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Postgraduate Transitions from Masters to Doctoral Study: Managing Independence, Emotions and Support

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Abstract: As elsewhere in the world, higher education (HE) provision and uptake in the United Kingdom (UK) has grown exponentially since the widening participation agenda begun in the 1970s, and research has predicted that by 2030 there will be an increase in global HE student enrolment of well over 300% (University World News 2012). As HE has grown and changed, so too has interest in it, and there now exists a substantial literature on student transitions to undergraduate education. However, the experiences and perspectives of students transitioning at the postgraduate level have been significantly overlooked, largely due to powerful assumptions around postgraduate students being HE 'experts' for whom educational transitions are presumed to be 'natural'. The relative lack of research conducted on these transitions is particularly surprising given the significant growth of, and major changes to, the postgraduate sector in recent years, and despite growing state involvement in its performance. Universities are under increasing pressure to more explicitly demonstrate the value of postgraduate education, and particularly doctoral degrees, to the burgeoning 'knowledge economy', which increasingly positions doctoral researchers as "knowledge workers" rather than students (Hughes and Tight 2013: 771). These pressures have produced significant changes in how the doctorate is structured and supervised, has placed different and additional expectations on PhD students beyond their thesis and, in turn, has cultivated a qualitatively different academic community in which they are expected to transition and thrive. This paper addresses gaps in understanding around both the transitions of doctoral students and the impact of wider changes to HE on these experiences by synthesising the available literature on postgraduate transitions and the broader academic climate alongside qualitative focus group data from a small-scale project conducted with doctoral students and supervisors conducted in the social sciences faculty of a Scottish university. It finds that transitions to doctoral education are complex, demanding and emotional, as well as exciting, and that changes to the academic community in recent years are creating new and significant pressures for both doctoral students and academic staff which can further complicate transitions and progress.

Keywords: doctoral students, educational transitions, institutional practices, changes to higher education

Introduction

The United Kingdom's (UK) higher education (HE) sector has long been considered one of the best in the world (Lea 2009; Maringe and Gibbs 2009). The prestige of many UK HE institutions (HEIs), the global weight and recognition of British qualifications, and the level of priority and positivity accorded to the worth and value of HE in public and political discourse has earned it an enviable international reputation. Indeed, while the UK represents just 0.9% of the world's population, it accounts for 4.2% of researchers, 3.2% of global research and 15.9% of the world's most highly cited journals, and is the world's fourth largest producer of PhDs (Department for Business, Innovation and Skills 2013; Mellors-Bourne et al. 2014).

HE student numbers have risen exponentially since the 1970s, and recent research has forecast that by 2030 there will be a 314% increase in global HE student enrolment, with particularly substantial growth predicted for undergraduate study (University World News 2012). The comparatively larger undergraduate population has thus long commandeered the majority of HE resources, policymaking and research attention, rendering the rapidly growing postgraduate sector relatively overlooked. Little is known about the transitions undertaken by postgraduate students, despite the fact that changes in the economy and labour market are resulting in a sharp increase in the number of people entering or returning to postgraduate study.

Indeed, in the last 25 years, the postgraduate sector has been the largest growth area in HE in the UK, United States (US), Australasia and Europe (Wisker 2012), with Wakeling and Kyriacou (2010: 12) describing the phenomenon as a "quiet revolution". The taught postgraduate (PGT) population has increased by over 54% since 2002/03 and recent research found a 41% increase in the number of doctorates achieved in the US between 2003 and 2013 (Gould 2015). A considerable literature exploring the reasons behind this substantial increase in participation in postgraduate education exists, most of which points to 'credential inflation', whereby the massification of HE since the 1970s has progressively devalued undergraduate qualifications, saturating the labour market with equally qualified graduates who are increasingly turning to PGT and research postgraduate (PGR) degrees to differentiate themselves to employers (Mellors-Bourne et al. 2014; Ellison and Purcell 2015).

There are also strong links between rising postgraduate participation and the priorities of the so-called 'knowledge economy', which demands and depends on a specialised, highly trained and educated workforce (Christie et al. 2005). One effect of the 'knowledge economy' and concurrent narratives around lifelong learning and upskilling has been a growing state involvement and interest in the performance of the postgraduate sector, with universities under increasing pressure to make doctoral degrees more demonstrably valuable to the economy (Willmott 1995; Goluvshkina and Milligan 2012; Kallio et al. 2016). This has not only made doctorates more structured and regulated undertakings, but has, according to Hughes and Tight (2013: 771) repositioned PhD students in public discourse as "knowledge workers with obligations to the economy".

