

## Non-supervisory support for doctoral students in business and management: a critical friend

Dr S L Greener

[S.L.Greener@brighton.ac.uk](mailto:S.L.Greener@brighton.ac.uk)

Brighton Business School  
University of Brighton  
Mithras House  
Lewes Road  
Moulsecoomb  
Brighton  
BN2 4AT

### Abstract

Today's doctoral students will have a major role in educating tomorrow's students, so how do we want to shape their doctoral experience? Should this be a lone, unsupported journey as they try to find their way among institutional regulations, periodic supervisory inputs and milestones, or should Business Schools look for some way to integrate and support their doctoral students as is often done in science and technology Schools? This paper reviews available academic literature on doctoral completion, the impact of social isolation and the relevance of online and offline support communities on that completion. Business researchers are particularly diverse compared with other doctoral groups, employing a variety of soft and hard disciplines and methodologies and this makes it more difficult to connect meaningfully with their peers. International students may be particularly vulnerable. The research questions driving this study are: what kind of support needs arise at different stages of the doctoral journey for these students and what opportunities derive from facilitated or peer-led support communities to offer that support? A phased model is proposed to guide policy and initiatives in this area.

### Keywords

Non-supervisory support; peer support; doctoral journey; social isolation

### Introduction

Much current academic discussion of doctoral research in terms of its process and procedures relates to completion times, doctoral attrition and how best to supervise these students (for example see: Carter, Blumenstein & Cook 2013, Castelló, M., Pardo, M., Sala-Bubaré, A., & Suñe-Soler, N. 2017, Gardner 2009, McAlpine, L. & McKinnon, M. 2013. Pyhältö, K., Vekkaila, J., & Keskinen, J. 2012). This is in the interest of every Higher Education institution which offers doctoral study in order to expand research knowledge, to train academic researchers and to build research reputations in time and cost-efficient ways; and in the twenty-first century highly qualified researchers are increasingly demanded by national governments and international foundations to further not just scientific but economic and social research (Nerad 2014). This paper takes a look at the ways in which doctoral students are supported through the process, not at the well-documented academic supervision process, but how these individuals might need other kinds of support and what institutions are doing to put this in place. A key theme will be the way such support needs may vary through the process of doctoral study. The research questions driving this study explore the needs of doctoral students at different stages of their registration and ask what opportunities may derive from facilitated or peer-led support communities to offer that support.

When a student completes a business doctorate, whether Doctor of Philosophy (PhD) or Doctor of Business Administration (DBA), this is a great occasion for celebration and joy, spirits are high as the examiners congratulate the newly qualified Doctor and with good reason. The candidate will have experienced a long journey both in terms of time spent and in terms of personal interrogation, times of doubt and inadequacy and times of breakthrough but most of all hard effort getting the thesis done and defending it at examination. The qualification is likely to be an entry pass into either an academic career or significant professional development. A business doctorate, unlike some in other fields, is likely to have been undertaken for some direct personal purpose, so award becomes a key milestone in the candidate's life.

Given that so many (according to OECD data in 2017 40%) of UK doctorate holders will go on to work in education, the majority in Higher Education, today's doctoral students will have a major role in educating tomorrow's students. This varies greatly across countries, for example 75% of doctoral students in Brazil work in education, but the proportion will depend on the challenges, tradition and status of the varying education systems and economies. A recent survey by Nature (Woolston 2019 406) of more than 6000 doctoral students around the globe found that 56% overall aspired to continue to work post-doc in academia. While we would hope these graduates remain open to learning after award, a considerable chunk of their personal doctoral journey will be the benchmark or guide for their treatment of others on the same path (Anderson & Gold 2019 17). This raises the question of how that journey felt to them, how the highs and lows balanced, what they ended their doctoral journey saying they would never do again, and what they began to realise were their greatest sources of support. If this was a particularly extreme experience, for example a submission of thesis without the agreement of the supervision team due to disagreements, or one in which a regular detailed criticism of text without positive encouragement characterised every partial submission, or even one of solitary work and poor mental health due to lack of support, then this may have repercussions in future educational cohorts taught by these students.

