# Exploring the impact of a professional doctorate on higher education organizations: A critical realist perspective

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The realist perspective defends the idea that a text is the creative outcome of the interrelationship of individuals whose interactions generate reflections and discussions on a subject because they matter to them. Given this, I would like to express my gratitude to my supervisor Dr Peter Kahn whose constant support and advice were inestimable to get this work done. His invaluable considerations, comments and encouragements motivated and kept me going throughout the thesis stage. I would like to extend my appreciations to Dr Lucilla Crosta for her insightful assistance during the past four years and especially in the final stage of this journey.

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*Per i miei genitori, con affetto*

## Abstract

The impact of a professional doctorate on students and their organizations has become a recent topic of interest to researchers, however, there has been debate regarding the impact of a professional on his or her organization and whether this represents the straightforward manifestation of professional learning. As a doctoral student enrolled in the educational doctoral programme (EdD) offered by the University of Liverpool and a lecturer at one of the Universities of Applied Sciences and Arts (UAS) in Western Switzerland, I wanted to explore how the learning that occurs within such a programme can enhance organizational change. Consequently, this study investigated the interplay between agential and structural dimensions to develop causal explanations of how organizational change might – or might not – result from undertaking a Doctor of Education (EdD) programme based on the study of higher education.

The critical realist paradigm offered a good basis to do this, grounded as it is in the stratified ontology of a layered reality contingent on context, people's personal experience, and social structures. The study addressed the following research question: What are the mechanisms that influence the impact on a higher education professional's organization through the learning that arises from undertaking a professional doctorate in higher education? This study has used a combination of grounded theory techniques with critical realist retroduction to explore causal explanation about mechanisms. Semi-directed interviews were conducted with 16 participants, five of whom were EdD students focused on the study of higher education offered by a UK university, and the remaining 11 participants were their work colleagues well placed to comment on organizational change.

Data analysis identified individual meta-reflexivity as the key mechanism enhancing individual agency giving rise to professional concerns, in turn generating students' projects that attempted to address these concerns. In terms of individual agency, transformational leadership was also identified as a key mechanism emerging from the sharing of professional concerns with work colleagues, thus fostering social relations between human agents. Another aspect of this mechanism was the emergence of social relations resulting from collective meta-reflexivity that engaged work colleagues with the students' concerns, thereby leading to corporate agency. However, different expressions of collective reflexivity influenced how corporate agency unfolded, which in turn shaped the nature of organizational change.

Indeed, the need to align human actions with existing social structures triggered countervailing mechanisms whose powers could either enable or constrain human actions and their capacity to

impact on the student's organization. Critical realism explicitly endorses the view that generative mechanisms will not always be triggered. The theory that ensued from this study is that doctoral learning needs to be conceived, not simply in relation to producing knowledge for one's personal growth, but also in terms of mastering a discourse that crosses both research and professional practice and through one's capacity to draw others into that discourse in an ecologically-relevant fashion.

**Keywords**: corporate agency, critical realism, impact, knowledge economy, organizational morphogenesis, professional doctorate, reflexivity, social relations

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## List of abbreviations

| | |
|---|---|
| AHRE | Arts and Humanities Research Council |
| BERA | British Educational Research Association |
| BPS | British Psychological Association |
| BSA | British Sociological Association |
| DBA | Doctor of Business Administration |
| DClinPsy | Doctor in clinical psychology |
| EdD | Doctor of Education |
| EngD | Doctor of Engineering |
| ESRC | Economic and Social Research Council |
| EUA-CDE | European University Association – Council for Doctoral Education |
| HEFCE | Higher Education Funding Council for England |
| HEP | Haute école pédagogique (University of Teacher Training) |
| LEHE | Loi sur l'encouragement et la coordination des hautes écoles (Federal law in higher education matters) |
| MD | Doctor of Medicine |
| PCF | Participant consent form |
| PD | Professional Doctorate |
| PhD | Doctor of Philosophy |
| PIS | Participant Information Sheet |
| RCUK | Research Councils UK |
| REF | Research Excellence Framework |
| UAS | Universities of Applied Sciences and Arts |
| UK | United Kingdom |
| VPREC | Virtual Programme Research Ethics Committee |

# Chapter 1 – Introduction to the research

Higher education has become an increasingly important issue within the wider social and economic debate on internationalization and globalization. Its importance as a research area is increasing as it is perceived as contributing to the growth of the knowledge society and economy through the development of knowledge workers (Brennan & Teichler, 2008, Teichler, 2008b; Brinkley, 2006; OECD, 2015; Temple, 2014; Tight, 2012). The term "knowledge economy" refers here to a market that relies on knowledge as a production factor rather than on human and material physical resources (Temple, 2014). In his knowledge economy programme report, Brinkley (2006) highlights how difficult it is to define the term knowledge economy in a precise way and draws on a variety of sources to explain its significance. However, the definitions offered in his report generally overlap with Temple's description, thereby highlighting the use of "intangible assets such as knowledge, skills and innovative potential as the key resource for competitive advantage" (p. 4).

These definitions move from the sense of "an epistemological [to] an economic definition of knowledge", which has inevitably impacted on how we understand the term "knowledge worker" (Usher, 2002, p. 144). For Usher (2002) knowledge worker means a person who is "flexible and multiskilled with an openness to learning", and who endorses the role of change agent through their creative, entrepreneurial, collaborative and reflexive competencies convenient for problem-solving in complex professional situations (pp. 144-6). Brinkley (2006), however, calls for caution in the definition and application of the term because for him it overlaps with the notion of manager or discipline expert having the above-mentioned skills, but who can hardly be the only knowledge workers. However, for Brinkley (2006) what stands out in such definitions is that knowledge turns into an economic good whose value is regarded as an asset capable of increasing an organization's economic growth and in turn its prosperity.

Therefore, in this globalized economic context, higher education settings are nowadays regarded as being a key-element for economic and social advancement and as such they experience constant internal and external pressure for transformational change, thus adapting their structures to economic demands (Temple, 2014; Tight, 2012). Higher education settings respond to such pressures by adapting their structural and regulatory systems in terms of student enrolment, access and admission regulations, diversification of academic programmes, but also by increasing the economic relevance of research and by fostering knowledge acquisition applicable to changes in the professions (Brennan & Teichler, 2008). Since their inception, universities have

always been linked to knowledge acquisition through applied research for professional purposes, albeit in a more indirect way since the mid-nineteenth century advent of Humboldtian research-based institutions (Temple, 2014).

However, it is only since the late 20th century that knowledge has become a commercial good, a development that has paralleled the diversification of higher education institutions and changes in academic programmes, especially at the doctoral level (Bourner et al., 2001; Teichler, 2008a). Promoting learning that produces knowledge which can be commercialized has become a central element in higher education institutions to ensure the latter's economic survival (Temple, 2014). As reported by Temple (2014, p.1) higher education organizations are nowadays considered to be "*the* key motor of the knowledge economy" and an "indispensable ingredient of [a nation's] economic success".

However, the commercial nature of the relationship between universities and the economic markets has been questioned in relation to its more traditional role and mission which should primarily promote "collective and rational communication" (Barnett, 2003, p. 170). Higher education settings have started to diversify their study programmes to respond to market demands, expressing implicitly the need for qualified professionals with highly developed critical thinking competencies as well as other transferable communication skills, and analytical and evidence-based problem-solving approaches relevant to the knowledge economy (Mellors-Bourne, Robinson, & Metcalfe, 2016; Scott, Brown, Lunt & Thorne, 2004). This, however, suggests the addition of an "economic value" to the students engaged in such learning programmes and an "instrumental value" to learning intended to increase organizational productivity (White, 2016, p. 94).

The emergence of the professional doctorate has been a response to economic pressures from the workplace (Scott et al., 2004). Indeed, the professional doctorate is defined globally as a degree provided for professionals with advanced professional experience and whose research focuses on professional practice, thus enhancing professional knowledge relevant for the given profession and workplace (Fell, Flint & Haines, 2011; Fenge, 2009; Powell & Long, 2005; Tennant, 2004; Scott et al., 2004). However, as argued by Brown (2011), the results of higher education learning as an economic good is difficult to appreciate immediately in terms of its economic and instrumental impact on organizational productivity. Indeed, for Brown a direct link between learning and its economic and instrumental value is difficult to establish as the worth of higher education learning can only be ascertained many years after its completion. Such observations raise the question of the professional doctorate's impact on the organization in terms

of structural change and practice (Teichler, 2008b; Tight, 2012). This obviously raises broader questions about the responsibility and positionality of higher education settings regarding knowledge production and its value, not only for the knowledge economy, but also for the wider society (Barnett, 2000). Moreover, it also begs the ontological question, "what is it to *be* a university" (Barnett, 2011, p. 1) in today's social order, based on the idea that variety in knowledge production is equivalent to excellence that can be commodified in terms of adding to organizational growth.

In this sense variety becomes the expression of an opportunistic view which pressures people into producing even more variety in relation to "ideas, techniques, skills, products or life-styles" that might enhance productivity (Archer, 2017, p. 3). This understanding of variety implies a constant change of organizational structuring to comply with demands from economic stakeholders to ensure variety in knowledge production, thereby jeopardizing the fundamental conception of a university (Barnett, 2000). In this case, change cannot be considered automatically as a positive outcome that increases "the human well-being or flourishing of all" (Archer, 2017, p. 4). Indeed, variety has become the trademark of universities, including in terms of strategic and operational restructuring (strategic plans, programmes, curriculum design, etc.) or knowledge production (research strategies) which abide by the current economic trends as dictated by the globalized academic market.

This, inevitably, begs two further ontological questions: firstly, what should the learning that occurs within a professional doctorate look like in order to produce knowledge that is not only perceived as a marketable product relevant for higher education settings or industry's economic benefit but also worthwhile for the wider society? The second relates to what kind of critical being should such learning produce that is relevant for the flourishing of the human being and not only for the work organization? Indeed, the order of natural necessity relies on the fact that individual flourishing is the basic condition for collective flourishing. Natural necessity refers here to human agency's causal power acting upon the social context to change it according to the person's desire (Bhaskar, 2017). These unanswered questions demonstrate that there remains scope to explore how learning that occurs by undertaking a professional doctorate can impact on the workplace in terms of the organizational change beneficial for the organization and the human flourishing of its professionals. These key factors were investigated during this study and will be further developed in Chapter 2 and again in the conclusion.

This chapter outlines the research context and problem, my positionality as a researcher, the origins of this topic and the choice of research paradigm. Furthermore, it defines the scope of this

project and the contribution it hopes to make to the current conversation. The chapter closes with a description of the dissertation's organization.

### 1.1. The researcher and the research context

I have been working as a teacher, at the secondary level from 1990 to 2000, and since 2012 at the University of Applied Sciences and Arts (UAS) in Geneva, Switzerland after having obtained my first master's degree in Modern Languages (English, German and Linguistics) and subsequently my Master of Science in Adult Education at the University of Geneva, Switzerland. In between I held the administrative position of Deputy Secretary General at the Ministry of Education in Geneva, Switzerland and, from 2013 to 2015, I was Deputy Director of the Unit of Higher Education with the main responsibility to help the administration introduce the new Federal Law in Higher Education Matters (LEHE). I currently teach human resource processes and organizational and human dynamics at the UAS's business department in Geneva, while also undertaking the University of Liverpool's online education doctoral programme (EdD).

When I served as Deputy Director of the Unit of Higher Education, I became interested in exploring why UAS institutions were not offering doctoral programmes even though they were – given the introduction of the LEHE – on a par with more traditional universities, which has shaped my research subject. Indeed, the researcher's positionality is influenced by the personal, practical and intellectual goals s/he wants to pursue, particularly in relation to the phenomenon under study (Hammersley, 1992; Maxwell, 2013). The research process is therefore influenced by the researcher's desire to explain and identify solutions to these personal concerns (Belfrage & Hauf, 2016). In this context, clarifying the researcher's intentions regarding the research approach adopted is also a way to explain the researcher's positionality. However, researching within one's own organizational setting – be it academic or professional – can impact on access to participants, thus influencing the research design. This issue will be discussed further in Chapter 3.

### 1.2. Initial researcher positionality

An important key factor that shaped this study is that my work environment has been impacted by the 2015 introduction of the new federal law in higher education matters (LEHE). This new law situates the Universities of Applied Sciences and Arts (UAS) and the Universities for Teacher Training (HEP) on a par with the more traditional universities in terms of academic prestige. The

former, in contrast to more traditional universities, propose more practice-oriented programmes leading to taught degrees at the Bachelor and Master's level, and run applied research programmes for the benefit of industry and the labour market (Swissuniversities, 2015). These "new" universities have adapted their study programmes to the increasing demand for practice-based and vocational training in higher education institutions.

However, the Universities of Applied Sciences and Arts (UAS) and the Universities for Teacher Education (Haute école pédagogique, HEP) do not have the mandate to provide doctorates, which is currently the sole privilege of the traditional cantonal universities (n=10) and the federal polytechnics (n=2) in Switzerland. The European University Association (2007) in its report on doctoral programmes in European universities, posits that doctorates are a significant element in the advancement of the knowledge economy. As a result, professional doctorates are highly relevant to enhance the knowledge economy, their introduction into an applied research-driven academic environment seemed rather obvious to me. Bearing in mind that UAS teachers need a doctoral degree to pursue their career as professors, the question of introducing the professional doctorate as a third cycle qualification in UAS had some legitimacy, especially as one of the key elements that distinguishes professional doctorates is their relation to professional practice. However, the Federal Ministry of Economy, Education and Research has maintained its position that the doctoral level in Switzerland is for the moment reserved for traditional universities (State Secretariat for Education, Research and Innovation (SERI), 2015).

A second important element for the choice of this study's research topic is my personal history as a doctoral student and as a professional working in a "new" higher education environment in Switzerland. The difficulties I encountered in looking to undertake a doctorate in Switzerland as a mature student already professionally active triggered my interest in exploring the particularities and specificities of a professional doctorate in terms of added value for the candidate. I was also motivated to explore how the professional doctorate is relevant for the organization in terms of research that impacts organizational change. Relevant insights about such issues were provided when attending the 5th International Conference on Professional Doctorates, which took place in March 2016 in Belfast. One of the themes covered at the conference was how the doctoral students' work-based research projects could impact the researchers' workplaces and their professional context. The discussions held during this conference and various contributors' case-studies on professional impact illustrated both converging and divergent views on how professional doctorate outcomes are viewed as impacting on the workplace and their potential contribution to organizational change.

The recent Higher Education Funding Council for England (HEFCE) report on professional doctorates in the United Kingdom related the difficulties in linking the academic with the professional domain through the research conducted during a professional doctorate. The report also pointed towards an ambivalence on the part of employers regarding the influence of the professional doctorate on new knowledge production relevant for industry and wider society. This seems mostly to do with the dearth of evidence of a professional doctorate's impact on the work environment, and this even though its provision is perceived as resulting from job market requirements (Burgess, Weller & Wellington, 2011; Costley & Lester, 2012; Wellington & Sikes, 2006).

This lack of evidence might be one of the reasons why practice-based higher education settings and industrial stakeholders are less inclined to invest in professional doctorates and those who hold them. Another reason stated in the HEFCE report is that the professional doctorate is not well known outside the Anglo-Saxon education system, which was already reported earlier on by Green & Powell, (2005). Moreover, different degree titles fall within the designation of a professional doctorate qualification such as the for instance the Doctor of Education (EdD), Doctor of Medicine (MD), Doctor of Clinical Psychology (DClinPsy), Doctor of Business Administration (DBA) or even the Doctor of Work-based Learning (DProf) to name only a few of the most popular ones (Bourner et al., 2001). As stated by Bourner et al. (2001, p. 67), the University of Exeter offers for example four different professional doctorates in the professional field of education, namely the Doctor of Education (EdD) in Mathematics Education, Educational Psychology, Teaching English as a Foreign Language, and in Professional Studies. Bourner et al. (2001) suggest that this variation in titles under which the degree falls appears to contribute to the confusion about its quality and pertinence. Consequently, these elements informed my investigation of the relationship between the professional doctorate and its impact on the workplace in terms of organizational change.

## 1.3. Research problem

The aim of this study is to explore the role of professional doctoral learning in organizational change. The research focused on identifying the underlying generative mechanisms which acted as enablers or constrainers on the impact doctoral learning had on organizational transformation. The concept of generative mechanisms refers here to what emerges from any action or steps of actions that bring about change in a particular context. In relation to the social sciences, generative mechanisms are described as "people's *choices* and the *capacities* they derive from group

membership" (Pawson & Tilley, 1997, p. 66). Mechanisms, therefore, have causal powers to bring about change through the way they interact with each other (Hartwig, 2007). This causal power is thereby constituted by what has the potentiality to be exercised or not. When exercised, it is referred to as a tendency which can remain non-actualized or unobserved, while still having the power to impact on agency and social structures (Carter & New, 2004).

Despite the existing literature establishing a clear connection between the professional doctorate, the workplace, profession and research, putting forward the potential of such learning to impact on the student and his/her organization (see Burgess & Wellington, 2010; Costley & Stephenson, 2007; Lester & Costley, 2010; Lee, Green, & Brennan, 2000; Scott et al., 2004), comparatively little research has explored the conditions and circumstances under which such learning impacts on organizational change. Therefore, there is still scope to investigate how academic research can be integrated into the context of work in order to sustain organizational knowledge production beneficial for organizational change (Kahn, 2015; Mellors-Bourne et al., 2016). Indeed, as highlighted by Kahn (2014, 2015), learning that triggers collective reflexivity generates actions which, under certain contextual and social circumstances, can give rise to institutional change.

My concern relates to the fact that the existing literature investigating learning that occurs from engaging in a professional doctorate and its impact on professional practice and the work environment is based mostly on the Humean causation model or on the Kantian view that a phenomenon can only exist if we can know it. This aspect will be treated in more detail in Chapter 2. The Humean model implies that causality displays itself as a constant conjunction between events based on subjective expectations (Gorski, 2013; Groff, 2008). It accounts for reality through observation while its interpretation offers law-like regularity in terms of a phenomenon's regular patterns or arrangements, whereby Event X is always followed by an Event Y (Groff, 2016; Sayer, 2011). The second, is based on the idea that reality is what we sense and judge about things. Causation is therefore the expression of a "transcendental principle of lawful order built into cognition itself" (Groff, 2016, p. 4). If a thing exists beyond our senses, then we cannot know it, thus it doesn't exist.

The learning that occurs within a professional doctorate is often reported as taking place in conjunction with the notion of transformation through the classical input-output pattern (Fox & Slade, 2014). However, this paradigm cannot explain the causes behind such learning nor how it affects its environment. This is because most of these causes are underlying mechanisms with their own properties and power which affect the environment, yet remain unobservable (Bhaskar, 2017). As stated by Kahn, Qualter and Young (2012), learning theories tend to minimise the

mechanisms generated through the interplay of social structures and students' agency which develop the students' capacity to engage in purposeful reflections and actions, thus impacting on professional practice. Indeed, for critical realists, causation relies on mechanisms and their casual power or dispositions that things (namely any phenomenon) have to bring about change by virtue of their properties (Groff, 2004, 2016; Hartwig, 2007). Exploring generative mechanisms implies however adopting a different research perspective than those provided by positivism or social constructionism. Indeed, since mechanisms are not always observable, this implies reaching beyond positivist "hypothesis formation and testing" or constructivist phenomenon description and interpretation, all to find in deeper strata the nature of these mechanisms and the conditions and circumstances which triggered them (Sayer, 1992, p. 2).

While most of the literature exploring the impact of professional doctorates reports positive outcomes regarding the personal transformation of doctoral candidates (Burgess & Wellington, 2010; Costley & Stephenson, 2007; Davis & Frame, 2016), it also reveals the difficulty of explaining how doctoral learning impacts on the organization (Burgess, Weller & Wellington, 2011; Costley & Lester, 2012; Maxwell, Evans & Hickey, 2004; Scott et al., 2004; Wellington & Sikes, 2006; Wellington, 2013). Oftentimes, the literature conflates agency with social structures or vice-versa to explain the causes behind the positive outcome of doctoral learning on the organization (Lee et al., 2000; Davis & Frame, 2016). Rarely do such accounts refer to the interplay between structure and agency and to mechanisms with their own emergent properties and causal powers (Fox & Slate, 2014).

Agency refers here to the capacity of an individual or a group as a collectivity to "make their own decisions based on an awareness of their situation and the range of responses open to them" (Hammond & Wellington, 2013, pp. 7-8). Structure, conversely, relates in this context to institutional and relational structures respectively (Elder-Vass, 2010). Elder-Vass (2010, p. 78), endorsing Lopez and Scott's (2000) views, defines institutional structures as cultural and normative guides which regulate people's behaviour, thus organising their "enduring relations with each other". On the contrary, relational structures are comprised of the social relations that agents create among themselves to guide their actions, as well as the positions and roles such agents hold within a given organization.

Considering what the literature discussed above, this study focused on exploring the interplay between the human agents and the social structures involved in this study and how interrelationships between work colleagues triggered mechanisms via their own emergent properties and causal powers, thus resulting in new actions which led either to organizational

transformation or organizational reproduction. This meant adopting the critical realist perspective advocated by Bhaskar (1978) as it matches the problem under investigation.

Indeed, Bhaskar suggests an ontology to investigate change which implies the analysis of the world in terms of structures and their interrelationships (Gorski, 2013). These interrelationships are then analysed in terms of their forming parts of a system. According to Gorski (2013), agents are a part of the social system and they engage in reflexive deliberations and actions to change that system according to their own concerns and vested interests. For Bhaskar, this way of viewing the world is the basic framework for all learning about it. Bhaskar's views on how to account for change are therefore radically different from the empiricist standpoint, where change is perceived as a variation between T1 (time) and T2 (time) and abstracted from it. On the contrary, Bhaskar accounts for change in structures through the interaction with other structures, be they human or objects, whereby new structures can emerge or existing ones are transformed or dissolved (Gorski, 2013).

Critical realism is therefore a meta-theory that shifts from the epistemological to the ontological level and, in terms of the latter, from events to identifying underlying mechanisms (Danermark et al., 2002). In essence, critical realism is based on the idea that there is a real world independent of our perception and its theorisation, while knowledge of that world is socially constructed (Maxwell, 2012). Moreover, critical realists treat meanings, intentions and social relations – although not observable – as real things (Sayer, 1992). Consequently, as Sayer asserts, concepts such as meanings, intentions and social relations have causal powers that can eventually produce regularities to be explored and explained independently of the events or objects that produce them. Causality, thereby, endorses the nature of a real phenomenon called a "mechanism" which, when triggered, can give rise to change.

The emphasis in critical realism is therefore on understanding what mechanisms produce these events and not the events in themselves. If they are experienced, then they become empirical facts and can be explored and described. However, if this is not the case, then they remain hidden while still influencing agents and their social world (Danermark et al., 2002). Thus, mechanisms need to be analysed not by mere observation but by understanding under what circumstances and conditions they can be triggered and by advancing plausible explanations about such mechanisms in terms of tendencies in the form of theories, albeit fallible ones (Maxwell, 2012). Critical realism offers, therefore, an explanatory framework regarding social reality, one that is made up of generative mechanisms which, when triggered, give rise to actual events and our experience of them (Bhaskar, 2008b). The critical realist paradigm can be considered as an emancipatory

critique of social science as it offers the possibility of moving away from unwanted, dominating and oppressive sources to liberating and desired ones (Hartwig, 2007). However, this can only occur under conditions and circumstances that allow the development of agency (Bhaskar, 1986). A fuller discussion of critical realism will follow in chapter 2.

### 1.4. Purpose and relevance of this research

This research project has involved exploring and explaining the learning that occurred within a professional doctorate in the UK in the study of higher education itself and its impact on knowledge production leading to organizational transformation. As a lecturer working in the business and economics department of a Swiss UAS, understanding how learning takes place within a practice-based institution has the potential to lead to actions that foster organizational change. Moreover, focusing on exploring the relation between the nature of the learning that occurs during a professional doctorate as an enabler for organizational transformation and the conditions under which it can transform the organization may lead to new insights relevant for new doctoral programme and curriculum design.

### 1.5. Outline of the thesis

The thesis is structured in the following way: Chapter 2 is a detailed literature review on the professional doctorate and its impact on the individual and the workplace. Chapter 3 outlines the methodological framework used to explore how the underlying mechanisms and causal powers of doctoral learning that occurred within a professional doctorate has an influence on how it impacts organizational change and influences the student's work environment. Chapter 4 relays the research findings and their discussion. Finally, chapter 5 concludes with the findings' theoretical and practical implications as well as discussing the study's limitations and recommendations for further investigation, and its impact on the researcher's positionality.

# Chapter 2 - Literature review

This chapter provides an overview of the literature on the professional doctorate and its impact on the individual and their work environment. It also includes insights into the critical realist paradigm as well as Archer's (1995) morphogenetic approach as theoretical frameworks to address this study's research aim and questions. Some relevant key terms were also defined such as the professional doctorate, impact, and organizational change as well as discussions underpinning this study. This review has been updated throughout the research process to include the latest themes and sources (Hammond & Wellington, 2013). Indeed, this procedure helped the researcher to maintain an open mind regarding the conclusions that could be drawn from the findings, while the literature helped to externally validate the research findings, which is in alignment with the grounded theory approach to data analysis.

## 2.1. Introduction

This study focused on the impact the professional doctorate had on both the student and the organization concerned, which remains an under-researched area (Davis & Frame, 2016; Fulton, Kuit, Sanders & Smith, 2012; Mellors-Bourne et al., 2016; Wellington & Sikes, 2006; Wellington, 2013). The existing literature on the professional doctorate relates to different areas as detailed in Table 2.1.

**Table 2.1.** Areas discussed in the existing literature on the professional doctorate

| Area | Selected literature |
|---|---|
| Historical context | Bourner et al., 2001; Kot & Hendel; 2012; Green & Powell, 2005; Lee, 2009; Scott et al., 2004 |
| Purpose of PD | Kemp, 2004; Powell & Long, 2005; Park, 2007; Scott et al., 2004; |
| Subject areas of PDs | Bourner et al., 2001; Green & Powell, 2005; Powell & Long, 2007; |
| Justification for PDs | Brinkley, 2006; Neumann, 2005; Tennant, 2004; Usher 2002; |
| PD vs PhD | Boud & Lee, 2009; Bourner et al., 2001; Fink, 2006; Gregory, 1995; Green & Powell, 2005; Neumann, 2003; Park, 2007; Scott et al., 2004; |
| International context | Boud & Lee, 2006; Bourner et al., 2002; Lee, 2009; Green & Powell, 2005; Huisman & Naidoo, 2006; Powell & Green, 2007; Scott et al., 2004; Wildy, Peden, & Cha, 2015; |
| Typology of knowledge production | Boud & Lee, 2009; Lee et al., 2000; Malfroy, 2004; Maxwell, 2003; Scott et al., 2004; Tennant, 2004; Usher, 2002; |
| Impact | Burgess &Wellington, 2010; Burgess, Weller & Wellington, 2011; Costley, 2010; Costley, 2015; Costley & Abukari, 2015; Costley & Armsby, 2007; Costley & Lester, 2012; Costley and Stephenson, 2007; Davis & Frame, 2016; Fox & Slade, 2014; Fulton, Kuit, Sanders & Smith, 2012; Kumar, 2014; Mellors-Bourne et al., 2016; Lester & Costley, 2010; Scott, D., 2014; Scott et al., 2004; Servage, 2009; Siebert & Costley, 2013; Wellington & Sikes, 2006; Wellington, 2013. |

(Table derived from Lee, 2009)

As shown in Table 2.1, different studies have examined the impact of the professional doctorate on its organizational context with some diverging conclusions. Indeed, studies in this area highlight the difficulty to establish a direct link between the learning occurring within a professional doctorate and its impact on the organization (Scott et al., 2004; Wellington, 2013). The literature review will therefore discuss scholarly work on the impact of the professional doctorate on the student, the profession and the work environment as related to this study's research questions, while excluding literature on other areas such as the historical background and differences between various types of professional doctorates as these topics are not directly relevant to this dissertation. However, since this study's research topic is the professional doctorate within a British context, a short overview on this subject will also be provided.

Wellington (2015, p. 67) emphasises that the literature review is intended to identify relevant themes in a wider background, thereby helping to "build an argument". Furthermore, Ridley (2012) recommends adding relevant theories, concepts, terminology and definitions to generate a broader overview. Indeed, there are different concepts and terminology to consider and to define when discussing the impact of learning that occurs within a professional doctorate. The first concerns the definition of the professional doctorate itself, its characteristics and role in knowledge production. The second concept relates to the definition of the impact of the professional doctorate on the individual and the work environment. Only once the above-mentioned concepts have been clarified can we begin to explore what mechanisms are triggered by the learning derived from undertaking a professional doctorate. However, exploring mechanisms requires the use of theories and conceptual frameworks to analyse the interplay between the doctoral students' agential actions within the professional doctorate and the social structures that enable or constrain such actions to unfold in the way it was designed by the student's research project.

Therefore, this literature review covers the following themes:

- Defining the professional doctorate, its characteristics and role;
- The professional doctorate in the UK;
- Situating the notion of the professional doctorate's impact;
- Defining impact and its relationship to the professional doctorate;
- Exploring the impact of the professional doctorate in the UK;
- Conceptualising impact within the critical realist perspective;

- Critical realism;
- Archer's morphogenetic approach.

## 2.2. Defining the professional doctorate, its characteristics and role

Defining the professional doctorate is not straightforward as there is no generally agreed description of the qualification that explains its overall characteristics and role, or the types of people who undertake it (Lee, 2009). As stated by Bourner et al. (2001) and attested to in the latest HEFCE report on professional doctorates (Mellors-Bourne et al., 2016), the number of professional doctorates in the UK is significant and constantly growing, while the nomenclature is so wide-ranging it is difficult to arrive at a universal definition. However, the first report on professional doctorates published by the Council for Graduate Education in the UK (Hoddell, 2002, p. 62) has defined the professional doctorate as follows:

> A Professional Doctorate is a programme of advanced study and research which, whilst satisfying the University criteria for the award of a doctorate, 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.

Fell, Flint & Haines (2011) have added the notion of practice-based rather than discipline-dependent research. They also highlighted that professional doctorates are embraced by working people with wide professional experience, while they are normally undertaken within the student's work environment to produce practical knowledge for professional practice and the profession, leading eventually to professional and organizational change. Similarly, the Economic and Social Research Council (ESRC) and the Research Councils UK (RCUK) (Raddon & Sung, 2009, p. 7), define the professional doctorate as a qualification that fulfils a role different to that of the doctor in philosophy (PhD) as it emphasises "practice, the professional context and a shift away from academic scholarship as the primary focus of knowledge production". The University of Liverpool in advocating its online educational doctoral programme (EdD) "encourages a deep understanding of the role of universities as places of learning and as learning institutions, from a global perspective, allowing [students] to apply research-based knowledge and critical thinking in practical contexts around the world" without, however, clearly defining the educational doctorate.

Considering these explanations, what seems to characterise a professional doctorate and distinguishes it from the PhD is its relatedness to the professional community in which it is

situated and its impact both on the student and the work environment. However, research also demonstrated that the divide between a professional doctorate and the traditional PhD has narrowed significantly. Scott, D. (2014) considers the differences between the professional doctorate and the PhD less distinct as most PhD programmes have adjusted to correlate theory and practice more closely to respond to market demands. Indeed, the introduction of integrated PhD programmes with a taught component featuring a more structured and cohort-based teaching and learning approach is slanted towards candidates developing and acquiring more market-orientated skills (Mellors-Bourne et al., 2016; Park, 2007). As stated by Wellington, Bathmaker, Hunt, McCulloch, & Sikes (2005), the traditional PhD with its self-regulating, directed and full-time research approach is no longer the rule. Indeed, Wellington (2013) asserts that there is now a wide range of different doctorates which make the distinction between traditional PhDs and professional doctorates less obvious. Given this, the legitimate question arises how the learning that occurs from undertaking a professional doctorate can produce work-relevant knowledge to generate organizational change.

Meanwhile the European University Association's Council for Doctoral Education (EUA-CDE, 2015) has stated that variety in doctoral-level training is important. Different models can coexist but quality and practice need to be the same to ensure that different doctoral programmes are comparable across institutions and states in terms of quality assurance-related requirements and outcomes. Wellington (2013, p. 1491) has suggested looking at this issue under five different areas: the purposes of doctoral study; its impact, the written regulations governing such awards; the examination process; and "the voices of those involved in it". Despite this attempt, there is still no clear consensus about the nature, form, content, role and purpose of doctoral studies.

A professional doctorate's characteristics as revealed in this dissertation can, however, be summarised as follows: it is practice-based rather than focused on a single discipline situated within a particular institution. Such studies are primarily undertaken by professionals in current employment and holding significant work experience, while the learning adds to practical knowledge production contributing eventually to professional and organizational change. The professional doctorate is thus considered as a doctoral programme located at the intersection of academe, the profession, and the workplace (Lee et al., 2000). Fell et al. (2011, p. 14) contend that the UK-based professional doctorate is multidisciplinary with "a reflexive focus on professional development". Lee et al. (2000) outline a hybrid curriculum model representing the professional doctorate as a conceptualized space that links academic research, work practice and organizational dynamics in a coherent and formalized reflexive relationship. Indeed, as

stated by Lee et al., the workplace becomes not only the place of knowledge production but is also the "object for reflexive analysis" through the knowledge generated from professional doctorate-derived learning located within the work environment (p. 128).

However, their theoretical model has not generated a consensus in the existing literature as underlined earlier. Debates on the notion of impact and how it should be measured have been highly controversial. The lack of consensus about outcomes and their impact on the organization has been emphasised by Malfroy (2004) who argued that industry and organizations had "unrealistic expectations" about the research outcomes and their impact on organizational transformation. Meanwhile, Maxwell, Evans and Hickey (2004, p. 3) posit that impact has become a way to justify and validate the existence of the professional doctorate, at least in Australia. Indeed, professional doctorates' funding was jeopardised in Australia due to criticism of the award as "dumbing down the doctorate" and a "quick fix" qualification in response to market demands for a more qualified work force. This supports Fox and Slade's (2014) suggestion that there is a need to clarify further the notion of "impact" due to its heterogeneous definitions. Their work also emphasises the need to question the traditional cause and effect model which shows clear limitations in measuring the effectiveness of doctoral learning in terms of impact on the student and workplace due to the "complexity and messiness of the professional learning process" (p. 546).

### 2.3. The professional doctorate in the UK

The professional doctorate (PD) was introduced in the 1990s in the UK as an alternative to more traditional PhD programmes encompassing over 100 different subjects (Bourner et al., 2001; Brown & Cooke, 2010). Doctorates in education (EdD), business administration (DBA), clinical psychology (DClinPsy) medicine (MD) and engineering (EngD) have been highlighted by McVicar, Caan, Hillier, Munn-Giddings, Ramon and Winter (2006) as being the most awarded professional doctorates. The PD award shows variance and divergences in modes, nomenclature and structures, leading to a certain confusion around its purpose (Bourner et al., 2001; Powell & Green, 2007).

The drivers for such changes to doctoral education in the UK are multiple but are linked mostly to changes in the relationship between academia and the workplace triggered by the fact that most academics are not employed as faculty but are seeking employment elsewhere (Lee, 2009; Green & Powell, 2005; Scott et al., 2004). The PD appears, therefore, as more aligned with the industrial interest groups' requirements as it focuses on work-based learning related to the professional domain

in order to generate practice-related research beneficial for the knowledge economy (Fell et al., 2011). Therefore, the PD is considered a response to a need and demand for doctoral programmes that allow active professionals to engage in part-time studies and projects which might contribute to or have an impact on their professional practice (Fulton, Kuit, Sanders, & Smith, 2013).

However, despite the PD being defined as an award enhancing transferable skills relevant for the economic development of the profession and organization (McVicar et al., 2006), there are controversies regarding how such doctoral learning impacts on the former. The next section will therefore focus on how the notion of impact is debated in the existing literature.

### 2.4. Situating the notion of the professional doctorate's impact

As demonstrated in Table 2.1, there exists now a critical mass of leading research investigating the professional doctorate in relation to its impact on the individual and the workplace (see Burgess & Wellington, 2010; Costley 2010; Costley & Abukari, 2015; Costley & Armsby, 2007; Costley & Lester, 2012; Costley & Stephenson, 2007; Maguire, 2014; Mellors-Bourne et al., 2016; Scott et al., 2004; Servage 2009; Wellington & Sikes, 2006). Indeed, Scott et al.'s (2004) study, based on students' motivation to enrol on a professional doctorate, highlighted that the professional doctorate impacted professionals in their personal and professional life-courses in different ways. Young professionals reported that the professional doctorate enhanced their professional identity through professional socialization, workplace experience and career development. More established professionals stated that the professional doctorate improved their professional trajectory as a continuation or development of what they were already doing, rather than advancing their career. It improved their credibility as professionals in terms of their "contextual understanding of the practice" (p. 134). For well-established professionals, the professional doctorate generated instead confidence and personal growth and new knowledge acquisition.