Whilst more is known about the postgraduate sector than before due to its expanding student body and its growing importance to political and economic agendas, the transitions and experiences of postgraduate students into and within this greatly changed academic community remain relatively poorly understood (McPherson et al. 2017). This paper seeks to address this gap by reviewing some key literature on postgraduate transitions and is specifically focused on the experiences of doctoral students. It draws from qualitative focus group data from a small-scale research project conducted with doctoral students and supervisors within one faculty at a Scottish university, and reflects on the challenges encountered by these students – both academic and emotional – at the beginning of their PGR studies.

Background

The dominance of the 'transition' metaphor in discussions of youth and education is well-documented (Shanahan 2000; Bynner 2005; Thomson 2008), and has traditionally focused on linear transitions between school, HE and the workplace (Christie 2009; Hamilton and Adamson 2013; Mortimer 2014). However, recent debates have increasingly challenged the reliance of the literature's dependence on such a traditional model of the life course, pointing to the rising trends of delayed and/or declining marriage, parenthood, residential independence and entry to the labour market that have resulted from rising unemployment, higher and longer participation in education and broader societal change (Walther 2006; Roksa and Velez 2012; Berrington and Stone 2014).

Expansive literatures exist around the educational transitions to and between primary, secondary and tertiary education (see, for example, Sirsch 2003; Aunola et al. 2006; Abbott-Chapman 2006), with a particularly large body of research dedicated to understanding the shift from school/college to undergraduate study (Haggis and Pouget 2002; Macaro and Wingate 2004; O'Donnell and Tobbell 2007; McMillan 2014). By contrast, transitions to and experiences of postgraduate education have been significantly overlooked in the literature. A number of authors have argued that the lack of attention in this area is attributable to the conventional, powerful construction of postgraduate students, and particularly doctoral students, as HE 'experts', for whom educational transitions are presumed to be 'natural' (O'Donnell et al. 2009; Tobbell et al. 2008, 2010; McPherson et al. 2017).

A growing number of studies are challenging this presumption, however, not least because it generalises the highly heterogeneous postgraduate student population, but because postgraduate and undergraduate education are significantly different undertakings. Wisker et al. (2003: 93) suggest that moving from undergraduate to postgraduate study necessitates a "leap of learning behaviours as great at least as that from pre-university to university study", alongside taking on a considerably more substantial and intellectually challenging workload and with less structure and support from academic staff (Sastry 2004; Artess et al. 2008). Indeed, it is this demand for more independent scholarship and lone-working that most clearly differentiates postgraduate from the very structured nature of undergraduate education (Phillips and Pugh 1994).

As noted, there has been a persistent assumption within HE that transitioning to more independent study and critical thinking represents a 'natural', manageable progression for highly intelligent students who, because of their previous academic achievements, will likely thrive in a more challenging context (O'Donnell et al. 2009). However, research carried out by Cluett and Skene (2006) stated that 80% of postgraduate respondents experienced the first year of their programme as 'overwhelming', whilst a

survey conducted by West (2012) indicated that 64% of postgraduate students found the transition from undergraduate to postgraduate to be 'difficult'. Mounting a further challenge to the construction of doctoral students as 'experts' are results from the HEA/NUS (2013) survey, where significant proportions of postgraduates reported feeling they were inaccurately and unfairly expected to automatically know how to work and succeed at postgraduate level due to their previous educational successes. The same survey revealed that the growing demand for more independent study was identified by postgraduates as the most worrying and difficult transitional issue. Furthermore, compared with undergraduate and further education students, postgraduate students were the most likely to report feeling 'underprepared' for their studies (HEA/NUS 2013). These findings suggest that, contrary to conventional wisdom, many bright, highly capable students do not inevitably come 'equipped' for postgraduate study (O'Donnell et al. 2009; Heussi 2012).

A number of commentators have also pointed, in various ways, to HE itself as the source of many of the difficulties faced by new postgraduate students (Tobbell et al. 2008; O'Donnell et al. 2009). Some have suggested that just as there has been an identified misalignment between the curricula, priorities and structure of secondary school and university, with consequences for the performance of many first-year undergraduates (Chemers et al. 2001), the highly choreographed and supported nature of undergraduate study does not encourage students to be sufficiently creative, independent or critical in their work, as is expected at postgraduate level. It also does not expose them, as students or practitioners, to enough research; the veritable bread-and-butter of postgraduate education and professional academia (RP Group 2010; Van der Meer et al. 2010; Cheng et al. 2015). There has been a lack of focus on the impact of other HE practices on the transitions and ongoing progress of doctoral students, however, including the effects of the major changes wrought in academic departments by growing state involvement and interest in the postgraduate sector with regards to the knowledge economy.