In this doctoral process, students will have had relationships with a range of authorities and people: at minimum this will be their supervisory team or committee and their University, Graduate or Doctoral College. These two will provide authority, guidance and clarity about regulations. Supervisors will have made significant contributions to their students' achievements, not always enjoyable contributions but triggers to effort and informed guidance. For some there will also be vital non-supervisory support from close family, for whom the study period of several years may have been a period of sacrifice of time and money and emotional energy. Yet doctoral students often feel alone and unsupported. For example the Nature survey (Lauchlan 2019) identifies 36% of student respondents (n=6320) seeking help for anxiety or depression and although the survey did not specifically explore loneliness, just a third of respondents said their university supported good work-life balance (pp17-19). This is not just due to a good or bad relationship with supervisors and authorities, it is also due to the depth of enquiry and extent of vulnerability which can be experienced by such a student. The literature on the solitary nature of doctorate study is considerable, as will be discussed, and the result is far too often withdrawal or non-completion.

Looking wider across disciplines we can observe those doctoral students who experience a solitary unsupported journey to PhD, punctuated by supervisor meetings and review milestones, and at the other extreme full integration into their academic communities. For part-timers in the business discipline, mostly though not all registered for DBA, there will also be unplanned work pressures and changes which steal time away from precious research activity. Most doctoral students will be somewhere between the extremes of solitariness and integration, given the chance of choosing to balance their personal, work and academic lives. The author's

background was study of a professional doctorate, including the now common mix of taught elements and prior assessments before launch into the heady climate of thesis research and preparation. In this doctoral study there was a clear third party in my doctoral life: a peer support group which provided nudges and shoves in the right direction, some gentle competition and always a rekindling of intense attention and interest in my progress. The literature suggests that isolation can potentially be mitigated by wider institutional support and by scholarly communities for peer support (Lahenius 2012). It is this notion of peer and non-supervisory support which is the purpose of this paper. This study first sets the scene by reviewing available academic literature on doctoral submission and completion, factors inhibiting that completion and, in particular, the relevance of online and offline support communities to the individual student's wellbeing. The impact of social media on the non-academic or pastoral and practical support needs of doctoral students is discussed, and a specific project to support students at a UK university through a blended (campus-based and LinkedIn) support community is offered as an example from which HEIs may learn. The paper does not discuss supervisory practice, but looks outside this relationship to the broader needs of the doctoral student and their relationships with peers.

### Theoretical background to the study

This study is influenced by notions of Social Exchange Theory (SET) and subsequent discussions of this theory in relation to reciprocal behaviour and expectations in relationships. The framework of SET relates to actions which are interdependent and which are expecting reward actions from others (Blau 1964). This theoretical framework, which continues to be debated, has developed within the Organisational Behaviour domain, but offers ideas of particular relevance to the nature of the exchanges and relationships between doctoral students and their peers, their supervisors and their institutions, particularly when discussing the nature of perceived organisational support (Cropanzano & Mitchell 2005). While simple assumptions of rationality in micro or macro perspectives of SET may offer little of direct relevance to this study, the framework gives us a way of considering how students can reach out when isolated, and the orientations of their position, notably the extent to which they are transactional and formal in what they need, denoting greater independence, and the extent to which they may be communal in their relationships. This point will be discussed further as we consider the development of social networks.