Scott et al.'s (2004) study thereby revealed that the professional doctorate's impact perceived was mainly in terms of self-actualization and self-construction, but less as a collective action that contributed to improved organizational performance. However, they also recorded negative impacts derived from students' increased reflexivity resulting from professional doctoral learning. Indeed, critical knowledge as the outcome of reflexive deliberations influences how students understand their own self and their work environment, thereby imposing a new set of values on their given institution which challenges the institution's function and knowledge production (Scott et al., 2004, p. 52). Similar results were also reported by Siebert and Costley,

(2013), who argue that reflective deliberations empower student-practitioners to reconstruct their own personal and professional self. In some cases, this transformative experience can lead to unpredictable outcomes, resulting in value conflicts between employers and the student. However, although such different viewpoints create tensions within the organization, they can also result in new actions through the student's research project, thereby addressing such differences and creating a space for organizational change.

Based on Scott et al.'s (2004) study and framework, Wellington and Sikes (2006) have investigated further the professional doctorate's impact on doctoral students' personal and professional development. However, their study excluded an analysis of the professional doctorate's impact on the profession or organization concerned. Their study concluded that the professional doctorate impacted students' personal lives in terms of personal growth both in the cognitive and the affective domain, which inevitably also enhanced their professional self in terms of increased reflexivity in their professional practice. Further research by Burgess and Wellington (2010) and Burgess, Weller and Wellington (2011) has also underlined how the professional doctorate impacted significantly on the doctoral candidates' professional career advancement, and their discourse.

Changes in discourse were reported to stem from professional doctoral learning in terms of new knowledge acquisition, greater understanding of work-related problems through increased reflexivity, and enhanced communication skills by gaining insights into work-related terminology. Likewise, Servage (2009) pointed out that the professional doctorate is regarded mainly to enhance personal development rather than professional practice. Burgess, Weller and Wellington's (2011) findings, however, also highlighted that despite the clear evidence of the professional doctorate's impact on the individual in terms of self-transformation, it remains difficult to establish a direct link between academic learning and its impact on the profession, resulting in debates about the creation of professionally-relevant knowledge (Burgess et al., 2011).

Concerns regarding knowledge production and its impact on the organization have also been addressed by Maxwell (2003) and more recently by Fulton, Kuit, Sanders and Smith (2012). Their studies highlight that knowledge from undertaking a professional doctorate is derived from reflexive deliberations both as an individual and as a professional, thus impacting on professional practice. Their work draws on Gibbons, Limoges, Nowotny, Schwartzman, Scott & Trow's (1994) proposition, and on the later revised version of Nowotny, Scott and Gibbons (2003), that different kinds of knowledge production and locations exist, generating different outcomes. Gibbons et al.'s (1994) theory is based on the idea that Mode 1 knowledge is formal,

occurs within the academic field and is produced via fundamental research. Conversely, Mode 2 knowledge is generated by practice within the workplace with the intention to transform professional practice. In relation to the professional doctorate, this implies the use of Mode 2 knowledge production based on the students' capacity for critical self-reflection, and as a professional in their professional practice, thereby resulting in organizational knowledge relevant for the work environment and the profession. Knowledge production is therefore perceived as resulting from the interplay between academe, the work environment and the profession, and not only derived from academic research.

This concept has been transferred to the professional doctorate by Lee et al. (2000), who established a clear relationship between the learning that takes place during a professional doctorate in academe, the workplace and the profession, thereby establishing a new model of hybrid knowledge production. Indeed, Lee et al. have argued that the end result of a professional doctorate lies in the intersection between the higher education setting and the project's workplace. Their interrelationship produces new kinds of knowledge and professional practice based on reflexive deliberations which result in organizational transformation. This concurs with Scott, D.'s (2014) argument that a professional doctorate as a hybrid mode of knowledge production relies on developing the candidate's criticality about how work is done within an organization with the intention of changing it accordingly. He posits that academia is the context that allows the student to acquire the necessary theoretical knowledge, whereas the workplace is the source for reflection to create practice-based knowledge.

Lee et al.'s (2000) conceptual framework has, however, been disputed by Malfroy (2004), who argues that the academic setting is dominant and relates only theoretically to the professional environment, most importantly because the workplace is rarely actively implicated in professional doctorate research. Indeed, she suggests that the source for research is the profession, from which the practitioners acquire and develop the necessary understanding of what goes on in the workplace. Thus, there are tensions that arise between these sites regarding which one has the control over knowledge production. This viewpoint was also advanced in the latest HEFCE report on professional doctorates which underlines that employers show little interest in the outcomes of professional doctorates because the impact they have on professional practice and the workplace is intangible (Mellors-Bourne et al., 2016).

However, a countervailing argument has been developed by Lee et al. (2000) and Scott, D. (2014) who link the academic context and the work environment through the doctoral student's project. Similar arguments to Lee et al. (2000) and Scott, D. (2014) have also been proposed by

Costley and Stephenson (2007) and Costley (2010). Both studies report that professional doctorate-derived learning has a direct impact on the organization and the profession through the students' specific projects concentrating on real professional problems within their own organization. Further work by Lester and Costley (2010) have built on the same argument, and such impact as stemming from three spheres. The first domain relates to the student's work-based project which generates new knowledge, thereby increasing the organization's potential. The second refers to the student's personal development as it becomes relevant for the organization in terms of increased professionalism, leading to students taking on strategic roles. Finally, the third domain relates to organizational transformation as the organization understands the students' work-based project as offering the possibility to generate new professional practices and business, thus increasing the organization's "recognition and prestige" (p. 568). Later work by Costley and Abukari (2015) reiterate the same findings by reporting that the student's work-based project impacts on their personal and professional development, which in turn has a direct impact on the organization and the professional arena via the student's newly acquired professional knowledge.

These views concur with Davis and Frame (2016), who argued that since the student's project is deliberately chosen by the latter to address a professional concern, this enhances their professional skills in terms of critical thinking, argumentation and working with others collaboratively. Such collaborative work in turn improves the work colleagues' creative participation in generating new actions to advance work practices at the organizational level and policy at the national level. Lastly, such learning induces students to apply theories to their practice-based concerns which in turn expand on such theories to improve the understanding of existing professional practice. This concurs with Maguire (2014) who argues for the benefits of the professional doctorate by highlighting that such programmes link academic knowledge with professional experience, thus contributing knowledge to the wider society.

A later study by Costley and Lester (2012, p. 266) has, however, emphasised the "limited amount of evidence" of the professional doctorate's impact on the organization, profession, or on professional practice respectively, as it is dependent on the organization's ability to respond supportively to the student's project. This concurs with Scott et al. (2004) and Burgess et al.'s (2011) findings, who argue that the link between the professional and academic world remains fragile, contested, and not as robust as many pretend, while some authors have foregrounded this fragility (Malfroy & Yates, 2003; Malloch, 2010; Mellors-Bourne et al., 2016). Malloch (2010) argues that the link between study and work is debatable, even if there is a close correlation between the research project, work, and professional practice. Her research findings indicate employers' major disinterest

towards such studies as they perceive them as irrelevant despite the usefulness of research for the professional environment. The scant support of students' work-based projects from their work environment inevitably weakens the impact that professional doctorate learning can have on professional practice and the work environment itself. These findings have also been supported by the recent research undertaken by Mellors-Bourne et al. (2016) in relation to professional doctorates in the UK, where employers appear disinterested in doctoral research in the workplace.

Tennant (2004) questions the idea that a professional doctorate is the sole agent to produce work-based knowledge by arguing that doctoral education has now transcended the divide between a professional doctorate and a PhD. Equally, Malfroy (2004) has posited that the idea of a professional doctorate as the sole producer of work-based knowledge remains unproven. Indeed, Malfroy's argument advances that Lee et al.'s (2000) hybrid model, based on the idea that there is a relationship between academe, the workplace and the profession, fails to accurately represent the professional doctorate, because the profession's involvement as well as that of the workplace, have a vague connection to the degree. This perspective was already sustained in earlier research conducted by McWilliam, Taylor, Thomson, Green, Maxwell, Wildy and Simons (2002, p. 100), who highlighted that most professional doctorates reveal a "surface level linkage with the professional body/bodies and/or industry with which they claim to engage". This underlines that the workplace represents an important element for research, but has no deep relationship within the research process. According to Malfroy (2004), this is partly explained by workplaces' resistance to engage actively with academic research because of its apparent non-relatedness to work-based practice.

What stands out from these studies is a clear tendency to conflate human agency with structure or vice-versa. Indeed, the doctoral student is often portrayed as the only actor with the properties and causal power necessary to change the organization and the profession. Human agency as the primary source for organisational change was highlighted by Lester and Costley (2010) and recently by Davis and Frame (2016). Indeed, both studies emphasise how the student's research project increases their knowledge and professionalism, thereby impacting on the individual's personal development and the organization's prestige and potential, thus increasing the latter's competitiveness. Academe, the work environment and the profession are described as mere supporting structures for such actions, thus omitting the importance of the power of social structures pertaining to norms and rules and their potential constraining influence on human agency (Archer, 1995). Indeed, social structures with their own properties and causal power can enable or constrain the doctoral student's project unfolding in the way they intended. Conversely, studies such as Lee et al. (2000) Malloch (2010) or McWilliam et al. (2002) emphasise the

importance of the workplace as a social structure that influences people as "social beings" (Archer, 1995, p. 1). This implies that much less is reported regarding the interplay between agency and social structure whose emergence influences professional doctorate learning and therefore also the impact it can have on the work environment, which is what this study covers.

It is rather surprising that the literature fails to provide more evidence on how doctoral learning produces mechanisms that can influence its impact on the student and organization. This is partly due to the complexity of researching this interrelationship and the difficulty in identifying an appropriate research paradigm. The difficulty results from the dominant tendency in the existing literature to relate impact in an input-output causal approach to theoretical explanations (Fox & Slade, 2014). In other words, the notion of impact is directly linked to the outcome of the professional doctorate, namely the research project, and to the influence it has on changing work practice. Thus, there is a tendency to relate professional doctorate learning directly to new knowledge production relevant for the work environment, without exploring the mechanisms that lead to this process and the circumstances and conditions under which they appear. Indeed, despite the work-relatedness of professional doctorates, there is still little evidence that demonstrates how such provision has a tangible impact on professional practice and organizational change. The difficulty in establishing evident causal links between professional doctoral learning and its impact on organizational change, and proving the relatedness between practice-based research and knowledge acquisition and tangential impact on professional practice and organizational change underlines why there are such diverging arguments regarding the concept of impact.

The literature's differing views about the impact of the professional doctorate on the work environment rekindles the question about the usefulness of academic learning for organizational knowledge production (Usher, 2002). Tsoukas and Vladimirou (2001) define organizational knowledge as the capacity that human agents must have to carry out work in a structured context while depending on the collective understanding of organised procedures to solve work-related problems relevant for practice and the profession. This definition raises a more complex question about the interplay between human agency and existing social structures. This in turn leads us to ask how existing social structures can enable or constrain the capacity of professional doctoral learning to generate collective actions addressing professional concerns in an organized fashion, leading to change in, first, existing work practices and subsequently with the organization.

However, it requires a robust theoretical framework to understand how organizational knowledge is concretely integrated into collective practice to ensure organizational transformation. A possible explanatory framework is the critical realist paradigm and more specifically Archer's

(1995) morphogenetic approach based on the "analytic dualism" between structure and agency. The link between professional doctorates, academe and the workplace cannot make abstract of the interplay between human agency and the work environment's social structures. Indeed, agency has an impact on organizational structures while these structures enable or constrain human actions to unfold in the agents' desired way.

In terms of the relatedness between professional doctorate-derived learning and its impact on the student and their work environment, there is a need to understand two main elements. Firstly, it is necessary to ask how the professional doctorate impacts agency and agential actions, which in turn can be enabled or constrained by existing social structures. Secondly, it is important to understand the theoretical underpinnings that can explain how mechanisms triggered through the interplay between agency and social structures can impact both the person and their work environment. These elements will be analysed in the following sections.

## 2.5. Defining impact in relation to the professional doctorate

Defining the professional doctorate's effectiveness in relation to its impact on the student and the workplace implies defining the concept "impact" itself. According to the Online Oxford English Dictionary (OED) impact relates to "com[ing] into forcible contact with another object" and "hav[ing] a strong effect on someone or something". Chandler (2014, p. 2) describes impact in relation to research activities as "making a difference", whereby the notion of "action or activity which leads to change" is included and change is "seen within a context which may be global, local or even individual". Both definitions refer thus to the notion of impact as a relational activity that impinges both on the subject who acts and the object on which the action takes place. In the context of higher education, impact is mainly referred to as making a difference in relation to research matters (Chandler, 2014).

Chandler describes impact in relation to the definition provided by the Arts and Humanities Research Council (AHRC), the Research Councils UK (RCUK) and the Research Excellence Framework "REF2014". The AHRC (2015, p. 1) characterises impact as "the influence of research or its effect on an individual, a community, the development of policy, or the creation of a new product or service". The RCUK (n.d.) describes it as "the demonstrable contribution that excellent research makes to society and the economy", whereas the REF (n.d.) understands it as "an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia". What results from the combination of these

diverse definitions is that the concept reaches beyond the knowledge creation relevant for academia as it also includes both the economy and wider society. Chandler (2014) argues for the need to consider the nature of impact in relation to the context in which it occurs and its outcomes in terms of contribution, benefits or changes.

When considering the above elements concerning the notion of impact, it becomes evident that the concept creates a relationship between human activity (research) and existing social structures (e.g. society, economy, development of policy). Indeed, the context in which doctoral learning takes place ought to be considered as it contributes to turning newly acquired knowledge into effective actions that impact professional practice and thus the organization. However, actions are directed by people who also make up organizations. Consequently, the nature of impact refers here as the emergence from the interplay between the person who acts and is acted upon by the context in which the action takes place (Elder-Vass, 2010). The concept of emergence relates to the properties and causal powers of agents and social structures since change in one of the two forms inevitably impacts on the other, without necessarily conflating them (Hartwig, 2007). The theoretical underpinnings this implies and how the notion of impact can be conceptualised is discussed in the section that follows.

## 2.6. Conceptualising impact within the critical realist perspective

If the knowledge developed thus far about the impact of professional doctorates on the work environment is divergent, it might originate from posing the incorrect research question. Instead of gaining an understanding of this issue through the traditional cause and effect paradigm, research should instead ask the ontological question, what does it take for doctoral learning to impact on an organization. Inquiring about conditions and mechanisms that enable or constrain doctoral learning impacting on organizational change focuses on the ontological nature of the object and the environment in which it is situated (Owens, 2011). The question how a professional doctorate impacts on professional practice and through what underlying mechanisms individual and organizational transformation occurs remains unresolved. However, this asks for a different theoretical and methodological research perspective than the positivist or constructivist traditions used in previous research on this subject, which is instead provided by the critical realist perspective.

The critical realist approach helps to question the concepts required to explore the underlying mechanisms needed for morphogenesis to occur. As argued by Ackroyd and Karlsson (2014, p. 21),

critical realist researchers attempt to connect the "inner world of ideas to the outer world of observable events" by identifying the possible causal mechanisms at work and how they have come to exist. However, such a connection is not easy to establish, as the knowledge we have of ideas and events depends on our interpretations of things, which in turn rely on our knowledge of them. Yet, the knowledge we have of our thought processes and the events that make up our reality are not to be confounded with reality itself. Indeed, objects are what they are, independent of what the researcher knows about them (Sayer, 2000). It is precisely the fallibility of our knowledge that convinces critical realists that there exists a world outside our knowledge of it while its understanding is socially constructed (Sayer, 2000).

Indeed, the world is a set of socially-constructed objects and things based on discourse, which reflects its effects only partially and fallibly. This implies, however, that to acquire knowledge about the world we cannot rely simply on empirical observations, because objects and events exist independent of our knowledge of them. Moreover, we are trapped by our own limited "available descriptions and discourses" in interpreting such observations and constructing our knowledge about the world (Sayer, 2000, p. 6). Given this, the choice to use the critical realist paradigm makes sense, as it provides the necessary research tools to combine the positivist paradigm based on scientific observation and the constructivist approach founded on discourse to explore the underlying mechanisms, creating plausible explanations about the issue under study.

The following section discusses critical realist theory as an explanatory framework necessary to conceptualising impact based on professional doctoral learning influencing work environment-related social structures.

## 2.7. Critical realism

Critical realism is based on the philosophical underpinning that reality exists independent of our perception of it while revealing regularities in the form of patterns which can be studied and explained (Maxwell, 2012; Sayer, 2000). As stated by Maxwell (2012), critical realism is grounded in the idea that there is no objective knowledge of the real world, as there are many alternative ways to perceive it. This makes all knowledge incomplete and fallible especially because such knowledge is context bound and thus can change at any time through research-led understanding. Critical realists' ontological stance consists of arguing that objects exist in the world independent of our perception, experience and theorisations, and that knowledge is socially constructed (Bhaskar, 2008a; Maxwell, 2012). This implies that people's perceptions of the world

in which they live are treated as real objects with their own properties and causal powers which can trigger mechanisms that impact on the social world (Danermark et al., 2002). One of the main tasks attributed to critical realist research is to identify explanations for social phenomena by recognising the underlying causal mechanisms created through the interplay between human agency and existing social structures which lead to structural elaboration (Danermark et al., 2002).

Critical realism offers therefore an alternative view to positivism based on law-finding social science modelled on natural science as well as to interpretivism based on interpretation of meaning (Sayer, 2000). The positivist approach in critical realism derives from searching for causal mechanisms to explain causation. However, causation is not to be interpreted in terms of the Humean constant conjunction theory, but in terms of how similar mechanisms operating in similar contexts, when triggered, can give rise to different outcomes, due to the circumstances and conditions under which they might or might not operate. Indeed, some mechanisms are triggered in all circumstances and display their effects, while others come alive only in certain contexts (Danermark et al., 2002), thus, our knowledge about the world is always incomplete and fallible (Bhaskar, 2008a). The key notion on which the critical realist paradigm is based is the rejection of the "epistemic fallacy", which confounds reality with how we construct knowledge of it (Bhaskar, 2008a, p. 36).

Critical realists claim that to gain knowledge of such underlying mechanisms, we need to discover their nature which implies to look at reality from a stratified point of view as shown in Table 2.2 (Collier, 1994). Reality is indeed not transparent and, consequently, its underlying mechanisms and causal powers are not immediately observable (Danermark et al., 2002). Bhaskar (2008a), the founding father of critical realism, divides reality into three different ontological domains: the empirical, the actual and the real. The empirical domain relates to what we can experience directly or indirectly; the actual domain is where events happen regardless if we experience them or not; and the real domain relates to the underlying mechanisms that make things happen in the world.

Table 2.2 shows how structures, mechanisms, powers and social relations pertain to the realm of the real, because they are unobservable elements. When triggered, they influence actions and events whether we experience them or not, thus relating them to the domain of the actual. When such events and actions are experienced, then they become observable and rely on the empirical domain.

**Table 2.2.** The structured ontology

| Entities/Domains | Real | Actual | Empirical |
|---|---|---|---|
| Structures, mechanisms, powers, social relations | ✓ | | |
| Events, actions | ✓ | ✓ | |
| Experiences, perceptions | ✓ | ✓ | ✓ |

Adapted from Bhaskar (2008a, p. 13) and Ackroyd and Fleetwood (2000, p. 13).

To understand social phenomena, it is therefore not enough to observe them. We need to understand what produces social phenomena by seeking out causes in the domain of the real to explain what underlying mechanisms are triggered through the interplay between structures and human agency (Ackroyd & Fleetwood, 2000; Archer, 1995; Sayer, 2000). However, such mechanisms act at different levels and are organized hierarchically on a micro, mesa and macro level, with each level comprising more than one stratum, while Bhaskar (2010) defines seven different strata comprised in a laminated system as detailed in Table 2.3:

**Table 2.3.** Underlying mechanisms organized according to Bhaskar's laminated system

| Level | Individual | Group | Organization/Society |
|---|---|---|---|
| **Micro** | i) the sub-individual psychological level;<br>(ii) the individual or biographical level;<br>(iii) the micro-level studied, for example, by ethnomethodologists and others; | | |
| **Meso** | | (iv) the meso-level at which we are concerned with the relations between functional roles such as capitalist and worker or MP and citizen; | |
| **Macro** | | | (v) the macro-level orientated to the understanding of the functioning of whole societies or their regions, such as the Norwegian economy;<br>(vi) the mega-level of the analysis of whole traditions and civilizations; and<br>(vii) the planetary (or cosmological) level concerned with the planet (or cosmos) as a whole. |

Source: R. Bhaskar (2010, pp. 9-10).

As shown in the above table, social explanations of the transformative capacity of social activity considers distinct levels of agency, both individual and collective. This implies that for social change to occur, there is a need to situate explanations at the level of the individual, the group and the organization/society, to understand their vested interests that generate socially transformative actions.

Critical realists argue that the social world is composed of different groups of people and social entities defending different vested interests. Such entities can be defined as organizations or normative circles that possess the necessary causal power to influence individuals (Elder-Vass, 2010). Normative circles are defined as social structures with their own causal powers that encourage human agents (individuals or groups of people) to conform to social norms. Social norms are in turn defined as being the emergent causal power of specific social entities or a group of people which influence social actions (Elder-Vass, 2010). Simultaneously, structural factors are informed, reproduced or transformed by human agents, as they possess the human capacities to think, act and transform structural properties in relation to their vested interests (Archer, 2003). Consequently, social events depend on agential actions (reflecting, believing, interacting, etc.), whether individual or collective, thus human agency is indispensable for social change to occur (Archer, 2012). Therefore, critical realism is associated with human emancipation as agency transforms "unwanted, unneeded and/or oppressive sources of determination to wanted, needed and/or liberating ones" while establishing the necessary conditions for its growth (Hartwig, 2007, p. 157).

The search for evidence and truth in critical realism is based on exploring the underlying mechanisms of an object in order "to develop a deeper level of explanation and understanding" (Oliver, 2012). By exploring mechanisms, critical realist research goes beyond the descriptive element of specific patterns that can be observed through factual accounts or narratives to find causal explanations for the phenomenon under study (Archer, 1995; Bunt, 2016, Patton, 2015). According to Bhaskar (1986), not all accounts are equally valid because they have no rational basis on which to explain one choice over another. Therefore, there is a need to break down the social world into its components to understand the "inner composition making each object what it is and not something else" (Danermark et al., 2002, p. 47). Indeed, it is the interrelationship of such objects that act as generative mechanisms giving rise to impacts on the social world. However, objects or events are not reducible to such generative mechanisms as they can remain untriggered under certain circumstances (Bhaskar, 1978). This implies that knowledge remains fallible because of the unpredictability of the outcome of the interplay between different mechanisms. Therefore, a phenomenon can be explained in terms of tendencies but not in terms of certitudes.

Since the process of exploring generative mechanisms implies analysing the interplay between objects and their relations, and since they are not always empirically observable they cannot be tested by using the logic of deductive or inductive reasoning (Danermark et al., 2002; Sayer, 1992). Therefore, to create plausible explanations about underlying mechanisms, it is necessary to introduce abductive and retroductive reasoning to acquire knowledge of the generative mechanisms underpinning the phenomenon under study, which cannot be explained through direct observation (Danermark et al., 2002; Patton, 2015).

Indeed, for critical realists, to explain an event it is necessary first to work back in time to explore the causes that produce the event, which occurs through abduction. It forms the reasoning process starting from the consequences of an event or experience to identify the causes that produced the given occurrence (Danermark et al., 2002). However, to explain what causal mechanisms produce a certain event means stepping beyond the empirically observable by exploring the conditions under which the given phenomenon occurs. This occurs through the retroduction inference mode. Retroduction takes abduction a step further as its inferential process is based on identifying the conditions of a phenomenon. It is through retroduction that critical realists explain the circumstances under which certain mechanisms occur. Retroduction is therefore a form of abduction, which asks the transcendental question about the properties of a given object (Danermark et al., 2002). Indeed, critical realism looks at social objects as mainly relational. They are social objects because of their internal relations with other objects. Therefore, retroduction becomes a way to obtain "knowledge about what internal relations make X what it is" (Danermark et al., 2002, p. 97). Causality in critical realism acquires, therefore, a different connotation since, by explaining how a mechanism causes a particular result in a given context, it offers a transfactual truth transcending the particular context in order to offer a general theory about mechanisms (Pawson, 2013).

Archer's morphogenetic approach is relevant in establishing the causal interrelationship between human agency and social structure. Indeed, it defines an object's characteristics which confers on it causal power and thus the potentiality and tendency to change things (Hartwig, 2007). According to Hartwig, causal powers have the potential to be exercised or not depending on the context, whereas tendencies are potentialities which are exercised but not actualised, thereby remaining unobservable as their effects can be countervailed by other powers. Therefore, the two concepts constitute the generative mechanisms through which change occurs. However, it is important to define the properties of an object to understand how its causal power can influence change within a given context to find plausible explanations for such transformation. Archer's

(1995) morphogenetic approach as an explanatory framework helps to explain how human action is conditioned by existing social structures, which in turn influence agency and the outcome of their interaction.

### 2.7.1. Archer's morphogenetic approach

Archer's morphogenetic theory is based on the belief that society is "shaped and re-shaped by the interplay between structure and agency to elaborate or change a system" (Hartwig, 2007, p. 319). Society is thus an open system that changes according to human action. Hence, the term "morphogenesis" as it relates to "the process of social structuring [through] social relations" (Archer, 1995, p. 166). How people make choices causes them to undertake actions generating mechanisms influencing the outcome of such actions impacting on their environment. These choices again change existing social structures which then alter other people's choices. Human agency, while changed by social structures, does, however, interfere with these structures through deliberate actions, thereby changing the social order (Pawson, 2013).

Archer's theory also asserts that social structures are present before agency and that the latter influence the social world individually or collectively (Scott, 2010). Archer's theory tends thus to find plausible explanations about the causes that induce agents to act in a certain way and how the consequences of such actions impact social structures either by transforming them, resulting in social morphogenesis, or by reproducing them under social morphostasis.

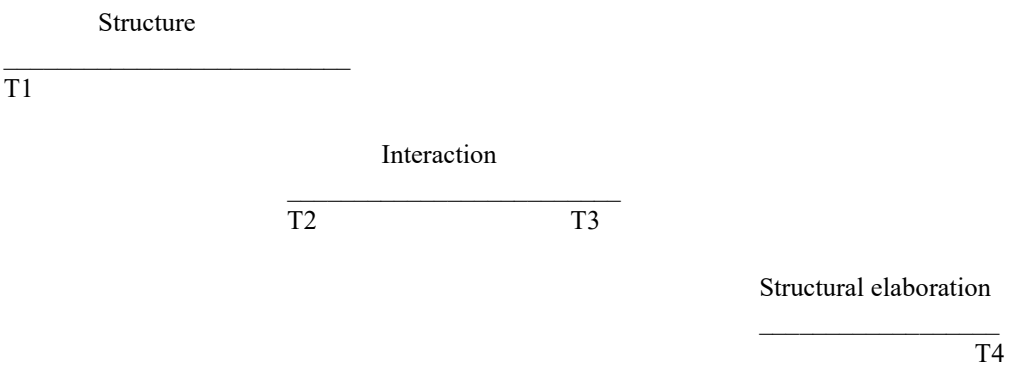
### 2.7.2. Archer's analytical dualism theory

For Archer (1995), structure and agency are separate aspects of social reality with different powers and capacities to elaborate, modify and transform social and institutional practice through their interrelationship. However, to analyse these entities separately, a practical social theory that she calls "analytical dualism" is needed to explain the structuring and re-structuring of the social order over time. The separation of structure and agency is possible for Archer because they are different emergent entities with different properties and causal powers, even though they depend on each other for their continuation and development.

Moreover, one of the crucial points in Archer's theory is that structure and agency differ diachronically over different time sequences. For her, the morphogenetic argument that structure and agency operate over different periods is based on the proposition that structure pre-dates human

agency, which however transforms it, and that structural elaboration post-dates such actions. It is only through the breaking down of this temporal flow into different sequential periods, which can work backwards and forwards, that structure and agency can be analysed (see Figure 2.1).

**Figure 2.1.** The morphogenetic sequence




Source : M.S. Archer (1995, p. 76).

The analytical dualism concept starts normally at T4 with a problematic question and moves to T2-T3 by interrogating what happened during the interactions generated and who is responsible for it, how and why. However, such questions are usually not straightforward responses, because the T4 results found are not always what the agents wanted to produce when they started to transform things. We have therefore to return to T1, namely to the actions' structural context, to understand the interactions between T1 and T2, thereby identifying the motivational sources, ideological commitments, and any other causes responsible for such changes (Archer, 1995, pp. 77-79).

### 2.7.3. Defining social structure and human agency

There is no ontological agreement in social sciences about what structure and agency entails, except that structure refers to objectivity and agency to subjectivity and that they have different properties and causal powers (Archer, 2003). Structure in the morphogenetic approach refers to any kind of human construct including human relations and the social roles humans occupy (Porpora, 2013). Agency refers to the reactions of humans as individuals or collectivities towards such social and structural arrangements, who have (or have not) the power to act upon pre-established socio-cultural systems (Archer, 2000). Archer distinguishes primary agents as a collectivity that might share the same structural and cultural properties as corporate agents, but with the difference that the former lack "a say in structural or cultural modelling" (p. 265).

Corporate agents are, conversely, defined as "organised interest groups [engaging] in concerted action to reshape or retain the structural and/or cultural features in question […] by having a voice in cultural and social restructuring" (p. 265).

Therefore, corporate agency plays a significant part in redefining social relations and human actions, and can be understood as one of the key elements transforming theoretical problems into concrete actions (Kahn, 2015). Regarding the organization, corporate agency can be viewed as a generative mechanism allowing organizational morphogenesis to occur as it possesses the necessary causal power that can be activated under certain circumstances. However, to understand what generates individual and corporate agency there is a need to first understand the relationships between social structure and human agency and how its interplay results in its own properties and causal powers.

### 2.7.4. Reflexivity as the mediatory element

Explaining the link between human agency and social structures implies understanding how structural and cultural forms condition the unfolding of human actions, and how the reflexive agent acts on such constrainers or enablers by engaging in deliberate projects to unfold these actions (Archer, 2003). This, however, implies that "agents have to diagnose their situations, they have to identify their own interests and they must design projects they deem appropriate to attaining their ends" (Archer, 2003, p. 9). According to Archer, this occurs through individual reflexivity, which she also describes as "internal conversations" denoting a way forward to gain a critical perspective upon one's self and the social environment in which the person stands and the motivation to act according to one's vested interests. However, not all agents can exert their causal powers in the same way and under the same circumstances. Indeed, this depends on the type of reflexive mode they adopt. Archer identifies four different modes of reflexivity, each entailing a different way of engaging with the social environment leading to actions that try to impact the latter.

Communicative reflexives are people whose internal conversations need to be confirmed by others before they engage in consequent actions. Conversely, autonomous reflexives engage in reflexive self-contained deliberations based on their own priorities rather than those imposed by their social context. Their projects are based mostly on enhancing performance and productivity and – although their agential power can always be countered by "circumstances which are not of their making" (Archer, 2003, p. 253) – autonomous reflexives use their agential power to control structural powers that work against their personal aims. Meta-reflexive people engage in self-

reflexive deliberations about themselves and their environment and are critical about the actions undertaken in society. They are motivated by an ideal and tend to find faults in their social context as it never lives up to their expectations. Finally, fractured reflexives are people who hold internal conversations which do not lead to purposeful actions due to personal distress or result in antagonistic relations with others.

To conclude, these different reflexives can be summarised as follows: communicative reflexives are people who relate to primary agency whose causal powers are limited and therefore act according to what others require. Autonomous reflexives are inventive but occasionally lack the necessary holistic approach to engage in collective and organized actions aiming at a coherent outcome. Meta-reflexives are likely to produce actions that engage the collectivity as they rely on overt communication and critical deliberations to evaluate actions in relation to expected outcomes. These different modes of reflexivity are relevant to understanding how participants in this study mediated the effect of structure upon agency. Reflexivity was thus an important mechanism in exploring how it influenced the impact of doctoral learning on the student and the work environment.

## 2.8. Conclusion

The literature reviewed in this chapter situates this study within the field of research that covers the professional doctorate's impact on the person and the work environment. Despite the clear connection between the professional doctorate, the academic environment, the workplace and the professions, most researchers underline the difficulty of establishing a clear link between the professional doctorate and its workplace and professional impact. However, the literature also demonstrates that this link exists due to the student's research project addressing professional concerns by engaging in relevant actions.

Nevertheless, such views are contested in arguments that the workplace provides only the research context without any real say in the research process. Such perspectives emphasise the difficulty in providing an accepted definition of impact. Indeed, the traditional input-output model as an explanation concerning the impact of the professional doctorate on the person and workplace have been critiqued. Therefore, the critical realist paradigm and Archer's morphogenesis/stasis explanatory theory were introduced as a theoretical framework to address the notion of impact to provide a different perspective.

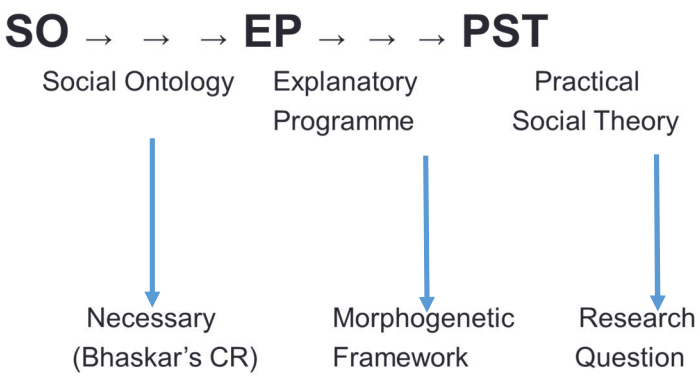
The critical realist ontological and methodological stance towards research needs, however, a research method which the critical realist paradigm lacks (Oliver, 2012). The choice of an adequate research method compatible with the critical realist approach will be discussed in the next chapter.

# Chapter 3 – Methodology

The present study was designed to identify the generative mechanisms that were triggered through EdD-derived learning and how this could prompt organizational change in certain of the participants' higher education institutions and not in others. The choice to concentrate on an EdD focused on higher education and offered by a UK university was purposeful and relates to the fact that I am myself studying within the same programme as discussed in Chapter 1. This aspect will be developed later in this chapter. Participants' perceptions were therefore interpreted as generating possible causal explanations about how doctoral learning could impact their organizations. This occurred by using the critical realist perspective, which relies on abductive and retroductive inference methods (see Chapter 2) to identify the underlying mechanisms triggered through doctoral learning that influences organizational change in the student's professional environment.

These methodological strategies are intended to answer the ontological question regarding what qualities professional doctorate-derived learning should have to enhance doctoral candidates becoming self-conscious social agents and the impact this has on their work environment. Subsequently, these inference modes also address the question how individual transformation can enhance change at the corporate level. The question of the nature of the mechanisms involved and the conditions under which they can be triggered was also addressed. Archer's (1995) morphogenetic/static framework was used to frame the research questions regarding how learning that occurred within an online EdD triggered change in the doctoral candidates' work context, and under which circumstances and conditions (see Figure 3.1).

**Figure 3.1.** The structure of practical social theory




Source: M.S. Archer, "Morphogenetic Approach" workshop, University of Warwick, June 2016.

However, as an explanatory programme, the morphogenetic approach fails to produce concrete explanations regarding how social elaboration occurs because it remains a highly theoretical framework (Archer, 2016). Therefore, to answer this study's research questions it was necessary to rely on a practical social method for data analysis compatible with the critical realist approach (see Figure 3.1), like grounded theory. The reasons for this choice will be explained later in this chapter.

The following sections provide an overview of the research design and the outline of the data collection and analysis process. The chapter concludes by reframing my research questions, discussing the validity and reliability issues regarding the research approach used and by addressing the ethical considerations of this study.

## 3.1. Rationale for the research design

This study began by addressing the initial research questions based on the diverging opinions in the existing literature regarding the correlation of a professional doctorate with the impact it has on the individual, the organization, and wider society. These initial research questions read as follows, but were then ultimately refined as explained later in this chapter:

1. *How does the professional doctorate impact organizational change?*
2. *What are the generative mechanisms that influence the nature of this impact?*
3. *How do these generative mechanisms work in a given context*?

The research intended to explore how professional doctorates-derived learning influenced organizational change in the doctoral students' higher education settings. This is a direct choice that followed from the research questions. The research questions focused on exploring the underlying generative mechanisms and their causal powers that emerged from the interplay between agency and social structure and which act as enablers or constrainers for organizational change.

In the previous chapter, the difficulty in establishing a clear connection between the professional doctorate and its impact on professional practice, the workplace and the profession was highlighted. Therefore, there is still scope for investigating how doctoral learning triggers concerns in doctoral students who then engage in projects, whose actions when integrated into the work context sustain organizational change.

This was achieved by using Archer's morphogenetic/static explanatory framework (see Chapter 2) to explore the triggering of mechanisms through the interplay between social structure and human agency to give rise to structural elaboration. However, Archer's morphogenetic approach as an explanatory framework is a high-level theory which needed a suitable research methodology such as grounded theory as an analytical method for data analysis. Indeed, both approaches complement each other as both sustain the exploration of the human and structural dimensions of the social world to find plausible explanations for new theories (Belfrage & Hauf, 2016).