This paper seeks to address these gaps in the literature – the lack of focus on the difficult transitions undertaken by doctoral students and the impact of wider changes to HE on these transitions – by reviewing some key literature and drawing on data from a small-scale qualitative research project conducted in the social sciences faculty of a university in Scotland. Funded by the Stirling Enhancement of Learning Fund (SELF), the research project explored the transitions of all postgraduate students – including Masters and international students – but this paper draws specifically on focus group data with PGR students and academic supervisors. In total, this paper considers the reflections of 8 doctoral students and 15 supervisors.

From dependence to independence

Transitioning to postgraduate study is a complex, often bewildering process, that requires the abandonment and reconsideration of many of the educational doctrines instilled and accepted at

undergraduate level (Phillips and Pugh 1994; Wakeling and Kyriacou 2010). Whilst the challenging nature of the transitions undertaken by all new postgraduates needs to be better acknowledged in research, it is arguably most important to recognise and explore the particularly significant leap made by doctoral students, who exit 'taught' education entirely as they enter their almost exclusively self-directed doctoral studies (Geiger 1997; Austin 2002; Dedrick and Watson 2002). Indeed, whilst the transition to PGT study is undoubtedly complex and challenging (see McPherson et al. 2017), Masters degrees typically contain remnants of the undergraduate formula, whilst the doctorate bears very little, if any, resemblance to prior higher educational experience (see Table 1).

Table 1: Differences between PGR and previous learning experiences at undergraduate and PGT level.

Theme	Detail
Level of knowledge	Significantly deeper; a contributory role to knowledge expected rather than just recipient of it; expected to master and become expert of field.
Duration of study	Three years (full-time); six years (part-time).
Academic focus	Much more specific/refined than the more general overview of undergraduate; more detail and scope than at Masters level.
Teaching environment	Traditionally no taught element (professional doctorates include taught modules).
Learning style	Immersive, independent study.
Nature and quantity of staff contact	Much flatter hierarchy between staff and student; less instruction; increasingly collegial.
Assessment style	Unlike at undergraduate and PGT level, not assessed via set module essays/exams. Assessed entirely on substantial thesis and production of original contributions to knowledge.

The strangeness of this new environment, and its irreconcilability with past educational experience, can disorientate many first-year doctoral students who, with a relatively undefined time horizon, and a task of overwhelming and uncertain proportions, often do not know how or where to begin (Hockey 1991; Delamont et al. 2004). These feelings were shared by the doctoral students in the Scottish study, many of

whom described being daunted about both the long journey ahead and the onus on them as independent scholars:

> The task of planning and completing a PhD on my own terms is pretty terrifying. Going from zero words to 80,000 in just three years is a daunting prospect and on top of that trying to have what I write be worthwhile and make a useful contribution rather than just waffle. (Louise, doctoral student)

> A PhD leaves you to find your own way through the academic jungle, desperately hoping you are on the correct path. The PhD requires so much more emotional intelligence and maturity than previous academic work. (Anthony, doctoral student)

Having spent years being guided, supported and assessed in much more heavily structured educational contexts, the self-directed nature of PGR degrees, combined with expectations around the size, calibre and value of the work to be produced, caused many of the participants to feel disorientated:

> I do feel at this point that I could bin a month and nobody would notice. And it should be a good feeling, like yeah, I could milk it for all it's worth, but at the same time you need that level of structure. (Lisa, doctoral student)

> Now I am working completely under my own steam and have periods where I feel as though I'm wading through paper after paper with no real direction as yet… I'm not used to this kind of freedom. In many ways it's liberating and empowering but at the same time I end up going through phases where I'm expecting someone to walk through the door, tell me that there's been a horrible mistake and that in fact I wasn't supposed to be selected for the studentship. (Sean, doctoral student)

These concerns were also acknowledged by supervisors in the study, who highlighted the shift to significantly more independent study as a challenging transitional barrier for many new doctoral students:

> I think that some students can find the organising of their own deadlines and schedules challenging. It can take some students a while to work out who is responsible for which aspects of the work. (Kim, supervisor)

> The anxiety of self-directed work is probably quite a key experience/issue. (Bradley, supervisor)

As noted, it is often assumed that the transition to more independent working simply represents a natural, manageable step-up for highly intelligent, capable postgraduate students (O'Donnell et al. 2009). These testimonies from both students and staff not only challenge these assumptions, but also point to how students' anxieties around self-directed study can engender feelings of 'imposter syndrome', a common and often very debilitating experience for many doctoral students who are typically unused to feeling unsettled and insecure in academic contexts.

Imposters

Due to their prior successes, students typically navigate the pathway to doctoral study with a strong sense of themselves as successful, intelligent holders of well- and hard-earned qualifications (Phillips and Pugh 1994). However, it is not long before this initial confidence, self-belief and enthusiasm can deteriorate and they begin to question themselves and their capabilities, particularly as their contact with academic staff, more experienced students and the wider professional academic discourse increases and changes over time (Phillips and Pugh 1994; Coryell et al. 2013). This often manifests in 'imposter syndrome', a state of anxiety and self-doubt in which doctoral students feel undeserving and incapable of their new educational status, and await being 'found out' by their funders, supervisors or postgraduate colleagues (Cope-Watson and Betts 2010; Deconinck 2015). This state of anxiety and self-doubt is typically temporary, but potentially enduring, for many students. It can be clearly linked to how the doctorate, and doctoral holder, have been positioned in academic and public discourse as the epitome of intellectual success and ability.