### Doctoral completion and dropout

An annual survey of postgraduate research (PGR) students in the UK offers a worrying statistic. In 2019, in a survey of 50,600 PGR students, more than a quarter said they had considered leaving their course (Williams 2019). The Higher Education (HE) climate and particularly the HE research climate in the UK and in many other research focussed countries is keener than ever to measure the outcomes of research funding. Learning analytics are becoming increasingly important measures in undergraduate and postgraduate taught courses, driven by increasing student fees and loans, and growing awareness of the importance of data on student satisfaction and wellbeing as well as achievement outcomes. In doctoral research, these data on satisfaction and wellbeing are a relatively new concern for many universities. Traditional approaches, particularly in the UK and Western Europe, have focussed on the recruitment of doctoral candidates and the allocation of suitable supervision to develop their research pipeline and to satisfy demand for academic staff. Time to completion and satisfaction of doctoral students during the process were of secondary importance until the 1980s (Bourke, Holbrook, Lovat & Farley 2004). This has changed. Academic staff recruitment at all, not just research-intensive, universities is setting PhD as an essential criterion for entry, at the same time often reducing resource which previously encouraged staff to develop their doctoral studies in post. The AdvanceHE UK PGR survey (Williams 2019) shows consistent levels of doctoral student satisfaction across disciplines, and those levels are high with an overall satisfaction rate of 81% in 2019, but completion rates are a different story.

So the demand for doctoral graduates is increasing, and the culture of measurement in order to demonstrate improvement in rankings is setting a spotlight on submission and completion rates for PhD and professional doctorates. Across the globe there is considerable variation, and this is partly accounted for by major variations in the doctoral programme models used. Ames, Berman and Casteel (2018 82-83) discuss the considerable differences in the organisation and phasing of doctoral programmes across the world. In the US the norm is to offer a taught first stage with coursework before success in examination can lead to the appointment of a supervisory team or committee for the final dissertation stage. This model is often applied in other countries to professional doctorates, where there is an assessed taught stage focussed on research skills prior to the development of the initial research proposal. Differences are also evident in the norms for paid employment of doctoral students and the frequency of part-time versus full-time students. South Africa for example commonly registers part-time students, while these are less and less common in the UK for PhD, though usual for DBA. In the US, students may be taken on as paid research assistants (Ames, Berman and Casteel 2018). The model in many countries outside the US, such as Europe and Australia, is to take students directly into the development of a research plan without prior coursework, often within 3-6 months of the start of doctoral registration. This may be based on Masters level coursework. There are evident pressures when students are treated as independent novice researchers right from the start of their doctoral programme. This will be a major change in work activity for many who have previously been given considerable support and guidance through a Masters programme.

Spronken-Smith, Cameron and Quigg (2018) in a recent study cite US completion rates, i.e. the proportion of registered candidates who submit and are awarded their doctoral degrees, of around 50%, while Canadian completion rates varied within a range of 40 and 83%, Australian rates between 62 and 72% and UK rates between 70 and 87%. Bekova (2019) mentions dropout or attrition rates of 87% in Russia in 2017 and a 36% completion rate in 2018, but care should be taken here as students may have achieved a Diploma award but subsequently not proceeded to a public defence of their thesis. I use these data to give a sense of the variation world-wide although the differences in doctoral model and large variations in completion periods for these data would make a nonsense of simple comparison. Another key factor in the assessment of these completion rates is subject discipline; sciences and health sciences tend to produce shorter completion times and higher completion rates than humanities and social sciences including business and management. This pattern seems fairly robust across different models and here there is a disciplinary difference where doctoral students in STEM faculties are often assimilated directly into strong research groups as useful contributors, where in other disciplines, including business and management, the strength and cohesion of the research group may be much less. As HE institutions and government funding agencies push to reduce completion times and reduce dropouts (Geven, Skopek & Triventi 2018), clarity about the factors influencing them is a priority.

### **Influencing factors on doctoral completion**

What then are the factors which affect submission and completion? The literature offers a range of ideas here. Personal circumstances including family and health will always change during a prolonged period of study and this can be a common reason for dropout or withdrawal (Spronken-Smith *et al* 2018, Waight and Giordano 2018, Williams 2019). Such circumstances are particularly challenging for doctoral students, all of whom are classified as mature students, and who often juggle study with childcare or elder care, work commitments, financial worries and other major life events.