### 3.2. Grounded theory as a research methodology

Grounded theory is a widely-used research methodology developed by Glaser and Strauss (1967; 2008) and later refined by Corbin and Strauss (2015) for theory building grounded in data. Glaser and Strauss's original version was developed as a response to the positivist turn adopted in sociology in North America during the early 1960s (Charmaz, 2014). As such, it relied on rigorous empirical research procedures including the use of different forms of data for research analysis, which conferred a certain rigidity to the process.

The classical version developed later by Strauss and Corbin (1990) departed from the original by adopting a more qualitative research approach. Finally, Charmaz (2014) refined the classical version of grounded theory by adopting a constructivist approach. Indeed, what differentiates constructivist grounded theory from Glaser and Strauss's (1967, 2008) version is its flexibility as it "resists [its] mechanical applications" (Charmaz, 2014, p. 13). Moreover, it is also open to extant theory and existing literature (Lempert, 2007) as it accepts the fact that the researcher's positionality cannot avoid integrating "pre-existing frames of reference" (Hammond & Wellington, 2013, p. 84). Therefore, new literature and extant theory can be brought into the analysis process to inform the possible explanations and to "develop theoretical sensitivity" (Bryant & Charmaz, 2007, p. 20).

In addition, grounded theory as a research methodology (any version) can be combined with different theoretical frameworks, because the "strategies are, in many ways, transportable across epistemological and ontological gulfs" (Charmaz, 2014, p. 12). Finally, and as stated by Charmaz, the research process occurs within pre-existing social structures and conditions including the researcher's own positionality, which in turn impact the research outcomes accordingly. This aligns with Archer's morphogenetic approach since the same idea underlies her theory as emphasized earlier in this chapter.

Although grounded theory as a research methodology has different approaches, they share the same core elements, namely the identification of key concepts derived directly from data while developing theoretical explanations that reach beyond empirical knowledge (Corbin & Strauss, 2015). This occurs through an iterative method intertwining data collection and data analysis in an ongoing process. Indeed, grounded theory relies on a coding process that breaks down data into manageable parts to detect underlying meanings and "to move the researcher away from her preconceptions" (Oliver, 2012, p. 376). This is again in alignment with the critical realist perspective which advocates the breaking down of an event or object into different strata of reality to identify the underlying mechanisms that give rise to an event or an object opening it up to causal explanation. Moreover, grounded theory depends on the constant comparative process that relates relevant evidence between and within categories, and explores their properties, dimensions, and variations within different contexts and under different conditions. This suggests, however, that reality is constantly changing through agential actions. Grounded theory is thus not only a means of describing social events, but offers explanations about why and how social interactions and events occur, thereby developing new knowledge.

Critical realism and grounded theory reach beyond the deductive and inductive inference method (Charmaz, 2014; Corbin & Strauss, 2015; Maxwell, 2012; Sayer, 1992) and both adopt the abductive thought process through which the outcome of a phenomenon is retraced to its cause and the consequences it produced, as well as to the conditions under which it came about (Danermark et al., 2002; Patton, 2015). Although the earlier version of grounded theory by Glaser and Strauss (1967, 2008) relied on induction, constructivist grounded theory advocated by Charmaz (2014) uses abduction as a mode of inference for logical argumentation and theory building. Abduction in constructivist grounded theory relies on theoretical sampling to investigate the empirical social world (Emmel, 2013). Similarly, critical realism employs both abduction and retroduction for theory building (Danermark et al., 2002). The use of these two inference modes will be discussed later in this chapter.

Conceptualisation, abstraction, causal explanations and theorising are thus core elements for both social methods, although critical realism tends to look at differences in social events and relations and their causal powers rather than at data regularities (Charmaz, 2014; Sayer, 1992). Charmaz's (2014) constructivist approach to grounded theory concurs, therefore, with Danermark et al. (2002) regarding that pre-established concepts and theories convey knowledge of social properties, revealing underlying mechanisms and structures which should be used, not only for the coding system, but also for explanatory argumentation and theorisation.

This constitutes evidence of the compatibility between the critical realist perspective as an ontological theory, Archer's morphogenetic approach as an explanatory theory, and grounded theory as a social research methodology because they all look at "the event itself *and* the meanings made of it" through the emergence of analytical concepts and generative mechanisms stemming from data analysis and not from pre-conceived concepts (Oliver, 2012, p. 378). These constitute the main reasons why this study has adopted an interpretative qualitative approach informed by the critical realist paradigm and using Archer's morphogenetic/static approach as an explanatory framework combined with analytical techniques borrowed from grounded theory.

### 3.3. Setting and participant selection

According to Maxwell (2012) the selection of participants and settings in qualitative research is based on how best they can respond to the research aim and questions, and on their accessibility. This strategic selection principle is called purposive sampling in qualitative research. However, any sampling strategy implies building a research relationship with participants and gatekeepers to ensure participation, which is not always readily granted (Maxwell, 2012).

My initial purpose was to study the impact of two different online professional doctoral programmes offered by the University of Liverpool and to explore their influence on different organisations. The choice of these programmes situated within my own immediate ambit as a student was influenced by the prospect of gaining access to an appropriate setting and participant cohort. Gaining access to participants, relevant research institutions and organizations is considered one of the most challenging tasks for researchers as it relies on a relational process based on trust, which in turn influences the information one can access (Feldman, Bell, & Berger, 2003). Gaining unrestricted access is almost impossible due to practical issues, but also because access is based on the gatekeepers' tendency to protect participants and their institution "for ethical and safety reasons" (Wellington, 2015, p. 122). In relation to my own higher education institution, there is a tendency to protect the student body from the innumerable demands made on them by different researchers located outside of the immediate study programme.

As posited by Cohen, Manion and Morrison (2011) and elaborated by Walford (2001) and Hammersley and Atkinson (1983), gaining participant access and acceptance is a slow process, especially when it involves an organization, as the researcher is regarded as an outsider intruding on a social system, and one who has no real relations with that system (Flick, 2014). Indeed, the reluctance of some participants to accept to be interviewed could reflect the absence of a

relationship and trust between the interviewer and the interviewee. As stated by Cohen et al. (2011), gaining access as an outsider needs to be eased through informal contacts to establish rapport. Indeed, creating a rapport between interviewer and interviewees is vital but depends on how easily contact can be established between the two parties (Wellington, 2015).

Given this, I had to go through different administrative channels and gatekeepers to establish access (Cohen et al., 2011; Wellington, 2015). While permission was granted by the EdD Programme Director to approach doctoral students enrolled in the EdD programme, it was more difficult to obtain consent from the DBA manager despite the professional relationship between the Programme Directors who shared the same university context. As argued by Shenton and Hayter (2004), refusing access to the research site where the fieldwork might be conducted can prevent the researcher from approaching potential participants, thereby impacting on the quality of the data collection and consequently the research design. One of the reasons for not gaining immediate access to the DBA students can be ascribed to my being considered as an outsider to their student community (Cohen et al., 2011; Grey, 2014). Another reason could be that my research project felt like an intrusion into the life of this community, which must have been unsettling, despite the numerous ethical precautions I took to explain the research project's aims and purpose (Flick, 2014).

Despite the DBA department's later acceptance, I encountered some difficulties to contact DBA students because I could not access their database for confidentiality reasons. After spending innumerable hours locating such participants through my own devices (LinkedIn, DBA's doctoral online community network), I failed to receive any positive answers. Because of this lack of initial cooperation from the DBA community, there were research design consequences, which had to be reconsidered in terms of choice of research setting and participant selection. I had therefore to rethink my basic research design and decided to restrict the sampling to EdD candidates while widening it to students who had reached the thesis phase. After I received permission from the Virtual Programme Ethics Committee (VPREC), I used this new sampling approach, which eventually provided me with the necessary number of participants. How this affected my research design will be discussed in one of the following sections.

This not only highlights the difficulty of gaining access to participants and settings but also the issue of the researcher's role in relation to his/her insider or outsider status (Corbin-Dwyer & Buckle, 2009). Indeed, as stated by Corbin Dwyer and Buckle (2009), the role of the researcher is important as it has a direct impact on data collection and analysis.

### 3.4. The researcher's reviewed positionality

One of the major elements to consider in this research was that I am a doctoral student engaged in the same doctoral programme provided by the same university under study, thus underlining my insider status as a researcher. Being a member of the group I was studying could easily be conceived as researcher bias and thus influencing the research outcomes. However, I also reclaim the outsider status in this research since I had no prior relations with the doctoral students' organizations – including the University of Liverpool – as a research context before this study. This emphasises the difficulty involved in establishing clear boundaries between insider/outsider researcher positionality since they can be situated at different levels and advocates for a "fluidity between the two states" with their respective advantages and disadvantages (Merriam, Johnson-Bailey, Lee, Kee, Ntseane, & Muhamad, 2001, p. 405).

The insider researcher status refers to researchers conducting research within their own population and their own research settings (Corbin-Dwyer & Buckle, 2009). According to these authors, this stance benefits the researcher's acceptance and legitimacy, thereby facilitating relationships of trust with participants, leading to improved data collection depth. However, they also highlight that this inevitably raises questions about an increase in researcher bias whereby the researcher's subjectivity might impact on data collection and analysis. Similar concerns regarding researcher insider status have been proposed by Kanuha (2002) and Asselin (2003) who argue that insider research can threaten the study's trustworthiness and credibility due to cultural assumptions about the context influencing the research analysis and its outcomes.

On the contrary, as an outsider the issue regarding how to be accepted by participants and their organization (Cohen et al., 2011) depends on how easily contact can be established between the two parties (Wellington, 2015). However, this might affect how the researcher can understand the research population when not fully aware of their own context (Corbin Dwyer & Buckle, 2009). Moreover, participants can show reticence to fully disclose their experiences to outsiders, due to the lack of a prior relationship and trust (Feldman, et al., 2003). Nevertheless, being an outsider unfamiliar with the research setting can also induce the researchers to raise questions that go beyond the implicit, thus allowing for richer data collection while increasing authenticity and objectivity (Corbin-Dwyer & Buckle, 2009).

In this study, my positionality as a doctoral student pertaining to the same group as the students taking part in this study provided me with an insider status which allowed me to build relationships based on trust and respect, thereby gaining acceptance and legitimacy as a

researcher. Conversely, acceptance was not granted by the DBA students due to the lack of a relationship with their community. However, the outsider status I endorsed with the doctoral students' work colleagues granted me a wider perspective on the phenomenon under study, since their work context was unfamiliar to me prior to this study, thus excluding the anticipation of social concepts by being too close to the research context.

Having endorsed a hybrid insider/outsider researcher role within my own research setting, I hope I bridged the relationship between "us" and "them" (Kanuha, 2000, p. 440), thereby reducing researcher bias and consequently increasing participants' trust in this research. Although the given researcher's positionality influences knowledge acquisition and production (Corbin-Dwyer & Buckle, 2009), by gaining doctoral students' acceptance of me as an insider I had access to deep data, while, by simultaneously assuming an outsider role in relation to their work colleagues, I was guaranteed a more "objective" stance towards the phenomenon under study (Merriam et al., 2001).

### 3.5. Changing the research design

A change in the research design might arise questions regarding how this affected the study and its focus on organizational change. Indeed, although it has not changed my core research questions, it nevertheless limited the applicability of the research findings by restricting it to one single doctoral programme and setting of which I am a member, while offering a range of different organizational contexts. This issue will be treated in a separate section in Chapter 5's "Limitations" section. However, for critical realist research, a single case study can be as effective as any other method, because the goal is to identify the conditions under which causal mechanisms are activated in specific contexts by comparing the outcomes (Ackroyd & Karlsson, 2014). Consequently, for critical realists, such comparisons can occur within a single case study as they rely on comparing how mechanisms, when triggered, can give rise to variation in outcomes (Steinmetz, 2004).

It was, therefore, paramount to adopt a robust research design that would overcome such prejudices. For critical realists, the researcher's identity, reflexivity and perspective are fully integrated into the research design model. This occurs by stating clearly the research goals, the conceptual framework and any other properties pertaining to the researcher at the beginning of the research to integrate the given researcher into the research process (Maxwell, 2012). This is consistent with the constructivist grounded theory approach which encourages the researcher's interaction with data from the beginning and through reflexive deliberations about the process that takes place through memo writing (Bryant & Charmaz, 2007). The critical realist perspective and the

constructivist grounded approach accept, therefore, that the researcher's viewpoint is included as s/he interacts with the data collected as underlined earlier in this chapter. The researcher's subjectivity is thus treated as a real component of the research process, one which shapes the interpretation of the phenomenon under study while remaining "open to revision and elaboration" (Tappan, 2001, p. 50).

The critical realist paradigm and grounded theory provided thus the necessary conceptual and regulatory structure while helping me to generate the concepts used to explain the phenomenon under study. Interpretative qualitative research is inevitably theory-laden and thus affects the objectivity of the researcher's position (Hammond & Wellington, 2013). However, I do hope that by adopting a critical stance through this research design I convinced the reader of the soundness of this study's research outcomes.

## 3.6. Data collection

The purpose of data collection was to gather information from participants to answer the research questions. These questions were informed by the existing literature and to develop new insights in relation to the existing conversation by providing plausible explanations about the impact of doctoral learning on the student and the work environment, thereby reaching beyond the "input-output" perspective (Fox & Slade, 2014). However, since the research question attempted to understand how doctoral learning can impact organizational change, it was necessary to identify people with the necessary knowledge and influence, thus, work colleagues closely connected to the doctoral students were included as key informants in the sampling, and these participants were well placed to comment about organizational change. My sampling choices will be explained in the next subsections in terms of sampling strategy and sampling size.

### 3.6.1. Participant sampling

As mentioned previously, the research process was informed by the critical realist grounded theory approach, and attempted to identify the generative mechanisms and causal powers triggered through doctoral learning's potentially transformative impact on higher education organizations. It was thus necessary to locate information-rich participants who could provide the necessary data to explain the question under investigation. Data collection targeted therefore doctoral students enrolled in an online EdD to develop in-depth case studies to gain an understanding of the

question under examination (Patton, 2015). I therefore used the purposeful sampling strategy to find doctoral candidates enrolled on an EdD willing to participate in this study.

The logic behind purposeful sampling is to select participants who can provide rich information about the phenomenon, thereby developing "in-depth understanding rather than empirical generalizations" (Patton, 2015, p. 264). According to Patton (2015, p. 265), purposive and purposeful sampling are synonymous. However, the term "purposive" originated during the 1925 International Statistics Institute meeting in Rome and referred to sampling that involved groups which had average values "approximately equal to the population averages for the characteristics already known of the population". Concurrently, I adopted the snowball strategy with doctoral students who were asked, if possible, to identify three work colleagues who would be able to explain, from an organizational point of view, how research from the EdD could make a significant impact on organizational change.

However, purposeful sampling is not only about practical considerations. It also considers the underlying theories used in the study to guide the sampling strategy to produce the best explanations for the phenomenon under study (Emmel, 2013). For grounded theorists, this implies using theoretical sampling to collect further data "that will maximize opportunities to develop concepts in terms of their properties and dimensions, uncover variations and identify relationships between concepts" (Corbin & Strauss, 2015, p. 134). This, however, suggests that sampling cannot be predicted fully in advance as it follows the lead of the research rather than procedures and rules. This resonates with the critical realist sampling strategy, whereby sampling offers the possibility to disclose the causal relationships that generate the phenomenon and to explain the generative mechanisms that enable or constrain such relations. Again, it is difficult to anticipate in the initial sampling what relationships can be revealed in terms of underlying mechanisms. In both sampling strategies, what is important is that they are grounded in data "to make visible the hard-to-see elements", relying however on a "theoretically sensitive researcher, and constant comparison" among cases (Emmel, 2014, p.12).

Given this, I secured five doctoral candidates, who were all enrolled at the University of Liverpool and had either completed their studies or were at least in their thesis stage, and 11 work colleagues (see Table 3.1). It is noteworthy, that doctoral students were either in my cohort or students I met personally at one of the University of Liverpool residencies, which enabled me to establish a pre-interview personal relationship. All participants worked in higher education contexts across the world and held leading positions in their company, albeit one was retired. It

was interesting to explore different institutions with similar contexts as the latter can generate alternative mechanisms and causal powers that either enable or constrain organizational change.

Indeed, for critical realists, social interactions are context-bound and can generate different generative mechanisms and causal powers in different organizational contexts even if they combine in a single case study. Moreover, generative mechanisms can emerge in one context without effect and can remain unobserved in other contexts, thus resulting in different events and experiences (Kempster & Parry, 2011; Tsoukas, 2004). Equally, for grounded theorists, context influences the action-interaction process via the conditions in which the process occurs and affects the result (Corbin & Strauss, 2015). Thus, grounded theory conditions can be compared to the causal mechanisms in critical realism as representing enabling or constraining factors for human actions to occur, thereby controlling their outcomes.

### 3.6.2. Case classification

The study participants consisted of sixteen people all working within different higher education settings. Five were students from an online doctoral programme focused on the study of higher education offered by a UK university, and were either graduates or students in their thesis phase. For practical reasons, doctoral students and graduates will hereafter be referred to as students. Students in this study were all professionals working within their own higher education institutions. The remaining eleven participants were immediate work colleagues in junior, peer or senior positions, and were well placed to comment on organizational change. For constant comparison purposes as well as for abductive and retroductive argumentation, I built five different case classifications based on each student as my unit of analysis (see Table 3.2). Indeed, to develop an explanation about mechanisms triggered through the interaction between agency and structure, there is a need to identify the cases' common structures and then to find "contingent differences to arrive at the common and more universal" (Danermark et al., 2002, p. 105).

The cases were characterised according to following properties: the students' geographical location, the type of higher education organization, their position within their organization, and their occupation as detailed in Table 3.1. Given the small number of students and their position and role within their institutions, and for anonymity and confidentiality purposes, gender and age attributes were deliberately omitted to reduce the combination of personal characteristics facilitating participant traceability and identification (Cohen et al., 2011; Raffe, Bundell, & Bibby, 1989). Students were also given gender neutral pseudonyms for the same reasons. Extracts from work colleagues were therefore referred to as follows: C = continent or country, U = University, P = participant, n +/=/-, refer to the hierarchical role of work colleagues in relation to the student. For example, (C1) (U1) P(n+1) refers to Alex's senior work colleague employed by a traditional research-intensive university situated in Europe.

**Table 3.1.** Case classifications

| Case 1 | Geogr. area | Name of University | Type of university | Participant | Position | Occupation | Functional Role |
|---|---|---|---|---|---|---|---|
| | C1 - Europe[1] | U1 | Research - intensive University | **Alex** (P1) | Doctoral student | Faculty | Reader, Researcher, Director |
| | | | | P1(n+1)[2] | Senior colleague | Faculty | Former Director, Lecturer |
| | | | | P1(n-1)[3] | Junior colleague | Faculty | Researcher, Academic advisor, Senior tutor, committee member |
| **Case 2** | Geogr. area | Name of University | Type of university | Participant | Position | Occupation | Functional Role |
| | C2 - Europe | U2 | Research-intensive University | **Bert** (P2) | Doctoral student | Administrative staff | Senior executive, HR |
| | | | | P2(n+1) | Senior colleague | Administrative staff | Senior executive, Business leader |
| | | | | P2(n-1) | Junior colleague | Administrative staff | Deputy director, HR |
| **Case 3** | Geogr. area | Name of University | Type of university | Participant | Position | Occupation | Functional Role |
| | C3 - Caribbean | U3 | Teaching oriented University | **Chris** (P3) | Doctoral student | Administrative staff/Faculty | Manager and tutor |
| | | | | P3(n+1) | Senior colleague | Faculty/Administrative staff | Associate professor & Assistant Dean |
| | | | | P3(n-1) | Junior colleague | Administrative staff | Project coordinator & Assistant Technical Officer to external organization |
| **Case 4** | Geogr. area | Name of University | Type of university | Participant | Position | Occupation | Functional Role |
| | C4-Oceania | U4 | Ex-Polytechnic Research oriented | **Dominique** (P4) | Doctoral student | Administrative staff | Senior executive, Director of Business & Law |
| | | | | P4(n+1) | Senior colleague | Faculty/Administrative staff | Associate Professor of Management/Associate Dean Academic |
| | | | | P4(n=0)[4] | Peer colleague | Administrative staff/Faculty | Deputy Director Business & Law dep. Senior Lecturer management and law. |
| | | | | P4(n-1) | Junior colleague | Administrative staff | Manager Business Undergraduate Student Success |
| **Case 5** | Geogr. area | Name of University | Type of university | Participant | Position | Occupation | Functional Role |
| | C5-Canada | U5 | Rural Community College Teaching oriented | **Jamie** (P5) | Doctoral student | Faculty | Tutor, chair of articulation committee |
| | | | | P5(n+1) | Senior colleague | Administrative staff | Dean |
| | | | | P5(n=0) | Peer colleague | Faculty | Tutor |

[1] Location identification is deliberately geographically broad to reduce identification.

[2] N+1 refers to a senior work colleague with a superior hierarchical position in relation to the doctoral student.

[3] N-1= is a junior work colleague who refers to the doctoral student.

[4] N=0 refers to a doctoral student's peer colleague.

### 3.6.3. Types of higher education institutions

In this study, all five students were working for publicly-funded higher education institutions. As shown in Table 3.2, two were working within a traditional, research-based higher education institution, one worked for a research-based university that was a former polytechnic, another student was based at a research and service-oriented university and the remaining student was at a rural college focused primarily on the first two years of university or career programmes while delivering some applied research to local industry.

**Table 3.2.** Doctoral students' work environment

| Case | Doctoral student | Type of university | Selected quotation |
|---|---|---|---|
| 1 | **Alex** (Faculty) | Traditional | I was responsible for quality assessment and research for the whole [discipline] school, so a huge job. …but I moved over to be the person in charge of the research team of the [discipline] school. |
| 2 | **Bert** (Administrative) | Traditional | I work for [a] research intensive university and we're a reasonable-sized organization… It's one of the oldest established universities. |
| 3 | **Chris** (Admin/Faculty) | Teaching based University | My department is basically housed in the school of medicine. And we work for one academic program and we do different tracks, different specializations. |
| 4 | **Dominique** (Administrative) | Former Polytechnic – University since 2000 | I work at …. University of Technology and it is the eighth university. There's eight publicly funded universities …. and it is the newest one. ..It was formerly a polytechnic. |
| 5 | **Jamie** (Faculty) | College | …. college is the first rural college in…., it was born in the 60s with all the civil rights movements and the whole drive to make higher education accessible to all citizens including those people living in the rural areas working in the extraction fields like forestry and mining and what not. |

Personal attributes in terms of role and function and work environments were relevant for constant comparison and to identify mechanisms within different contexts which could eventually give rise to similar outcomes despite the different institutional properties, or lead to different outcomes in similar contexts.

### 3.6.4. Theoretical and realist sampling strategies

The grounded theory approach uses theoretical sampling to access more data after the initial data collection, thereby deepening the tentative concepts derived from initial analysis (Charmaz, 2014). However, as argued by Corbin and Strauss (2015), not all researchers can gather more data.

They argue that since theoretical sampling aims at saturating already existing concepts which emerge from initial analysis to add variation for theory building, this can also be achieved by re-examining already existing data. Indeed, re-examining existing data after an initial analysis cycle allows the fresh examination of data by "reorganizing them according to theoretically relevant concepts" (p. 144). Thus, returning to existing data for further analysis is a valid procedure which furnishes the researcher with the opportunity to flesh out concepts that emerged from the first analysis. Indeed, by looking at data in a different way, new incidents and events can be found for variation purposes (Corbin & Strauss, 2015).

In this study, theoretical sampling involved re-examining previously collected data at a later stage rather than adding new cases and for two principal reasons. Firstly, and as previously stated, realist sampling is based on finding the underlying mechanisms that enable or constrain the phenomenon under study to occur (Emmel, 2013). This, however, implies analysing the initial sample by comparing all cases at hand to refine the existing theory. Indeed, Archer's (1995) framework helps to explain change in social structure which is the focus of this study and, without seeking to pre-determine the mechanisms leading to that change, the grounded approach to data analysis also fits quite well. Thus, after initial data analysis, the concepts that emerged aligned with Archer's morphogenetic approach which relies on analysing the interplay between structure and agency to identify the causal mechanisms resulting in structural elaboration (see Figure 2.2). Secondly, through the iterative approach to theoretical sampling, the key concepts reach variation in terms of their properties and dimensions, resulting in more refined conceptualisation (Corbin & Strauss, 2015). However, it is worth noting that theoretical saturation within critical realist grounded theory approach is not fully achieved because of the provisional state of the knowledge acquired, which is always incomplete and subject to revision (Belfrage & Hauf, 2016). Indeed, mechanisms can be enabled or constrained by the context in which they occur. Therefore, the causes that trigger such mechanisms can change, giving rise to variation in outcomes.

The aim of critical realist research is not to generalise findings through typical cases, but to find in the relationships between similar experiences and events the necessary arguments for theory building. For critical realists, emergent theory derives not from gathering more empirical data, but through the interpretation of existing data linking "ideas and evidence to explain real phenomena" (Emmel, 2013, p. 84), and this can occur within a limited number of cases (Steinmetz, 2004). Given this, I estimated that no further samples were needed to identify the necessary explanations to answer my research question. However, this explanation does not clarify how the initial sample size was decided, which will be outlined in the following subsection.

### 3.6.5. Sample size

It remains difficult to identify a sufficient sample size in qualitative research, even more so using grounded theory as normally new data is collected until the saturation point has been reached. Saturation means that no new categories or themes emerge from data but also that the key concepts emerging from the data analysis are fully developed in terms of their properties and dimensions, and show variation (Corbin & Strauss, 2015). However, when using the realist sampling strategy, it is not the number of interviews and sample size that are relevant for saturation, but how the data shows the relationship between ideas and evidence to make robust research claims (Emmel, 2013; Steinmetz, 2004). Indeed, as qualitative research is based primarily on participants' personal experiences, whatever sample size will be used will represent only a portion of the resources available. Cases are therefore chosen because they provide insights in terms of how people perceive, explain and experience the phenomenon under study in "particular contexts and circumstances" (Emmel, 2013, p. 140).

Thus, for critical realists such experiences represent significant thick descriptions, providing "opportunities to test and refine ideas, to prove and refute conjectures" rather than critical cases (p. 140). Therefore, the sample needs to be of a manageable size to do in-depth analysis that leads to interpretation and causal explanations for theory building (Steinmetz, 2004). As stated by Patton (2015),

> No rule of thumb exists to tell a researcher precisely how to focus a study. The extent to which a research or evaluation study is broad or narrow depends on the purpose, the resources available, the time available, and the interests of those involved (p. 258).

However, quantifying the sample size to prove the research findings' trustworthiness is still paramount, even though there are no calculation tests available to define the appropriate qualitative sample size (Emmel, 2013). Corbin and Strauss (2015) posit that it is difficult to set a precise number of interviews sufficient for theoretical saturation of key concepts. However, they state that 5-6 one-hour interviews will not be enough to validate an emergent theory. Charmaz (2014) argues that for researchers who try to solve problems related to practice, a small number of interviews can be enough, without, however, stating a precise number or explaining how practice-related research should be interpreted. Guest, Bunce and Johnson (2006) suggest 12 interviews as sufficient when analysing the experiences of a relatively homogenous group of people. However, their findings have been critiqued by grounded theorists because, in their opinion, they saturate

data rather than categories and concepts (Charmaz, 2014). Baker and Edwards (2012, p. 4) discuss the issue of "how many interviews is enough" in qualitative research in a paper that compiled answers from 14 experts and five new career researchers. The overall response was "it depends". One of the experts turned the question around by asking "how many answers did you decide were enough?" and urged the researchers to answer this thereby resolving their question.

Given this, I considered that to answer my research question I needed to secure at least two doctoral students from two different higher education settings for comparison purposes. Knowing that it would be unlikely to secure the highest number of work colleagues for all doctoral students, I added three more doctoral students and a minimum of one work colleague to the sample size. I therefore applied for ethical approval for five doctoral students and three work colleagues for each student, which brought the number of participants to a minimum of 10 and a maximum of 20.

### 3.6.6. Data collection methods

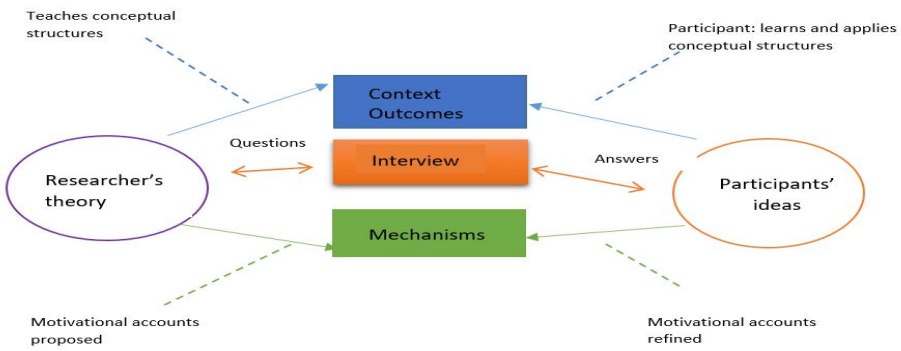
Data was collected using semi-directed interviews and, to a lesser extent, open-source documents related to participants' higher education institutional contexts. Interviews were used as they allowed access to participants in a very direct way. Documents were integrated because they were mentioned by some participants during interviews as well as illustrating certain argumentations. These documents were strategic plans that policy-makers had set for years to come and concerned forthcoming changes in their higher education settings. Documents provided extant data that generated more information about the higher education settings in terms of their organizational structure and strategic dimensions. They also revealed the organization's values, beliefs and worldview, and were thus interesting resources to implement data analysis (Charmaz, 2014).

The semi-directed interviews were carried out either face-to-face, by Skype or telephone, according to the participants' location and availability and took place after the participants had read the participant information sheet (PIS) stating the research purpose, participant rights and obligations, how data would be collected and used, and for how long it would be held. The participants then signed the participant consent form (PCF) and returned it to me prior to our meeting. The interviews varied in length according to the participant's interest in the research study. Interviews could therefore last between 30 to 90 minutes. However, the interview length did not always relate to the content generated. Some very short interviews provided me with very pertinent and interesting information and some lengthier ones were not as informative. All interviews were audio-recorded with participants' informed consent and then transcribed.

### 3.6.7. Rationale for using the interview method

The grounded theory approach uses interviews as it enables participants to share their perceptions and views about their experiences and events in a flexible manner. Moreover, interviews produce the data required to form conceptual categories to construct theory (Charmaz, 2014). Critical realists use interviews to transform the subjects' knowledge into sociological explanations by exploring the underlying mechanisms of socially significant outcomes. According to Smith and Elger (2014), what distinguishes the realist interview approach from positivist or constructivist designs is the meaning construction generated through the interrelationships between human actors giving rise to actions. These actions, however, take place within the pre-existing social structures and social relations that constrain or enable the unfolding of such actions. Pawson (1996) and later Pawson and Tilley (1997) developed an interview method (Figure 3.2) which draws directly on Bhaskar's (2010) multi-layered approach to social reality to construct plausible explanations to develop new theory (see Table 2.3).

**Figure 3.2.** Theorizing the interview




How can we know that the participant is attending to the researcher's understanding of concepts such as outcomes and contexts?

| Traditional | Critical realism |
|---|---|
| Structured interviews | Semi-directed interviews |
| Rely on precision in question wording | Teach overall conceptual structure of research topic |
| Clarity in operationalization | Gives more sense to each research question |
| Not sufficient to teach participants the underlying research tack. | Pays more attention to explain why we pass from one question to the other |
| | Describes the nature of the information sought |
| | Involves participants in a closer articulation and clarification of the underpinning theories |

Source: R. Pawson (1997, p. 304).

Likewise, for grounded theorists, interviews represent the process of human reflexivity, which constructs meaning about experiences, events and other activities through interactions between the

researcher and the interviewee, thus leading to new knowledge production (Charmaz, 2014; Smith & Elger, 2014). However, for critical realists, social reality is not simply what emerges from participants' ideas or descriptions; reality is stratified and consists of different layers (Table 2.2). The theories that we construct to refer to reality are concepts that include mechanisms which are considered as real facts since their powers have a substantial effect on people's behaviour and actions, thus impacting on social structures (Emmel, 2013).

Considering this, I have used Bhaskar's (2010) stratified system (Table 2.3) to define my interview questions as it helps explore in depth how alternative underlying mechanisms work on different levels. Therefore, the interview questions addressed the individual, group and organizational levels, providing insights regarding how social interactions lead to underlying mechanisms with the necessary causal powers to influence organizational change.

### 3.6.8. Interview questions

I designed two different interview guides, one for the doctoral students and one for their work colleagues which shared similar interview questions (see Figure 3.3). I asked the same amount of questions (10) of all participants, but the interview guides differed slightly in relation to the question concerning knowledge acquisition through doctoral studies.

**Figure 3.3.** Interview questions

Interview questions

| Name | Sources | Reference |
|---|---|---|
| Q. 01. Context and main activities of organization | 16 | 16 |
| Q. 02. Role and responsibility | 16 | 17 |
| Q. 03. Knowledge acquisition and impact on professional | 16 | 26 |
| Q. 04. Reflexivity | 16 | 20 |
| Q. 05. Professional concerns | 16 | 17 |
| Q. 06. Social relationships and collective learning | 16 | 20 |
| Q. 07. New projects, collaborations and actions | 16 | 16 |
| Q. 08. Organizational change | 16 | 20 |
| Q. 09. Temporal issues to change | 5 | 6 |
| Q. 10. Personal comments | 11 | 11 |

Indeed, this was a question aimed directly at doctoral students and how they saw their personal changes induced by their EdD studies and how this affected their professional practice. For their work colleagues, the question about EdD studies was posed as a general question regarding how

they perceived the impact that doctoral students' learning had (or could have) on the organization. This question was added to the work colleagues' protocol after I had conducted interviews with work colleagues in the first case and realised that their opinion on this issue was an essential one.

The interview questions were semi-directive and designed to understand the context, the participant's position and role, her/his social relationships and how this might impact collective learning, collective reflexivity and corporate agency, their professional concerns how they shared these with work colleagues, how such concerns led to new practices, projects or new organizational strategies, and how this could eventually impact their professional practice and workplace. The semi-directed interviews were based on a "division of expertise" between researcher and interviewees (Pawson, 1996, p. 303). Indeed, the interview questions were motivated by critical realist theory, which influenced how they were phrased.

For instance, the question in relation to reflexivity (Q4) was divided into three sub-questions which tried to tease out from the students and their work colleagues how they perceived the professional doctorate influenced the students' thinking, beliefs and values, and what impact it had on his/her personal and professional self. Regarding work colleagues, the question was asked whether they acknowledged a shift in the way they perceived their professional role and activity due to interactions with the doctoral student. These questions prompted a follow-up question about professional concerns (Q5) regarding the doctoral learning triggered in the student, if such concerns were shared with work colleagues, and what kind of actions were undertaken to address these, if any. Obviously, these related to the "concern-project-action" trilogy in Archer's (2003) explanatory morphogenetic/static framework, which will be discussed in the following chapter.

The following-up of such questions was obviously based on the participants' interpretation and their perceptions of what was asked and sometimes had to be slightly adapted to their responses, without losing the overall core meaning. Both interviewer and interviewee were thus equally active in setting up the interview, which implied that data analysis was influenced by pre-existing theoretical perspectives and personal hunches, such as reflexivity and social interactions as mediatory factors in terms of the potential effect of social structures on human agency, even though the core concepts were not yet theorised. However, as argued by Kempster and Parry (2014), underlying mechanisms and causal powers are not always present and observable, and may or may not have an impact on organizational change. It was therefore necessary to induce participants' reflexivity about the impact of the educational doctorate on organizational transformation by asking all participants about their perceptions of this matter. This included enquiring if the actions that resulted from the professional doctorate gave rise (or would influence) new practices or policies and

if the organization was aware of the student's project and the changes that it could eventually have on practice and the work environment.

### 3.6.9. The pilot study

Before starting the real interviews, I did three pilot studies. The latter are defined as a smaller version of a full-scale study or as pretesting research tools such as interview protocols or survey questionnaires (van Teijlingen & Hundley, 2002). In the last scenario, pilot studies serve to test the adequacy of interview questions by exploring the interview protocol with people who share the same conditions as the interviewees in the real study, allowing refinement and revision of interview questions if necessary (Creswell, 2013; Maxwell, 2013; Yin, 2014; Wellington, 2015). The pilot study also assists in pretesting the interview questions capacity to discriminate in terms of prompting a range of views in participants, while highlighting any redundancy in the questions (Gray, 2014).

In this study, the pilot tests were conducted for the reasons stated above and involved interviewing three doctoral students I knew from the EdD programme and were conducted via Skype. The pilot interviews were audio recorded and used to test the adequacy of the research questions with doctoral students. However, I was unable to arrange pilot interviews with their work colleagues, due to the access difficulties reported in the previous subsection. Although the questions were revealed to be adequate, given the participants' feedback I reformulated some questions so that they were more readily comprehensible to subsequent participants, without altering their meaning. Furthermore, I added or dismissed some follow-up questions which were ultimately unnecessary.

