academic publications and book chapters and through networking. I personally feel that’s a great impact as a result of my doctorate” (PD6).*

In summary, our analysis of the interview data reveals a dynamic and interconnected process between individuals' professional standing and networking opportunities and the impact of doctoral education for professional status. It suggests that the benefits of the professional doctorate for professional status are dependent, in part, on the extent to which graduates are able to leverage their existing professional status.

Role autonomy

Linked with graduates' organizational and professional status, the data indicate that their role autonomy in their workplace context exerts a powerful influence on the impact that can be achieved. Those whose roles provided greater freedom to expand their duties and responsibilities and to apply more discretion to their ways of working were able to offer more examples of the impact of the doctorate. For example, "*My professional doctorate, which I did specifically around my own work activities and it was to enhance and support the development of the next stage of consultancy...I knew exactly what I wanted to do ...and that's what I did*" (PD12) and "*[In my new role] 'I've' been at more than one meeting over the last nine months where I've walked out saying 'Thank God I did that doctorate' because ...the subject matter of the research is rarely relevant to what I am doing now, but the skills are day-in, daily being used*" (PD4).

Those who described limited autonomy in their work role context found it difficult to generate impact as a result of their studies. One participant indicated that "*The only resistance ...was from my own section... where my research was beginning to tread into other people's work...I think it exposed part of their vulnerabilities (PD1)*" and another reflected that "*My last couple of roles, if not more than that, they've been very operational - very frontline. I think there is less opportunity for the sort of work that I have done to be relevant there*"

(PD3). Another highlighted how changing job roles had influenced their ability to leverage impact from the doctorate *“But in terms of how do you make your prof doc your actual life, that I’m struggling with because probably it’s not as connected to my employment as it once was...my work landscape changed somewhat ...and probably even now, it probably isn’t as relative to my day-to-day work activities as [it] once used to be...which is a shame really because I have a real interest in it. I have to earn a salary”* (PD9).

In organizational contexts, therefore, the evidence from graduates suggests that a changing landscape in terms of graduates’ job roles is an important feature of the a nuanced and negotiated process of interaction between workplace role and impact from the doctorate Interviewee PD1, for example, who indicated resistance from their work team (above) also suggested that some impact may be achieved but not acknowledged in the workplace context- *“I may not have been able to implement what I wanted to implement, but the other benefits of doing a PhD have really come through. I’m applying every single component of that research through my framework. I could only have learned those skills by doing the PhD”* (PD1).

Organizational culture

The data also confirm the important influence of organizational norms, assumptions, and ways of interacting on the extent to which impact dimensions can be applied. One respondent reflected *“Security is not necessarily seen as something that you need a qualification to do...this is the perception”* (PD9). Another interviewee, from within the police service suggested that *“Actually, maybe we should be more critical and questioning. But in the police environment its a bit difficult to do that. I have gone along with things to an extent, or I’ve just kept quiet. I tend to keep quiet because if we speak up too much then you’re even more marginalised. I just tend to go with it”* (PD11).

The data indicate that organizational culture does not exert a consistent influence. Some participants described encouragement of impact at specific times. For example, *“I do notice it sometimes in certain quarters where some people will ask for your opinion and they will take your opinion based on the fact that you hold a doctorate in the subject matter and won’t argue with you”* (PD9). However, the data also suggest that local workplace support was not always sustained. For example, *“They seemed to have more of an interest in those days than perhaps they have had in latter years”* (PD6) and *“I worked in an environment which was very pro what I was doing...they were all for the educational world....so my immediate surroundings and the hierarchy that were concerned with that group were all in favour of it”* (PD5). The same participant further described a fragility to this support, commenting that *“There are lots of internal ironies here. As I went along, it was almost a journey of...if I were to do a fly-on-the-wall documentary of the apathy and the ambivalence of the organization towards this project, it would prove the point, as well, which is quite sad in a way”*. As a result, this latter participant suggested that organizational culture could act to stifle the impact of doctoral research outcomes.