Hayton (2015) rejects and subverts this typical construction of the doctorate, and argues that PhDs should be understood as the bottom layer of professional academia, rather than the top layer of educational attainment. Hayton's (2015) position helps to demystify and ground the PGR degree as an 'apprenticeship' (Lee and Green 2009) to academia rather than the pinnacle of academic attainment. The latter construction can be inhibiting for many students, who struggle to self-identify as 'brilliant', and who are intimidated by the weight of the doctorate's prestige as well as the complexity of its task. These feelings of 'imposter syndrome' were prevalent amongst the Scottish study's participants, many of whom were struggling with self-doubt and anxieties about their deservingness of a place in doctoral level education:

> There has been a lot of talk about imposter syndrome recently and this has resonated with me. Pretty much the whole time I feel like I'm not sure I should be here and that everyone else's topic sounds better and they all sound like they might be more prepared and cleverer than me. (Louise, doctoral student)

The prevalence of these feelings amongst the participants suggest that there are deep-seated, intense anxieties amongst doctoral students about their capabilities, mounting a challenge to conventional assumptions about the 'expert' status of doctoral researchers and the naturally 'smooth' transitions they are presumed to experience. As Delamont et al. (2004: 14) note, "it is hard to recognise how terrifying the new status of 'PhD student' can be… [and] many bright, clever undergraduates are paralysed by the almost invisible demands of graduate work".

The doctoral supervisors consulted in the Scottish study were well attuned to the wide range of new emotions that students were likely to face over the course of their doctorate:

> The PhD is done over the long haul so it can involve a wide range of emotions – lack of motivation, anxiety over progress, loss of focus, exhaustion. So, I think this sets the PhD apart as being a qualitatively different experience from other academic forms/projects. (Bradley, supervisor)

This gamut of emotions can be particularly debilitating for doctoral students not only because of their interference with productivity and progress, but because they are likely to be new experiences for students who have typically proceeded through education relatively straightforwardly and very successfully. In navigating their transitions to PGR education, the high-achieving old hands of undergraduate and PGT study are suddenly the new-starts, often in a campus where they have studied and/or lived for years, in a status reversal that may not only further disorientate already dazed new doctoral students, but may also build a personal sense of inadequacy and self-doubt (Sambrook et al. 2008; Wisker 2012).

Changes to HE and their impact on doctoral transitions and experiences

Posing further challenges, but also opportunities, to doctoral students is the number of changes made to the delivery, structure and assessment of PGR education in recent years. As recognition about the numerous academic and emotional challenges encountered by doctoral students has grown to disrupt narratives of 'HE experts', and as the state has paid more attention to the performance of the postgraduate sector, a number of major changes have occurred in how the doctorate is assessed and supervised. This has included PGR degrees becoming progressively more regulated and structured undertakings, with compulsory training elements and milestones, and a strong emphasis on building an academic community of formal and informal support and mentorship with peers and staff (Petre and Rugg 2010).

There have been growing demands from the government for universities to more transparently and explicitly demonstrate the long-term benefits of doctoral education to society, which has resulted in pressures for higher and quicker completion rates. Wisker (2012) highlights the potential impact of the

rising tension between the growing emphasis on timely completion and students having the time, space and freedom to produce an original, creative and 'risky' piece of work. At a broader level, these shifting priorities and pressures have raised a number of questions around what constitutes a doctorate, and a debate has arisen concerning the tension between the 'traditional' knowledge-based doctorate, involving an original contribution to knowledge, and the more contemporary doctorate, which increasingly features large elements of formal research training, and where the emphasis is on the process rather than on the product (Young et al. 1987).