One example of changes to the initial interview questions related to the functional role doctoral students and work colleagues endorsed in their employment activity. I added the questions: *What are your responsibilities related to your role?* Two questions that I dismissed were: *How long have you been working for this company? What other roles did you have before getting your doctoral degree?* For the work colleagues, I ended up adding a final question related to the doctoral students' learning and its perceived impact on the organization. This question was added after the first group of interviews were completed, as it emerged as a relevant issue. The following question was therefore added to the interview protocol: *How do you perceive that the professional doctorate contributes to enhance professional practice and change in the workplace?* This final question was included as it was intended to provoke the participants' reflexivity regarding how they perceived the professional doctorate contributing to organizational change. Furthermore, the question provided

insights into mechanisms with causal powers aligned with the participant's reality (Kempster & Parry, 2014).

#### 3.6.10. Institutional documents

Institutional documents were also used in this study, albeit to a lesser extent, to understand whether knowledge produced through doctoral learning could be transformed into collective knowledge aligned with the organization's strategic plan and overall mission and role statements. Indeed, for organizational change to occur, the transformations proposed by doctoral students and their work colleagues needed to have the same orientation towards joint actions when working collaboratively towards the same shared goals. However, sharing the same orientation went beyond the concept of "sharing the same personal beliefs, aims, concerns and so forth" (Donati & Archer, 2015, p. 31), as these are mainly common intentions.

This is an important concept for this study as strategic plans reveal the institution's decisions about actions that take the organization forward in a mutual agreed manner. However, as argued by Donati and Archer (2015), engaging in the same action is not the same as thinking alike, because collective reflexivity relies on personal intentions which can diverge in individuals engaged in collective actions. Thus, the next section explains how interviews and documents used in this study provided the necessary data to inform these concepts for theory building.

### 3.7. Data analysis

This section justifies the data analysis used by referencing the techniques borrowed from grounded theory's methodology. It also outlines how this study's data analysis has two purposes, first, to explain how grounded theory techniques were combined with critical realist methodology to offer tangible reasons for their combined use, and second, to allow the reader to judge if the resulting explanations are valid by delivering a transparent account of how data has been merged into analytic concepts. Table 3.3. provides an overview of how data collection and analysis were conducted.

**Table 3.3.** Overview of data collection and analysis process

| Data collection | Data analysis |
|---|---|
| **Gather data through interviews & documents**<br>**16 interviews: 5 EdD students & 11 work colleagues**<br>**Two different interview protocols for each group**<br>**10 questions for each: questions were common to both groups, albeit with sometimes a different emphasis** | |
| | Search for underlying mechanisms and structural conditioning<br>Interviews analysed using constructivist grounded theory techniques and the assistance of NVivo software:<br>1. Initial coding; 2. Focused Coding: 3. Categories: 4. Analytic concepts<br>Search for similarities and differences in identified concepts |
| **Going back to data to search for more codes** | |
| | Finding causal explanations for these analytic concepts<br>Identify mechanisms and structural conditioning within these analytic concepts<br>Using retroductive argumentation for explanation<br>Explore how mechanisms and structural conditioning led to morphogenesis or morphostasis in organizations |

Data analysis in grounded theory is based on an iterative process that intertwines data collection with data analysis, memo writing and theoretical categorisation of data through constant comparison of data and a theoretical sampling process. The resulting codes and categories stem directly from data and are not imposed by pre-existing themes or categories derived from theory, and the researcher follows their lead and adds more data if required (Charmaz, 2014; Corbin & Strauss, 2015). The notion of saturation acquires a flexible connotation as it is based on knowledge acquisition rather than on the notion of truth, which is a modifiable concept due to the different ways of acquiring knowledge (Oliver, 2012). Moreover, final explanations take variations and the circumstances and conditions in which they were produced into account (Flick, 2014).

These elements overlap with the critical realist perception that all knowledge is fallible due to reality's stratification (Bhaskar, 2008), therefore objective truth about an object or event is impossible. Indeed, objects and events exist for critical realists beyond their observation and description, while plausible explanations can only be expressed in terms of tendencies and not absolute truths (Sayer, 2000). Therefore, the analytical procedures used in grounded theory allow

the researcher to reach beyond objects' observation and description since their aim is to stick closely to data while considering "all plausible theoretical explanations for the observed data, and then form and test hypotheses for each explanation until arriving at the most plausible theoretical interpretation" (Charmaz, 2014, p. 200). How this was achieved in this study will be explained in the next subsection.

### 3.7.1. Analytic procedures

The interview data was transcribed verbatim excluding pauses, repetitions and tone of voice. It was then coded and categorised, first manually and later using NVivo software. Data was grouped into five different cases according to the doctoral student, his/her work colleagues and the higher education organization in which the student worked (see Table 3.2). Each case was therefore similar regarding the doctoral student for comparison purposes but differed in the work context for variation principles.

Data analysis began with a first cycle of coding after having collected and transcribed the first case interviews, and continued over approximately three months in an iterative fashion until all the data was coded. A second cycle of analysis was conducted to categorize these codes and to establish core-categories, which aligns with Charmaz's (2014) constructivist approach, Corbin and Strauss's (2015) classical method and Glaser and Strauss's (1967, 2008) original technique. Further analysis was then conducted through theoretical sampling of existing data to elaborate the emerging analytic concepts by using extant theory.

This helped to achieve a level of abstraction generating explanatory theory for the phenomenon under study (Danermark et al., 2002). As argued by Kempster and Parry (2011, p. 107), reaching a level of abstraction for theory building requires reaching "beyond surface-level data" and therefore Danermark et al.'s (2002) critical realist six-step explanatory analytic framework was used to explore emerging analytical concepts and to research conceptual abstraction for theory building.

### 3.7.2. The critical realist and grounded theory analytical framework

Consistent with the critical realist theoretical framework and grounded theory methodology, I used abduction and retroduction reasoning as the inferential process to build theoretical explanations to answer the study's research questions. Abduction is now integrated into the constructivist grounded theory approach which analyses how empirical experiences, as narrated by

participants, can be conceptualized and compared with further empirical data to generate new hypotheses to assist with theory elaboration or building (Charmaz, 2014).

However, abductive reasoning remains at the empirical level, which in terms of critical realist theory is insufficient for a satisfactory explanation of how events, situations and other occurrences happen in the world. Thus, critical realists take abductive reasoning a step further by investigating events and phenomena beyond the empirical domain using retroductive inference. Abduction and retroduction are very similar inference methods, except in their questioning of reality. Indeed, retroduction relies on questions such as: "What properties does X need to exist and to be what X is? What makes X possible?" which implies that the researcher needs to look at the internal relationships X entertains with other phenomena to answer these questions (Danermark et al., 2002, p. 97).

This is not very far from the questioning used in grounded theory through abduction, which relies on asking questions such as "What does X mean?", "What is going on here…?" and "How is it different from…?", which are intended to reveal all plausible answers to help the researcher incorporate different perspectives (Corbin & Strauss, 2015; Richards & Morse, 2013). Both methods aim at understanding data using abstract thinking, thereby leading the researcher away from data and towards concepts to help understand and explain data (Richards & Morse, 2013).

Given this, abstraction was achieved by exploring the data using Danermark et al.'s (2002) six stage explanatory research model (pp. 109-111), summarised as follows:

1. **Description:** of analytic concepts derived from participants' narratives to understand how doctoral learning could impact organizational change;
2. **Analytic resolution:** separating these analytic concepts into possible causal components in terms of aspects and dimensions as empirical manifestations enabling or constraining underlying mechanisms;
3. **Abduction/theoretical redescription:** interpret and describe these aspects and dimensions by using conceptual frameworks and theories about structures and relations to find plausible causes for emergent powers;
4. **Retroduction:** identifying possible underlying mechanisms with their causal powers that impact an organization or are a condition of it; however, there can be a number of these, each equally plausible;
5. **Comparison between different theories and abstractions:** use extant theories to elaborate the explanatory powers and conditions of mechanisms and structures that

influenced the impact of doctoral candidates on their organization through EdD-derived learning;

6. **Concretisation and contextualisation**: engaging in constant comparison between different cases to examine how different mechanisms and structures manifested themselves in concrete situations, interpreting their meaning and finding plausible explanations for their occurrence.

For example, the individual agency analytic concept derived from the participants' narratives repeatedly featured "confidence" and self-awareness" as key elements emerging from doctoral studies (stage 1). The causal components of individual agency as an empirical manifestation were distinguished in terms of personal development (stage 2) leading to a self-transformative process about the self and the social environment (stage 3), which in turn derived from individual meta-reflexivity triggered by doctoral studies (stage 4). These findings were compared with Archer's reflexivity theory to consolidate these findings (stage 5). Finally, the findings were compared between the five cases to explore similarities and differences, leading to the creation of plausible explanations (stage 6).

These stages do not have to be followed chronologically and some of these steps were combined in this study. It is notable that this model moves from the concrete description of events (step 1) to the abstract level through abduction, retroduction and comparison of different theories (steps 2-5), and back to the concrete (step 6) through contextualization of plausible explanations. Abstraction and contextualisation provide two different types of knowledge about reality: the first offers the knowledge of the causal components, mechanisms and influences (properties and causal powers) that underlie a given phenomenon and make it happen. The second explains how they work in the real world (Danermark et al., 2002).

### 3.7.3. Coding process

The grounded theory coding process aims to break down data into manageable parts and thereby constructs concepts to better understand the process itself using an iterative approach (Richards & Morse, 2013). Coding in grounded theory implies different steps such as developing categories, searching for their properties and dimensions, and investigating their relatedness (Flick, 2014). This occurs through three main coding cycles which englobe initial coding (referred

to as “open coding” by Glaser, and Corbin and Strauss) and focused coding (also referred to as “axial coding” by Strauss and Corbin, and “theoretical coding” by Glaser), and finally selective coding which combines or discards categories to find core-categories for conceptual abstraction and then theory building (Charmaz, 2014; Corbin & Strauss, 2015).

Initial coding develops units of meaning by segmenting data into concepts, whereby the latter refer to short expressions that summarise the meaning of the passage which is coded (Charmaz, 2014). The result is turning data into a list of codes and provisional categories for further coding (Flick, 2014). Focused coding is used to refine the initial coding process by recombining and synthesising provisional categories into core-categories through constant comparison (Wellington, 2015). The selective coding process is the last step which abstraction takes a step further by elaborating key-categories into concepts. In this stage, new evidence is required through theoretical sampling until theoretical saturation is obtained. Theoretical saturation implies that there are no more insights obtainable through the coding process (Flick, 2014). The result is to attach a concept to a phenomenon which makes up the “story of the case” for theory building (Flick, 2014, p. 409).

In this study, the first interview-based coding cycle started with the process coding method used in grounded theory to define actions, events, situations and thoughts expressed by interviewees and which referred to the three concepts cited above. As stated by Saldãna (2013), process coding is not a method but is a means to start initial coding in grounded theory. During this first coding cycle, I ended up with an average of about 32 codes per interview, the highest being 46 and the lowest 18, which correlated with the length of each interview transcription (see Table 3.4).

**Table 3.4.** Initial coding with average codes per interview

| Interviews | | | | |
|---|---|---|---|---|
| Name | Nodes | References | Created On | Created By |
| Interview 01 | 46 | 165 | 03.11.2016 | MLU |
| Interview 02 | 40 | 245 | 03.11.2016 | MLU |
| Interview 03 | 28 | 73 | 03.11.2016 | MLU |
| Interview 07 | 29 | 55 | 03.11.2016 | MLU |
| Interview 08 | 21 | 32 | 03.11.2016 | MLU |
| Interview 09 | 18 | 29 | 03.11.2016 | MLU |
| Interview 10 | 28 | 48 | 03.11.2016 | MLU |
| Interview 11 | 20 | 42 | 03.11.2016 | MLU |
| Interview 12 | 31 | 57 | 03.11.2016 | MLU |
| Interview 13 | 39 | 108 | 03.11.2016 | MLU |
| Interview 14 | 34 | 64 | 03.11.2016 | MLU |
| Interview 15 | 26 | 60 | 03.11.2016 | MLU |
| Interview 16 | 35 | 96 | 03.11.2016 | MLU |
| Interview 17 | 33 | 67 | 03.11.2016 | MLU |
| Interview 18 | 23 | 49 | 03.11.2016 | MLU |
| Interview 19 | 25 | 40 | 03.11.2016 | MLU |

After this, I followed the grounded theory coding process by starting with initial coding to break data down into workable parts while labelling them by the actions they described. This is the first step of the analytic process that immerses the researcher into the data, allowing one to generate an overall perspective (Wellington, 2015). Initial codes were then regrouped into focused codes which avoided over-conceptualization and therefore identifying too many categories at once (Charmaz, 2014) as shown in Table 3.5.

**Table 3.5.** The cycle of grounded theory's coding process, after Charmaz (2014).

1. Initial coding; 2. Focused coding: 3. In Vivo code 4. Concepts; 5. Categories; 6. Core categories= themes

| N° | Interview questions | Text | 1.Open codes (Gerunds = action verbs) 2.Focused codes 3. In Vivo code | 3.Concepts (define & provide explan. Of Categories) | Properties (characterizes concepts) | Dimensions (variations within properties) | 4. Categories (=main themes; found in all data) | 5. Core-categories= Themes |
|---|---|---|---|---|---|---|---|---|
| 1 | Context of activities & main projects of organization | Ok, that's changed over the period of time when I started the EdD. When I started working on the EdD, I was the deputy director of the medical school and so I was responsible for quality assessment and research for the whole medical school, so a huge job. We had about just as I was entering my thesis stage... my role changed... I was already the Reader in medical education that was my academic rank, but **I moved over to be the person in charge of the research team of the medical school, so I am in charge of research in the medical school** and still am. And I took over as director of something called ..... | **Changing activities** After starting EdD.<br><br>**Changing role** while being in the thesis phase<br><br>Being in charge of medical school<br><br>**Being in charge** for the UNI of an internationally acclaimed collaboration center which is very influential.<br><br>Looking at evidence for new educational approaches.<br><br>***Professional role and rank: gaining status; "being in charge".*** | Position/rank/ status | Gaining power | **Control over sb, smtgh;** Responsibilities: Supervision Competency, skills= New knowledge Gaining experience | Human agency Individual power | Empowerment through new knowledge acquisition |

Once the analytical categories were set, I examined possible relationships between them, which in grounded theory is realised through the theoretical coding method (Charmaz, 2014). A theoretical code functions as an umbrella concept that covers multiple codes and analytical categories to explain in a few words the research's major issues or concerns. As stated by Charmaz (2014), theoretical codes move the coding from an analytical stance to a theoretical direction by either elaborating or modifying existing theory. Lastly, I used the theoretical sampling approach by re-examining existent data at a later stage to consolidate these analytic concepts. By using retroductive inference and extant theory, I furthered my interpretation of the findings, while I generated my own explanations about what generative mechanisms were at play in this study which enabled or constrained a doctoral student impacting their own higher education setting in terms of organizational morphogenesis or morphostasis.

After concluding each interview coding process, I wrote a memo about one key incident that I found relevant for my research. These memos helped to clarify the meanings of categories and analytical concepts, or to identify relationships between them and even the thinking that went on while analysing the data (Corbin & Strauss, 2015). Moreover, I ensured that the coding was connected to the data and not to my own ideas and preconceptions or forced through extant theory. The next chapter will therefore explain how findings occurred, but I will provide a brief explanation about how NVivo software was used for coding in this study, albeit in a limited fashion while discussing how the coding system changed the research question and how I dealt with validity and ethical issues.

### 3.7.4. NVivo's use in data analysis

NVivo software was used to handle and to code data to increase the rigour of data management by consolidating research documents in one place. Indeed, as argued by Flick (2014), computer software is used for different functions in data analysis, specifically for data coding, linking and display, text storage, memo writing, and theory building, just to name a few, and especially when using grounded theory approach for data analysis. I used most of these facilities for my data analysis as evidenced in chapter five.

However, in the final analysis stage of theoretical sampling analytic concepts needed to be fleshed out and interpreted through abduction and retroduction, in which case I reverted to the traditional coding scheme. This implied comparing interview data manually and building a case with data from other cases to achieve a global hermeneutic understanding, after which I checked for coding consistency to increase research reliability.

### 3.7.5. Changing the research question

Qualitative research is described as a journey whose end destination is built upon each previous stage and the experiences we gain (Richards & Morse, 2013). This implies that the end point of the journey is not pre-established but guided by the research design which is adopted to answer the research aim. The research aim is in turn framed by methods, respectively by the research questions that help attain this aim. However, as stated by Charmaz (2014), methods are only tools for "generating, mining and making sense of data", but have consequences for the research design (p. 26).

Although research questions should dictate the research design in terms of goal setting, the conceptual framework, choice of methods, and validity criteria (Maxwell, 2013), the opposite can be true when using the grounded theory approach (Charmaz, 2014). Indeed, grounded theory is a flexible method based on an iterative process between data collection and analysis, and consequently what happens with the data becomes narrower after each analytical step, yielding new insights into analytical procedures and research designs, which can also affect the research questions. As stated by Charmaz (2014), "be willing to alter your research questions, when you discover that other questions have a greater significance in the field" (p. 26).

Theoretical coding made me realise that the question that I was trying to research relied on: 1) doctoral learning; 2) the impact it has on doctoral students and their work environment in terms of change; and 3) underlying mechanisms. This led to the rephrasing of my research question as follows:

*What are the generative mechanisms that influence the impact of a professional's higher education organisation through the learning that arises from undertaking an EdD?*

a) *What is the nature of these mechanisms and what are their causal powers?*
b) *Under what conditions do these generative mechanisms give rise to organizational change?*

Although the research questions' reframing had no impact on the research methods themselves, it nevertheless shifted the focus from a more general view of impact to a more specific one that integrated the learning process of the EdD as the starting point of change (input) and the student's work context (higher education institutions) as the aim of change (output). Moreover, the sub-questions address the nature, conditions and circumstances of how such mechanism are generated, implying variation among cases due to the interplay of mechanisms which can impact the outcome. The research questions have therefore been refined using a more focused approach applied in data collection and analysis as suggested by Charmaz (2014), thereby reframing the research design. This will be treated in the next chapter under the heading of "limitations".

Reframing my research question meant thinking about how to account for research reliability and validity as the refinement of the research questions occurred during the study itself. However, as argued by Maxwell (2012), validity in qualitative research is not about methodological rigour, but more about what plausible conclusions can be derived from such procedures. The next section will thus discuss how the study's validity and reliability was constructed.

### 3.8. Validity, reliability and generalisation

Discussing validity, reliability and generalisation issues in qualitative research involves verifying the trustworthiness and credibility of the research rather than measuring its absolute veracity (Maxwell, 2012). This is because qualitative research relies on the researcher's subjective interpretation and the context in which the study takes place, thus discarding the notion of objectivity (Miller, 2008). Therefore, multiple interpretations are possible and, as stated by Maxwell (2012), data is not valid or invalid but the focus instead is on the inference, abstraction and the conclusions that the researcher draws from it. Meaning is what counts, not the methods, as the reflections that result from interpreting data are also considered to be data (Creswell, 2011). Maxwell (2012) argues that there are five different categories that assure validity in qualitative research: descriptive validity, interpretive validity, theoretical validity, generalisability of the research findings and evaluative validity. Within these categories, there are two different types of validity, namely internal and external.

In this study, descriptive validity was reached through "member checking" with participants after each interview transcription. Interpretive validity was acknowledged by the transparency used in the coding process and theoretical validity given the abductive and retroductive reasoning process. This process also implied the generalisability of my findings, as in critical realism generalisation occurs by explaining the "fundamental and conceptual properties and structures" of a given phenomenon or event (Danermark et al., 2002, p. 77). Thus, by explaining through retroduction the generative mechanisms which, when triggered under certain circumstances, gave rise to organisational change, I reached a deeper level of abstraction that explored the transfactual conditions of the phenomenon under study. Thus, as stated by Danermark et al. (2002), abstract concepts become universal, which generate new knowledge about the qualities something needs to have to exist, and are therefore generalisable.

In this study, internal validity was achieved through the analytic procedure based on creating categories and concepts through the iterative coding process of individual data, ultimately leading to the emergence of key categories. By comparing and contrasting these key categories with other existing data and between the categories themselves, key concepts emerged which were then applied to explain the phenomenon under study. By exploring their interplay and adopting the abductive and retroductive inference method to locate their transfactual conditions, I discovered various underlying generative mechanisms that were at play, which allowed me to draw theoretical conclusions with generalizable claim regarding their validity and reliability. By comparing my findings with existing research, I achieved external validity.

### 3.9. Ethical considerations

Ethical considerations in research refer to moral principles and norms that reach beyond the adoption of the most appropriate research design to conduct research (Gray, 2014). Research ethics are thus guidelines or a code of conduct that directs the researcher's practice in terms of behaviour and participant relationships prior to, during and after research (Gray, 2014; Wellington, 2015). Ethical research is particularly important in the social sciences and in education as they are based on studying people, which can sometimes be risky depending on the vulnerability of the participants (Cohen et al., 2011; Wellington, 2015). Therefore, every researcher should adopt a code of conduct which acknowledges the researcher's responsibility in terms of protecting participants' interests (Flick 2014).

The researcher's responsibility includes justifying the necessity of undertaking the research issue, research aim, the study's methodological underpinnings, positive or negative consequences for the participants, and possible damage the research could impose on them and their work or social environment. It also includes what steps the researcher takes to prevent such damage, the avoidance of false claims about the usefulness of the research, and complying with current data protection regulations (Flick, 2014) from the institutions or organizations where the research will take place (Cohen et al., 2011). Next, informed consent must be obtained from participants prior to the research which implies that they have the choice whether to take part in the research or not. Moreover, it also entails that participants and their social environment are protected through anonymity and data confidentiality. Finally, privacy as a corollary to confidentiality and anonymity must also be considered in terms of dissemination of information that could harm the person or the organization in which the research takes place (Cohen et al., 2011).

The ethical considerations that were observed within this study are detailed in the University of Liverpool's Virtual Programme Ethics Committee (VPREC) prior to undertaking this research (see Appendix). Ethical considerations were addressed regarding participants' informed consent, and they received an extended written overview of the research outline prior to agreeing to participate. It was also made clear that no incentives would be provided to participants. Anonymity and confidentiality were assured by coding the names of participants and institutions as well as broadening geographical locations to avoid possible identification.

Moreover, gender identification was neutralised by using pronouns such as “s/he” or him/her to refer to individual participants. However, when specific naming was used in individual participant quotations, they were either left out or replaced by pseudonyms. Lastly, before starting each interview, I clarified with the participant what his/her participation in this study entailed, whether additional information was needed, and if the person wanted to retreat from participation after reflection. None of the participants asked for further clarifications or asked to withdraw from the study.

### 3.9.1. Ethical issues related to the research design

Using the 360° feedback tool for my interviews, which in this case implied having work colleagues with a senior role, a peer role or a junior role discuss the impact of the student’s doctoral learning on organizational change, was a rather hazardous choice as I had to take the risk that apprehensions could arise with candidates and other stakeholders. Indeed, the 360° feedback tool could have been perceived by participants as a rather intruding instrument that invaded the candidates’ professional sphere as it is normally used as a management tool to assess people’s performance. However, since the focus of my research concentrated on the narratives produced by the participants to understand how EdD-derived learning impacted the organization in terms of change, it was not focused on measuring individual or organizational performance or productivity, hence such apprehensions did not arise.

Cohen et al. (2011) suggest that to avoid tensions between participants and the researcher it is important to maintain a clear communication scheme through different channels such as the PIS but also through actual contact with the appropriate people. Such hesitations were therefore mastered through constant communication with participants and on multiple occasions, first through emails asking the cooperation of potential participants, then through the written participant information and consent sheet, and lastly during our Skype meetings prior to starting the interviews.

### 3.9.2. Ethical considerations as a researcher

Discussing ethical considerations without considering the researcher’s personal code of ethics would not be a complete account. Indeed, as stated by Creswell (2011), the researcher has an obligation towards his/her research community to conduct studies in a rigorous fashion.

My positionality as a researcher engaged in an EdD could lead the reader to suspect me of having a vested interest in showing positive outcomes for this research. However, I have endeavoured to be transparent in terms of outlining the research design and detailing how the data has been collected and then analysed.

# Chapter 4 – Findings and Discussion

The current study explored how doctoral learning derived from undertaking a professional doctorate could impact on higher education institutions in terms of organizational change. This research adopted a critical realist perspective on the interplay between agency and social structure to determine their relatedness. More precisely, the study attempted to provide a richer account of the mechanisms that enable or constrain agency unfolding in its most desired fashion.

It is therefore not surprising that the current study identified the following three main analytic concepts that emerged from the data analysis:

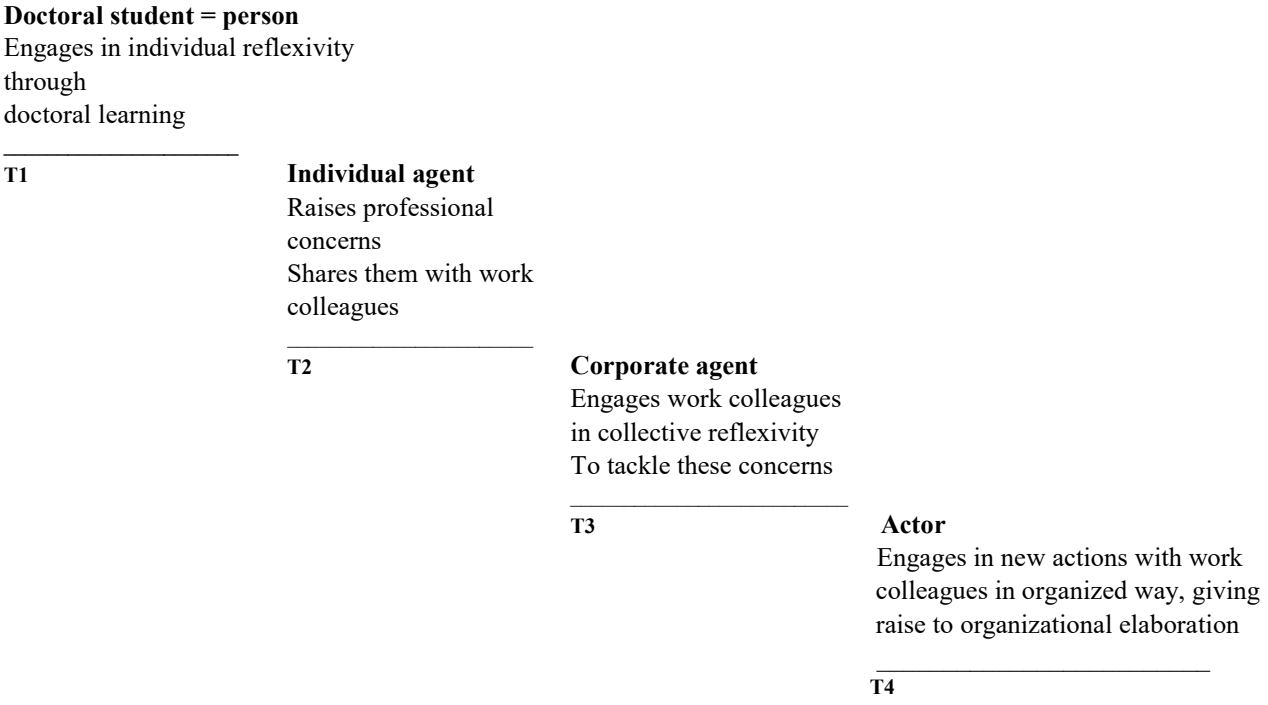
1) Human agency
2) Social relations
3) Social structures

The findings were consistent with Archer's morphogenetic model, which is based on social interactions as the underlying mechanism mediating the effects of social structures on human agency. By considering the relationship between these three concepts (human agency, social relations and social structures), plausible explanations were developed about professional doctoral learning impacting organizational change while drawing on Archer's (2003) reflexivity theory highlighting how different modes of reflexivity mediate the effect of structure on agency via the pursuit of specific projects. Archer defines reflexivity as the mental process of normal people engaging in reflexive deliberations about their social context, which then turn back on the subject engaged in such considerations. This allowed me to expand on Archer's theory, which explored how individuals engage in different modes of reflexivity to generate individual social mobility.

This involved considering how doctoral learning engaged students in reflexive deliberations (individual reflexivity) that would generate professional concerns, thereby triggering the desire to engage in projects that enabled them to exercise individual agency. Individual agency in this study refers to the doctoral students' intention to engage in deliberate actions to address their professional concerns in their desired way (Archer, 2007a). A common view emerging from the data analysis was that doctoral students subsequently engaged in deliberations with work colleagues to address their concerns collectively, thereby extending the notion of agency to the group. Archer (2003) refers to the agential power that emerges from such collective reflexivity as corporate agency. The latter refers here to a group of people who collaborated in an organized way to generate new actions addressing professional concerns triggered by a given student's doctoral

learning. In this way, corporate agency transformed these work groups into change actors who could act on existing social structures to give rise to organizational elaboration. This process is depicted in Figure 4.1.

**Figure 4.1.** Transformational process from person to corporate actors




Source: adapted from Archer (2003, p. 124). *Structure, agency and the internal conversation*

Identifying the process that transformed doctoral students from individual agents into corporate ones, and then into transformational actors with their own properties and causal powers, constitutes my personal contribution to Archer's reflexivity theory. Indeed, the latter's study was based primarily on researching individuals' social mobility as triggered by different modes of individual reflexivity, while failing to address the collective aspect of these reflexive modes due to the "interpersonal nature" of collective actions (Archer, 2003, p. 124). Archer researched the collective aspect of reflexivity in later work but the outcomes remained limited regarding the impact of collective deliberations on the organizational level. Therefore, this study explored the mechanisms that were triggered through doctoral learning at the individual level and how this could activate mechanisms at the corporate level which, under certain circumstances, could either enable or constrain organizational change.

This chapter is based on a causal analysis exploring how human agency and structural conditioning influenced organizational elaboration or reproduction in the work settings of five doctoral students. It is separated into six explanatory sections, mirroring Danermark et al.'s (2002) critical realist analytical research model comprised of a descriptive and analytic phase, abduction and retroduction for abstraction purposes, comparison of cases to emphasise their commonalities and differences, and contextualising cases for theory building (see Chapter 3).

The first three sections outline, interpret and illustrate the three concepts and their components using tables and figures. They also explain the mechanisms that enabled or constrained doctoral students impacting on their organization through EdD-derived learning. Furthermore, these sections explain the necessary conditions and circumstances for such mechanisms to be triggered, and what kind of structural elaboration they generated. Section 4 contextualizes the generative mechanisms at play in this study and explains how the interplay between social structures and human agency gave rise to relationships whose causal powers would either enable or constrain organizational morphogenesis in the students' work environments, thereby producing the best possible explanations for such outcomes.

### 4.1. Human agency

Defining human agency in the social sciences is a central problem as the concept refers to a person's capacity for reflexivity about the self and the social environment, thereby experiencing transformation. Agency, therefore, is equivalent to the concept of causality, since it has the power to change things intentionally and accordingly (Hartwig, 2007). As stated by Hartwig, agency embodies a "causal intervention in the world that brings about a state of affairs that would not otherwise have [been] obtained… and reflexive monitoring of that intervention" (p.18). For Smith (2010), agency refers to the human capacity to choose deliberately what actions to undertake and to impose these on the social environment, thereby influencing the outcomes of such actions. A similar description is offered by Hammonds and Wellington (2013) who define agency as the capacity of individuals "to act independently and to make their own decisions based on an awareness of their situation and the range of responses open to them" (p. 7).

In this study, human agency refers to *in vivo* codes that emerged from the interview question posed to participants regarding the students' doctoral journey and the impact it had on the candidate, both from his/her and their work colleagues' points of view. These codes referred to "confidence, credibility, authority, control, insight, understanding, and self-awareness," terms that express personal growth generated through the learning that occurred within the doctoral journey as shown in Table 4.1.

**Table 4.1.** Doctoral learning as an individual reflexive process

| Country | Doctoral students | Selected quotation |
|---|---|---|
| **Europe** | **Alex** | The doctorate has actually given me real **confidence** to say that I actually know what the literature is. And to be able to use it. ..It gave me more **credibility** and …**individual maturity** and **development**. |
| **Europe** | **Bert** | I guess, [it] has given me an **understanding** of the activities that [teachers] are involved in and therefore has given me more tolerance of their needs. |
| **Caribbean** | **Chris** | I noticed that my approach to **interacting** with the students has changed a bit. [H]aving gone through some of the modules and the learning we did in this [EdD] program, I am seeing the students more as clients and more as colleagues than just persons who get in to get an education and then move out. |
| **Oceania** | **Dominique** | I would never have been able to do that before not because I didn't really have the knowledge, but I didn't have the **confidence** to do it. I think it's given me the **confidence** to actually refer to research when I'm writing papers and things for the faculty management. |
| **Canada** | **Jamie** | It has just given me more **confidence** in the choices I make in terms of pedagogy. I feel a little bit more **in control** of how students learn and how I can facilitate that learning… that gives me a certain **control** over what I have been doing an **insight** I would say -- an **insight** and **understanding**. It has given me **self-awareness** of what my values are and have been. |
| Country | Work colleagues | Selected quotation |
| **Oceania** | Dominique's Senior colleague C3U3P4(n+1) | Perhaps the difference I noticed that is that s/he speaks up with perhaps more **authority** and **confidence** since s/he started the qualification…. S/he's certainly grown in **confidence** with the research. |
| | Dominique's Junior colleague C3U3P4(n-)1 | I guess it gives [the doctoral student] decision more **credibility** because it is informed. I know that s/he has a huge body of **knowledge** that I don't have. I can go to [the doctoral student] as an **authority** and if s/he doesn't, s/he'll just tell me s/he doesn't. |

As highlighted in Table 4.1, in terms of the impact that doctoral learning had on the students' individual confidence level, their credibility and self-awareness were mentioned repeatedly by all, apart from Chris. Confidence resulting from doctoral learning was also confirmed by their work colleagues, who perceived such learning as helping to increase their professional authority. Only

one student (Chris) referred to this process as a change in the relationship with his/her students, pointing towards the emergence of new social relations as the underlying mechanism for personal growth through doctoral learning (discussed at greater length later in this chapter). Confidence is indeed repeated several times by interviewees, which leads one to assume that it is one of the most important aspects that doctoral learning triggered in students. The dictionary definition of confidence refers to a "feeling or consciousness of one's powers or of reliance on one's circumstances" (Merriam-Webster Online Dictionary). This confirms the idea that personal development stemming from doctoral learning is a means to enhance personal power in terms of individual agency. The above mentioned *in vivo* codes refer thus to personal development as a means to enhance self-consciousness in students as generated through their doctoral studies. These codes were therefore regrouped into a subcategory of individual agency titled "personal development", as they pointed towards learning as a self-transformative process both as a person (Mezirow, 2009) and by extension as a professional.

The *in vivo* codes highlighted in Table 4.1., such as "maturity", "[personal] development", "understanding", "interacting" and "self-awareness" resulting from doctoral learning, align with Archer's (2003, p. 115) "morphogenetic process of the person" as the comment below shows:

> The doctorate has actually given me real confidence to say that I actually know what the literature is. And to be able to use it. It gave me more credibility ... and there is something about the individual maturity and development. **Alex (doctoral student)**

Archer (2003) argues that personal transformation occurs when people engage in individual reflexivity regarding their personal and professional concerns, which in turn engages agents in actions to tackle these given concerns. Smith (2010) builds on Archer's reflexivity theory when acknowledging that self-reflexivity is a process that requires one to consider and evaluate oneself as an object in relation to the world, thereby shaping an individual's experiences. Both perspectives on reflexivity overlap with Brookfield's (1995) notion of critical reflection as the means to gain self-awareness of one's assumptions about our being and the world in which we live in terms of human behaviour, normative structures and the conditions under which these can be changed.

The notion of the human capacity to reflect upon one's own self in relation to the social environment and to change accordingly has also been treated by Schön (1983) in his seminal work about reflection-on- and reflection-in-action respectively as a means of thinking critically about one's professional practice. In turn, this highlights the process through which practitioners

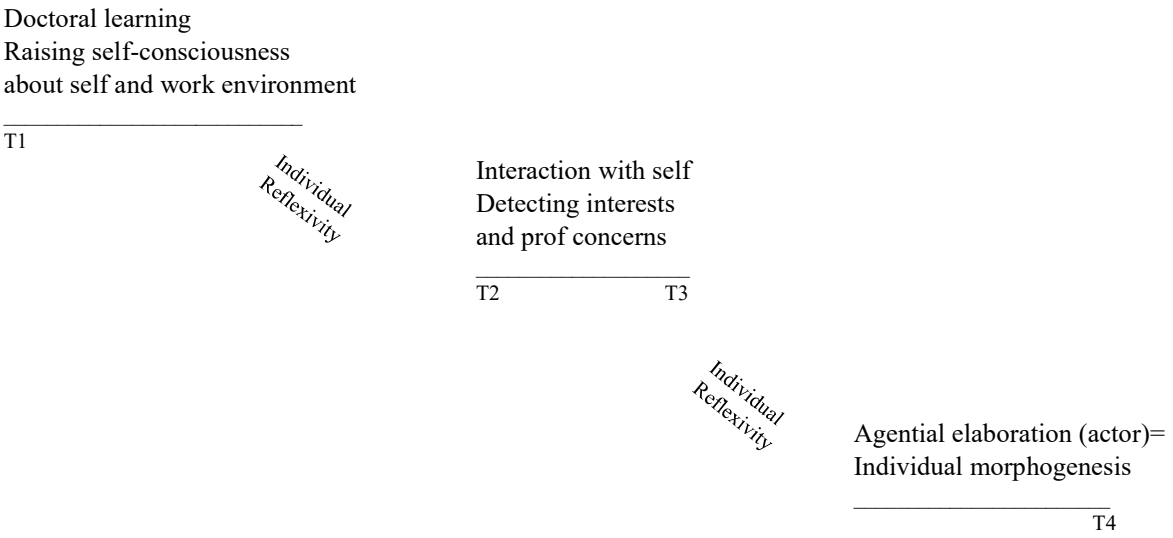
"surface and criticize the tacit understandings that have grown up around the repetitive experiences of a specialized practice" (p.61). These notions of self-reflection heightening awareness about self and the environment also echoes Mezirow's (2009) transformative learning theory which identified that learning as a transformative process addressed 10 different phases, including self-examination, assessing assumptions, planning a course of action and building self-confidence in roles and relationships (p.19). Where Archer's account of reflexivity diverges from these theories is in its division of reflexivity into different modes whose nature can change the impact it has on social structures. However, it does not fully account for the individual transformation process that changes individuals into active human agents who impact on their social environment. The notion of individual morphogenesis through transformation learning will be treated later in this chapter.