Part-time registration while students follow employment seems to be a particular risk factor and has led to fewer part-time registrations being accepted, although many institutions would continue to allow full time registration to revert to part-time when, for example, funding ends or the student moves to the writing-up stage. In Russia, Bekova (2019) reports very low funding for doctoral study necessitating full time employment in many cases, and sees this as a driver for the high dropout rates. DBA and other professional doctorates at least offer the opportunity of early stage doctoral study being accredited, meaning that even if the thesis is not submitted, earlier assessments at doctoral level may offer a lower award such as Master of Research (MRes), a postgraduate degree at masters rather than doctoral level.

HESA data for 2018-19 suggests there were 3900 international (non-UK) students studying business and administration studies at PGR level in the UK (HESA website accessed Nov 2020). This compares with a total of 2910 UK PGR students. International students in business and management may see doctoral study abroad as a crucial investment in their future career, but then must deal with geo-cultural change and the details of relocation, language fluency and, crucially, separation from their family and friends, sometimes their partners and children. It

is no surprise that international students can see this study period as especially challenging; they may have few opportunities either to maintain contact with people of their own nationality or to build new links with others in the study environment. Furthermore, where international students are funded on scholarships, there are pressures to complete and these may act as stressors or drivers to achieve within a short time period (Waight and Giordano 2018, Cornwall *et al* 2019). Cultural norms may be experienced as hindering students with concerns about their own research progress who may find it difficult to approach their supervisors for help and prefer to maintain the appearance of doing well in front of academic colleagues. This is particularly relevant for those from high power-distance cultures such as Asia and the Middle East.

However the main focus in the literature on factors influencing doctoral completion versus dropout are laid down in the seminal articles by Ali and Kohun (2006, 2007) as they explore the impact of social isolation on doctoral students. Widely cited, these papers, which are rooted in the US doctoral model, establish social isolation as the main contributor to dropout of doctoral students. Social isolation is understood as a lack of meaningful relationships and is clearly illustrated in details from studies discussed by Professor Geoffrey Cantor (2019) in his paper *The Loneliness of the Long Distance (PhD) Researcher*. Social isolation is related to an increasing profile of mental health issues and poor wellbeing among doctoral students; for example both Levecque *et al* (2017) in a Belgian study and Barreira, Basilico & Bolotnyy (2018) in a study of US Economics students identified high risks of common psychiatric disorders, particularly depression, among doctoral students. In one sense this might be expected. There is a widespread perception that studying for a doctorate will be personally challenging and hard to see through to a successful conclusion. Levels of anxiety in the UK PGR survey (Williams 2019) were the area of greatest concern, with levels directly comparing unfavourably with both UK undergraduates and the population in general (p25). The specific concerns of the PhD student may be exacerbated by structural changes in society (for example: greater geographic mobility and separation and restructuring of families, increasing focus on individual rights, needs and entitlements) and technology (for example: instant global comparison with others, freedom to publish online, ubiquity and accessibility of information). All this is likely to increase the social isolation of the doctoral student in what may be termed 'normal' times, compared with the 2020-21 experience of global pandemic which has thrown further stressors and isolating factors into the mix. Some doctoral students have been required to return with little notice to their own countries, others staying in the country of study have had to remain absent as family members experience sickness and even death.

Such horrors of isolation will be mitigated by the personal characteristics of the student: their sense of self-efficacy as academic researchers, their personal determination to achieve the award, their mental health and personality, but also by the kinds of support they seek and find. Those who are able to build strong constructive relationships with supervisors and local research communities will be generally well supported, although even when these relationships and communities are available, individual students may still experience isolation and loneliness off campus (Cantor 2019). Even when caring and open offers of support are available from academic supervisors or colleagues, students may bring their own cultural perceptions and needs for approval which may not fit with what is on offer. For example, invitations to socialise outside working hours may involve alcohol which may be unacceptable for some students, just as encouragement to participate in sport may feel trivial to a student struggling to make academic progress and not inclined to take time off. In addition, those students who are studying fully online or at a distance from campus will have to build support networks of their own.