A number of commentators have criticised the introduction of formal research training within the doctoral programme as not only potentially undermining the whole definition and meaning of a doctorate, but as evidence of direct state policy to obtain greater control over the educational process (Hockey 1991; Hughes and Tight 2013). Critiques of the newly structured doctorate have also been tabled on the ground, with many of the students in the study complaining that they were now expected to commit to various tasks beyond reading, researching and writing for their actual thesis. They perceived that activities such as creating and promoting an online presence, producing research 'impact' and gaining experience in teaching occupied too much of their time. For some, this had seriously compromised the impression they initially had of the doctorate as an immersive, once in a lifetime opportunity to focus only on your research topic:

> Doesn't feel like I have the time to experience this 'greatest time, being able to spend three years focusing on one topic' that they all talk about. I feel that I am still rushing to read and then get things down on paper. (Rita, doctoral student)

> I just think that lots of other things are taking up my time at this stage and at the moment the image I had in my head of being immersed in my PhD topic is not happening. (Danielle, doctoral student)

Some of the staff shared these perspectives or observed these feelings in their doctoral students:

> I think that there is less scope to get a bit lost in the literature and to play around with ideas. It feels a bit more of a production line and... I think students are preoccupied with 'employability' from a very early stage of the PhD. (Kim, supervisor)

> I think it is working for some and not for others. Some feel it is not what they thought the PhD would be and are being marched through it with too much structure. (Samuel, supervisor)

Whilst many are against the increasingly structured, employability-focused new shape of the doctorate, others approve of these changes, citing the poor quality of undergraduate research training which can result in underprepared and detrimentally inexperienced students partaking in doctoral research, often translating into low completion and retention rates (Wilson 1987; Delamont and Atkinson 2001; Higher Education Commission 2012). Hockey (1991) has argued that these changes to the doctorate provide a much-needed structural transition between undergraduate or PGT study and doctoral education, as well as providing more opportunities for student-student and staff-student interaction, which were previously limited by the individualistic nature of the 'traditional' doctoral process. Indeed, whilst many of the changes to the doctorate have not necessarily been welcomed by many staff or students, there has been collective praise for the impact of efforts to instil a sense of supportive community in academic departments between doctoral students and staff. As Owler (2010: 291) notes, "one advantage of all the notice now paid to the doctoral degree is the number of initiatives that have been put in place to support students within many universities".

Peer support

A well-documented experience of many PGR students is isolation, which can become a significant barrier for transitional and educational progress because of its impact on self-esteem, confidence and mental wellbeing (Janta et al. 2014). The vital influence of social networks and friendships on individual educational outcomes has been well-established in the literature, including the important role it plays in providing a sense of relatability and emotional and instrumental support during particularly stressful periods (Brooks 2002; Christie et al. 2005; Brown 2009). Friends are especially beneficial for students who lack in confidence or experience, and who feel unable to seek institutional support, in that they provide an informal system of information, collective experience and reassurance (Harley et al. 2007; Menzies and Baron 2014).

Informal support networks have increasingly been embraced at an institutional level, with many universities introducing peer-mentoring schemes where more advanced students mentor new students. Peer-mentoring schemes are increasingly being provided for postgraduate students, as recognition of their needs has begun to grow, and have been widely reported to be the most effective and beneficial support initiative for addressing both the academic and emotional transitional needs of students, who can find it difficult to seek formal support (Darwin and Palmer 2009; Huang 2012; Chester et al. 2013). Beyond these schemes, many other peer-oriented initiatives have been implemented by universities in efforts to improve not only the confidence, skills and research output of their doctoral students, but to provide a better a sense of belonging and support (Wisker et al. 2009; Owler 2010). The majority of UK universities have instilled and encourage peer-led academic communities, for example, where postgraduate students can informally exchange ideas and opinions on works-in-progress and lend support to one another in particularly difficult periods (Mullen 2012; Wisker 2012).

These initiatives have been found to not only significantly reduce stress and isolation amongst doctoral students, but also to instil a sense of sociality and friendship into academic departments, the busyness of which can often inhibit the development of social networks. One of the ways in which this is achieved amongst the PGR student body is via the 9-5 approach taken by many doctoral students to their studies, meaning that they are in the department on a Monday-Friday working week basis, providing ample opportunities for friendships and support networks to emerge. This benefited many of the students in the Scottish study, who drew a lot of energy and support from their shared routines and experiences with their peers:

> I am enjoying the friendships with my fellow PhD students and our interesting (or silly) conversations over lunch/coffee, which I think is important to break up the day. (Daniella, doctoral student)

> Having an office and using it is definitely a good thing. We are lucky to have a good group who are in most of the time and to be able to share issues and problems. (Gemma, doctoral student)

> I think that having peers going through the same thing as me is going to be hugely helpful because when things get frustrating, we can talk them through and we can relate to one another. (Yvonne, doctoral student)

The importance of peers as a source of support was also identified as key by staff in the focus groups, with one supervisor remarking that "being part of a community of other postgraduate students is crucial" (Bradley, supervisor). However, a number of supervisors also highlighted some potential drawbacks of the intensive focus on peer support, with one noting the potential for students to over-rely on general advice from peers in place of guidance more specific to their own doctoral situation:

> Some students are making too much use of generic advice from fellow students or other staff which reflects treating the PhD as if it were a structured, generic programme, when more bespoke and conditional issues usually apply. (Darren, supervisor)