The following subsection explains how reflexivity as a causal mechanism exercised through internal conversations mediated the effects of social structure on human agency, thereby contributing to change of the self and the group, thus impacting on the organization itself.

### 4.1.1. Reflexivity and human agency

The data demonstrated that doctoral learning transforms the person into an individual who actively reflects upon his/her own future by engaging in reflexive deliberations about their professional and personal existence, gaining thus in maturity and personal development as illustrated by Alex's response. Individual reflexive deliberations consequently enhance the person's agential power as an actor who can shape their current professional life according to the concerns demonstrated in Figure 4.2.

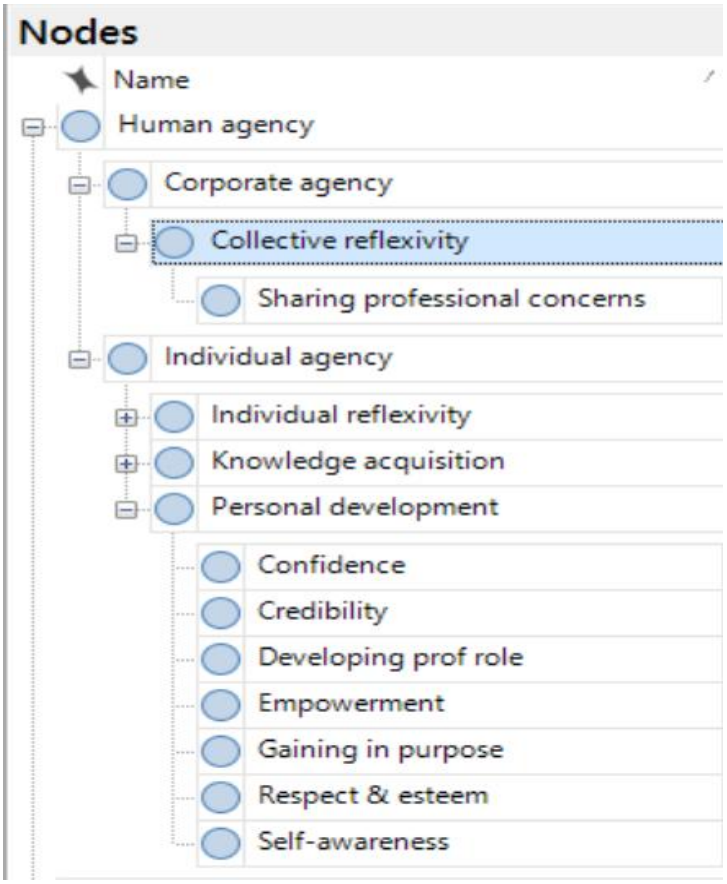
**Figure 4.2.** Individual morphogenesis through doctoral learning – 1st level of organizational change




Adapted from: Margaret S. Archer (1995). Realist social theory: the morphogenetic approach. Cambridge University Press, pp. 76, 193-194.

The first data analysis cycle (see Table 4.1.) demonstrated that personal development is fostered through individual reflexivity as the transformative learning process whereby critical thinking skills as well as a higher awareness of context were promoted to engage in relations with the self and others, thus enhancing individual agency. This was highlighted in the literature review through research conducted, for instance, by Scott et al. (2004), Servage (2009), Wellington and Sikes (2006) and Burgess, Weller and Wellington (2011). The subcategory "personal development" was therefore attached to the core-category "individual agency" to express the individual transformative process as a person with enhanced agential power. In a subsequent coding cycle the category "individual agency" was attributed to the "human agency" key conceptual category of, as shown in Figure 4.3.

**Figure 4.3.** Analytical concepts related to human agency




It appears from this figure that in addition to personal development through individual reflexivity as a key element for individual agency, sharing professional concerns with work colleagues and engaging in organized actions constituted key elements for the unfolding of corporate agency. Indeed, Archer's (2003, p.118) definition of human agency encompasses a more collective aspect since she refers to it as the expression of *collectivities* which share the same *life-chance* by occupying a given social position.

Archer (2003, p.118) distinguishes two types of agents, namely "primary agents" who occupy a position without agential power, and "corporate agents" who, by defining the aims they want to pursue and organized themselves accordingly into interest groups, have gained agential power. It is therefore the ability of corporate agents to engage in deliberations that raise their self-consciousness within a given social environment, leading them to engage in deliberate and purposeful actions with the intention to operate in a given social context while changing it according to their vested interests or concerns.

In Archer's (2003) reflexivity framework, human agency derives from individual and collective deliberations about shared concerns leading to human interactions that deal with these concerns by engaging in deliberate actions to address them purposefully. Therefore, it seemed logical to create a larger core-concept entitled "human agency" encompassing both forms of agency as constitutive elements for organizational change. Indeed, the students' learning that occurred within a professional doctorate had not only their personal growth at its heart, but was also directed towards tackling professional concerns at a collective level to change the organizational status-quo, however with different outcomes as Table 4.2. illustrates.

**Table 4.2.** Doctoral students' professional concerns, projects and impact on practice

| Case | Doctoral candidate | Hierarchical position | Prof concerns | Projects undertaken to tackle prof concerns | Selected quotations on (expected) impact on professional practice |
|---|---|---|---|---|---|
| **1** | **Alex** | Faculty-Senior Faculty | Teaching based on best evidence | New Master's course in education for medical students | Alex has introduced a new program in medical education that will be giving the students not only a chance to get an extra qualification, […], [but]the chance later on in their career to become experts.<br>**Alex's Junior Colleague C1U1P1(n-1)** |
| **2** | **Bert** | Admin - Senior Faculty | Promoting women into academic careers | Discussion with women and management on annual promotion round | I raised the issue about there being a huge discrepancy and something that we needed to do about this…. And so, over time, I've developed the criteria to be clearer and have done a variety of different things just to raise awareness. We now have gender equality groups within each of the faculty strand to address some of the issues around why women do not put themselves forward.<br>**Doctoral student (Bert)** |
| **3** | **Chris** | Admin/ Junior Faculty | Research productivity | Discussion during sessions to motivate faculty to undertake research projects | We have been trying to have sessions to motivate faculty to do research. At the moment, we still can't require of them to do it. But we have had sessions just to motivate them, to show them why we need faculty to engage in research.<br>**Doctoral student (Chris)** |
| **4** | **Dominique** | Admin-Senior Faculty | Improving students' success and achievement rate | Up-skill undergraduate office to motivate students through holistic advice. Interdisciplinary discussion with faculty/admin members | The person who I work quite closely on this area is someone who I got her position created […] as a result of doing one of the modules, it might have even been a master class, about how there's this disconnect between the academics and the student support, and her job is to try and make that connection work so that the academics know what student support is available, and the students have kind of a coherent message.<br>**Doctoral student (Dominique)** |
| **5** | **Jamie** | Faculty-Senior Faculty | Promoting academic integrity regarding plagiarism | Discussing issue at various college committees | Practice which would be initiated -- would be to have all classes that have research or research components in it be required to use Turnitin. But the faculty would be trained on how to use it. And that would be all orchestrated and implemented in an orientation or workshop kind of thing like we do one School at a time maybe and get that community of practice going within the School.<br>**Doctoral student (Jamie)** |

This perspective surfaces quite clearly in Bert's comment where the issue, after discussing it with work colleagues, led to gender equality groups addressing why women do not put themselves forward for professorial positions. This is also evident in Chris's extract which mentions that faculty workshops were created to motivate staff to do more research to comply with quality assurance demands. However, Jamie's comment shows that collective reflexivity did not really occur as it relates a hypothetical approach to taking further action to transform organizational practice.

In this study, human agency as shown in Figure 4.2. relates to two different aspects of the same concept which are interrelated and constitutive of one another. On the one hand, human agency refers here to the individual agency triggered by the doctoral students' individual critical reflections about their professional concerns, which denotes the individual transformative step. On the other hand, human agency also refers to the collective form of agency derived from sharing individual agents' internal deliberations with work colleagues, thus engaging them in collective reflexivity that generated corporate agency, which represents the second step towards organizational change. Corporate agency refers in this context to individual agents who regroup to articulate their concerns in an organized fashion, thereby tackling them collectively (Archer, 2003) as reported by the following interviewee:

> [O]ften when trying to do these programs there is not a lot of funding for it. And this involves a lot of persuasion and convincing for people to get involved. And s/he had to use that...his/her skills …to work with the academics, and s/he had to work with the administration and the students. Three groups of people and facilitate that program to get it up and running. And the stats as far as I know are speaking for themselves that the students are benefitting from it and they do like it. **Dominique's peer colleague C4U5P5(n=0).**

These findings suggest that collective reflexivity was employed (or not) by doctoral students in this study as a mediatory mechanism to engage in actions that would transform corporate agents into actors who have a say in organizational elaboration. Thereby students engaged in individual and collective reflexive deliberations to monitor themselves as individuals and, as a work group, engaged in projects that mediated the impact of social structures on their agential power (Archer, 2003). The comparison of these findings between different cases (examined later in this chapter) distinguish the different modes of reflexivity triggered by doctoral students as these modes are diverse in nature and thus impacted differently on the students' work environment and consequently on organizational change.

### 4.1.2. Modes of reflexivity as a transformative mechanism

Findings derived from the initial coding of the interview question concerning doctoral students' learning demonstrated that it enhanced individual agency through the development of self-awareness and self-confidence in their academic competences. This process occurred through individual reflexive deliberations which developed in students a critical stance towards existing forms of professional practice and triggered their desire to tackle these concerns by engaging with work colleagues in actions which in turn generated collective social relations. However, there was variation in how their desires unfolded due to the different modes of reflexivity they engaged in, which affected their internal deliberation process.

Archer (2003; 2007b) has explored this issue by analysing how individuals engaged in deliberations to enhance their social mobility and identifies four different modes of reflexivity. Archer characterises communicative reflexives as people who engage in a reflexive process that seeks external confirmation of actions undertaken to tackle these concerns. Communicative reflexives share their concerns with others and partake in projects situated within the existing structural context, thereby generating little or no social constraints. Autonomous reflexives are self-confident people who know what they want to achieve in their personal and professional life, but are less inclined to share their internal deliberations with others. They engage in transformative projects to change the existing social structures to accommodate their personal interests, thus they are more likely to be driven by personal performance, attempting to deactivate social constraints working against their projects. Meta-reflexives are people who reflect on their own thought process to gain a higher level of awareness about themselves, their organizational context, and the impact these actions have on the wider society. Finally, fractured reflexives are people whose internal conversations concerning themselves and their social environment have been suspended due to contingencies that impede the development of agential power, or whose internal deliberations did not generate active actions and make decisions as a reaction to such incidents.

Data analysis revealed, however, that most students in this study engaged in various modes of reflexivity simultaneously as detailed in Table 4.3a, which clearly diverges from Archer's (2003; 2007b) reflexivity theory as discussed later. Indeed, students engaged in individual meta-reflexive deliberations through their doctoral learning, generating a critical stance towards their self both as a person and a professional. Doctoral learning thereby increased their understanding of their social context through internal deliberations about their beliefs and values regarding their work context, which correlates with Archer's (1995) theory of meta- and autonomous reflexivity. For example, Bert expresses that being part of a community of students who are teachers has

given him/her the necessary insights and understanding of what this profession entails, changing their perceptions of their needs and, consequently, altering their attitude towards the issue. This demonstrates quite clearly the student's meta-reflexive process about him/herself as a person impacting on their values and, simultaneously, the autonomous reflexive process as this personal transformation shaping the student's view on the profession and thus his/her work environment by raising their acceptance of the issue.

Likewise, Dominique and Jamie's comments highlight how their meta-reflexive deliberations caused the students to reflect on their personal values, which in turn increased their awareness and understanding of their relations with their work environment as professionals. Indeed, such increased self-awareness about themselves and their professional environment conferred on them a sense of increased capacity to fulfil their role and to consolidate their position as professionals, which relates to Archer's autonomous reflexivity regarding personal performance.

**Table 4.3a:** Modes of reflexivity triggered by professional concerns generated through doctoral learning

| Doctoral students | Modes of reflexivity | Comments | Selected quotations |
|---|---|---|---|
| **Bert** | Meta-reflexivity & autonomous reflexivity | Doctoral learning triggered student's understanding and awareness of what teaching implies changing thus his/her idea about education. | [B]eing part of a group of students some of whom are obviously teachers or lecturers, or professors even, I guess, has given me an understanding of the activities that they are involved in and therefore has given me more tolerance of their needs…. I think it has influenced my values. |
| **Dominique** | Meta-reflexivity & autonomous reflexivity | Doctoral learning prompted the student's awareness of his/her own values and those of his/her work environment. | I could see that bigger picture that I hadn't been able to see before and I guess it's just really caused me to look at what my values are and realized that this is-- because we did that thing about, "Do your values align with your institution?", and I've realized that mine do and so I think I'm quite happy with that. |
| **Jamie** | Meta-reflexivity & autonomous reflexivity | Doctoral learning triggered self-awareness of own beliefs and values about educational issues. | Well, it has given me self-awareness of what my values are and have been, so it has forced that kind of an articulation for me and it has given me a new and deeper appreciation of the research that is being done. |

Moreover, gaining in confidence and self-awareness also increased their credibility with work colleagues, suggesting that they engaged in communicative reflexive deliberations seeking external approbation as shown in Table 4.3b. Indeed, Bert's junior colleague reports how the sharing of professional concerns with work colleagues shaped their understanding of the subject and the actions that followed for the benefit of the organization, indicating clearly that actions were discussed beforehand, echoing Archer's communicative reflexive deliberation mode. Likewise, Dominique's colleague highlights how personal deliberations about the student's

doctoral learning challenged their thought processes which then were discussed with work colleagues to seek confirmation, correlating with Archer's communicative reflexivity.

**Table 4.3b:** Work colleagues' accounts on doctoral students' collective reflexive mode generated through doctoral learning

| Work colleagues | Modes of reflexivity | Comments | Selected quotations |
|---|---|---|---|
| **Bert's junior colleague** C1U2P2n-1 | Communicative reflexivity | Doctoral student shares insights of his/her learning with work colleagues | I think we have benefitted from Bert's openness and that s/he shared some of her research work with us, which is very valuable. And having an understanding of what s/he is doing and how it impacts all what the rest is doing and the department. |
| **Dominique's junior colleague** C3U4P4n-1 | Communicative reflexivity | Communicating with work colleagues about his/her learning | [S]/he has talked about the fact that the [modules] that s/he has undertaken have challenged [the doctoral student] to think about things more than s/he would have without them. Because our studies are -- they do make us rethink things, don't they? They do open our doors to different ways of thinking and broaden our thinking. |

From the data in Figures 4.3a and 4.3b, it appears that these findings deviate from Archer's (2003, 2007b) dominant mode of reflexivity theory, as she attributes to each individual a single mode of reflexive deliberation. However, it concurs with Kahn et al.'s (2017) findings on student engagement highlighting the use of several modes of reflexivity in the same agent. Individual meta-reflexivity as an underlying mechanism triggered by doctoral learning thereby enhanced doctoral candidates' agential power as a necessary condition for individual human flourishing (Archer, 1995). Bhaskar (2008b) refers to human flourishing as the expression of a person's free choice to pursue and realize their most valued interests while Archer's (2003) definition of meta-reflexivity comes close to Bhaskar's concept of human flourishing as the former refers to a person's capacity to reflect on his/her social environment and its circumstances that they confront when pursuing their own interests. Reflexivity is, however, not a self-contained concept; rather it is always directed towards something, and this something refers usually to concerns and interests that emerge from the reflexive process, unless the person falls into the category of those who, for various reasons, are unable to engage in reflexive modes of deliberation and thus cannot employ their agential power to pursue their concerns, namely individuals who are "fractured reflexives" (p.298).

In this study, individual meta-reflexivity triggered through doctoral learning not only enhanced students' confidence in their professional skills as practitioners, but also their self-awareness of what is going on in their professional world in terms of professional interests and concerns. These

concerns led them to engage in actions with the intention to change their practice, which clearly indicates an autonomous reflexive mode directed towards increasing professional performance. In four out of five cases (see Table 4.5), doctoral students engaged in "concrete courses of action" through individual meta-reflexive deliberations, which comprised the following sequences (Archer, 2003, p.133):

**concerns** → **projects** → **practice** →

In Case 1, Alex's concern was to enhance the students' medical experience by providing them with an extra-curricular qualification that would improve their knowledge of teaching practices, the lack of which was clearly identified as a problem for medical staff engaged in teaching activities. In Case 2, Bert addressed the professional concern about gender inequality by promoting women's professorial career paths through equality groups and grading criteria that raised the faculty and managing staff's awareness of this issue. The intention behind these workshops was to have more women appointed as professors over time as highlighted in the strategic plan (see Table 4.14). In Case 3, Chris promoted faculty workshops to increase staff interest in research activities as this was one of the main concerns raised in the university's strategic plan. However, his/her project was imposed by the quality assurance organization, which limited agential power in terms of collective reflexivity. Indeed, Chris' actions were not deliberately and freely chosen but were imposed by external quality assurance bodies. Flann (2010) refers to dominating influences restricting an individual's critical thinking as restrictive reflexivity, particularly as it gives rise to controlled or imposed actions. Dominique, in Case 4, addressed the concern of linking student support staff with faculty to make students' learning journey more coherent and less disruptive. This concern also aligned with the institutional strategic plan to increase overall student completion over the next few years. Finally, Case 5 shows that the doctoral student's deliberations about his/her professional concern remained fractured due to work colleagues' different views on the issue, at least when this study was conducted, thus inhibiting engagement with work colleagues and management in constructive reflexive deliberations about his/her project, indicating a variation on Archer's (2003) fractured reflexive mode as delineated in Table 4.4.

**Table 4.4.** Doctoral student and work colleagues' accounts showing fractured reflexivity

| Doctoral student/work colleagues | Comments | Selected quotations |
|---|---|---|
| **Jamie (doctoral student)** | There seems to be some frustration in Jamie's words that s/he couldn't get all relevant stakeholders to adhere to the project. | It is kind of epic what has been going on, trying to get the senior management team just to purchase Turnitin and just do a pilot program. It's hot here…I have the support, there is just one person on the Deans' and Chairs' committee who is very vocal against even trying Turnitin and that's our main librarian. It is just one vocal person that can stop it. I was close to getting it when I was a Chair. This close. |
| **Jamie's Peer colleague** C4U4P5n=0 | Faculty seems to say that the whole idea was abandoned | S/he put it to give it to the chair and the Dean and we waited and waited and then s/he followed up and it just sat there. No, nothing has happened. |
| **Jamie's Senior colleague** C4U4P5n+1 | Management awaits a more detailed explanation about the project to endorse it. | It's a little early to say for sure because again, I only have a very broad outline of what s/he wants to study. But I can certainly imagine that it's a study work as I said, very consultative and working with the people for who plagiarism are issues and working in a supportive way and saying, "What can I do to clarify up the process for you?" It could be to clarify processes and procedures and maybe even clarify policies. That would be a best-case scenario that s/he does something that supports the schools in developing and clarifying their policies on academic integrity and leads to some kind of more unified approach to those issues up in the college. |

Overall, these findings show clear variation among the five cases concerned with the impact of doctoral learning on their organization. Indeed, two out of five participants demonstrated a form of restricted or fractured reflexivity in the pursuit of their projects, indicating limited control on their undertakings and thus a diminished agential power due to social constraints. These elements also highlight that, despite the individual reflexivity process being present as a necessary mechanism for doctoral students' self-determination to engage in actions to tackle their concerns, in Cases 3 and 5 the collective reflexivity process was not fully engaged in terms of freely chosen actions for the elaboration of existing social structures, indicating a fractured collective reflexivity (Kahn et al., 2017).

The remaining three doctoral students, however, raised professional concerns that entailed work colleagues joining them in articulating new actions to tackle these concerns, which generated a form of collective meta-reflexivity leading to Archer's corporate agency. Collective meta-reflexivity, thereby, became the mechanism that mediated the effects of social structures on human agency, as it helped doctoral students understand their work context, identify professional preoccupations, and engage in actions with work colleagues to pursue their concerns, resulting in organizational elaboration. This theme will be developed in the following section discussing social relations.

In relation to this study, the knowledge that students gained from their doctoral studies enhanced their self-awareness and self-confidence, which had a transformative effect on their self. Students engaged in an individual meta-reflexive stance about their own self at the beginning of their doctoral studies and subsequently about their social context, elevating their professional concerns which eventually led to projects intended to change their professional practice. By engaging in collective meta-reflexive deliberations with work colleagues, they then engaged in freely-chosen actions to elaborate new social structures. Conversely, in situations where the doctoral student could not engage work colleagues in collective meta-reflective deliberations about professional concerns, a fractured collective reflexivity mode ensued.

It is noteworthy, however, that fractured reflexivity here does not fully cover Archer's explanation as she relates it to anxiety issues which lead to the absence of purposive actions. In this case, fractured reflexivity is extended to inaction due, presumably, to antagonism between the student and a work colleague to take the student's project forward in a collective way:

> I have the support, there is just one person on the Deans and Chairs committee who is very vocal against even trying Turnitin and that's our main librarian… It is just one vocal person that can stop it. I was close to getting it when I was a Chair. **Jamie (doctoral student).**

A more detailed analysis on the different modes of reflexivity is not the purpose of this study. However, what is of interest here is understanding how individual meta-reflexivity led to professional concerns which were then shared with work colleagues, thereby generating a collective meta-reflexivity intended to articulate collective action in an organized fashion leading to organizational change. Conversely, in the case of fractured collective reflexivity there was an absence of purposive actions resulting in organizational reproduction.

These collective patterns of reflexivity diverge from Archer's individual modes of reflexivity when related to social mobility. Indeed, Archer (2003) has stated in her conclusions about the different modes of reflexivity that one of the limits of this exploration is "how the different individual modes of reflexivity, which mediate constraints and enablements in quite distinctive ways, are also related to collective action," understanding this as the "missing link" in her theoretical framework which explains how the interplay between structure and agency leads to social/organizational morphogenesis or morphostasis (p.166). However, Archer (2013, pp.153-154) has more recently treated the issue of collective reflexivity as the generative mechanism for social relations, albeit in relation to its "qualitative dimension" as the condition for generating "relational goods" or "evils". In turn Donati and Archer (2015) explain relational goods and evils

as the emergent properties from social relations, which have "internal effects upon the subjects themselves and external effects upon their social environments" (p. 31). Such explanations remain comparatively limited when it comes to proving how the emergence of such durable relationships induced by collective reflexivity give rise to organizational morphogenesis.

Understanding how learning that increased individual meta-reflexivity changed into a collective purposive endeavour or alternatively into the absence of joint actions, is what allowed me to understand what was responsible for organizational morphogenesis or morphostasis in this study. This process is developed in the next subsection and extends Archer's (2003) theory about distinctive modes of reflexivity for social mobility to individual learning, thus generating corporate-level change.

### 4.1.3. Transformative learning as a meta-reflexive process

In the previous subsection the data demonstrated how personal transformation triggered through doctoral learning constituted a fundamental feature for individual morphogenesis to occur, representing the first step towards organizational morphogenesis. Doctoral learning as an individual meta-reflexive process raised students' awareness about professional concerns, engaging them in projects to tackle these concerns, thus increasing their agential power. However, Archer's reflexivity theory does not explain in concrete terms how meta-reflexivity contributes to self-transformation and as a professional enhancing one's individual agency. Thus, this dissertation extends her theoretical concept to the transformative learning theory based on the idea that the learning process is "teaching for change" (Taylor, 2009, p.4), which uses "prior interpretation to construe a new or revised interpretation of the meaning of one's experience to guide new action" (Mezirow, 2009, p.22).

Although Mezirow's (2009) work is not inspired by the critical realist perspective, there is overlap on how reflexive deliberations can impact on individual morphogenesis and how such transformation through increased awareness of the self and the social environment can influence how human agents act on their own social context to change it accordingly. Mezirow defines transformative learning as "learning that transforms problematic frames of reference to make them more inclusive, discriminating, reflective, open, and emotionally able to change" (p.22). In this context, frames of reference refer to social structures such as professional and governing bodies or quality assurance and institutional strategic plans, which have their own causal powers to constrain or enable human agency (see Section 4.5).

The data analysis highlighted how doctoral learning triggered the necessary critical stance in doctoral students to tackle existing social structures through new projects in accordance with Mezirow's (2009) above cited criteria. In Case 1, Alex's meta-reflexive deliberations led to changes in the existing programme for medical students by including an educational module to make it more professional, thereby altering the existing disciplinary frame of reference, which was based more on the discipline itself rather than on the art of teaching medical practice. This is clearly reported by the graduate's senior colleague:

> Alex has brought back collaborations between the medical education side and the genuine academic education people, but also with […] University, with [….] University, and with some of the clinical departments dealing with getting clinicians involved in education. **Alex's senior colleague C1U1P1(n+1)**

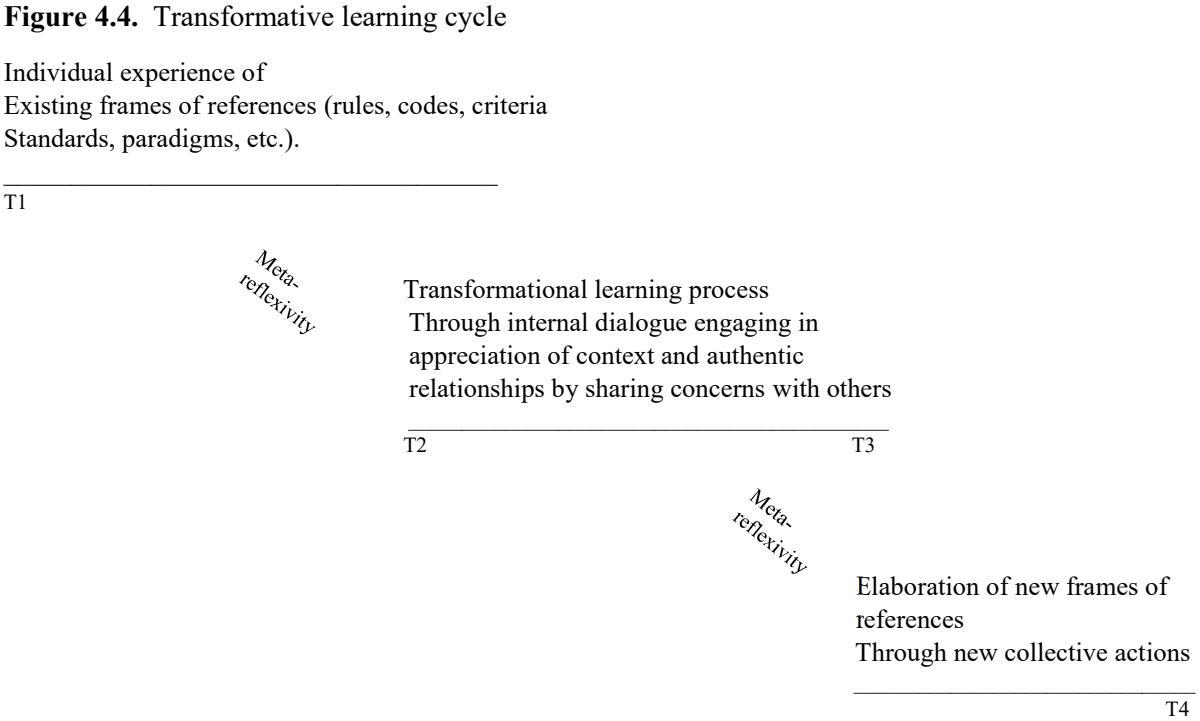
The next excerpt illustrates how Bert's internal deliberations changed the institutional referential quality framework by providing a more inclusive people strategy. This was the result of his/her doctoral learning which led them to engage in a more critical stance:

> There are certainly projects that are under way like workload planning, like leadership and development programs that I think are directly influenced by [ the student's] research so far. Certainly, [the student's] work and research undertaken around equality and diversity has resulted in a renewed focus in the university to improve in our performance in respective to equality and diversity. **Bert's senior colleague C1U2P2(n+1)**

Transformative learning therefore implies that people through critical reflection question existing assumptions and beliefs about their self and the world, thus generating new ways of thinking that guide their actions instead of acting on beliefs imposed by others (Mezirow, 2009). These elements align with Archer's (1995) human agency theory as discussed in the previous section, which presupposes that the flourishing of human agency occurs through reflective deliberations, raising concerns and interests that lead to new actions to address these concerns thus changing those professional practices that impact on existing social structures such as strategic plans, thereby generating change.

However, it is worth noting that human agency can only fully flourish when human actions are decided on freely and deliberately and are not based on choices framed by others. This is typical of meta-reflexive deliberations directed towards improving the self, work environment and professional practice, all with an increased awareness of the impact they can have on the wider society. By drawing a parallel between Archer's (1995) morphogenetic theory and Mezirow's (2009) transformational learning theory, the following schema emerged.

**Figure 4.4.** Transformative learning cycle




Adapted from Archer (1995, pp. 76, 193-4).

As stated by Taylor (2009), individual life experience is what students bring to a new learning experience. Students' experiences, both in terms of professional practice and doctoral learning, represent the means through which critical reflections were generated in this study. Critical reflections refer here to the questioning of previous assumptions, worldviews, values and beliefs which were challenged through new knowledge acquisition from doctoral learning as detailed in Tables 4.3a and 4.3b. In turn, Table 4.5 shows how Bert, Jamie and Dominique's doctoral learning developed their understanding of education, thereby changing their perspective.

**Table 4.5:** Transformative learning process triggered through doctoral learning

| Doctoral student | Selected quotations |
|---|---|
| Bert – Case 2 | [B]eing part of a group of students some of whom are obviously teachers or lecturers, or professors even, I guess, has given me an understanding of the activities that they are involved in and therefore has given me more tolerance of their needs…. |
| Dominique – Case 4 | I could see that bigger picture that I hadn't been able to see before and I guess it's just really caused me to look at what my values are and realized that this is-- because we did that thing about, "Do your values align with your institution?", and I've realized that mine do and so I think I'm quite happy with that… |
| Jamie- Case 5 | Well, it has given me self-awareness of what my values are and have been, so it has forced that kind of an articulation for me and it has given me a new and deeper appreciation of the research that is being done. |

Although it is not expressed directly, one can deduce that their understanding ensued from internal deliberations which incited the doctoral student to critically reflect upon themselves in relation to his/her work environment and the values it defends, thus raising the student's self-awareness of their position in this particular context. Indeed, the quotations highlight how students compared previous experiences with new ones derived from doctoral learning, and acknowledged changes in their thinking about professional issues. This is clearly expressed by Dominique in Case 4, where the student through doctoral learning gained more insight into his/her values regarding the work environment and the institutional activities which they could identify as matching their own.

Internal dialogue therefore constitutes "the essential medium through which transformation is promoted and developed" (Taylor, 2009, p.9). Taylor's concept of dialogue can thus be compared to Archer's (2003, 2012) notions of communicative- and meta-reflexivity as inner conversations about personal experiences that question beliefs, values and underlying assumptions, eventually leading to interpersonal relations to seek acknowledgment from other people thereby making informed decisions about what future actions to undertake. This fits with Mezirow's transformative cycle theory as delineated in Figure 4.4, which shows that learning and individual experiences trigger critical thinking through internal deliberations that question existing social structures (frames of references) that, when shared with others, engage these agents in new actions which transform these frames of references accordingly. The addition of this social dimension to the transformational learning process confers a collective approach on it, as it represents not only a transformative process on the part of the individual but also of the environment in which the person acts through the creation of social relations.

Therefore, establishing social relations constitutes another important factor for transformational learning. As stated by Taylor (2009), building trusting relationships allows the learner to develop

the confidence necessary to question assumptions in discussions and to share information openly to achieve consensual understanding. Transformative learning triggered through individual reflexivity leads, therefore, not only to personal growth, but enhances the learners' awareness of their professional context by sharing their queries with others, thereby developing social relations that give a social dimension to the transformational process. This, again, supports Archer's (1995) morphogenetic theory about social relations as a generative mechanism that triggers social transformation (developed later in this chapter). Social relations triggering a collective meta-reflexive process to address mutual concerns in a joint organized fashion thus constitutes one of the key mechanisms that enhances human flourishing in terms of collective-level agential power.

### 4.2. Social relations

The concept of "relations" refers to the properties that things possess by dint of their position in relation to other things. In this sense, relations exist only virtually as they have no material substance of their own and are therefore imperceptible. In critical realist terms, relations can, however, become real causally through the effect they can have on material things (Hartwig, 2007). Social relations by extension refer to the interactions between people and the impact they can have "on people and the changes people make to other material things" (p.410). Indeed, in the critical realist perspective social relations are treated as real objects with causal power that can affect other things. As explained earlier in this chapter, human agency relates to the capacity of a group of people to reflect on their social environment in which they develop their interests, thus changing existing social structures, which Archer (2003) denotes as corporate agency. In this study, corporate agency relates to the capacity of students to engage in social relations by sharing their projects with work colleagues to generate deliberate actions leading to the transformation of existing social structures.

Data analysis revealed *in vivo* codes such as “working together”, “networking”, “collaboration” and “connection” which pointed towards the concept of “building relationships” as a key element to share students’ professional concerns, which stemmed from previous autonomous and meta-reflexive deliberations at the individual level (see Table 4.6). The verb “building” indicates that these relations were directed towards ongoing activities with a certain duration. Indeed, codes such as “working together” or expanding “academic networks” and “collaborations” implied an ongoing set of interactions between work colleagues and/or other institutional stakeholders constitutive of durable social relations. Social relations were therefore perceived as a stable and ongoing element leading to organized actions, which could eventually impact on existing social structures.

**Table 4.6.** Building relationships with work colleagues through social interactions

| Case | Doctoral student | Professional concerns | Selected quotation |
|---|---|---|---|
| **1** | **Alex** | Teaching based on best evidence | They are information technologists, and we are now **working together** in a way that I would have never thought of working before the EdD, because I wouldn't have understood about information technology in the way that I now do. |
| **2** | **Bert** | Promoting women into academic careers | I have now a hugely expanded **network** of […] academic work colleagues that I never had before. So, by setting up the **mentoring network**, by running […] **academic networks**, and things that weren't in place previously, are now having a huge set of colleagues, […] academic colleagues, that I could say that they know me now quite well and I know them quite well. Whereas, I would probably not would have had that, if I had not done this doctorate. |
| **3** | **Chris** | Improving research productivity | [R]ight now, the department it's looking at **collaboration** with other universities so we have had a research consultant come down and there will be further meetings with her on how we can boost research. How we can make research part of the culture.... So I am hoping that the research that I am doing, will give them some ideas as to what ... faculty experiences are in meeting these accreditation requirements. |
| **4** | **Dominique** | Improving students’ success and achievement rate | [W]ithin the university there’s one woman who's the head of the school of education and she is doing the EdD, and I went up to her and said, "I’m doing the EdD", And so, I went to meet this woman and talked to her through it and stuff. We’ve made quite a good **connection** and …. it’s quite interesting because the academic quality office- the head of it, the director, is quite high up. She reports to the Deputy Vice Chancellor. **Dominique** |
| **5** | **Jamie** | Promoting academic integrity regarding plagiarism | Yes, it has. It preceded it as well, because when I was a Chair I wasn't in the program yet. I was Chair up until 2013 and then I started the program. People knew beforehand that I was trying to champion this Turnitin. Now they know that that's going to be my research interest. I suppose it has a little interest. |

These *in vivo* codes were therefore merged into the category titled “building relationships”, since the sharing of students’ professional concerns with work colleagues created social relations which could eventually have an impact at the organizational level. However, to build relationships with work colleagues it was necessary to do more than merely engage in social interactions

resulting in stable social relations. Indeed, Jamie's quotation (see Table 4.6) shows that work colleagues' awareness of the student's professional interest is insufficient to create a stable relationship for organized collaborations at the corporate level. Indeed, active communication strategies were also a relevant factor in terms of fostering new collaborations (see Figure 4.5), whereby communication relates to the concept of engaging in collective meta-reflexive deliberations rather than to the sharing of information among work colleagues.