Discussion

Identity orientation and signaling

Our analysis indicates the importance of both professional education and career intentions are important features of impact construction through identity orientation and signaling. Fulton et al. (2012) argue that professional doctorate programmes set out to provide the basis from which professionals can view their practice through a fresh lens and with enhanced intellectual agility. Such aspirations, however, present challenges in relation to both ‘territorialized knowledge’ (Fulton, et al, 2012:134) and professional identity. However, our study indicates that career intentions and professional education trajectories affect

professional skill and knowledge development processes achieved through the professional doctorate and also affect the impactful application of those skills through a process by which graduates explore and ‘claim’ new professional identities. Our analysis indicates this dynamic process in play; those participants who were primarily motivated for their own personal development and satisfaction, with no expectation that it would impact on their career trajectory, reported less impact than those who had undertaken the programme with specific career outcomes in mind. The former category tended to retain their existing professional identity, whereas the latter group were more actively involved in constructing a new professional identity for which the credibility and status associated with the doctorate in the professional field was an important feature.

From the perspective of professional doctorate educators, Mawson and Abbot (2017) highlight how territorialized professional norms may inhibit socialisation of professional doctorate students into academic communities. However, our analysis, which examines the graduates’ perspective, indicates that professional identity orientation and signalling beyond the confines of the academic community is more important for impact construction both during the period of study and beyond the point of graduation. In addition, the analysis indicates that, although the doctoral credential is an important feature of professional identity signaling; in different contextual circumstances that signalling mechanism may be exploited or concealed. Many of the police officer respondents do not use the title in their working environments, and some thought hard about whether to include it in applications for other roles within the police service. Those in other professions and contexts however, actively marketed themselves as holders of doctorates in order to enhance their professional credibility. Therefore, the analysis indicates the nuanced ways in which graduates must navigate the construction of an identity orientation to maintain alignment with professional

practice whilst at the same time applying academic skills and practices such as participating in conferences, publishing and teaching.

Situated practice within professional hegemony

Our analysis also indicates the important effect of graduates' professional context as a feature of relationships that determine the ways in which impact is constructed. Scott et al. (2004) offer a typology of approaches that describe expectations of the nature of the relationship between universities and other societal stakeholders such as employers and policy-makers. One model they propose is referred to as the 'colonisation model' where academic knowledge is privileged and professional knowledge is 'captured' or subsumed by the "colonising" tendencies of the university. In this model, there is no requirement for a two-way relationship between the university and other stakeholders and impact expectations focus on the meeting of students' personal educational goals and outcomes. They also propose a 'reverse colonisation model' which, in contrast, identifies practitioner settings in social and organizational contexts as the primary source of knowledge production and application. Understood from this perspective, employers and other societal institutions might expect to 'drive' or control the direction of knowledge generation and curriculum development. From such a reverse colonisation model, the role of universities is to deliver relevant theoretical underpinning for, and accreditation of, professional knowledge. Fundamentally, however, this model requires universities to "...move much more into the territory of practice setting and adjust their way of working so that knowledge is produced which has practical applications" (Scott, 2004, 54). The third model within this typology is labelled the 'adaptation model'. This assumes that academic and professional knowledge are integrated and that knowledge generation processes should occur through boundary crossing and interaction between academic and practice settings. Most professional doctorate programmes are designed and

marketed in line with the epistemic assumptions of the adaptation model and scholarship related to impact also assumes a two-way exchange of practice and scholarly knowledge as the basis for relevant and rigorous knowledge generation (Anderson & Gold, 2019).

However, Scott et al's analysis of professional doctorate programmes suggests instead that, in practice, the colonisation model is dominant. Creaton and Clements' (2010) study of a professional doctorate programme further indicates limited interaction between employers and the university, even where employers pay all or part of the students' professional doctorate fees.