### **Online social networks for support**

Given the ubiquity of online networks, it could be suggested that these might take the strain for socially isolated students. Social media is described by Kapoor *et al* (2018) as a "tenacious social structure" p351, one which facilitates relationship building and is driven by users and their own content. For business purposes, social media networks provide immense marketing opportunities and potential for dialogue with customers or users, effectively providing what used to be available only to researchers in physical focus groups. Regardless of physical space, given a platform (often commercially provided but free at point of use) and access to wifi, people of diverse backgrounds can form congregations or loose groups around a common interest or purpose.

There are, of course, concomitant dangers: issues of privacy, commercial use of private data, unethical tracking of people without their knowledge or understanding and simple but potentially dangerous social media overload. The analogy of the combustion engine or even the electric car is thought-provoking: car ownership is widespread and available to most income groups with costs being relegated to the necessity list rather than the luxury list; the

use of cars brings immense benefits, collapsing geographic space in a small way, bringing people together for work, social and personal reasons but also capable of single solitary use, becoming personal living spaces littered with personal objects and memories, having an addictive quality in that being without a car when you are used to one can cause anxiety, and accident and mortality rates are significantly increased through their use. The value of this analogy is to see social media as a piece of technology which is much loved, widely used and requires caution in practice.

Kapoor *et al* (2018 536,549) discuss the uses of social media including that of pedagogy and healthcare practice and addressing emotional, social and health concerns and point out the development through social media of virtual knowledge networks and self-help networks. Matook, Cummings and Bala (2015) have a fascinating discussion of the nature of relationship building in online social networks broadly based on the nomothetic approach of Social Exchange Theory (SET), noting the impact of what they term either an exchange orientation or a communal orientation to social loneliness, mediated in turn by propensity to self-disclose and networking capability. In applying social media to the development of communities which might therefore support doctoral students, we might learn from the seminal work by Wenger on Communities of Practice (Wenger & Wenger 2015) in which they are defined thus:

“Communities of practice are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly.” (p1).

A shared domain of interest, relevance and priority, activities and discussion based on practice within the community and Matook *et al*'s “communal orientation” to help each other are requirements for a group to be termed a Community of Practice (CoP). CoPs can be face to face or online, large or small and there will be elements of informality and fluidity as “core” members who fully engage and understand the domain engage with “peripheral” members who learn through this engagement. Facilitation of a CoP can help, however, CoP members do not require status in order to engage or support others, peer support is common. Would this then be a source of non-supervisory support for doctoral students?

An Australian study by Kelly and Antonio (2016) explored the use of online social networks to provide various forms of support to school teachers. They also used Social Exchange Theory to investigate reciprocity within the social network under study and found this open group of practitioners readily offered facilitative “convenors of relations” posts asking questions online and received largely comments which offered pragmatic advice or information. The researchers here were looking for evidence of other kinds of community practice such as reflections on practice and constructive feedback but found little evidence of this, despite posts involving emotionally supportive comments along with the practical suggestions. We should note that this was a large, open Facebook group; the authors found a reluctance to ask (p147) in the group which may have related to perceived professional status in a public space.

Relating the use of social networked communities directly to doctoral students, Janta, Lugosi and Brown (2014) carried out a netnographic study which noted the importance of peer support, particularly the use of students more advanced in their doctoral studies as mentors to new starters. Their study was based on a public, globally available site online. They found that many lonely doctoral students try to get involved and active to deal with perceived isolation. They may join groups or do sport with other doctoral colleagues to build social connections, though some found it difficult to make these connections and others looked outside the doctoral network for such social activities. They also sought to build relationships for professional development (accumulating teaching experience, attending conferences and developing professional networks) which they perceived as contributing to academic careers. This study supported the notion that online social networks could mitigate against social isolation, but also recommended the development of knowledge and information networks and portals for doctoral students to HE institutions, designing work and social spaces for these students which offered both social connection for early stages of research and private spaces for writing up, and improved training for supervisors in this field. Ames, Berman and Casteel (2018) also acknowledged the value of online spaces private to students and their supervisors (dissertation committees) plus a wider online space where all doctoral students could congregate and share information and support, this latter offered directly by the local institution.