**Figure 4.5.** Analytic concept related to social relationships

| Social relations | 0 |
|---|---|
| Building relationships | 15 |
| Communication strategies | 1 |
| New actions | 13 |
| New collaborations | 4 |
| External collaborations | 6 |
| Internal collaborations | 11 |

This aligns with the transformative learning theory discussed earlier in this chapter, which highlights that dialogue with self and others is one of the constitutive parts of the reflexive process promoting transformation and personal development (Taylor, 2009). Taylor argues that dialogue is based on "relational and trustful communication" (p.9) that questions the trustworthiness, relevance and validity of norms or assertions (Mezirow, 1991). In this way, dialogue converts critical reflective deliberations into critical actions that question the assumptions and beliefs through which "habits of mind are ultimately transformed" (Taylor, 2009, p.9). This also supports Archer's collective reflexivity as it represents a key mechanism in the mediation of the effects that social structures can have upon corporate agency.

The following sub-section therefore explains how doctoral students' social interactions with their work colleagues resulted in collective meta-reflexive deliberations as a transformative mechanism that led to structural elaboration.

### 4.2.1. Collective meta-reflexivity as a transformative mechanism

The previous section underlined that doctoral learning triggered individual meta-reflexivity, as it raised doctoral students' awareness about their professional environment and professional concerns, which were then woven into the social domain by sharing them with work colleagues. The data analysis also demonstrated that doctoral students engaged by sharing such concerns in social relations that generated collective meta-reflexive deliberations, leading to new actions intended to tackle their professional concerns jointly and in an organized fashion, as shown in Table 4.7.

**Table 4.7.** Collective meta-reflexive deliberation generating joint actions to tackle professional concerns

| Social relations based on | Comment | Selected quotation |
|---|---|---|
| Collective meta-reflexive deliberations | Doctoral student engaging with work colleagues in collective meta-reflexive deliberations generating new actions. | Every year, we have an annual promotion round, so we discuss with my colleagues who administer that promotion round, the applications which remain, what happens in the panels when they assess those applications, and the outcomes. …So, the focus for me is to discuss that with my colleagues. **Bert (doctoral student**) |
| Collective meta-reflexive deliberations | Sharing learning to increase work colleagues understanding to make informed choices about new actions. | Bert has shared with us the things that s/he has been learning and as a greater understanding on why we would behave the way we do in terms of promotion and the things that affect our choices and some other things that have been put into place and the concern about whether women put themselves forward for promotion…. What I would say is that the understanding of the issues of female academics is better understood and therefore when there is greater understanding its more likely to be like a more constructive conversation. You are getting over that barrier of not really understanding where people are coming from so the quality of the conversation has improved. **Bert's junior colleague C1U2P2(n-1)** |
| Collective meta-reflexive deliberations | Having good discussions with work colleagues about how to tackle professional concerns in a coherent way | In terms of talking to the people that work with me, I do talk to them, particularly the ones who are involved in students' success and achievement and also, I work much more closely now with the Director of Equity. So, I'm able to have good discussions with her. **Dominique (doctoral student)** |
| Collective meta-reflexive deliberations | Brainstorming to find new ways of tackling professional problems in a holistic and inclusive fashion. | We talk about maybe individual students, because there are always memorable students, and that's not always for the right reasons. If there are particularly sensitive issues we bring it to a meeting we brainstorm ideas… At every meeting, we deal with these things and there's generally always a forward movement. **Dominique's junior colleague C3U4P4(n-1)** |

The above excerpts illustrate that the social relations concept represents how human beings relate to their social context through collective meta-reflexive deliberations changing existing social structures. Meta-reflexivity thus constitutes the generative mechanism through which organizational morphogenesis occurs, first, by assessing what matters to individuals (individual meta-reflexivity), and then by addressing these concerns as an organized entity that aims at

addressing these professional concerns at a collective level (collective meta-reflexivity). In this sense, social relations constitute a mechanism emerging from social interactions with their own properties and causal powers that condition the social context through the process of collective meta-reflexive reasoning.

Conversely, Jamie's example (see Table 4.8) indicates that even when professional concerns were discussed with work colleagues, such interactions did not necessarily result in a stable relationship with his/her work colleagues, thereby generating a fractured collective reflexivity process. Chris's case highlights how the dominant mode of corporate agency generated a restricted form of collective reflexivity as the group had no free choice in addressing the student's project in terms of new activities.

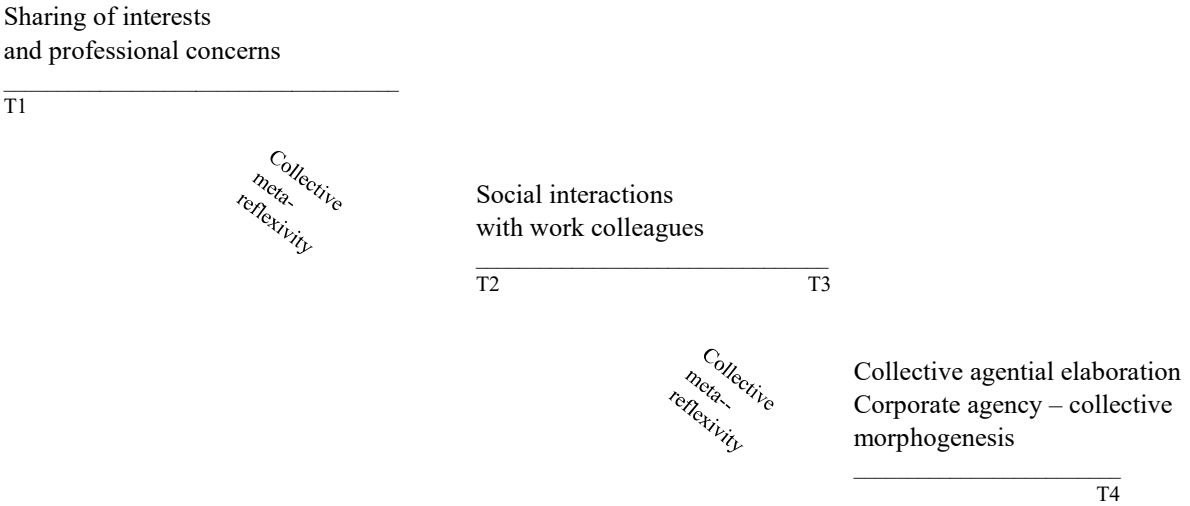
**Table 4.8.** Restricted and fractured collective reflexive deliberation to tackle professional concerns

| Case | Social relations based on | Comment | Selected quotation |
|---|---|---|---|
| 3 Chris | Restricted collective reflexivity | Reflective deliberations are restricted by imposed actions from internal bodies and external accreditation systems | I am trying to address the issue of research productivity at my organization. The thing is that my organization has a strong teaching culture and we are moving towards more and more accredited programs. But accreditation agencies are asking, are requiring in fact that faculty demonstrates research outputs… within the organization…In order to get promoted, even though research is not required from the organization, to get promoted you....one of the criteria is that you show the number of research projects you will have done during the year. …**Chris (doctoral student)** |
| 5 Jamie | Fractured collective reflexivity | No exchanges among faculty on professional concerns because of high competition among them. | No not really, but it might be informally in conversations during breaks, during school meetings, informally in office visits, but no we don't really actually sit down and talk about philosophy of education and pedagogical views… Individual faculty members are very individualistic. They are used to being the best and when you get a bunch of those kinds of people in the same room it doesn't actually lend itself to a good exchange of information because there is such high competition and strong egos in the room. **Jamie (doctoral student)** |

These results concur with Kahn et al.'s (2017) findings on the role of reflexivity in students' learning engagement. They have highlighted that the absence of social interrelationships with peer students in the fulfilment of joint learning tasks resulted in fractured or restricted forms of collective reflexivity. However, in the other three cases (1, 2 and 4), sharing professional concerns

with work colleagues generated a collective meta-reflexive mode that engaged work colleagues in joint actions in an organized fashion, thus generating organizational change. The collective meta-reflexive deliberations thereby denote the underlying mechanism that produce second level morphogenesis of social structures in an organization as shown in Figure 4.6.

**Figure 4.6.** Corporate morphogenesis through doctoral learning - 2nd level of organizational change




Adapted from Archer (1995, pp. 76, 193-4).

When such interactions occurred, they would then give rise to stable social relations, and when this was not the case only fleeting interactions ensued, which did not generate collective-reflexive deliberations or facilitate joint actions. Professional concerns had, therefore, to gain a social dimension by engaging in social relations with work colleagues. However, work colleagues had also to engage in collective meta-reflexive deliberations to address these concerns at a corporate level. Therefore, the creation of social relations through new ways of working together or by extending existing networks were the mediatory factor through which human agency might impact on existing social structures. As demonstrated in Cases 1, 2 and 4 (see Table 4.6), the work groups were a result of social interactions generated from the sharing of professional concerns with work colleagues.

The sharing of professional concerns with work colleagues generated collective meta-reflexive conversations among the group members, in turn giving rise to new actions. These actions represent the foundation of the organizational transformational process. In these situations, social interactions contributed to the collective meta-reflexivity process, thus generating a sense of

collective human flourishing. Conversely, in Case 5 (see Table 4.8) Jamie's social interactions with management and faculty did not result in stable social relations engaging work colleagues collectively in actions concerning the student's project. In this case, the professional problems raised by doctoral learning remained at a personal level, therefore failing to foster new actions resulting in the elaboration of existing social structures.

### 4.2.2. Role and position as a mechanism fostering agential power

Collective meta-reflexivity could only occur on the condition that the sharing of professional concerns with work colleagues gave rise to stable social relations as shown in Table 4.7. Conversely, where discussing professional concerns with work colleagues failed to result in stable social relations, then collective meta-reflexivity was absent (Table 4.8). This concurs with Archer's (2012) reflexivity theory where social relations represent the mediatory factor in the reflexive process for the selection of professional concerns that need to be addressed collectively. Social relations based on mutual respect and trust can thus create affinities between the persons involved, fostering lasting relationships to address mutual concerns. Archer (2012, p. 99) refers to such relationships as "relational goods" and, conversely, in situations when social interactions give rise to antagonistic or dominating relations as "relational evil".

However, the creation of stable relations and collective meta-reflexivity depended also on the doctoral student's agential power as conferred by the role and position s/he held in the institution and the way they engaged work colleagues in collective meta-reflective deliberations. Doctoral students in this study were all professionals working within a higher education setting with either an educational or an administrative function, sometimes both roles, and different hierarchical positions (Table 4.9).

**Table 4.9.** Hierarchical positioning and impact on work environment

| Case | Doctoral candidate | Hierarchical position | Prof concerns | Actions undertaken to tackle prof concerns | Stable social relations to tackle prof concerns | Prof concerns aligned with strategic plan |
|---|---|---|---|---|---|---|
| **1** | **Alex** | Senior Faculty & Senior executive (Director of school)<br>External professional board member | Teaching based on best evidence | New Master's course in education<br>for medical students | Yes | No, but with external professional body policy |
| **2** | **Bert** | Senior executive (Director of a transversal service) | Promoting women into academic careers | Discussion with women and management on annual promotion round | Yes | Yes |
| **3** | **Chris** | Total quality manager & Junior Faculty | Research productivity | Discussion during sessions to motivate faculty to undertake research projects | Yes/no. Only with younger faculty. Seniors not very willing to adhere. | Yes |
| **4** | **Dominique** | Senior executive (Director of 2 departments ) | Improving students' success and achievement rate | Up-skill undergraduate office to motivate students through holistic advice. Interdisciplinary discussion with faculty/admin members | Yes | Yes |
| **5** | **Jamie** | Senior Faculty | Promoting academic integrity regarding plagiarism | Discussing issue at various college committees | No | Not clear |

Positions and roles constituted, therefore, key-factors that could increase agential power, as such professional properties represented a causal component that triggered social relations. Indeed, doctoral students in senior positions who endorsed management roles were better able to generate stable social relations with their work colleagues and to engage them in their projects (see Cases 1, 2 and 4). Thereby, the students' role and position constituted mechanisms which changed them into actors who had a say in organizational elaboration. Conversely, in Cases 3 and 5, the students' social role and hierarchical position were not causal elements that increased their agential power to generate stable social relations and result in actions addressing the doctoral student's professional concern as triggered by doctoral learning.

However, although the occupation of a role and position shapes a person's deliberate reflexive act (Archer, 2003), such roles and positions are nevertheless conferred by the organization and represent the institution's causal influence on agential actions in terms of integrated norms (Reed, 1996). It is therefore important to highlight that in this context roles and positions become the expression of regulatory frameworks pertaining to organizational structures, which in turn impact on the nature of professional concerns and actions (Kahn, 2017a). Thus, the nature of students' concerns overlapped more easily with the organizations' strategic plans when they were in managerial positions. Conversely, students whose role and position were related to faculty staff revealed themselves as being less restricted by institutional norms and requirements regarding how to address their professional concerns.

This is exemplified by Table 4.9 where excerpts illustrate the divide between students in faculty positions and those who were administrative staff in relation to what constituted professional concerns for them. The table also illustrates the students' orientation in terms of actions deployed to confront such professional concerns. Moreover, the table also emphasises that such professional concerns were not always aligned with matters detailed in the institution's strategic plan (see Table 4.14 for strategic plans). Faculty members were indeed less inclined to engage in activities that would contribute to the objectives set out in the organizational strategic plan, whereas administrative staff's professional concerns were seemingly in alignment with such objectives. In Case 1, Alex's project was not aligned with administration and internal governing bodies' plans. However, due to his/her external executive role and managerial position, s/he could engage with (external) policy-makers who had a say in producing organizational change:

> Yes, they have [the project]. At a local and national and international level. Really because the work that I was doing has been talked about before it became a thesis and it was being talked about by people who are policy-makers. So, the work that I was doing is part of the reason for the [external governing body] promoting excellence documentation and the standards that have been put forward for demonstrating, promoting excellence. So, it was my research that actually was in mind when that has been planned and so of course I am in a strong position to capitalize on that, and both nationally and internationally. I work with people in that area now. **Alex (doctoral student).**

The student's statement was also corroborated by their senior colleague who reported that their project not only addressed the student's vested interests but was aimed largely at improving the careers of teaching staff:

> Well, I think one of the things that is being introduced actually is the EdD (*Master's course in education*) course itself as a course that we are running. S/he has introduced a number of educational courses. For instance, for the staff, most of the teachers for clinical level are actually clinicians. There are educational courses that s/he has introduced, not actually mainly at this university. I mean we work with other universities as well and training colleges. But, s/he has introduced educational courses so that a proportion of the teaching staff, those who want to make it, and have thought of excellence, can get higher qualification. **Alex's senior colleague C1U1P1(n+1)**

In Case 3, Chris's project was aligned with the overall institutional strategic plan, and thus received endorsement from the internal governing bodies. However, his/her reduced agential power due to the internal and external governing bodies' dominant corporate agential power, as well as their role as junior faculty made it more difficult to engage faculty in the proposed project. Indeed, it lacked an overall collective interest that would engage work colleagues in actions of their own choice to address this issue:

> We have an organization that has a strong teaching background and accreditation agencies are requiring research. Now, at the moment, the organization does not require from faculty to do research. But if we don't do research then we jeopardize accreditation. We have been trying to have sessions to motivate faculty to do research. At the moment, we still can't require of them to do it. But we have had sessions just to motivate them, to show them why we need faculty to engage in research. There is a genuine interest among junior faculty who are really the group that has the biggest issue because they do not have the experience to conducting research. So now they have to work along with senior faculty who has research experience to get their own research experience going. **Chris (doctoral student)**

Students endorsing a senior management position and whose projects were aligned with either external professional bodies or overall institutional strategic plan seemed to enjoy a higher rate of success in terms of making change happen as shown in Table 4.10.

**Table 4.10.** Doctoral students' role and position and their impact on organizational change

| Case | Role and position | Comment | Selected quotation |
|---|---|---|---|
| 1 - Alex | Senior Faculty & Senior Executive | The doctoral student's position and role enabled him/her to involve both work colleagues and external professional bodies in changing existing social structures to meet the professional concerns generated through doctoral learning. | Well, there is something coming out of it [the project] already because the next academic year we've got the .....we've developed the residence's trainers program that has just been published [a guide] in Medical Teacher and that's been rolled out in health education England North-West for all the junior doctors in the North-West and that's starting in September and is really in response to having done the training for the consultancy and so ....and the intention of that is really that in terms of education ability we've got to pin some movements from junior and seniors converging in the middle. It means that there is... we are very close to having a critical mass of people who can actually lead projects and move forwards. |
| 2- Bert | Senior executive | The same is also the case in this situation | [T]he vice-chancellor is very aware of it, because it is a particular interest of his/hers as well. Challenge and diversity are very high up on his/her agenda. S/he is the chair of the sector's equality challenge unit. So, s/he is really interested in what I am doing and the deputy vice-chancellor is also very aware of what I am doing, because I talk about it as part of my appraisal, I talk about it when we are in meetings together with the remuneration committee. I and a number of my colleagues are engaged with on ..... we have something that is called the Swan award which is again a sector wide kite mark if you like, a quality mark for gender equality. And I work with quite a lot of senior academic colleagues, so executives, pro vice-chancellors and deans of this schools on particular issues that are addressing gender equality in the faculty. So, it is quite well known and of course now it is very well known across the academic network, the female side of the academic network, because they have been approached to participate in the research and therefore they are aware of it from that. |
| 3- Chris | Manager & Junior Faculty | The project stems from external and internal governing bodies that has been then taken on board by the doctoral student who somehow failed to include faculty in addressing the professional concern. The doctoral student's role and position failed to engage faculty in collective deliberations to address the issue under study. | The organization is not fully aware of the research per se but it is aware of the issues that I am researching. Because there is a move to get other programs accredited and they know that we need to maintain our research outputs and to grow that we have to get other faculty involved to doing research. But nobody has ever researched the experiences or asked faculty what is the experience like in being in an accredited program that requires research from them. |
| 4- Dominique | Senior Executive | The student's role and position enable him/her to implement his/her project. However, the student points out that this must be done by including senior management and work colleagues equally. | I think if I was just a lecturer and I wanted to present my research, I could. What I can do as the director is I can implement stuff, and the programs I'm responsible for. Now I need to obviously make sure that the heads of department are happy. I guess as the director, I can implement things or I can go to other program leaders around the university or the deputy dean whom I know and say, "Hey, this is what I found, this is what I'm thinking of doing. |
| 5- Jamie | Senior Faculty | Despite the fact that the doctoral student tried to engage senior management and work colleagues in his/her project, his/her position and role failed to sustain her endeavours. | I talked about it with our Registrar and the Director of Students and s/he says it is such a significant topic right now especially in the context of internationalization that s/he was more than supportive of the research -- and this was last year. People actually come to me because it gets around the grapevine that I am interested in this particular area and I would like to bring in…... It is kind of epic what has been going on, trying to get the senior management team just to purchase ….and just do a pilot program. I have the support, there is just one person on the Deans' and Chairs' committee who is very vocal against even trying …... |

Data also revealed that the divide between faculty and administrative staff in some cases related to their differing views on what actions a higher education setting should assume to fulfil their mission and role statements. As argued by Barnett (1994), the divide can be understood as the expression of two different ways of understanding and interpreting how the educational role of a higher education institution can be fulfilled. That seemed to be at the heart of some relational difficulties which shaped social relations by restraining agents pursuing new actions to address professional concerns:

> I understand that certainly working relationships have become very strained. When the new head of department had come, s/he threw out quite a few people who were established. But all I hear about from the people I know are insights about how things are to be done. It has made things very difficult. Yes, it's not easy. **Alex's Senior colleague C1U1P1(n+1)**

Conversely, when this divide could be surmounted, albeit in a provisional fashion, it would generate new collaborations and collective actions, enhancing new professional practices and giving rise to organizational change:

> I meet with the paper leaders every semester before the semester starts and I map out with them the interventions that have taken place in the past but from inside the faculty and the support services outside the faculty. I ask them, is there more that we can arrange for you or is there more help, have your assessments changed, where there any sticking points that we can build on last semester? It's about working very closely with them before the semester starts. **Dominique's Junior colleague C3U3P4(n-1)**

Although both parties might agree that universities' key role is to advance scientific research to produce new knowledge for the wider society, how this might be achieved was disputed. Indeed, the two parties differed significantly in relation to their social interests. The faculty-based participants perceived the educational aim of universities to be the building of academic competencies around the disciplines and the mastery of pedagogical contents to deliver their contents. Conversely, participants with an executive role saw the fulfilment of the educational aim in a more operational manner, namely complying with internal strategic plans in response to labour market demands, thereby increasing students and the higher organization's economic performance (Barnett, 1994):

> So, we are here for our students, we are here for society, we are here for the greater good. But in order to be sustainable in the longer term and to achieve that mission we have to be more profitable and generate more services to reinvest. Whether we like it or not, the government policy in the [Europe] has removed a lot of the support that the university had historically, and therefore we can't afford not to be much more professional and business-like in how we conduct ourselves, in how we manage our business. But the value-set says that we do all of that, but we do it for these very important reasons, for these missions. **Bert's Senior colleague C1U1P2(n+1)**

Such diverse views relate to Archer's autonomous and meta-reflexives, whereby autonomous reflexives focus-on performance and meta-reflexives on the impact their actions have on wider society. Both types of agents, however, gained part of their causal power through the roles and positions they held, which enabled them to pursue actions that led to structural elaboration (see Table 4.10). As stated by Archer (1995, pp.152-153), hierarchical positions and functional roles represent the "'*point of contact*' *between human agency and social structures*" (italics in the original), whose effects unfold through relationships that link agents to structure. However, as evidenced by Table 4.10, not all positions and roles were equivalent in terms of the power to foster social relations that could mitigate the imposition of social structures on human agents. This shows that other mechanisms – such as the social relations triggered by collective meta-reflexive deliberations – were also decisive mechanisms for structural elaboration. Nevertheless, data showed that students who retained executive roles seemed in a better position to enact their projects by virtue of increased agential power conferred by their roles and positions compared to students who were faculty staff with a limited agential impact on structures.

A plausible explanation for these findings might be that the higher the students' position on the hierarchical ladder, the more substantial their chances were to influence both work colleagues and management in terms of taking on board new ideas and actions. In this study, students with executive roles had a greater say in organizational matters because of their capacity to integrate with the cultural dimensions of their institution (Kahn, 2017a). Indeed, Archer (1995) highlights that organizational culture influences professional practice through institutional values and beliefs translated into regulatory frameworks. Meanwhile Kahn (2017b) refers to such frameworks as the outcome of ideational reflexivity which "shapes practice in the light of regulatory and managerial constraints" (p.4). For this type of doctoral student, their roles and positions were causal components of social and cultural relations as they facilitated their formation and increased the probability of engaging the student and their work colleagues in collective activities that addressed

their concerns in a stable and organized fashion with little constraint from existing social structures, thereby facilitating a change in organizational practices. Conversely, students who were faculty members or held a junior position in their workplace struggled to actively involve work colleagues and executives in new actions.

However, due to the study's small sample size, caution must be applied, given that the findings show that social relations were highly relevant in all five cases. However, the data revealed that role and position can be considered constitutive elements in fostering social relations in a work environment due to the causal power they exert on relational emergence as shown in Case 1, while this was not a determinant factor in Cases 2 and 4 where meta-collective deliberations were more effective in fostering social relations. In all five cases role and position constituted the "point of contact" between structure and agency as their effect impacted the emergence (or not) of social relations (Archer, 1995, p.152). However, what emerged from these social relations determined organizational morphogenesis.

### 4.2.3. Corporate agency and organizational morphogenesis

Table 4.7 highlights that the new actions that emerged from the interaction of people who decided to work together in an organized fashion transformed agents into actors whose actions reached beyond the immediate interest of the individual. Collective meta-reflexivity is thus the expression of a collective form of human flourishing as it constitutes a necessary condition for organizational change to occur by promoting relationships through collective deliberations that give rise to actions that reach beyond existing frameworks shaped by others. Collective meta-reflexivity represents, therefore, a generative mechanism that promotes agents who have less or no active part in decision-making into actors whose collective decisions have an influence on structural elaboration. Archer (1995) distinguishes two different types of agents: primary and corporate. The latter refer to "articulate and organized interest groups" which have the influence necessary for decision-making and thus play a substantive part in Archer's morphostasis/morphogenesis model.

Indeed, as the data analysis showed (see Table 4.10) Alex, Bert and Dominique, whose hierarchical role already conferred on them an increased sense of agential power, elaborated their professional concerns with others and were involved in concerted actions to tackle their concerns, thereby attempting to elaborate new social structures which reached beyond their own interests while turning them into corporate agents. Conversely, Chris and Jamie as primary agents

represented a collectivity which had little or no say in decision-making and thus could not address their concerns for structural remodelling. At the time of this study, both students did not have the role and position required to confer on them the agential power to engage work colleagues fully in meta-reflexive deliberations, thus generating corporate agency. Therefore, their role and position failed to represent the mediatory factors or "point of contact" between existing social structures and human agency (Archer, 1995, p.152).

What distinguishes corporate from primary agents is the way corporate agents coordinate and state their aims in an organized and joint fashion. Coordinating interests or concerns within a group or an organization implies creating social relations which involve a collective meta-reflexive mode with transformative properties, a condition necessary for morphogenesis to occur (Archer, 2013; Donati & Archer, 2015). It is noteworthy, however, that primary agents can become corporate agents and vice-versa depending on the social context in which they act (Archer, 2003). This implies that Chris and Jamie's agential power can change, turning them into corporate agents if the context in which they act endorses their projects in such a way that will confer on them the agential power required to engage in social relations with their work colleagues. Indeed, time in Archer's (1995) morphogenetic/static model represents an important element, because it separates structure from agency as social structures precede human action and action predates structural elaboration. Moreover, corporate agents, through their ability for decision-making, can over time change their vested interests, thus become dominating agents who impose their views on others. Dominant corporate agents thus impose their choice of actions on others, in turn restricting the possible outcomes of their collective meta-reflexive deliberations and, by acting as dominant agents, reduce their work colleagues to the status of primary agents.

The data analysis demonstrated that structural elaboration emerged from corporate agency, with the latter generated by students engaging in effective relationships with work colleagues. Social relations in turn were triggered by sharing the student's professional concerns with work colleagues. Indeed, structural transformations were built on human intentions organized collectively. It is because of such collective intentions that organizational transformation or reproduction occurred. In this case, it was the students' intention to tackle their professional concerns jointly with their work colleagues, thereby combining the agential power gained through their position and role, that enabled them to generate new actions to tackle professional concerns. Therefore, structural elaboration at an organizational level can only occur if individual agency generated through individual reflexivity transforms itself into corporate agency via collective meta-reflexivity. Indeed, collective meta-reflexivity engages agents in social relations which generate new actions that help the actor to pursue what is good for themselves and the wider society by elaborating new social structures (Donati & Archer, 2015).

However, to understand the causal conditions under which collective meta-reflexivity occurred in this study, it is necessary to understand how meta-reflexivity works within a group using the concept of transformational leadership. Indeed, Archer's (2013) collective reflexivity theory offers fairly limited explanations about how collective meta-reflexivity generated by social relations transforms corporate agents into actors whose actions trigger organizational changes relevant for the institution and wider society. Therefore, the following subsection deals with the notion of transformational leadership as a precondition for the transformation of corporate agents into actors whose agential power can result in organizational change.

### 4.2.4. Transformational leadership and organizational change

In this study, three out of five cases demonstrated transformational leadership triggering organizational change. Before discussing these cases, it is important to understand the notion of transformational leadership, seen as one of the most valid management styles in Judge and Piccolo's (2004) on its positive impact on organizationally-useful work performance. Transformational leadership is considered to be a managerial style focussing on organizational change and innovation and its effectiveness has been deemed especially important in periods of economic uncertainty (Van Dierendonck et al., 2014). It is also defined as a managerial process that stimulates and inspires a workforce to achieve higher level outcomes by englobing followers' personal needs while simultaneously enhancing their leadership capacities (Bass & Riggio, 2006).

The concept was first introduced by Burns (1978) in relation to political leadership efficacy, based on the idea that transformational leaders reach beyond short-terms goals and focus on higher level needs (Judge & Piccolo, 2004). Bass (1985) built on Burn's concept to distinguish four different dimensions: charisma or idealized influence, inspirational motivation, intellectual stimulation and individualised consideration. Bass (1985) described these four dimensions as follows: Idealised influence relates to the leader's behaviour, resulting in work colleagues' admiration and in the intention to follow the leader's behaviour. Inspirational motivation derives from the leader's clear vision and articulated goal setting, whereas intellectual stimulation derives from the leader's critical being in terms of risk taking while challenging assumptions. Finally, individualised consideration relates to how the leader takes the work colleagues' needs into consideration.

Thus, transformational leaders engage in actions which address individual, group and organizational concerns in a holistic manner. They are often seen as role models and as leaders who participate in social exchanges to challenge existing social structures by stimulating intellectual exchanges with work colleagues and by mentoring their activities (Bass & Riggio, 2006). Transformational leadership thereby increases the collective aspect of professional practice to collectively achieve pre-set goals. Moreover, by sharing collective goals with the workforce, it provides purpose and meaning to professional practice (García-Morales et al., 2012). The concept becomes the means through which organizational culture and knowledge production is transmitted, thus enhancing organizational performance (García-Morales et al., 2012).

In this study, transformational leadership refers to the categories related both to human agency, namely "personal development," and to social relations, such as the "building [of] relationships" and "communicative strategies". Indeed, doctoral students in Cases 1, 2 and 4 are clearly comparable to transformational leaders as their projects generated human agency, whereas in Cases 3 and 5 there is a clear absence of such transformational leadership. In Cases 1, 2 and 4 the student's projects enhanced their individual agency through learning that generated individual meta-reflexivity. This learning engaged students in deliberations about their own situation as students and professionals, thereby raising professional concerns which were addressed through their research project. Concurrently, by sharing their concerns with work colleagues, doctoral students generated corporate agency through collective meta-reflexive deliberations which engaged work colleagues to take on collective actions, transforming them into change actors at the organizational level.

Conversely, in Cases 3 and 5 the presence of restricted and fractured collective meta-reflexivity restrained the emergence of transformational leadership because of the absence of freely chosen actions (Case 3) or due to conflicting views on what constituted professional concerns and differing interests which restricted the emergence of new actions (Case 5).

In this fashion, transformational leadership influences the organization's performance by enhancing the collective learning beneficial for organizational change (García-Morales et al., 2012). García-Morales et al. define organizational learning as the process through which individual knowledge is shared with work colleagues in a collective and organized manner, thereby increasing the organization's knowledge system. This occurs by engaging in relationships with work colleagues that develop new abilities and insights into existing professional practice, as such enhancing organizational change. Indeed, transformational leadership works on how people change social relations into collective work practices by enhancing both individual and collective leadership skills, thereby generating human agential power. Transformational leadership as the expression of human agency in this study represented the mechanism that helped doctoral students to transform organizational practices leading to organizational elaboration as illustrated in the following examples.

**Table 4.11.** Impact of transformational leadership on work colleagues

| Case 4 | Comment | Selected quotation |
|---|---|---|
| Dominique's peer colleague<br>C3U3P4(n=0) | Dominique's ability to communicate effectively with others is the expression of a transformational leadership style based on stimulating and engaging work force in a higher level of professional achievement. | The research lecturers see him/her as a pragmatic, sensible person who has very good operational knowledge and as a problem-solver…I think having done the [EdD] has helped him/her to acquire the language the ability to communicate with other people who have PhDs in a very specific area of education or whatever from a total different area. |
| Dominique's junior colleague<br>C3U3P4(n-1) | Engaging in relationships with other work colleagues to transform existing social practice is also a notion used to define transformational leaders. | There's a group of us who meet every week […]and we are always refining our systems, whether that's how we enrol students or how we deal with special consideration applications, how we deal with student appeals. All of those things that happen every week with students we are constantly refining. We seem to have a much better relationship now with the Equity team who we seem to battle a little bit in the past. …Now we are working much more collaboratively with them. |

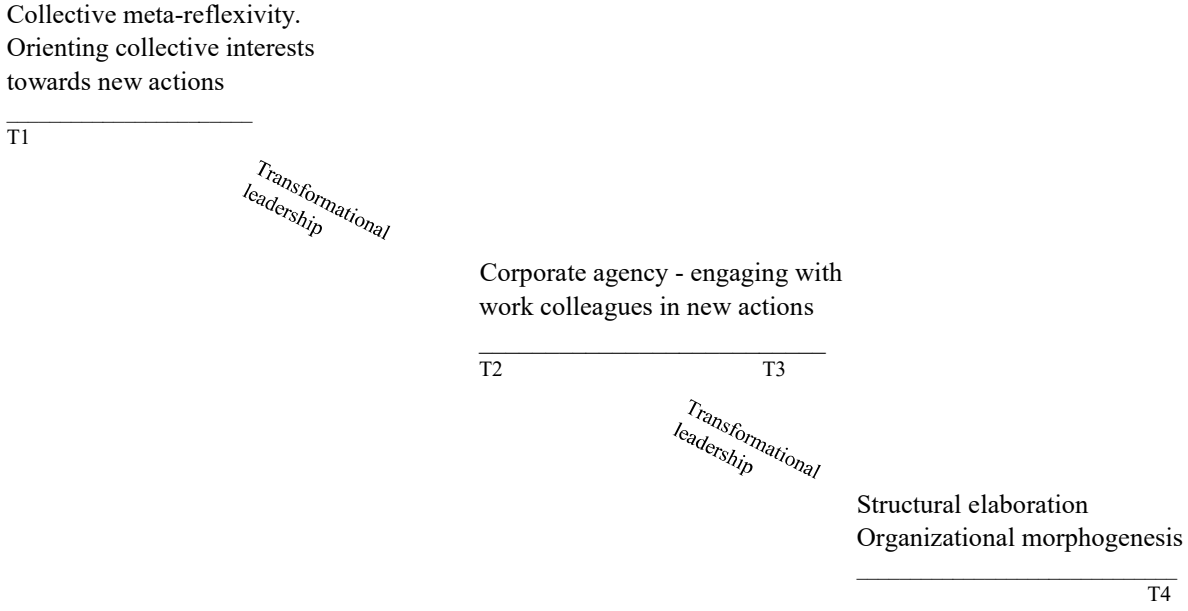
Leadership efficacy is important as it provides work colleagues with the trust necessary to engage in sustained relationships with the leader for purposeful action. Moreover, leadership efficacy enhances the organization's norm and regulatory system's vicarious learning through personal identification with the leader (Van Dierendonck et al., 2014). As stated by Mezirow et

al., (2009), transformative experience can only occur if positive and productive relationships are established with others. Data from this study showed that through the building of trusting relationships doctoral students shared their professional concerns with their work colleagues to foster a joint commitment to engage in new actions leading to structural transformation. Indeed, transforming professional practice could be perceived as threatening to those work colleagues who did not perceive these actions as fostering their own vested interests:

> I have the support, there is just one person on the Deans' and Chairs' committee who is very vocal against even trying … and that's our main librarian … who thinks that it is Big Brother and that we are turning over control of what really should remain between human agency – that whole thing. But to me, that just shows a misunderstanding of how … can be used pedagogically. **Jamie (doctoral student)**

Therefore, transformational leadership represents the means through which corporate agency enhances human flourishing by transforming agents into change actors whose actions contribute to attaining organizational morphogenesis as shown in Figure 4.7.

**Figure 4.7** Organizational morphogenesis through transformational leadership – 3rd level of organizational change




Adapted from Archer (1995, pp. 76, 193-4).

Indeed, transformational leadership is simultaneously rewarding and stimulating as it builds on people's needs and interests, thereby making them feel like they are contributing to their individual flourishing as well as that of others (Bass & Riggio, 2006) as stated by the following interviewee:

> When we did the action research module... It turned out to be really, really, useful because what it told me was that, when I'm making these decisions I need to consult more widely, and that there are people who have expertise that I wasn't drawing on. I'm really conscious now to make sure that I get the experts doing the work that they are expert at, and that we draw on all of those people inside or outside the faculty. … I realize that I have changed. I think I approach things more holistically now, maybe than I did. **Dominique (doctoral student)**

Nielson and Daniels (2012) have highlighted how transformational leadership can enhance individuals' well-being when their needs are mediated through meaningful interrelationships within a group. Likewise, Bass and Riggio (2006) argue that the mechanisms underlying such social relations generate an increased sense of commitment, trust and loyalty when people perceive that their vested interests and concerns are taken into consideration, as reported by this participant:

> [P]eople would have confidence on her ability to pick up a problem or come up with a solution but I think it has been layers added to this through his/her [EdD] studies in that s/he is able to speak some terminology and language that people would gain a little bit of trust that s/he really does know a lot more about what s/he is talking about in terms of the operation, of the degree and also about conceptualizing curriculum matters and so on. I think …people have actually the trust that s/he really does know what s/he is talking about. **Dominique's peer colleague C3U4P4(n=0).**

Trust has been defined by Giddens (1990) as the confidence that people place in the reliability of a person or a system, this despite the human condition being based on uncertainty and therefore potentially threatening to people (Scott, J., 2014, p. 769). Meanwhile, Hartwig (2007) refers to trust as a notion covering four different dimensions: abstract trust related to expert systems, mediated trust through knowledge of different domains (i.e. economics, politics etc.), concrete trust exemplified in solidarity and personalised trust as the expression of trustworthiness in a relationship based on mutual care and concern.