Our analysis extends this conceptualization, showing the dominance of shared professional, rather than academic, ideas, values and norms as the backdrop from which the impact of the doctorate is constructed. Some interaction occurs at the level of the individual between the professional field and the academic field although almost all of our respondents indicated difficulties with maintaining university based networks after the point of their graduation. In addition, our analysis indicates the hegemonic influence of the professional field on impact construction. Participants of lower status accepted in advance that their doctoral education would have no necessary positive impact on personal, organizational or professional practice change. Those with a higher organizational or professional status, however, expected to, and were able to, leverage their status and engage with their employer or with their profession in constructing impact from their doctorate.

Professional reputation and network building

Our analysis further extends understanding of the process of construction impact through identifying the importance of graduates' self-presentation and reputation-building practices.

Our analysis shows that, like impact, reputation is a highly subjective construction and 'reputation work' Zafirau (2007) requires intentional activities by professionals in their field

to generate a perception of legitimacy that align with professional or organizational expectations (Dumont, 2018). Our analysis shows the importance for impact construction of reputational construction and reconstruction processes. It further indicates the importance of decisions that graduates make about investment of their time and energy in professional and organizational networks, collaborations, and connections. Although some connections and network opportunities arise through serendipity, in many cases opportunities depend on conscious agency by the graduate and are affected by their position or status within their organization.

Butcher & Sieminski's (2006) study of professional doctorates in education indicates the importance of reputation at the meso level, (with colleagues in the workplace) as well as at the macro level of the wider professional community. They argue that professional esteem and professional credibility are important features of the impact of the doctorate. Our analysis extends this to show how, in spite of perceived barriers and limitations at workplace level, some graduates were able to generate impact through sector-level engagement with conferences, publications and consultancy.

An important feature of impact construction, therefore, is the dynamic processes in which doctoral graduates undertake reputation work to build their professional standing and networking opportunities. Our analysis clearly shows the importance, for some of our sample of participants, of self-initiated reputation building processes enacted through social media and conference-related activities. However, opportunities for impact also arise through network connections that are a feature of job and career position; levels of self-confidence, and differential commitment towards engaging in activities to leverage the social, symbolic and economic 'currency' of the professional doctorate. Professional networks form, 'churn' and change over time and our analysis reveals that professional reputation and network

building is not necessarily an individualistic and ego-focused process. Rather, impact through professional reputational and network building is located in specific sectoral, organizational and professional settings as

Organizational valuation of the doctorate qualification

Our analysis shows that the value accorded to the doctorate qualification by the organisation in which the student is working is a key factor in the construction of impact. In the field of doctoral education relatively few studies have examined the employment trajectories of individuals whose motivations for study are not situated in career aspirations within the university sector. Little is known about the differential valuation of doctoral ‘credentials’ in organizational contexts, particularly in relation to emerging professions in corporate contexts.

Our findings contribute important understanding of the ways in which organizational status hierarchies shape the valorization process of the professional doctorate qualification. Specifically, for our analysis, studies in the police service setting highlight the impact of an organizational history grounded in pride in being a non-graduate occupation with an reputation for scepticism, or even antipathy, towards academic qualifications (Lee and Punch, 2004; Punch, 2007). The current context for the UK police service is a more recent strategic recognition of the importance of higher and professional education to achieve professionalisation. This resulted in a Police Education Qualifications Framework requiring all new warranted officers to be educated to degree level (Wood, 2020). However, our analysis shows the potentially disruptive impact of the doctorate on the organisational hierarchy leading to occasions where lower status officers have higher levels of qualifications than their seniors in a context where distrust of academia and academic qualifications can still be observed in police culture and practice (Hallenberg & Cockcroft, 2017). Other public sector professional fields such as probation and social work, which were also represented in

our study, have a longer heritage as graduate level professions. However, the analysis shows that, even in these professional fields, practice-level knowledge and experience is more highly valued than academic knowledge and understanding.