### **Towards a model of support needs and responses for doctoral students**

From the above literature studies there is a demonstrated need for attention to be given to non-supervisory support for doctoral students, whether this is provided through peers, institutions or others. Not all of the students

will need this, many will be self-reliant and, particularly where there is a strong research community in the local institution, they may quickly find their own way through legitimate peripheral participation into the communities of research practice in their own field. However, if we examine the different stages of the doctoral journey, there appears to be a need for support particularly prior to registration and during the first year of study, where the all-important research plan is developed (depending on the doctoral model) and as students find their feet in a culture of independent study which may greatly differ from previous educational experience. According to the UK PGR survey (Williams 2019) we may also highlight a need for particular support in the final stage of writing up prior to viva voce where anxiety increases and satisfaction with the doctoral programme is seen to dip until completion and award. Bringing my own doctoral supervision experience into play here, I would also argue for peer support specifically in the long intervening stretch, where it is easy to lose track of the original time plans and, unless supervision meetings are frequent or at least regular, there is every reason to lose motivation and procrastinate. The table (1) below sets out the suggested phases of doctoral study on the basis of the reviewed literature in the common UK/European/Australian model of doctoral programme mentioned above, it also plots associated activities common to each phase since a one-size-fits-all approach does not make sense in relation to the variations experienced in business focussed doctoral study.

Table 1 Proposed phased model of support needs during social sciences (including business and management) doctoral study based on the literature reviewed above.

Stage	Phase	Activities related to each phase
Stage 1	Application and enrolment	Information seeking, making contact with possible supervisors, institutional application process, interviews, possible relocation, funding access.
Stage 2	First year of doctoral study	Beginning in a new academic culture and often place, induction and socialisation, developing research identity, building relationships with supervisors, gaining clarity on doctoral regulations, building new social connections, producing research plan/proposal and receiving institutional feedback, gaining ethical approval.
Stage 3	Operationalising the study	Maintaining social connections and supervisory relationships, dealing with change (e.g. supervision change, regulations change, change in personal, health, financial circumstances), submitting for annual academic reviews, developing understanding of fieldwork, methodologies for data gathering and analysis, producing regular written work, conference attendance, article production, maintaining focus and motivation.
Stage 4	Writing up and preparing for submission and viva voce	Increasing written activity, maintaining motivation at often higher levels of output, losing social and family time, often finding literature which is close to proposed thesis and reframing structure and outcomes of thesis, conference attendance or article production, personal and health issues may intervene, institutional and financial deadlines cause increasing pressure.

These four stages relate broadly but are not directly comparable to the four stage framework of Ali and Kohun (2007). Their four stage framework was based directly on the US model and included 1. Preadmission to enrolment, 2. First year of doctoral programme (prior to dissertation). 3. Second year through to candidacy and 4. The dissertation stage. It is useful to consider what kinds of support should and could be available to students during each phase. Ali and Kohun also suggest that kinds of support vary according to stage and in the initial pre-registration stage encouraged visits and face to face meetings with faculty in the local research community, which is great but difficult for international candidates unless done online. The stages of the model above also draw on Susan Gardner's empirical work on socialisation through the phases of doctoral study (2007, 2008) which are also based on the US tradition.

In the above model this first phase of application and enrolment will vary according to Business School. A glance at a range of top Business School websites demonstrates different emphasis depending on the extent to which the Business School is based in a traditional research-intensive university or one which is better known for its impact and teaching reputation. Some aspiring doctoral candidates will be presented with international academic reputation metrics, a focus on excellence output, research labs and spaces for personal doctoral study. Other Business Schools with a teaching focus build their offer to prospective candidates on researcher development resources, advice and support for students from information services. Some websites go further and discuss PhD Business Societies and groups run either through their Student Union or directly by Doctoral students for their peers. Institutions vary in how easy or difficult it may be for a prospective doctoral student to track down relevant supervision for their proposed study, with many Schools offering a front end application which is generic. This gives little guidance, given the diversity of discipline and methodology within Business Schools, on how to build a research proposal which can attract attention and gain interview. Students may put many hours of detailed research into building a proposal, only to find there are no suitable supervision opportunities in that School. Some Schools do offer advice on scholarships and funding opportunities but this is not the norm; there is perhaps an assumption that prospective PhD students will already know enough about research funding and the particular School's culture to find their way through the maze without help.