Trust according to Zhu, Newman, Miao and Hooke (2013) is bi-dimensional, whereby a distinction can be made between cognitive and affective trust. Affective trust relates to emotional social relations between the leader and their followers resulting from mutual care and concern, whereby cognitive trust is based on the followers' perception of the manager's competencies and reliability as a trustworthy leader (Dirks & Ferrin, 2002). Affective trust is referred to as the emergence of social relations between leaders and their subordinates, which mediate the effect of transformational leadership on both team performance and the workforce's organizational commitment (Schaubroeck, Lam & Peng, 2011).

The relationship between trust and the workforce's heightened organizational commitment has also been emphasised by Thursfield and Hamlett (2004) in relation to the soft human resource model. This model develops a discourse based on "collaboration, participation and trust", elements which are foregrounded in transformational leadership theory (p. 114). The workforce's collaboration and participation can be considered as elements triggered by trust, the latter having already been defined as the bridging element for social relations (Hartwig, 2007). Transformational leadership thereby enhances followers' organizational commitment, whereby commitment refers to the moral promise of individuals to engage in organizationally-relevant actions (Meyer & Herscovitch, 2001).

The above-mentioned excerpt demonstrates that doctoral learning allowed the student to "learn the language" of the faculty as a bridge to finding a common ground on which to build up corporate agency based on trust and commitment. These elements led, ultimately, to a sense of personal empowerment on both sides, thereby increasing human flourishing at the individual and corporate level. Transformational leadership has, therefore, direct implications for organizational development at the individual, group and institutional level through increased individual well-being within collectivities such as teams (Nielsen & Daniels, 2012). Indeed, the quotations cited above show that transformational leadership challenges people to enhance their personal competencies and those around them through individual and collective meta-reflexive deliberations beneficial for the organization.

Moreover, it also demonstrates that transformational leadership has direct implications on work performance through individualized considerations of personal concerns and interest, and through the sharing of a collective vision and collective goals enhancing thus corporate agency (Tse & Chiu, 2014). By engaging work colleagues in the pursuit of new actions, corporate agents transform themselves into change agents leading to organizational morphogenesis. Thus, transformational leaders are decisive actors influencing the decision-making process and, consequently, leads to the enhanced development of new actions to tackle professional issues, resulting in organizational change (Bass & Riggio, 2006).

Transformational leadership as detailed in Table 4.11 was a mechanism that emerged from the social relations that triggered collective meta-reflexive conversations, leading in turn to joint actions while mediating the effect that social structures have on human agency. However, transformational leadership can be enabled or constrained by the mechanisms related to existing social structures, thereby influencing whether organizational morphogenesis or morphostasis occurs (Archer, 1995; Elder-Vass, 2010). The subject of the next section deals with which specific social structures and their associated mechanisms and causal powers were at play in counteracting the mechanisms of transformational leadership as the expression of human agency.

### 4.3. Social structures

The concept of "social structure" is a difficult term to explain because of conflicting definitions within the social sciences. As defined by Porpora (1998), social structures refer either to "patterns of aggregate behaviour that are stable over time" as used in sociology (p.340), "law-like regularities among social facts" associated with the structural sociology (p.342), "systems of human relations among social positions" (p.343) associated with the Marxist principles of sociology, or "rules and resources" (p.345) associated with Anthony Giddens' (1981) theory. It is beyond this study's scope to expand on these differences, however, in relation to the critical realist perspective, the relational aspect is significant as it relies on a system of interactions that have causal properties and powers related to the structures in which they take place, thereby triggering the mechanisms that give rise to particular events, depending on how these mechanisms interact with each other (Porpora, 1998).

The data detailed in Table 4.12 show that the initial coding cycle revealed *in vivo* codes such as "standards", "ranking [system]", "governing body", "regulation body", all of which refer to normative and regulatory social structures produced by the interaction of people with different normative institutions external to the higher education institution researched here (Elder-Vass, 2010). Alex and his/her junior colleague refer, for example, to disciplinary standards put forward by the medical normative circle, which became the discipline's governing and regulatory bodies. Likewise, Chris mentions accreditation agencies as the normative and regulatory system regarding research requirements for faculty impacting the institution's internal promotion schemes. Consequently, these codes were regrouped into the category "external structures" as they related to external entities with their own properties and causal powers that either enabled or constrained higher educational activities.

Conversely, in vivo codes such as "strategic review", "strategic framework", "strategic objectives" and "organizational policy" clearly pointed towards internal regulatory structures functioning as organizational guidelines as reported by Bert and his/her work colleagues. Indeed, reference is made to the strategic plan as the regulatory framework for strategic objectives to determine future actions at the organizational level. Accordingly, these codes were regrouped into the category of "internal structures" as they related to the internal organizational system which had the properties and causal powers to impact on the internal activities of the organization at the individual and corporate level, and could thus influence students' projects as shown in Table 4.12.

**Table 4. 12.** Examples of institutional social structures as a system of social relations

| Internal structures: Organizational procedures and regulations | External structures: Normative circles | Selected quotation |
|---|---|---|
| | Governing bodies, Funding bodies, Professional regulatory bodies, Ranking system | So, the work that I was doing is part of the reason for the general medical council's promoting excellence documentation and the **standards** that have been put forward for demonstrating, promoting excellence…. the strategy for the medical school does build on such sort of things I've been talking about.<br>**Alex (doctoral student)**<br>S/he is operating obviously within the **framework** of the existing establishment. The other outside **pressure** that the university feels has to do with NSS **ranking**, National Student Survey. …We also have **pressures** of finance in that while, for instance, we might think that a better staff to student ratio would lead to better education, the university may say to us, "Yes, well that's expensive and therefore you can't have the staff you want."<br>**Alex's senior colleague C1U1P1(n+1).**<br>The general medical council is very important in the [country]. They, if you like, give validation to medical schools, to allow them to teach future doctors. So, they are the **governing body**, the **regulation body** for medicine and medical education**.**<br>**Alex's junior colleague C1U1P1(n-1).** |
| | Governing bodies, funding bodies, Professional bodies, Ranking system | We have therefore just agreed a new **strategic plan** for the organization... This is the first long term strategy plan we ever had. So, the major projects are the expansion of the University, so we want to get bigger and we're looking at ways in which to do that.<br>**Bert (doctoral student)** |
| | Governing bodies, funding bodies<br>Professional bodies | That **strategic review** involved major concentration on and engagement with staff and major **stakeholders** across the university. The outcome of all that work is strategy 20xx and that's a live, interactive **strategic framework** for the next 10 years for this university. All our projects now are focused and aligned to achieving the **objectives** that have been established for ourselves in strategy 20xx.<br>**Bert's senior colleague C1U2P2(n+1)**<br>There is a people administration element, there is also a **strategic element**, which is about how we make sure that the **organization's policy** is in terms of.... how it creates, how it develops, how it promotes staff that helps the organization to meet its **strategic objectives.**<br>**Bert's junior colleague C1U2P2(n-1)** |
| Internal people strategy framework | Accreditation systems | **Accreditation agencies** are asking, are requiring in fact that faculty demonstrates research outputs…We have an organization that has a strong teaching background and **accreditation agencies** are requiring research. Now, at the moment, **the organization** does not require from faculty to do research…[But], in order to get promoted, even though research is not required from the organization...one of the criteria is that you show the number of research projects you will have done during the year.<br>**Chris (doctoral student**) |
| Internal Deans and Chairs committee | | I championed [the project] at the "Deans and Chairs" level to get some sort of technology in to help us with something that was increasingly becoming a problem. There is just one person on the **Deans and Chairs committee** who is very vocal against even trying Turnitin and that's our main librarian.<br>**Jamie (doctoral student)** |
| Institution as an organized system | | The more that the program is set up …where it can take an emergent issue for the institution and allow the person to work really collaboratively **within our institution** to develop something that serve that institution, the better it will be in terms of having an impact.<br>**Jamie's senior colleague C4U5P5(n+1)** |

It is noteworthy that internal organizational structures were impacted by external normative structures as reported by Alex and Chris in the excerpts quoted above. Indeed, normative rules and regulations referred to by Alex as disciplinary standards were dictated by the General Medical Council and became the foundation for the internal strategy of the medical school. Likewise, in Chris's case it was the accreditation agencies who dictated the institution's Human Resource strategy to adopt in relation to promotion rules. The data reported here appear to support Elder-Vass's (2010) argument that two different types of structures exist within this system.

On the one hand, he refers to internal organizational structures and external normative circles as institutional structures impacting human actions as in Table 4.12 and, on the other hand, he suggests relational structures as the social relations behind human actions, which either impact on these structures or are then impacted by them as detailed in Table 4.13. In the table below, Alex's senior colleague illustrates eloquently how universities are impacted by financial problems which prescribe – albeit in an indirect way – the primary role and mission regarding teaching and learning endeavours, which support Elder-Vass's point. Likewise, Bert's senior colleague emphasises that to deliver qualitative teaching and learning for students, it is important for the institution to become profitable, thereby indicating the external structural pressure to organize professional education accordingly (Kahn, 2017a).

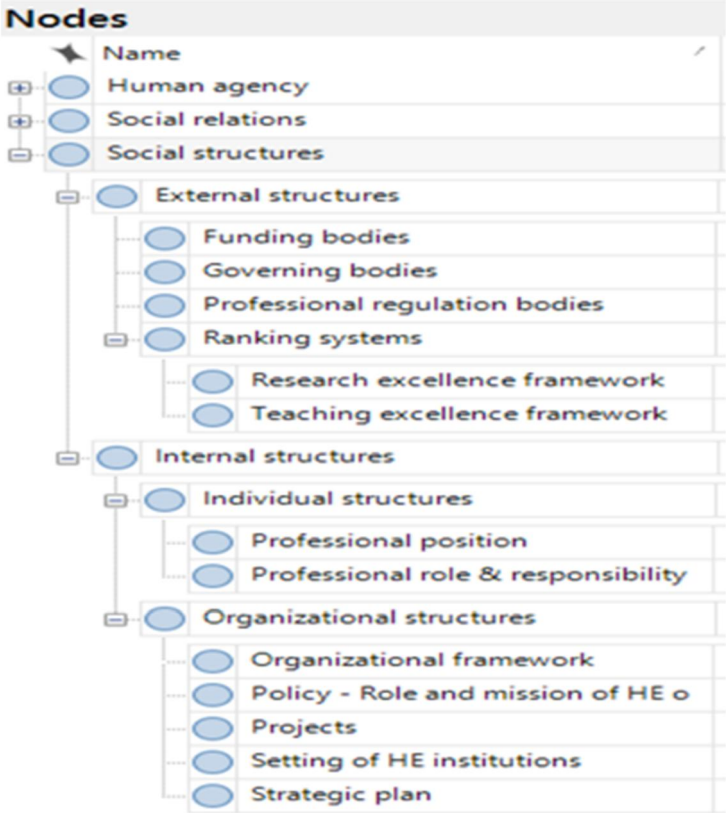
**Table 4.13.** Impact of institutional social structures on higher education settings' activities

| Social structures | Comments | Selected quotation |
|---|---|---|
| Funding bodies and internal strategic plan (student expansion) | Universities need to find financial funding from different sources to gain in profitability sacrificing in a sense their primary role and mission of teaching and learning to such funding queries. | If you're a vice chancellor, your first task is to see that the university is solvent… If I want to look at where I'm going to find money, I've got to find a way of ideally getting overseas students in because you can charge them more…. if your main concern is to keep the university afloat, the educational side is not necessarily the most important aspect of it. **Alex's senior colleague C1U1P1(n+1)** |
| Funding bodies and internal strategic plan (business plan) | The same idea of profitability is related here where universities are compared to businesses and not social institutions for the benefit of the wider society. | Like in all universities, there is always an ongoing debate why universities are here, what we are for…… Whilst at the very highest level, everybody would subscribe to why we are here and what we are for… the differences come when we talk about, when we discuss how we are going to deliver on that, how we are going to achieve it. …. So, we are here for our students, we are here for society, we are here for the greater good. But in order to be sustainable in the longer term and to achieve that mission we have to be more profitable and generate more services to reinvest. **Bert's senior colleague C1U1P2(n+1)** |

This shift from the traditional university to a liberal organization run as a globalized business aligns with Powell, Brock and Hinings (2001) view on how competition has changed professional organizations from autonomous institutions to interacting corporations whose actions tend to create more profit-making services rather than to generate activities for the good of wider society. Indeed, as underlined by Powell et al. (2001), government funding cuts increase universities' uncertainly about their future, thus they seek new opportunities by engaging in new competitive actions, such as joint-ventures with overseas universities (relational) or new study programmes (institutional).

Therefore, in this study social structures refer to both normative and organizational structures (Table 4.12), but equally to "structure-as-relations" (Elder-Vass 2010, p.82), as relayed in Table 4.13, since both are understood here as mechanisms related to social relations impacting human agency and their actions. Lopez and Scott (2000, p.3) refer to structures based on social relations as "relational structures", which are the expression of causal interconnections between agents through the actions they undertake and the positions they hold. Relational structures are thus based on social relations related to individual structures such as role and position, internal and external institutional structures such as strategic plans, objectives, mission and role statements as well as norms and regulations. Together, they form a "system of human relations among social positions" which, by interacting among themselves, affect human actions and in turn are affected by them (Porpora, 1998, p.343). Given this, these categories were reduced to one main concept, namely "social structures" (Figure 4.8).

**Figure 4.8.** Analytical concepts related to social structures




In this study, reference was made to both institutional and relational structures since their interplay with human agents influenced agential actions and the impact the latter could have on the organization. Indeed, social structures as the expression of normative and regulatory systems had a clear effect on how the students' projects unfolded. Likewise, the students' interactions with their work colleagues generated relational structures which in turn generated organized actions that addressed the student's project. These actions ultimately impacted on the organization itself, leading to changes in the latter's practices. The next subsection will therefore explore what institutional structures (referred to as the work context), and the relational structures (the expression of social interactions), were relevant to determining the underlying mechanisms at play, and how their interplay fostered or counteracted doctoral students' actions to generating or restricting human agency, giving rise either to structural elaboration or structural reproduction.

### 4.3.1. The work context as a relational social structure

As mentioned in the chapter introduction, participants were all working within different sectors of higher education organizations located across the world. The first set of interview questions attempted to define the higher education context within which participants were working, the institution's mission, how this correlated with their strategic plans, and what kind of project the doctoral student was developing to tackle certain identified professional concerns (Table 4.14).

**Table 4.14.** Organizations' main projects compared with doctoral students' projects

| Case | Type of University | Doctoral student's project | Institution's main project(s) | Excerpts from strategic plans |
|---|---|---|---|---|
| **1** | Research oriented | Expand students' disciplinary knowledge by acquiring teaching experience to increase prof practice | Enhancing institutions influence through increased research output & knowledge leadership | By 20xx, 145 years after its inception, the University of ……...will be a truly global institution – in its outlook, influence, impact and activity. We will be at the forefront of research, scholarship and knowledge leadership and will be among the top 100 universities in the world… carrying out research that genuinely changes lives for the better. Our students will come from diverse backgrounds and will be highly employable global. |
| **2** | Research oriented | Enhancing professoriate for female faculty | Enhancing institutions influence through increased research output & knowledge leadership | Idem |
| **3** | Teaching and service oriented | Enhancing faculties research capacities | Developing faculty's professional knowledge and skills to increase health care for the wider society | ...University School of Medicine prepares students for the lifelong study and practice of medicine. In addition to the essential knowledge and skills of practicing professionals, the program forwards the highest goals of health care professionals… part of our mission expressed a responsibility to improve the health care of (country). |
| **4** | Ex-Polytechnic – Research oriented | Enhancing students' success by federating inclusive practices among faculty and administrative staff. | Developing students' success through service-oriented research performance | ….is a university for the changing world, an increasingly powerful force for learning and discovery, that promotes the wellbeing of people and their environments, and provides them with opportunities to expand and achieve their aspirations |
| **5** | College – teaching oriented | Reinforcing students' research integrity by addressing plagiarism issues. | Student completion and retention & applied research | Learning is fundamental to becoming an empowered and engaged citizen. [College] is committed to learners: their access to, success in, and achievement of educational goals. …We focus on student retention and completion, and the need to maintain program and course currency, and for on-going renewal. |

This comparison generated a clearer understanding of the social structures that influenced the student's project and, consequently, how it impacted on the organization's structural elaboration. When comparing the students' projects with those of their organization, discrepancies appeared in Cases 1 and 5, namely between the student's project and the institutional mission (Table 4.14). In both cases students were faculty whose projects were more aligned with teaching and learning issues rather than with student expansion. Indeed, as reported in Case 1, external normative and regulatory structures such as ranking systems and industry, conditioned the institution's work environment, thereby influencing their strategic plan in terms of the expansion required to secure their competitiveness. In turn, this influenced the students' actions as they were not fully endorsed by internal structures. It was therefore through the student's role and position that s/he could implement their project in the desired way, thus influencing the organization's existing social structures as reported in the previous section.

In Case 5, however, the student did not endorse a role or a position that would allow him/her to overrule internal social structures as has already been emphasized and discussed in the previous section (see Tables 4.9 and 4.10 for both cases). Indeed, the student's project was based on qualitative teaching measures to avoid plagiarism, thus enhancing the quality of learning outcomes, whereas the overall strategic plan regarding student success was based on expansion of numbers, quite a different objective. Their project, therefore, did not meet with the necessary support to be transformed into a collective endeavour due to contrasting views on the project's objectives.

In Cases 2, 3 and 4, the students' projects were aligned with the institution's overall strategic plan as they were more inclined to address administrative matters including student expansion and retention namely by: increasing student success (Case 4); enhancing research outputs relevant for industry or wider society (Case 3); or reinforcing their competitive position nationally and internationally by increasing the number of professors engaged in research and knowledge production (Case 2).

Despite their apparent differences in academic orientation, participants expressed similar perceptions about how higher education organizations are nowadays impacted by external structures such as ranking systems, professional governing bodies, funding groups and industry, all normative circles which influence universities' mission and role statements (see Table 4.13). The above examples corroborate the hypothesis, albeit in an indirect way. In other words, regardless of the nature of the university, higher education settings were influenced by external institutional structures such as ranking and accreditation systems, public and private funding parties and industry, to deliver services more aligned with external stakeholders' economic needs (Table 4.13).

As stated by Elder-Vass (2010), organizations depend on institutional structures and their causal powers as they pattern human behaviour and their interrelations. However, institutional structures do not have causal powers *per se.* It is the social groups that constitute such institutional structures which generate social relations that retain causal power. Internal and external institutional structures impact on human interrelationships by regulating practices and by dictating rules and norms about appropriate human behaviours, thereby influencing the social relations that ensue. Conversely, relationships within organizations are influenced by people's roles and the authority they confer on them to represent the organization (Elder-Vass, 2010) as discussed in the previous section.

All five universities in this study strived to enhance their sustainability either through student expansion or by increasing their research performance to survive within a competitive international environment. The key themes emerging from their strategic plans seem to express, globally speaking, the same concerns and propose similar projects to address organizational concerns to enhance their international competitiveness. Indeed, they all focus on three key areas: research and teaching excellence, student learning and retention, and sustaining research for innovation and the creation of new knowledge for the benefit of industry (see Table 4.14).

The central element of these statements, however, resides in the organization's expressed intentions as they represent the "normative belief or disposition endorsing the practice" of people working within given organizations, which reinforces these normative social structures (Elder-Vass, 210, p.122). Expressing organizational intentions through strategic plans or mission statements involves members of these structures being morally bound to observe such statements and experiencing an obligation to give their best to comply with their strategic plans (Elder-Vass, 2010). It is, therefore, unsurprising that three out of five students' projects were aligned with the institution's overall strategic objectives and that these projects were also endorsed by internal institutional structures.

Conversely, if the student's research project was not fully aligned within the organization's objectives, this generated controversial responses with consequences in terms of social adherence to that project as reported in Case 5 (see Table 4.8). It is to notice that the student in Case 1 adhered to the external professional body's objectives and mission, enabling him/her to impact on the internal structures of his/her own higher education setting through the role s/he endorsed externally. Institutional structures, therefore, have the causal power to contribute to the determination of human actions, but it is the commitment and collective intention of human agents which finally determine the practice as demonstrated in this study.

Consequently, by sharing a commitment and intention to act on internal structures collectively, members of these groups created social relations that either produced new actions which elaborated existing structures as reported in Cases 2, 3 and 4. Conversely, when the student's project was not fully aligned with the organization's interests, this impeded the constitution of social relations and, consequently, the production of new actions to address the student's project in a way that would lead to the elaboration of organizational structures as in Case 5. Human agents' commitment and intentions towards norms and regulations can, however, change over time as they can adhere to different institutional structures based on different individual beliefs and motivations (Elder-Vass, 2010).

This was the situation in Case 1, where the student's project was not fully aligned with the institution's overall project, which induced the student to adhere to external institutional regulations, thereby impacting on his/her own work environment as evidenced by following quotation:

> The mechanism by which Alex is able to make a difference, it's a little convoluted in the sense that …s/he is also on some of the [professional] visiting committees. So, if we want to do something for educational reasons and the university at the time is thinking about money and is thinking about NSS surveys and other things, in order to make a change we actually have to get pressure from outside. This means that Alex's effect on our course, in some ways, is more indirect than her/his effect on other courses. Because if s/he is with the [professional] inspecting a course somewhere else, then s/he can say, "Well you're not completing these educational standards and that's not good." **Alex's senior colleague C1U1P1(n+1)**

The above quotation clearly highlights that external institutional structures impact on internal ones and that both can be influenced by human agency. In turn, social structures can shape people's beliefs and motivations and thus their behaviour. This demonstrates that a collective meta-reflexive relationship constitutes a generative mechanism between the social context, thus impacting on the professional environment and human actions challenging these existing structures while influencing whether organizational change occurs or not (Powell et al., 2001). Elder-Vass (2010, pp.16-17) refers to such organizational relationships as "emergent properties" whose causal powers have an impact on the organizational environment. He defines emergence as the morphogenesis of an entity (objects or things) resulting from the interaction of its parts that have properties and powers pertaining to the whole, but whose constitutive parts do not possess such properties and causal powers. In this study, the emergent property refers to the relationships triggered through meta-

reflexive deliberations, which then gave rise to organized actions leading to organizational elaboration. The power and properties to change things at the corporate level do not pertain to the individuals acting in a group, but they relate to the relationship that these people constituted by organizing their actions deliberately in a collective fashion.

Given the particular nature of this critical realist view, it is important to explain how in this study collective meta-reflexivity gave rise to relationships that impacted human actions, thereby generating organizational change. Consequently, the interplay between different institutional mechanisms and their causal powers will be reported in following section to develop a plausible causal explanation.

### 4.4. Contextualizing research findings to answer the research questions

The critical realist perspective relies on the ontological belief that social structures and human agency are independent entities with distinct properties and powers, and that their interplay activates (or not) generative mechanisms which are context bound and give rise to structural elaboration or reproduction (Archer, 1995). According to Bhaskar's (2008) stratified ontology (see Table 2.2), mechanisms are situated at the level of the real, whereas actions or events pertain to the domain of the actual, and experiences and perceptions to the domain of the empirical. This is because social reality is not only constituted by observable events, but also by events and actions people experience but which are not necessarily observable. In this study, the students' learning experiences (empirical level) triggered their critical stance towards existing professional practice, thereby raising professional concerns (actual) through individual reflexive deliberations (real), thus enhancing individual agency.

It is noticeable, however, that these steps are nested within each other as each stage generates its own phase of reflexivity, yet each step relies on the preceding one. Indeed, reflexive deliberations cross over these domains, thereby indicating their interrelationship. By sharing professional concerns with work colleagues, students generated new collaborations (actual) triggering thus social relations (real). Social relations triggered in turn new actions to tackle professional concerns in a collective fashion. This occurred through the mechanisms of transformative learning (empirical), triggering individual agency and transformational leadership which generated corporate agency that transformed agents into actors who, through organized actions, gave rise to organizational morphogenesis (see Table 4.15).

**Table 4.15.** Layering of mechanisms according to Bhaskar's stratified social reality theory

| Entities/Domains | Real | Actual | Empirical |
|---|---|---|---|
| Mechanisms | Collective reflexivity (Transformational leadership) | | |
| Events, actions | Social relations | New collaborations, new actions, new projects | |
| Experiences, perceptions | Individual Reflexivity | Professional concerns | Doctoral learning (Transformative learning) |

Adapted from: Bhaskar (2008, p. 13) and Ackroyd and Fleetwood (2000, p. 13).

Data analysis revealed that individual reflexivity mediated through transformative learning led to student's morphogenesis, thereby enhancing their agential power. Moreover, data also highlighted how social relations facilitated through transformational leadership were the underlying mechanism generating actions that were responsible for organizational change in this study. However, these mechanisms could not always be activated as pre-existing institutional structures with their own properties and causal powers impacted on human agency and thus either enabled or constrained organizational morphogenesis. The answer to my research question concerning what generative mechanisms influenced the impact of a professional's higher education organization through undertaking and EdD and the resultant learning is therefore not a straightforward one. The essential issue is that different intertwining mechanisms were at play whose causal powers could either reinforce or undermine human actions as shown in Table 4.16.

**Table 4.16.** Impact of mechanisms on higher education settings

| Case | HE settings | Context Prof concerns | Internal normative structures | External normative structures | Mechanisms | Enabling social forces | Constraining social forces | Organizational Morphogenesis |
|---|---|---|---|---|---|---|---|---|
| 1 Alex | Traditional University (C1U1) | Expand student numbers Vs Student centred teaching | International Collaboration Centre; General Medical Council TEF[5] | External professional body (GMC) | Collective reflexivity, group collaboration through normative professional body | External professional body (GMC) | External governing bodies (NSS) | Yes, but through external governing body (GMC) |
| 2 Bert | Traditional University (C2U2) | Expand student numbers; And Increase number of female academics | Strategic plan; REF[6] & TEF | | Collective reflexivity, group collaboration through transformational leadership | Internal governing bodies (Vice-chancellor and Pro-Vice chancellors) & Team | Faculty managers | Yes |
| 3 Chris | Service oriented UNI (C3U3) | Increase Research activities | Quality assurance framework | | Individual reflexivity | Internal governing bodies (Senior manager) | Senior Faculty | No |
| 4 Dominique | New UNI (ex-polytechnic) (C4U4) | Increasing student number And Student success | Strategic plan | | Collective reflexivity, collaboration; transformational leadership | Internal governing bodies (Senior manager) Team | Faculty | Yes (but restricted by dominant collective reflexivity! |
| 5 Jamie | Rural college (C5U5) | Increase oversea student numbers Vs Academic integrity | Strategic plan | | Individual reflexivity | Management | Admin staff | No |

[5] TEF = Teaching reference framework

[6] REF = Research excellence framework; TEF = Teaching reference framework

This study confirmed that different mechanisms emerged from identical contexts, and that the same mechanisms were triggered in different surroundings, while in others they remained absent. Critical realism endorses the view that mechanisms are not necessarily triggered and operational in all circumstances. Indeed, their existence depends on the social context and the conditions under which they take place as different mechanisms can co-exist whose causal powers can either reinforce each other or constrain their power (Danermark et al., 2002). This, however, implies that events or objects only *tend* to act in certain ways as the emergent property of the interplay between mechanisms is unpredictable depending on the interactions and the circumstances in which they occur (Elder-Vass, 2010).

Indeed, the interplay between human agents and institutional structures in Cases 1, 2 and 4 gave rise to mechanisms that enabled students to engage in new actions leading to organizational morphogenesis. Conversely, in Case 5 the student's agential power did not trigger social relations fully which would have generated the necessary mechanism for change in turn favouring the reproduction of existing social structures, namely morphostasis. This study also revealed that such mechanisms were affected by the student's level of agency, which in turn was influenced by his/her institutional role and position.

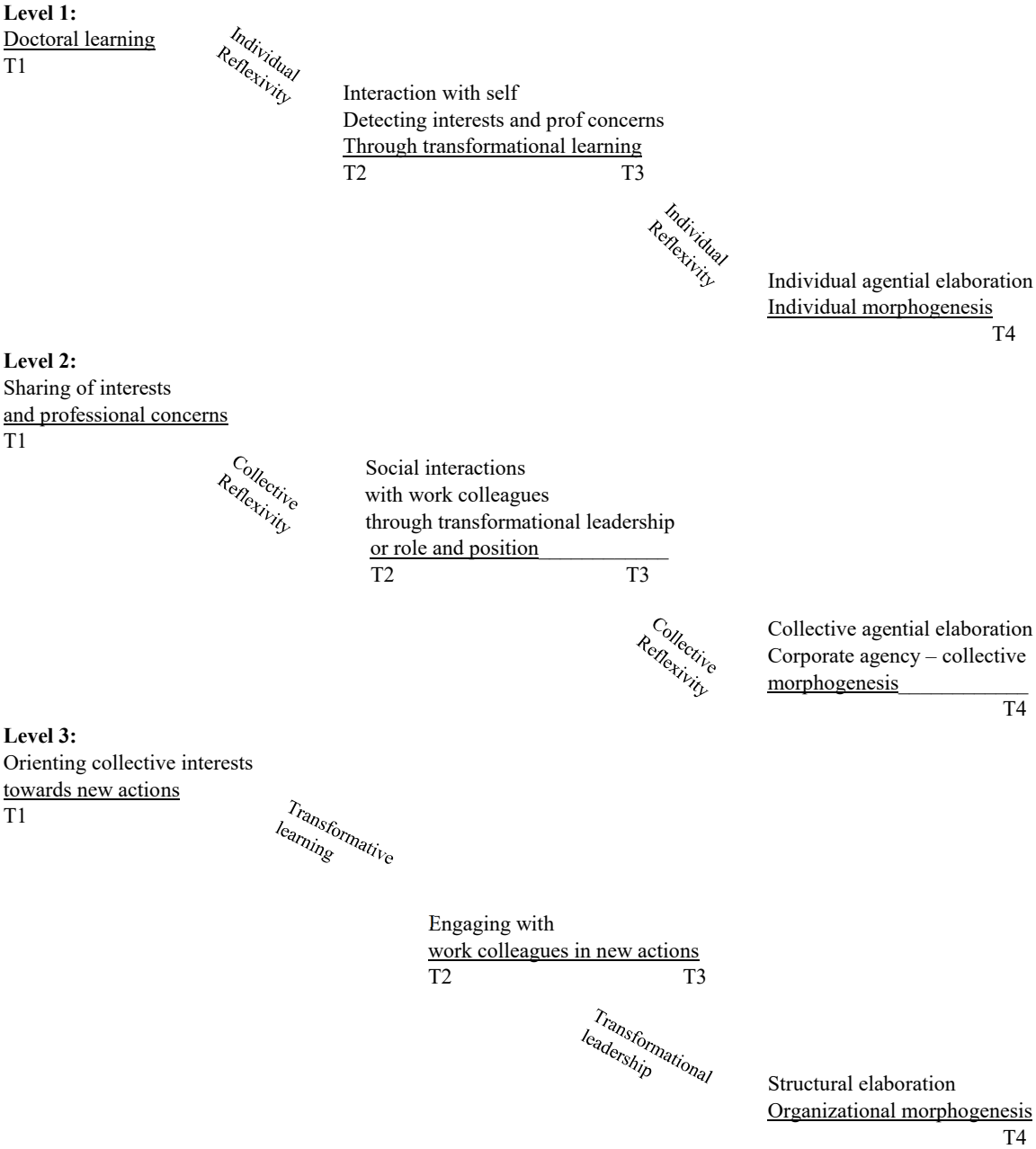
In Case 3, the student was identified as belonging to a group of primary agents whose reflexivity and actions were expressions of the dominant corporate agents. His/her agential power was therefore exerted only on people who were placed in similar circumstances and would thus act in similar ways given these circumstances without, however, achieving a cohesion leading to corporate agency (Archer, 1995). The outcomes in terms of Archer's (1995) morphogenesis/morphostasis model thus affected the level of individuals but not the organization as a system. Conversely, the students who created social affinities among their work colleagues with a strong orientation towards common professional concerns, as in Cases 2 and 4, could convert individual reflexivity into collective reflexivity by focusing on joint actions, giving rise to corporate agency.

Collective reflexivity in this context meant that work colleagues shared an interest in the professional issues (resulting in research projects) raised by the students from their learning, but did not necessarily have the same ideas about how to tackle them. What made it collective was the fact that they found a common orientation towards means of collaboration and what made it reflexive is that the orientation bent back to thinking about themselves as actors who would undertake new actions that could take such concerns forward in a collective fashion (Archer, 2013). However, we saw earlier that corporate agency was needed to take on a transformational

turn to avoid possible domination over other human agents, which occurred in Cases 2 and 4 through the adoption of transformational leadership.

Therefore, the findings of this study suggest that organizational change only occurs in cases where individual agency transforms itself into corporate agency and when these two mechanisms are triggered in combination. The findings also tend to support the idea that when corporate agency is not fully developed, the student's role and position – as representative of the organization itself – confers on him/her the necessary agential power to engage in collective actions and thus overrule existing social structures as shown in Figure 4.9.

**Figure 4.9.** The elaboration of a double morphogenesis




Adapted from Archer (1995, pp. 76, 193-4).

Indeed, as argued by Vincent and Wapshott (2014), role and positions are conferred on individuals by their institution to represent the organization while the individual's causal power and properties are, as a consequence, properties pertaining to the organization. Roles and positions thus become generative mechanisms of organizational structures by regulating individuals' behaviour and through which organizations assess their organizational power thereby impacting human activities. However, within these organizational regulating frameworks there seems to be a space for human intentionality influenced by the mechanism of reflexivity generating human agency, which in turn is triggered through transformative learning and transformational leadership, both determining the professional action required for structural elaboration as shown in this study.

This highlights the relationship between agency and social structures and confirms Archer's (1995) analytical dualism theory by underlining the interplay between human actions and structural constraints. This is what critical realists term the causal effect of social objects generated by mechanisms. Mechanisms, when triggered under certain circumstances, tend to act in certain ways depending on the context and the predominance of concurrently active mechanisms as they are triggered by human actions which gives a certain unpredictability to the outcome of these mechanisms (Danermark et al., 2002).

Critical realists posit, therefore, that despite some similarities that may occur within similar contextual settings, their level of similarity can vary as comparable contexts can comprise many different mechanisms with different causal powers (Fleetwood, 2004). Indeed, and as pointed out earlier (see Table 4.15), mechanisms and causal powers which are located within the domain of the real can give rise to events and social interactions taking place at the level of the actual, which in turn become experiences belonging to the empirical domain and vice-versa. It is, however, through human agency that the real and the actual domains are linked so that mechanisms and causal powers can be activated (or not) to become events. Then again, it is through human agency that the domain of the actual is linked to the domain of the empirical because of the detection of events which then become experiences (Bhaskar, 1978).

These actions are, however, context dependent, as generative mechanisms and their causal powers can remain at a standstill over some time or can even be opposed by other mechanisms, so that they will not give rise to events (Tsoukas, 2000). Therefore, despite some similarities within different organizations, the outcomes can be different as human action has been unable to generate a link between these three different domains. In turn, human agency is contingent upon the context in which it acts, as it is informed – although not dependent – upon social structures, which have their own mechanisms and causal powers. It is the interaction between social structure and human agency that results in new emergent powers over time which then lead to structural elaboration (Archer, 1995).

### 4.5. Conclusion

The mechanisms identified in this study as accountable for organizational change were the result of coordinated interactions of group members and thus the expression of social relations which generated human actions reinforcing either existing social structures or which elaborated new ones (Archer, 1995). However, what led finally to organizational morphogenesis was that students' projects were aligned with the institutional structures in force at that time, thereby generating organized actions at the corporate level to tackle these concerns in a collaborative manner (Cases 2, 3 and 4). Conversely, where the project was not fully aligned with the organization's main project, then it depended on the student's role and position as the expression of enhanced agency or as structural power to engage in actions for the elaboration of new institutional structures (Case 1) or their reproduction (Case 5). This proves that the mechanisms evident in this study were relational and transformative in nature and that the conditions under which they might emerge were influenced by the organizational context and the circumstances in which they took place.

The organization itself thus becomes the expression of a transformative mechanism whose causal power can sustain a space for collective meta-reflexive deliberations giving rise to social relations in terms of corporate agency which generate actions for structural elaboration. However, this implies that the organization provides the necessary resources that transform individual actions into corporate agency to sustain organizational change (Reed, 2005). For this study, this entails that higher education settings as the expression of the doctoral students' work environment should provide the latter with the necessary learning strategy that encompasses one's capacity to make an original contribution to knowledge and personal growth. It should enable the student to master a discourse that bridges both research and professional practice for the benefit, not only of the knowledge economy, but also for the wider society.