As our analysis shows, organizational level valorisation of the doctorate is a feature of impact construction that graduates confront and over which they have limited control. For some graduates there are opportunities to be leveraged. For example, the field of risk and security management has no specific entry-level qualifications, and our findings show that impact can be constructed when a scarcity of higher-level qualifications specific to the sector enables 'premium' value to be associated with the doctorate. In other contexts, the findings indicate challenges rather than opportunities for impact related identity projects when the construction of impact is inhibited by the value and worth that the organization or sector associates with the doctoral qualification.

Conclusion

Impact is an important concept for doctoral educators, policy makers and employers. Most attention, in HE policy and literature, focuses on the mechanisms through which doctoral education pedagogy and curricula lead to individual student level change in cognition, behaviour and academic self-confidence. However, it is graduates who construct impact in organizational and professional contexts that change over time. In giving 'voice' to the perspective and experiences of graduates the article shows the limitations of Human Capital theory that assumes that doctoral graduation is an end state marking the acquisition by students of skills, behaviours and personal qualities that will be easily applied for individual and organizational benefit.

This paper conceptualizes the impact of the professional doctorate as socially constructed in professional contexts, through negotiation between student, employer and

professional networks. This conceptualization contributes important understanding of the complexity of the process of impact construction involving, for example, professional educational trajectories, career intentions, status and role autonomy. The conceptualization we have developed indicates the important influence of contextual factors specific to organisations and sectors that shape and delimit impact. This extends the processual perspective on impact, conceptualising it as a complex and nuanced process, constructed through interactions between key stakeholders beyond the realm of the university. This enables us to explain the function of non-HE experience as a feature of the dynamic processes involved in the construction of impact.

Much of the previous literature on professional doctorates has been written from the perspective of the higher education provider, but in giving voice to professional doctorate graduates, our data shows that the impact of the programme is to be found in the professional reputation of the graduate. In many cases, this lies beyond the immediate organisational context of either the university or the employer, and is developed through the work of the graduate in dissemination and networking in wider academic and professional contexts. Impact is not linear and a necessary consequence of the completion of doctoral studies. Instead, it is more appropriately conceptualized as fluctuating and negotiated through graduates' engagement with others in their organization and professional field, whose perspectives exert substantial influence on the value or 'worth' ascribed to the skills, confidence and qualities that doctoral education generates.

Implications

A limitation of this study is its focus on professional doctorate students from the criminal justice sector. However our findings and analysis are transferable to other doctoral education programmes aimed at managers and leaders in other corporate professions and expert

occupations in management and business contexts. Understanding the impact of doctoral education as an interactive and constructed process has key implications for students, employers, professional bodies and universities. For students, it is important to interrogate their motivations, both personal and professional, for undertaking the programme and to recognise how these motivations will shape the impact of their doctoral development in the workplace and on their wider professional sphere of influence.

Our analysis further indicates that employers' stance towards professional development and doctoral education may well lead to substantial 'wastage' of the potential benefits and 'returns' from their employees' participation in doctoral programmes of study. This suggests attention to organizational attitudes and culture in relation to professional education to enhance the extent to which knowledge, skills, professional competence and credibility developed through engagement with professional doctorate study can be applied in impactful ways in workplace settings.

It is for universities, however, that the implications are most far reaching. Professional doctorates continue to be designed and marketed on the basis of the integration that they afford between professional and academic knowledge and for their potential to contribute to professional practice. However, without continual interaction and engagement between the employer and the university, the outcomes of doctoral education are likely to have limited impact or benefit in workplace or professional settings beyond the university. Academics developing professional doctorates in business and management need to consider how to integrate employers more fully into the curriculum, delivery and assessment. Doctoral educators must also direct students' attention to factors that can enhance their success in constructing and sustaining influence and impact on their situated practice outside the academy.