In the second stage, clarity was the key, and this also translates to the first year of study in our model. Clarity can be provided through the supervisor relationship but may also require proactive intervention from the institution whether through online portals, emails or conferences and workshops. Stage three in the Ali and Kohun model relates to our model stage 2 as the student develops identity and skills as an independent researcher. Support needs can be met through the supervisory relationship but also peer contact and mentoring or coaching guidance. In practice this stage will involve much learning both on the part of the student and the supervision team. The latter may not have worked together before, and may need to develop a working mode to benefit the student. The student will lack at this stage the tacit knowledge required to build effective interaction. This whole stage can be wasted when students do not know what questions to ask and supervisors make assumptions about what is and is not known by the student about their domain of research.

Some universities consider stage 3 as that phase in which the student is self-reliant and should need little further in the way of support due to this being accomplished through induction and orientation and the development of supervisor and peer relationships. The literature discussed in this paper suggests otherwise, as suggested by Corcelles et al 2019, this phase from year 2 to writing up can be lengthy (especially for part-time students) and lonely especially if the individual student has not made time to socialise and connect in the first year, often believing that the new academic identity should drive a full-time focus on research, literature reading and writing. Supervisor relationships may also start to go awry in this phase, as also mentioned by Corcelles et al as causing negative experiences; there may be changes of staff requiring appointment of new supervisors which students had not anticipated, or these academics may have less time for doctoral students than in their initial year, believing, and perhaps told, that all is going well; cultural norms will affect the honesty of such relationships.

The final writing up phase, which often reduces financial obligations on the understanding that less institutional supervision is needed, may prove stressful, and may require more rather than less frequent supervision. Where this is not forthcoming, students will need emotional as well as academic support as the deadlines for submission and completion of registration draw near. This corresponds with a time of anxiety as the student concludes the doctoral study and may feel vulnerable as they surface from the detail of data analysis and realise the apparent slimness of their original contributions to knowledge.

### **An experiment in peer support based on the proposed model**

'#docconnect' was a trial programme in a UK Business School in 2019-20, and was a practical attempt to recognise the phases of stress in the doctoral journey and the potential social isolation of students. The Business School in question was in a teaching-focussed University with small PhD student numbers and where relatively little peer organisation and support was available at that time. The University had an online space (PhD Manager by Haplo <https://www.haplo.com/phd-manager>) which shared doctoral information, regulations and milestones and which allowed separate private spaces for student/supervisor discussion, sharing of documents, action plans



and reviews. This online space is designed for Doctoral students and those staff involved in their supervision and assessment including Internal and External Examiners. The application works effectively to store data about progress, supervision meetings and reports, together with academic thesis panel appointments. It is however administered with respect to university requirements for formal registration and milestones, so does not provide informal support space for students and peers. Students were registered to the university's Doctoral College, but are given a home in a particular School or Faculty relating to their and their supervisors' discipline or domain. That home usually provides a physical workspace which is shared with other doctoral students. #docconnect was based in a Business School, where doctoral students typically have a wider range of disciplinary focus and methodological practice than in many science research communities. This gives them even less than usual in common with other doctoral students in terms of their own study.

The '#docconnect' initiative was trialled to offer a physical weekly lunchtime session in the physical doctoral workspace (for all School research students) and a social network space, especially for those who do not regularly travel to campus. Since many doctoral students in the School did not attend campus each day, the lunchtime sessions attracted small numbers who fitted them in around their own research priorities. The intention was to facilitate sharing of support and ideas, to develop a communal support orientation among School PGRs, to offer basic information on regulations and doctoral practice and generally to encourage doctoral students to share with others in the School their progress, worries and development. Individual research students acted as promoters of the lunch-time sessions, notably those with high communal orientation as described by Matook et al (2015) or Kelly & Antonio's convenors of relations (2016). They made efforts over the period of the year to encourage attendance, but inevitably it was those who liked the idea, or had a strong relationship with the convenor who made the effort to attend in person. Much was made of celebration where individual students passed annual reviews and vivas, and certain topics suggested by students involved invited guest speakers (e.g. physical exercise, mental health, working at the university, specific research methods).