Some supervisors also noted that peer support can sometimes actually produce negative effects on students' self-esteem and progress by becoming competitive rather than purely supportive. It should also be noted that not all doctoral students are able, or inclined, to adopt a 9-5, Monday-Friday approach to their doctorates. Many have to work to fund their doctorates, are studying on a part-time basis, have children or other caring commitments, and/or live some distance from campus (Thomson et al. 2002; Taylor and Beasley 2005). For these students, developing and benefiting from a peer-oriented supportive academic community is much more difficult. This is an important and considerable issue because, unlike

undergraduates, whose social and academic lives often converge, the older and more heterogeneous postgraduate population invariably have more complex and demanding 'home' lives, as well as a more challenging workload, and this can seriously complicate their transitions (Tobbell et al. 2008). The complexity of this 'multimembership' (Wenger 1998: 105) involves students in negotiating ways to enable the emergence of an academic identity and can impact on their ability to become socially integrated with, and thus supported by, peers or staff.

Staff support

Over the past 10-15 years, as the importance of generating skilled researchers has grown in public discourse, universities have invested considerable effort and resources into improving the doctoral research environment and enhancing student-staff relationships (Wisker 2012; Clarke and Lunt 2014). Primarily, there has been a significant emphasis on improving doctoral supervision, perceived as playing a crucial role in empowering students to become researchers (Adkins 2009; Wisker 2012). Historically, supervision has been guided by the assumption that doctoral students have the confidence and capabilities to cope with the demands of PGR study (Johnson et al. 2000; Taylor and Beasley 2005). However, given the transitional issues identified here, there is felt to be a growing need for supervisors to recognise that students, regardless of ability, often struggle at the start, and throughout, their doctorate, and can require more 'hands on' support (Gurr 2001; Taylor and Beasley 2005).

Moreover, the diversification of the postgraduate population, including the doctoral student body, brings with it a multitude of motivations and aspirations behind students' participation in postgraduate study (Tobbell et al. 2008, 2010; Tobbell and O'Donnell 2013). As a result of this, and of the noted rising pressure on universities to increase completion and retention rates as well as the production of skilled researchers of value to the economy, supervision has changed from a typically 'hidden', two-way relationship between student and supervisor to a highly structured and managed supervisory team, who must be sensitive and responsive to education and employment trends (Gurr 2001; Petre and Rugg 2010; Wisker 2012). Supervisors are also increasingly expected to attend to the pastoral as well as purely academic needs of their students (Easterby-Smith et al. 2002; Sambrook et al. 2008).

Whilst supervisors are expected to *do* and *be* more for their students, much is also expected of doctoral students, who are increasingly encouraged to set the agenda of supervision meetings and to gradually become more expert than their supervisors on their topic. The paradigmatic shift entailed in this from the typical staff-student hierarchy these students have been accustomed to, to varying degrees, since primary school is considerable and can be both empowering and intimidating. This was the case in the Scottish study, where a mixture of emotions around supervision was reported:

> Doing well and having my supervisors believe in me has really helped my confidence. (Danielle, doctoral student)

> The supervisory relationship is very new and very different to Masters where they have more power. Whereas now they are saying you need to have ideas, you need to be the expert, you should be setting the agenda. And I find that incredibly difficult because these people are experts and I am no different from when I finished the Masters to starting the PhD... I can't change overnight. (Sandra, doctoral student)

Supervisors clearly play a vital role not only in helping new doctoral students develop their research skills and knowledge, but also in the ontology of students *becoming* and *feeling like* researchers and valued participants in academic communities. However, as these testimonies show, the flatter hierarchy between staff and students, and the near role reversal eventually expected, can be intimidating and concerning for students new to PGR study. A number of authors have highlighted the importance (and difficulty) of striking the right balance between supporting students on the pathway to independence without encouraging continued dependence. Gurr (2001) recommends a trajectory of supervision which begins 'hands on' and becomes progressively 'hands off' in response to student need and their (hopefully) growing confidence in both their work and their capabilities (Delamont et al. 2004; Lee 2012; Wisker 2012).

Differences in how students interact with staff at PGR level are not limited to their dealings with supervisors, however. Whilst contact time with staff significantly decreases in teaching/learning scenarios at doctoral level, it is also increased in another sense, with doctoral students often working alongside staff within the same departments during the working week; sharing the same communal spaces, including kitchens, eating areas, corridors and photocopiers; working on projects and papers with them outside of their own studies/supervision team; and tutoring on their modules for extra income and experience. Universities have been keen to maximise the occurrence and benefits of this contact, and a strong literature exists describing the positive effects of regular and meaningful contact time with staff on doctoral students' sense of confidence, motivation and institutional belonging (see, for example, Ryan and Viete 2009; Griffin and Novotny 2012).