# Chapter 5 - Conclusion

The data analysis revealed two closely related aspects of reflexivity as the key mechanism which was triggered by the students' learning derived from their undertaking of an EdD. The first aspect was individual meta-reflexivity which enhanced individual agency and gave rise to professional concerns generating in turn actions (students' projects) to address these concerns. The second aspect of this mechanism was the emergence of social relations generated through collective meta-reflexivity that engaged work colleagues with the students' concerns, thus leading to corporate agency. Social relations in turn mediated the effect of social structures on human agency. Indeed, the normative and regulative structures representing the organizational context's mechanisms in which the students' projects evolved, exposed, in certain cases, counteracting forces whose own causal power could either enable or constrain social relations, thereby either fostering or restricting human agency.

In this study, social structures represented the organization's strategic plan and the professional position and role of the student or other stakeholders, such as senior management or external regulatory/normative bodies, which had an impact on the students' social relations and thus on their actions (projects). Social relations were identified as the expression of transformational leadership principles applied within the higher education context leading to new actions that enabled organizational change to occur. The contextual factors identified included the educational organization's readiness, mainly expressed through their strategic plans and mission statements, which allowed them to engage in new actions to address the student's projects as triggered by doctoral learning.

This chapter reports how this study's findings answered my research questions regarding the generative mechanisms that influenced the impact of a professional's higher education organization through the learning resulting from undertaking an EdD. It also explains the nature of these mechanisms and under what conditions and circumstances they generated organizational transformation, if any. A comparison with the existing literature as well as an account of my personal morphogenesis as an EdD student provides the necessary background to further the debate about the impact of the professional doctorate. To conclude, limitations and implications that such findings can have for future research will be discussed.

### 5.1. Summary of mechanisms

Individual meta-reflexivity was the underlying mechanism that triggered individual agency in all doctoral students through their EdD-derived learning giving thus rise to individual morphogenesis. Individual reflexive deliberations needed, however, to be converted into a collective endeavour to trigger corporate agency for organizational morphogenesis to occur. Indeed, it was through the sharing of professional concerns with work colleagues that collective meta-reflexivity was generated in Cases 1, 2, 3 and 4, which then gave rise to social relations that triggered new actions to address these concerns in an organized and joint fashion. Data analysis also showed that the simple act of sharing concerns, although necessary, did not by itself trigger social relations to generate organizational morphogenesis (Case 5).

Another factor that emerged from the data analysis was that mechanisms pertaining to human agency could be restricted by mechanisms relating to social structures. If social relations were constrained by institutional structures, then organized collective actions would either unfold as determined by the social context with its controlling structures hindering the full elaboration of these social structures (Case 3), or they would not be triggered, thereby reproducing the existing structures that led to organizational morphostasis (Case 5). It is only in Cases 2 and 4 that social relations were engaged through the process of transformational leadership, allowing organizational morphogenesis to occur, while in Case 1 the role and position held by the doctoral student meant that their influence could overrule existing institutional structures pertaining to his/her work environment.

Organizational morphogenesis depended thus on the work context, the circumstances and the conditions under which causal mechanisms could be triggered, which the next section discusses.

### 5.2. Variation in findings

The data analysis demonstrated that the students' work context with its regulatory and normative mechanisms determined what counted as professional concerns. Moreover, the work setting was also decisive in regulating these actions in the light of their strategic plans. The latter were therefore perceived as the underlying structural mechanism that constrained or reinforced such actions to unfold in the way they were perceived by the student's project. In Case 1, the student's project was not aligned with the organization's strategic plan. Therefore, the student's higher education settings' existing internal structures did not fully sustain the project. However, it

was the doctoral student's role and position derived from an external professional body that enhanced his/her agential power in terms of taking the project forward in the desired way, thus counteracting the student's own organizational structures and allowing morphogenesis to occur.

In Cases 2 and 4, the students' projects were aligned with the strategic plan, thereby supporting the social relations required for the joint actions to take the students' projects forward while facilitating organizational morphogenesis. In Case 3, it was the power of existing social structures regarding external regulatory bodies that maintained a dominant form of corporate agency in the student's own work environment, restricting individual reflexivity in a way that did not allow the student to engage in actions of his/her own choice. However, in this case the dominant corporate agency gave rise to organizational morphogenesis by dictating what actions to pursue. Finally, in Case 5 institutional structures triggered mechanisms that counteracted the student's agential power to take his/her project forward in a collective manner. In this case, social relations did not occur, impeding the collective actions required to sustain organizational morphogenesis while reproducing the existing social forms.

The above cases highlight how the interplay between social structure and agency resulted in mechanisms which – under certain circumstances and conditions – can generate structural elaboration (Archer, 1995). It also demonstrates that these mechanisms are transformative, relational and contextually bound (Archer, 2003). Indeed, mechanisms pertaining to human agency are transformative as individual reflexivity enhances individual agency through a heightened awareness of the self and the work environment. They are also relational as social relations are generated through the sharing of such concerns, thereby triggering corporate agency which in turn engages people in organized actions that can tackle these professional concerns (Archer, 2003). Mechanisms pertaining to human agency can, however, be enabled or constrained by countervailing forces related to social structures. Their underlying mechanisms and causal powers eventually invalidate causal powers of human agency, thereby highlighting the importance of the social context (Elder-Vass, 2010).

Variations in this study occurred because of the different mechanisms triggered by the interplay between agency and social structure, and not from the participants' experiences resulting in different projects (Danermark et al., 2002). Mechanisms, however, can vary according to their capacity to reinforce, modify or suppress other mechanisms through complex interactions, thus influencing the outcomes of human action and their effects on social structure. For this study, this implies that the relation between the learning that occurred from undertaking an EdD cannot be linked directly to the impact it had on the work environment and its capacity to influence organizational change. Indeed, this depended on the conditions and circumstances which would trigger causal mechanisms (or not) in each context and not on the students' projects.

It could, therefore, be argued that such findings are not representative or generalisable. However, this depends on the meaning we ascribe to the concept of generalisation. Indeed, for critical realists, generalisability is not synonymous with the positivist stance referring to what is universally applicable which implies the idea of a "*generally* occurring empirical phenomenon/event" based on observations of events from which "universally applicable conclusions [can be] drawn from a larger population" through induction (Danermark et al., 2002, p. 77, emphasis in the original). For critical realists, generalisation refers to the transfactual conditions under which an object or an event comes to exist and whose knowledge can be obtained through retroductive argumentation. Indeed, retroduction implies identifying the underlying mechanisms which generate a phenomenon and makes it what it is and not something else (Danermark et al., 2002; Sayer, 1992).

In this study, the interplay between reflexivity and social relations as an underlying mechanism pertaining to students and their work colleagues (both representative of human agency), and strategic plans as a mechanism pertaining to the work environment (representative of social structure) were revealed to be a regular pattern in all cases, and the causal powers pertaining to these mechanisms existed whether they were triggered or not. Therefore, the causal powers of such mechanisms and the impact they have on human agency or social structure are generalisable to other contexts as they represent the transfactual conditions constituting an event or object (Danermark et al., 2002; Sayer, 1992). However, for the purposes of theory building, further research should be completed over time as generalisation cannot be achieved fully from a single contribution. Indeed, generalising findings relies also on contributions from other scholars to build theory. This constitutes one of the limitations of this research, which will be discussed later in this chapter.

## 5.3. Comparison with findings from other research

The findings from this study confirmed what has clearly been observed in the literature. As stated by Burgess and Wellington (2010), Burgess, Weller and Wellington (2011), and Wellington and Sikes (2006), learning derived from undertaking an EdD had a clear impact on the student in terms of personal transformation through enhanced reflexivity relating to professional concerns, and thus influenced the professional self. Indeed, doctoral learning generated new knowledge and a better understanding of work-related problems, which in turn generated professional projects in terms of new actions to tackle these concerns. These findings also align with Costley and Stephenson (2007), Costley (2010; 2015), and Lester and Costley (2010). Indeed, their research has underlined that professional doctorates had a direct impact on the organization and transformation of professional practice through the doctoral student's project. This study's findings also confirmed Davis and Frame's (2016) argument that the student's project engaged them in working collaboratively with colleagues, this enhancing collective participation to transform work practice at the organizational and even national level.

However, the findings also corroborated opposing views put forward by Malfroy (2004), Malloch (2010), McWilliam et al. (2002), Scott et al. (2004) and Tennant (2010). Indeed, these researchers posited that the link between the learning triggered by a professional doctorate and its impact on the organization remains unclear, even though the student's project tackles professional concerns based in the student's work environment. Some of the arguments put forward in the literature suggest that work environments are often not very supportive of a given student's project, therefore the link between academic and work-based knowledge production remains unproven. Such arguments demonstrate that there is no straightforward explanation that proves a direct link between the professional doctorate and the impact it can have on the workplace (Fox & Slate, 2016).

Therefore, an alternative methodology set in the critical realist perspective was employed to obtain a better understanding of how a professional doctorate can impact on organizational change. This study offers new insights by exploring the different mechanisms that were triggered when relating human action (student's learning and work project) to an existing social structure (work environment), thus facilitating either organizational morphogenesis or morphostasis.

## 5.4. Explanation of findings

This study's findings demonstrated that doctoral learning does not impact directly on organizational change because the transformational process that occurs from learning first influences the individual through agential morphogenesis. It is only subsequently that the organization can be impacted, provided that social relations can be established which then trigger collective meta-reflexive deliberations about professional concerns, giving rise to new actions to address these concerns as detailed in Table 5.1. This table illustrates how the different mechanisms underlying doctoral learning generated actions which in an iterative manner enhanced organizational morphogenesis. Conversely, it also highlights how social structure pertaining to the work context impacted human agency either in a positive way, leading to organizational morphogenesis, or to organizational morphostasis, when the mechanisms underlying such actions were constrained by institutional structures.

**Table 5.1** Mechanisms and the morphogenesis/morphostasis of agency and structure

| Mechanisms | Events/actions | Morphogenesis | Morphostasis |
|---|---|---|---|
| Individual meta-reflexivity through transformative learning process | Doctoral learning | Individual agency | |
| Collective meta-reflexivity | Sharing of professional concerns. Finding common vested interests through active communication, based on trust and commitment. | Corporate agency | Absence of shared interests to pursue collectively |
| Social relations (collaboration) through transformational leadership process | Generating common intentional actions and shared direction to achieve organizational transformation | Social structure and context | Absence of common intentions and direction to pursue organized collective actions |

Doctoral learning played an important role in this study as it triggered individual meta-reflexive deliberations about professional concerns that impacted on the student in terms of personal development or agential morphogenesis. As argued by Williams (2012), learning comprises an ontological change in how one understands the self and the world in which one lives. This concurs with Case's (2015, p. 849) study, which demonstrated that knowledge acquisition in higher education

is not only focused on the cognitive side but is embedded in a "process of personal development" that helps students engage, first with themselves and subsequently with others.

This concurs with Wellington (2015, pp. 82-85) who argues that the notion of "critique" or "being critical" entails two different aspects, namely the affective and the cognitive, whereby the affective side responds to holding the correct attitudes and dispositions, such as confidence, insightfulness and open-mindedness, whereas the cognitive dimension requires skills such as evidence gathering and evaluative skills that demonstrate trustworthiness and credibility. Such findings overlap with Mezirow's (2009) transformative learning theory which describes the learning process as a transformation that includes "a critique of premises regarding the world and one's self" (p.22). Meanwhile, Barnett (1997) distinguishes between three different levels of being critical, which comprise critical thinking skills, critical thought, and critique while these are, in turn, based on three different domains: knowledge, the self and the world. This again calls for different approaches to being critical, namely "critical reason, critical self-refection and critical action" (p. 7).

Barnett (1997), however, contends that for instrumental reasons within higher education settings these domains are invested primarily in formal knowledge production, as knowledge becomes a way to enhance higher education settings' economic growth. For Barnett, "critical self-reflection and critical action have hardly appeared as components of higher education" (p. 7). His standpoint highlights that reflexivity triggered through doctoral learning should not only concern formal knowledge acquisition but also needs to include reflexive deliberations about one's self, as well as a critical stance towards the social context in which it takes place with the intention to act upon it.

This aligns with Archer's (1995, 2003) reflexivity theory which emphasises the importance of context in terms of shaping personal concerns and defining the scope for action. As stated by Archer (1995), human beings as social agents are affected by the social context, its social structures, and "our very efforts to transform it" (p. 1). As underlined throughout this study, human agency leads to structural elaboration "but is itself elaborated by it" (Archer, 1995, p. 247). Meanwhile, Ashwin (2008) has emphasised the importance of the social context's impact on agency in relation to agents' freedom to decide deliberately on their actions.

This requires us to rethink carefully the nature of the mechanisms identified in this study as explaining the occurrence of organizational morphogenesis. Indeed, the mechanisms evident in this study were defined as relational and transformative, whereby individual and collective meta-reflexivity were understood as a means to foster intentional, organized and collective actions for organizational transformation. However, how autonomous and critical can collective reflexivity be

when framed by existing social structures such as strategic plans with their economic operational objectives? This invites us to pose the question, whose interests the actions triggered by such collective-meta reflexive deliberations were really being served?

Given this, further questions arise regarding the intentionality of reflexivity as an underlying mechanism leading to agential actions and the nature of such actions in terms of autonomy and criticality. This in turn implies to admit the instrumental nature of the mechanisms influencing the impact of doctoral learning on organizational transformation. Furthermore, it also raises the question of the researcher's initial assumption, namely that morphogenesis is always a positive outcome for the individual, the organization and the wider society. Finally, these pragmatic questions raise more ontological issues about the being of a university (Barnett, 2011), the being of a person as a doctoral student (Smith, 2010), and ultimately the nature of the learning that occurs within a professional doctorate to enhance the flourishing of both the individual and the organization.

### 5.5. Ontological reflections on the impact of a professional doctorate

This study highlights that the learning derived from undertaking a professional doctorate triggered the students' self-reflexivity about professional concerns, which led to social relations resulting from collective meta-reflexivity that supported new actions to address these concerns. The findings also underline that such actions were endorsed by the students' organizations when they overlapped with their strategic plans, leading to organizational morphogenesis. Conversely, when they were not aligned, then the higher education setting would not fully endorse them, resulting in organizational morphostasis.

In relation to the professional doctorate, this seems to imply that the learning derived from undertaking a professional doctorate is restricted by the higher education setting's own informed agenda. Indeed, in this study, Bert, Chris and Dominique (Cases 2, 3, and 4) research projects engaged in social actions which, although directed towards the emancipation of human beings (e.g. getting more women to embrace professorial positions, faculty research capacity and student success) were also actions that tended to enhance the organization's competitiveness and survival by responding to economic and industrial demands. Reflexivity seems here to be used to further activities for the higher education setting's own benefit rather than intended to advance personal emancipation of students or faculty. Therefore, for the professional doctorate to generate fully meta-reflexive individuals, this would entail a further critique of the institutions own priorities, leaving the choice of what concerns to pursue up to those who confront such concerns in their daily work.

This concurs with Barnett's (1997) views on criticality. Indeed, he argues that to become a free and fully critical person this implies not only critical self-reflection for personal growth and critical thought about the social/organizational context, but also a deeper sense of criticality about the academic context in which the learning takes place. However, for him higher education settings are hardly ever self-reflexive, meaning that academic learning-enhanced reflexivity is restricted to what higher education settings view as critical thought. Given this, the following theoretical questions arise: What kind of critical individuals are professional doctoral studies creating? How critical is their learning in terms of action production that questions existing social structures and their context? Furthermore, who benefits from the transformations that these actions produce? To answer these questions, there is a need to reconsider the concept of reflexivity and what it entails.

This, however, begs the question regarding the role that HEIs should play in furthering this critique, and also leads us to ask whose interests benefit from organizational morphogenesis. As argued by Barnett (2011), the perception we have of higher education settings focussed on the flourishing of individuals in a learning context is different from the reality that underpins the organization as an institution. This has also been highlighted in this study, where students' projects aligned with the idea of a social structure supportive of the flourishing of the individual and wider society, whereas the real institution had to overcome problems relating to its own survival and flourishing in terms of economic growth. The two aspects seemed mutually exclusive or at best overlapping given higher education institutions' properties and causal powers and the influence these can have on human agency (Archer, 2017).

However, as stated by Barnett (2011), higher education settings have choices to make regarding their role, and thus need to acknowledge their responsibilities in terms of the intention they want to convey to students and the wider society. If their aim is to develop their academic position in the globalized higher education market by fostering relationships with industry, then they can lose sight of their intrinsic role to improve the wellbeing of individuals, thus undermining the potential improvement of the wider society. If their sole *raison d'être* is to foster human wellbeing, then their extrinsic motivation to secure their financial capital might be jeopardized. Risk taking entails uncertainty, which in turn calls for change to mitigate such risks. Changing higher education institutions' policy becomes, therefore, a way out of this dilemma, because on the surface it allows higher education setting to accommodate both issues.

Indeed, such structural changes even if they occur at a surface have a deeper impact on the organization's structure in terms of relationships within the institution and with the external world in terms of human intentions (Archer, 2003). As Archer argues, reflexivity can be dominated by

existing social structures as was the case in this study where students' projects generated change in the organization only if it aligned with the organization's overall strategic plan and its operational objectives, both of which were intended to ensure the institution's economic competitiveness (see Table 4.14). This does not mean that reflexivity is determined by structural considerations, but it is influenced by it (Archer, 2003).

Indeed, although doctoral students deliberately chose their own projects to address these professional concerns, their prioritisation and actions were influenced and sustained by the organization's strategic plans. Therefore, the social relations that were generated to tackle these professional concerns engendered restricted meta-reflexive deliberations about what actions could be triggered to address these concerns. Reflexivity as the mechanism generated by doctoral learning was thus restricted by mechanisms pertaining to the higher education setting, in turn influencing the type of actions that could arise from collective meta-reflexive deliberations.

Higher education settings should therefore be supportive of learning that triggers not only individual reflexivity for personal development, or collective reflexivity for the benefit of the organization but also enhance criticality in students to help them become critical beings, whereby, as Barnett (1997) argues, criticality englobes critical thinking, critical self-reflection and critical action. Regarding these notions of critical being, I would like to add the concept of organizational mindfulness as a fourth element. By organizational mindfulness, we refer to the capacity of human beings as a collectivity to promote organizational learning in a systematised fashion to foster collective reflexivity in organizational practice (Jordan, Messner, & Becker, 2009). Jordan et al.'s (2009) viewpoint is that collective mindfulness fosters collective reflections on possible ways to learn and improve organizational practice through social interactions. Such interactions are based on activities which offer the opportunity "to question expectations and behavioral routines and to evoke awareness of context in interactions" (p. 468).

Reflexivity in this sense implies considering different viewpoints, options, and drawing inferences beneficial for both the individual and the organization (Jordan et al., 2009). Mindfulness, thereby, defines an individual learning process which entails gaining an increased awareness of the organizational environment which triggers professional concerns for the well-being of the whole organizational system. Mindfulness works on two different levels, namely on the collective dimension through the interaction of people within organized groups and on the structural level in terms of rules and regulations (Jordan et al., 2009). Social relations become, therefore, relevant to engage in meta-reflexive deliberations that provide the opportunity to question one's own assumptions and actions and those of others. It is only through an increased

sense of mindfulness that individual and collective reflexivity can lead to social relations that generate actions impacting organizational strategies that can change the organizational structures (namely rules and regulations).

However, caution should be observed when discussing change regarding organizational transformation and its concern for the well-being of all actors (Archer, 2017). Indeed, and as suggested by Archer, the experience of continuous changes generates multiple choices that eventually constrains agential reflexivity in terms of how to prioritise concerns that can trigger actions that might promote human flourishing. As argued by Archer (2017), power comes in the form of various roles and regulations which determine how power is distributed within an organization. Thus, organizational change might enhance variety which, however, is not necessarily directed towards increasing human flourishing, but more towards sustaining new actions to comply with economic necessities. Human flourishing as the expression of human well-being is not an achievement in terms of self-interests nor of norm-following (Sayer, 2011). As stated by Sayer (2011), living together implies acting "with some awareness of the implications for well-being – both ours and that of others" (p. 8).

To conclude, the necessary conditions for doctoral learning triggering human flourishing involves enhancing a reflexivity mindful of others and their well-being. Such reflexivity should generate social relations which in turn should lead to actions that help people to recognise and respect one's own value, resulting in care for the well-being of other persons (Smith, 2010). What well-being might entail is a cultural aspect, but all cultures provide an overarching notion of what kind of behaviour leads to human flourishing (Sayer, 2011).

Higher education organizations should consequently promote learning which not only benefits the knowledge economy but also fosters the flourishing of different domains including the social, thereby changing the metaphor of learning from "knowledge economy" to an image of the "knowledge ecology" (Barnett, 2011, p. 142). This, however, entails that learning is not merely treated within higher education organizations as a commodity that can be commercialised but as a social good fostering actions relevant for the well-being of individuals, communities and the wider society (Barnett, 2011). It is only in the light of these arguments that higher education systems can fully embrace their role as change producers and foster growth through learning relevant for the person, the organization, and the wider society.

## 5.6. Contribution to existing knowledge

This study drew on the critical realist paradigm to provide plausible explanations about the generative mechanisms that led to organizational change through EdD-derived learning. The findings confirmed both existing perspectives on the impact of the professional doctorate on individual morphogenesis and current understanding of professional doctoral learning generating professional concerns resulting in projects that address these concerns. However, this study added to the existing academic conversation about the impact of the professional doctorate by developing new insights into how individual morphogenesis can influence organizational morphogenesis through increased collective meta-reflexive deliberations supportive of social relations. Indeed, social relations are constitutive of how doctoral students engage with work colleagues leading to new actions tackling professional concerns (Archer, 2003; Donati & Archer, 2015). Therefore, social relations as the underlying mechanism impacts on organizational change according to how such a mechanism is constrained or enabled by countervailing mechanisms that relate to existing social structures.

Such findings have an impact on how the professional doctorate can be understood as the sole provider of work-based knowledge. Indeed, the link that can be established between the learning that occurs from undertaking a professional doctorate and the impact it has on organizational morphogenesis is provided by the interrelationship that the doctoral student is able to construct with work colleagues, thus taking his/her project forward collectively. However, such relations can be enabled or constrained by existing social structures related to the student's own work environment. Therefore, there are tendencies that can be cited to explain the link between the professional doctorate and its impact on the work environment, as the organizational change outcomes depend on the interplay between mechanisms attributed to human agency and those pertaining to the social structure in which these actions occur. In other words, organizational morphogenesis depends on the contextual circumstances and conditions under which the mechanisms are triggered and the causal powers they display.

## 5.7. Implications for practice

The implications that such knowledge has for practice are threefold in relation to doctoral learning that is not only discipline related but encompasses students' professional development to provide change in their work environment. Firstly, doctoral learning should trigger collective meta-reflexive deliberations in a more direct fashion between academia and the workplace to ensure personal and professional development based on the student's research project. Consequently, this implies a doctoral programme that reaches beyond the traditional supervisory role of faculty by providing a joint advisory role between faculty and senior work-related colleagues in relation to the thesis project. However, this might be difficult to establish in a formal way, but students can still be encouraged to find a senior work colleague who would accept this role more informally. This idea is supported by Costley (2015) who argues that the relationship between the doctoral candidate and both academic and professional advisors should be strengthened to support "research, critical thinking and a whole range of pedagogical practices that can be of benefit to individuals and communities outside or on the periphery of higher education networks" (p. 22). Meanwhile, Kahn (2017c) suggests that doctoral programmes should reflect on new teaching and learning approaches that would give a wider scope to meaningful social relations between supervisor and supervisee and which are supportive of the student when dealing with uncertainty during his/her research project.

Secondly, the organizational context should be more supportive of students' projects regardless of the critique that such schemes reflect on the existing forces operating in such institutions. This has the potential to raise the organization's awareness of its functioning, both as a "structure-without-agency" dominated by external mechanisms pertaining to the knowledge economy, or as "agency-without-structure" where entrepreneurial activities foster constant change beneficial for the organization's own economic advantages without considering the countervailing forces that constrain institutional activities (Barnett, 2016, p. 158). Developing tools that enhance a tighter relationship between the individual, the work organization and the university has also been advanced by Costley and Abukari (2015) who argue that such a relationship would be beneficial for a better understanding of their needs. In my case, it would have been beneficial to explore how to handle delicate relationships with policy-makers in Switzerland both at the organizational and political level to introduce the professional doctorate as an alternative path compared to the more traditional PhD. Indeed, the reluctance to introduce such programmes at the Swiss national level might depend on the lack of understanding of such provision, and therefore gaining in confidence and communicating such a project to influential figures could have been an advantage for me.

This, however, has an impact on the actual EdD programme design, which should be amended to address the issue of developing social relations with other parties in the work organization (or beyond) as an individual part of the programme, which constitutes the third element. This implies new doctoral pedagogies that help the doctoral student raise his/her awareness of how social relations operate within a work environment and how the power of such a mechanism, when triggered, can give rise to organizational change. This approach has also been advocated by Armsby, Costley and Cranfield (2017) who highlighted the importance of doctoral pedagogies "fostering and building relationships, professional conversations and learning cultures within a wider social context, in ways that extend beyond the HE institutions to work-based and other community settings" (p.4).

However, not all students' research projects are designed to foster change, but in the case where the doctoral student's research project focuses on implementing change in the student's work context, this might raise apprehensions with work colleagues that need to be mitigated over the duration of the student's research project. Consequently, the doctoral programme should reflect more fully on how to approach these dual purposes in its design.

These recommendations will be made to professional doctorate programme designers by presenting a conference paper at the 6th International Conference on Professional Doctorates hosted by the UK Council for Graduate Education in London next March 2018. Indeed, the conference themes are arranged around issues that include curriculum development in collaboration with industry, commerce and professional and statutory bodies as well as the impact of professional doctorates on professional transformation. This seems to me the best occasion to reach the target audience to disseminate my findings.

### 5.8. Study limitations and suggestions for future research

This study has several limitations, one of which relates to the participants themselves who endorsed mainly managing roles in their work settings as vouching for facilitating organizational change. However, despite the students' similar roles, variation occurred within the cases, thereby assuring the findings' validity and generalizability (Maxwell, 2013).

Another noteworthy factor is that the doctoral candidates and their work colleagues were all volunteers who had a rather positive perception regarding how the professional doctorate might impact on their organization which clearly influenced their objective views on the issue (Price & Murnan, 2004; Patton, 2015). However, for critical realists, how participants make sense of their perceptions and how these inform their actions is more important than reporting what happened (Maxwell, 2013). Participants' subjectivity is therefore not a constraint for critical realists, but a real object with causal power which should be taken into consideration (Maxwell, 2013).

Another limitation of this study can be attributed to the research field itself which was restricted to the EdD undertaken by students enrolled at the University of Liverpool, and to their higher education organizations. By widening the field to other professional doctorate programmes and to different institutional contexts, the outcomes could vary. However, this concurs with the critical realist approach which posits that knowledge is fallible (Bhaskar, 2008), because what we know depends on our own perceptions of it, which can vary over time (Danermark et al., 2002; Sayer, 2000). Moreover, generalization in critical realist terms relies not on multiple cases, but essentially on the transfactual conditions of an object or an event which triggers causal mechanisms whose interplay give rise to variation in outcomes significant for theory building (Maxwell, 2013).

A further limitation relates to my positionality as an EdD student researching my own higher education setting, thus I have a dual role as both researcher and a member of the researched (Asselin, 2003). Indeed, such a dual role increases the possibility of role confusion influencing data collection and the findings' analysis in terms of trustworthiness and credibility (Asselin, 2003). As stated by Corbin-Dwyer and Buckle (2009), such a dual status might affect how the research is designed and directed through the researcher's own perspective, thereby diminishing the analysis's objectivity and thus its trustworthiness.

However, this insider status gave me the necessary common ground to gain participants' acceptance by building relationships and enhancing trust, without which this study could never have been conducted (Merriam et al., 2001). Moreover, by including in the participant group people from the students' organizations with whom I had no prior contact nor shared their work

context, I gained an outsider status which diminished researcher bias in terms of assumptions about the phenomenon under study (Asselin, 2003). Limitations, however, provide openings for further research. This study could be extended to other professional doctorates, such as the DBA, for instance, to explore the impact of the students' learning can have on work environments other than higher education institutions. Although this was my first intention, which was abandoned because of access issues, having gained some practical experience as a researcher could provide me with the necessary credibility to gain external acceptance to conduct future research in this area. Indeed, as stated by Patton (2015) echoing Denzin (1978) widening the research to another professional doctorate and different work environments could provide an opportunity to develop new forms of external triangulation, thus increasing the study's credibility outside the realm of education and social sciences. Another interesting study could follow up this research by developing a longitudinal study to further analyse how the social relations that emerged from the students' projects in this study transformed the organization into a more mindful institution with economic growth as well as human flourishing at its heart.

This has the potential to contribute new insights regarding the role and mission of higher education in a globalized world by encouraging debate about its ecological as well as economic value. Indeed, as stated by Barnett (2011), the concept of ecology relies on the relationship between organisms and their environment, resulting in actions for the well-being and the sustainability of the whole system (p. 5). This aligns with Archer's (1995) morphogenetic approach which relies on the interplay between human agency and social structure to enhance the structural elaboration beneficial for the individual and the wider society. The primary role of the ecological university would, therefore, be to provide learning that enhances the well-being of the wider social system and not just sections of it.

### 5.9. Personal morphogenesis through the professional doctorate

The learning derived from undertaking the EdD impacted both my personal and professional lives on two distinct levels, namely the cognitive and affective (Wellington & Sikes, 2006). On the cognitive level, my doctoral studies learning has sharpened my own thinking about learning and the meaning making process (Mezirow, 1991). I now have a deeper understanding of the dynamics of learning, which is not only a cognitive act of acquiring new knowledge and competencies for personal growth and career advancement, but also a relational act which, when shared with others, triggers new insights and perspectives on how to view the world (Archer, 2003). Although I have considerable experience both as a faculty and administrative member at different educational levels, my thinking was never systemised into a critical thought process that would reach beyond applying mechanically existing rules and regulations in my teaching endeavours. Consequently, I never questioned what the learning experience for the student should be in relation to enhancing their self-consciousness as human beings (Taylor, 2009).

Although the professional doctorate had no impact on my career trajectory, the insights I gained nevertheless impacted on my professional self as a lecturer. In my work environment, the tendency is to assume that teaching should be based primarily on practical matters, thus neglecting the academic process. Having acquired a better understanding of my own learning process, I am now more inclined to comply with my students' individual needs. I also try as far as possible to integrate collective work based on real experiences to anchor the students' learning process in the real world (Taylor, 2009). However, I support this with theoretical work to critically assess students' acquired knowledge based on their personal experience.

For example, I now ask students to work in groups and interview managers on different topics in relation to HR issues, and then measure such findings against existing theory. Such real experiences give students the chance to link theory to practice and thus gain a better understanding of the subject, and consequently assist them in being increasingly critical (Taylor, 2009). On the affective level, my doctoral learning has also given me the necessary confidence and self-awareness to discuss such matters with work colleagues and, consequently, to take a stance when controversial discussions arise. The quality of the social relations and the increased confidence enhance my commitment to teaching practices and student learning which have an impact on the individual, the organization and the wider society (Archer, 2000).

My personal morphogenesis has not made me another person, but I relate now to my professional self as a lecturer in a new way. What made this transformation possible, is my own experience as a doctoral student and the continual guidance I received from my tutors and doctoral supervisor which helped me to challenge my underlying assumptions and beliefs. Much of this transformation is linked to a change in relation to myself through meta-reflexive deliberations and how I perceive my role as a lecturer (Archer, 2003). I no longer see myself as a person dispensing knowledge to students (the sage on the stage), but as a facilitator (the wise on the side) who supports their learning journey through real life experiences but with the necessary academic rigour.

Indeed, learning at a higher-level should be conceived not simply in relation to one's capacity to accumulate knowledge and skills for the benefit of personal career advancement or to increase organizational competitiveness. Such learning should be imagined in terms of mastering a discourse that crosses both the personal and organizational level through one's capacity to draw others into a reflexive discourse "through positive social relationality" giving rise to "win-win outcomes" (Archer, 2017, p. 10).

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# Appendix



**Appendices**

**Appendix A: Ethical Approval Form (1), University of Liverpool**

Dear Mariangela

I am pleased to inform you that the EdD. Virtual Programme Research Ethics Committee (VPREC) has approved your application for ethical approval for your study. Details and conditions of the approval can be found below.

| | |
|---|---|
| Sub-Committee: | EdD. Virtual Programme Research Ethics Committee (VPREC) |
| Review type: | Expedited |
| PI: | |
| School: | Lifelong Learning |
| Title: | |
| First Reviewer: | Prof. Dr. Morag A. Gray |
| Second Reviewer: | Dr. Marco Ferreira |
| Other members of the Committee | Dr. Jose Reis Jorge and Dr. Anthony Edwards |
| Date of Approval: | 27th May 2016 |

The application was APPROVED subject to the following conditions:

**Conditions**

| | | |
|---|---|---|
| 1 | Mandatory | M: All serious adverse events must be reported to the VPREC within 24 hours of their occurrence, via the EdD Thesis Primary Supervisor. |

This approval applies for the duration of the research. If it is proposed to extend the duration of the study as specified in the application form, the Sub-Committee should be notified. If it is proposed to make an amendment to the research, you should notify the Sub-Committee by following the Notice of Amendment procedure outlined at http://www.liv.ac.uk/media/livacuk/researchethics/notice%20of%20amendment.doc.

Where your research includes elements that are not conducted in the UK, approval to proceed is further conditional upon a thorough risk assessment of the site and local permission to carry out the research, including, where such a body exists, local research ethics committee approval. No documentation of local permission is required (a) if the researcher will simply be asking organizations to distribute research invitations on the researcher's behalf, or (b) if the researcher is using only public means to identify/contact participants. When medical, educational, or business records are analysed or used to identify potential research participants, the site needs to explicitly approve access to data for research purposes (even if the researcher normally has access to that data to perform his or her job).

Please note that the approval to proceed depends also on research proposal approval.

Kind regards,

Morag A. Gray

Chair, EdD. VPREC

**Appendix B: Ethical Approval Form (2), University of Liverpool**

| | | | |
|---|---|---|---|
| Dear Mariangela Lundgren-Resenterra | | | |
| | | | |
| I am pleased to inform you that the EdD. Virtual Programme Research Ethics Committee (VPREC) has approved your application for ethical approval for your study. Details and conditions of the approval can be found below. | | | |
| | | | |
| | | | |
| Sub-Committee: | | EdD. Virtual Programme Research Ethics Committee (VPREC) | |
| Review type: | | Expedited | |
| PI: | | | |
| School: | | Lifelong Learning | |
| Title: | | Knowledge at work: exploring the impact of a professional doctorate on organizational change in Higher Education settings | |
| First Reviewer: | | Dr. Marco Ferreira | |
| Second Reviewer: | | Dr. Kalman Winston | |
| Other members of the Committee | | Julie-Anne Regan, Michael Watts, Dimitrios Vlachopoulos. | |
| | | | |
| Date of Approval: | | 12nd July 2016 | |
| | | | |
| The application was APPROVED subject to the following conditions: | | | |
| | | | |
| Conditions | | | |
| | | | |
| 1 | Mandatory | M: All serious adverse events must be reported to the VPREC within 24 hours of their occurrence, via the EdD Thesis Primary Supervisor. | |
| | | | |

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| |
|---|
| This approval applies for the duration of the research. If it is proposed to extend the duration of the study as specified in the application form, the Sub-Committee should be notified. If it is proposed to make an amendment to the research, you should notify the Sub-Committee by following the Notice of Amendment procedure outlined at http://www.liv.ac.uk/media/livacuk/researchethics/notice%20of%20amendment.doc. |
| Where your research includes elements that are not conducted in the UK, approval to proceed is further conditional upon a thorough risk assessment of the site and local permission to carry out the research, including, where such a body exists, local research ethics committee approval. No documentation of local permission is required (a) if the researcher will simply be asking organizations to distribute research invitations on the researcher's behalf, or (b) if the researcher is using only public means to identify/contact participants. When medical, educational, or business records are analysed or used to identify potential research participants, the site needs to explicitly approve access to data for research purposes (even if the researcher normally has access to that data to perform his or her job). |
| Please note that the approval to proceed depends also on research proposal approval. |

Kind regards,

Marco Ferreira

Chair, EdD. VPREC

| | | | | |
|---|---|---|---|---|
| Dear Mariangela Lundgren-Resenterra | | | | |
| | | | | |
| I am pleased to inform you that representatives of the EdD Virtual Programme Research Ethics Committee (VPREC) have approved the changes to your original Ethical Application that you requested. | | | | |
| | | | | |
| | | | | |
| Sub-Committee: | | EdD. Virtual Programme Research Ethics Committee (VPREC) | | |
| Review type: | | Expedited | | |
| PI: | | | | |
| School: | | Lifelong Learning | | |
| Title: | | Knowledge at work: exploring the impact of a professional doctorate on organizational change in Higher Education settings | | |
| First Reviewer: | | Dr. Kalman Winston | | |
| Second Reviewer: | | Dr. Anthony Edwards | | |
| Other members of the Committee | | NA | | |
| | | | | |
| Date of Approval: | | 16th August 2017 | | |
| | | | | |
| The application was APPROVED without conditions: | | | | |
| | | | | |

Kind regards,

Anthony Edwards

Programme Director EdD

Kalman Winston

Vice Chair, EdD. VPREC