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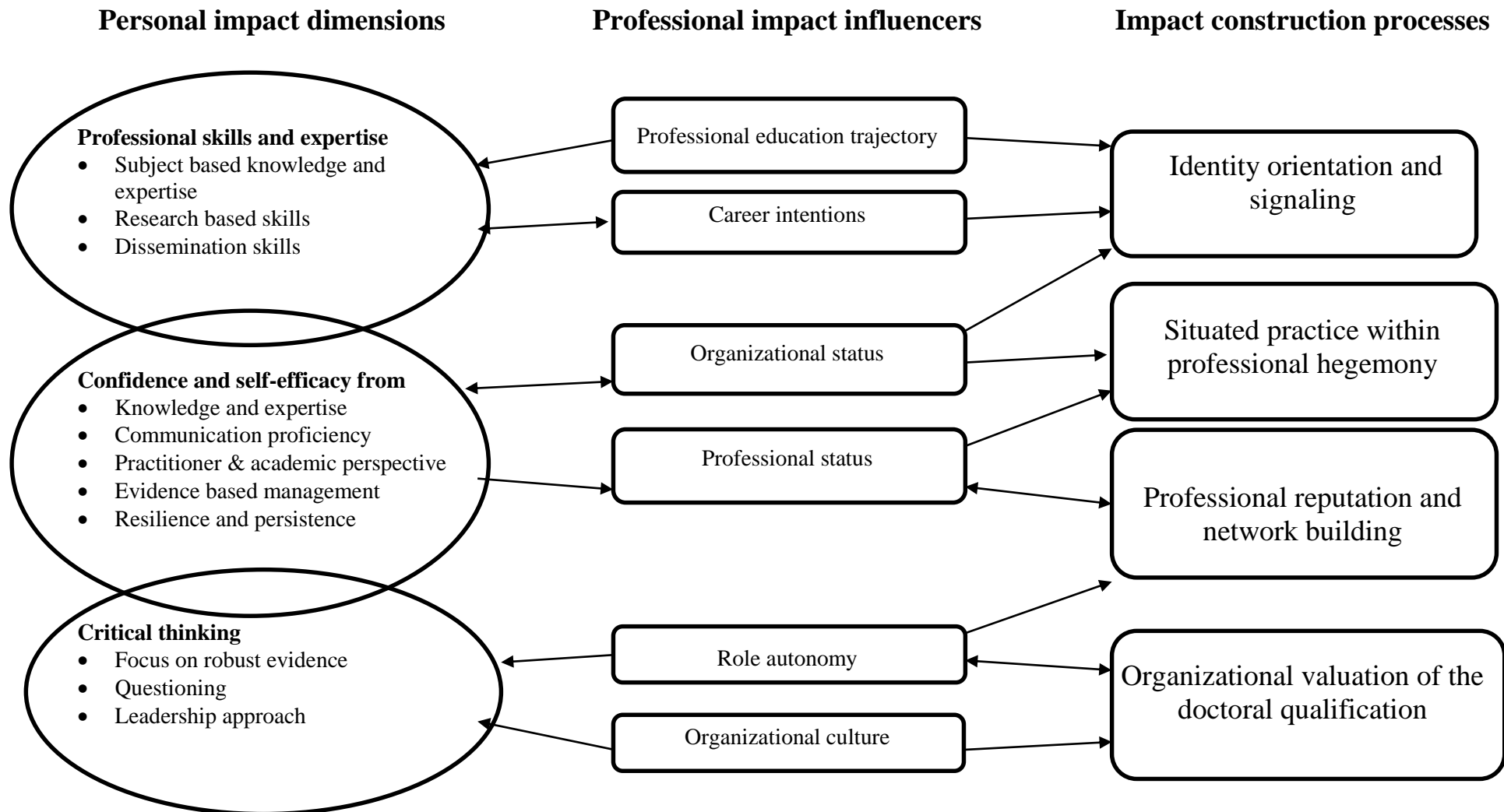


Figure 1 – Impact construction processes, dimensions and influencers