Staff are often actively encouraged to spend time getting to know doctoral students within their departments, in efforts to collapse student-staff barriers, circulate useful and supportive information and to help newcomers settle in. Whilst this worked well in terms of peer support for many of the participants in the Scottish study, most reported feeling little sense of community with staff and with their supervisory team:

> Peer relationships are great, but I don't feel that staff are all that interested. (Rita, doctoral student)

> I don't think that many staff have asked me about my research. I think there is a definite lack of community spirit within the department. (Max, doctoral student)

These testimonies suggest there is still some work to do to better mix doctoral students with academic staff, and also hints at how important staff involvement is – even at an informal level – in creating, or disrupting, a sense of community amongst new and nervous doctoral students. The study revealed a real appetite for more everyday contact with staff, and not necessarily on a formal basis but rather in a similar way to how the students interacted with and supported one another, with a focus on hearing about each other's work and how the other is getting on:

> Staff having informal chats in the common room with students over lunch etc. would be useful. It would let people know who is researching what but on an informal basis. (Sandra, doctoral student)

However, just as changes to the economy and labour market and thus to HE has significantly altered the structure, process and experience of the doctorate, these shifts have also placed significant pressures on academics. Like doctoral students, their focus and priorities are now expected to be multiple rather than unilateral, and a number of commentators have drawn attention to growing pressures on busy staff to produce impactful research alongside heaped teaching schedules, and the impact this can have on their ability to interact meaningfully and supportively with doctoral students (Gewirtz 2008; Yarwood-Ross and Haigh 2014; Li 2015). This was reflected in the focus group data from staff in the study, with some explaining that they often simply do not have enough time to have coffee and catch up with doctoral students:

> Sometimes you are hard pushed for time and it can put you under pressure for the rest of the day if you sit down [with a PhD student in the common room]. (Samuel, supervisor)

Other staff members cited the growing number of doctoral students in the department as making it very difficult, if not impossible, to get to know all of them, with one supervisor actually describing feeling too intimidated by the number of doctoral students in a communal eating area to go in. Another noted that staff often make an effort with doctoral students but it is not always reciprocated:

> Sometimes I can put a lot of effort into organising things and then no one takes it up, so I feel disappointed at the level of effort not being taken up. (Samuel, supervisor)

What all of these staff and student testimonies suggest is that while significant progress has been made in shifting away from the traditionally very individualistic nature of the doctorate towards more of a community atmosphere/experience, new and considerable pressures on both staff and doctoral students can limit opportunities to meet and mix with one another. It can also impact on how support is construed, with the rising number of doctoral students and the shrinking number of academic job opportunities available sometimes creating a sense of negative competitiveness in some departments and scenarios that not only threatens efforts to build community spirit into faculties, but which has also produced negative narratives around the value and process of PGR education itself.

Light in the dark

As the literature and the data presented here demonstrates, undertaking a doctorate is a challenging, daunting process that is often understandably fraught with self-doubt, disillusion and disorientation, particularly at the beginning. However, a story far less told in recent research is how rewarding and exciting commencing and participating in PGR education can be for those involved in it. In the Scottish study, a mixture of emotions characterised the early months of the participants' doctorates, with the soaring highs of excitement and a sense of intense privilege occurring alongside, and often dwarfing, deep personal doubts and anxieties:

> I think that it is difficult not to doubt yourself and I had worries about not being clever or intelligent enough. However, I was excited and thrilled at the prospect of starting my doctorate and I was confident that I did have the determination to do it so there was a mixture of emotions. (Yvonne, doctoral student)

> [I feel] fear because I no longer have someone to structure my learning and development for me. But having said that I'm also so excited about the next three years and when I try to think of my PhD completion as a job rather than as being a student I realise it's pretty much the best job in the world as far as I'm concerned. (Louise, doctoral student)

> I'm so excited that I'm working on a project that has the potential to make a real difference in so many spheres of work and every now and then I get these euphoric feelings when I remember this. (Sean, doctoral student)

Unsurprisingly, despite their nerves, at the outset of their PGR degrees, these doctoral students were ultimately mobilised by the passion they felt for their projects and the prospect of getting to focus on developing these interests, and themselves, in the coming few years. The motivation, industry, confidence and enjoyment of academic tasks and life that had served them so well throughout their past educational

experiences combined to create real excitement about the doctoral journey ahead; an immersive, challenging and highly respected and rewarded academic process. It seems important that in our efforts to explore and expose the academic and emotional challenges inherent in PGR education that we do not forget to acknowledge the genuine excitement, commitment and confidence of doctoral students in the process.

It is also important to guard against submitting to negativity around the worthwhileness of participating in PGR education in general. Negativity around the doctoral experience has been largely mobilised by concerns at both a state and student level about the long-term value and benefits of undertaking postgraduate, and particularly doctoral, study. Whilst it is undeniable that changes to the labour market and in the economy has produced a surplus of doctoral candidates and holders relative to academic vacancies, a research report by the Careers Research and Advisory Centre (CRAC) (2013) shows that whilst PGT and undergraduate students' employability has been negatively impacted by economic downturn, over 90% of doctoral graduate respondents were in employment, signalling that doctoral holders appear relatively 'recession-proof'. There is thus cause for optimism for transitioning out of postgraduate education into work despite the insecurities of the UK labour market, and it is worth confronting and striving to overcome the postgraduate transitional struggles that have been identified in this paper so that more students and, inherently, wider society, can ultimately benefit from their education and expertise.

Conclusion

The relative omission of the transition to doctoral level study from the educational literature has largely stemmed from the social construction of doctoral students as 'experts' of HE, and the concomitant implication that their postgraduate transitions will thus be natural, straightforward and unproblematic. Rather, the literature and data presented here demonstrate that the transition to PGR education is a complex, difficult and emotional experience for most students, regardless of their intellectual capabilities. It is a transition that can be fraught with self-doubt, anxiety and bewilderment, as the doctorate entails not only a huge amount of work, but a seismic change in learning style, environment and levels of support.

The focus group data described in this paper presents a small cohort of new doctoral students who, whilst highly bright and capable, had all felt daunted, disorientated and/or insecure at some point in the early weeks and months of their doctorate. Many were particularly concerned about the onus on independent scholarship involved in the doctorate, and this significant departure from past educational experience seriously, if temporarily, displaced and confused many of the participants who felt like novices after years of mastering the more structured and familiar undergraduate and PGT formulae. As the

literature suggests, 'imposter syndrome' was prevalent amongst the students, with many questioning their academic capabilities for the first time in their educational careers.

This paper also highlights the importance of both peer and staff support and involvement for settling new doctoral students. Most of the participants enjoyed positive, supportive relationships with fellow doctoral colleagues thanks to both institutional efforts to foster a sense of academic community within departments – through peer-mentoring, office-sharing and informal information and feedback exchange networks – and through students adopting a Monday-Friday, 9-5 approach to their studies. However, it is important to remember that this pattern of working does not capture everyone's doctoral experience, and students outside of this schedule can struggle to benefit from and participate in departmental communities of peers and staff. The data also reveals some continuing issues with the perception of barriers between staff and students.

Most significantly, this paper identified two key changes occurring in the postgraduate sector and environment: the aforementioned effort to build a sense of community into busy academic departments; and pressures for those students and staff working in academia to *do* and *be* more than their remit had perhaps originally implied. For staff, this includes the 'publish or perish' agenda and for doctoral students the mounting pressure to gain a wide range of employability skills on top of their thesis. All of these changes have emanated from growing state interest and involvement in the postgraduate sector, with universities under increasing pressure to improve the doctoral research environment (by building in more training, supervisory support and a sense of community) and to produce skilled knowledge workers of benefit to the economy in a timely fashion (by increasing the regulation of the doctorate and through more advanced skills training).

However, the data suggests that these two major changes have not always neatly dovetailed with one another, despite coming from the shared aim of improving the experience of doctorates in order to improve retention and completion rates. The ability for a sense of community to develop within the contemporary academic context was complicated in a number of ways for the participants, for example. First, both staff and students increasingly have less time to interact with another due to busier schedules and time pressures. Second, the rising number of doctoral students in departments can make it difficult to establish familiarity and community, particularly between doctoral students and staff, who can feel outnumbered. Lastly, negativity around the career prospects of doctoral students, and the long-term job security of academic staff, can breed negative competitiveness in small, busy and increasingly packed out departments. Much more research attention is required to explore the effects of these changes – which look set to intensify - on both staff and doctoral students.

However, amidst the nervousness and heaped schedules, this research also revealed a powerful sense of excitement, privilege and positivity amongst doctoral students at the beginning of their doctorates. The participants were thrilled at the prospect of immersing themselves in their topics and embedding themselves in like-minded, inspirational and informative professional and social networks in the coming years. It is important that this story – of optimism, enthusiasm and good fortune – is told in research on postgraduate transitions too, and that what gets doctoral students into PGR education – their intellect, thirst for knowledge and change, hard work and enjoyment and skilful mastering of academic tasks and life – is not overlooked. The doctoral students in this study may have been daunted and anxious about their doctorates, and they may come to learn that the doctorate is not perhaps what it was, but they were also hugely excited, and felt extremely lucky, to get started. Their excitement is a useful, needed reminder that we must be careful not to just submit to narratives of negativity around doctoral students and the doctorate itself, which, whilst certainly a different shape today, remains the ultimate educational goal for many bright, hopeful and hardworking undergraduate and PGT students that it has been for centuries.

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