The social network space was a private group, i.e. by invitation only, on the LinkedIn platform, the platform of choice from the students consulted. All doctoral students in the School were invited by the facilitator and student convenors in this group. The first six months of the trial demonstrated positive enthusiasm from a small group of doctoral students, mostly, though not all, those who were advanced in their study and whose communal orientation was evident in their willingness to post and respond to posts in the social network and to attend lunchtime chat sessions. The latter were always informal and involved the author as academic critical friend and facilitator, sometimes picking up directly on issues raised by attending students, sometimes setting up speakers in advance on requested topics. After the first few months, there was a stronger attendance by those in the early stages of their study, who began to use the connection to find basic information they lacked. However the uptake remained very limited and with the advent of coronavirus the group became dependent on online interaction through video-conferencing. The use of LinkedIn had limited growth and due to its poor navigation affordances, it was hard for new joiners to find earlier conversations and information topics; arguably a blog would have been more useful. The physical sessions prior to lockdown in March 2020 had been fruitful for those who attended, particularly for students in stage two and four, but were attended only through direct encouragement by those in stage three. arguably a time when more rather than less support was needed.

Based on this small experiment it was found that peer support was fragile, depending on a handful of committed and socially-minded students who were prepared to give time and effort to supporting others. These students were able to benefit personally from the critical friend approach of an academic who was not their supervisor. The notion of the critical friend is well-known since its discussion by Costa and Kallick in 1993. The key values which underpin such a relationship are trust and openness to provocative questioning and support, values which can take time to develop and are hard to find in the early stages of doctoral development from a supervisory team. For those in the short project who benefited, again largely students in stage 2 and 4, sustainable support was made possible by being able to talk to an academic experienced in doctoral supervision but who did not overstep the boundaries occupied by supervisory teams. The attempt to shift full responsibility for the project to doctoral students failed; they had developed good relationships but increasingly as stage 4 approached were unable to give time to support fellow students, even online. Without the facilitation of a critical friend academic, the support group dwindled.

## **Conclusions**

This paper has proposed, on the basis of literature, that support for doctoral students outside the supervisory and institutional mechanisms is needed. This holds particularly for international students and, due to the wide variety of methodologies and disciplines encountered in business research and lack of integrated academic research groups, in Business Schools. Social Exchange Theory, particularly the notions developed by Matook et al and Kelly & Antonio help us to distinguish between those doctoral students who resisted interdependence and those who demonstrated a strong communal orientation, those who could convene relations with others. In Business Schools, it appears less likely than in STEM disciplines that strong research communities of practice will be available to students. Perceived organisational support will vary along with each student's orientation, whether or not the educational institution provides an online workspace or much more supportive initiatives such as Doctoral Societies and while invitations to business-focussed seminar series are good to have and are common in Business School programmes, doctoral students will often give them low priority where they do not fit their particular research design approach or discipline. Supervisors are clearly a mainstream line of support, but the literature reviewed here suggests that social isolation continues to be a serious issue and the lessons of the global pandemic drive us towards a broader institutional offer of support.

But a psychosocial framework does not entirely help us to develop the varying support mechanisms which may be needed at different stages of a Business School student's doctoral journey. A phased approach is suggested on the basis of the arguments from literature in this paper and through the experience of the small project '#docconnect'. The phases are developed from Ali and Kohun's seminal paper which related to the US doctoral model and aimed to translate such phases into the UK/European/Australian model, as far as their variations would allow. Business Schools are encouraged to consider this model in connection with their cohorts of doctoral students, auditing what is currently in place to provide institutional support (both physical and online spaces) and what might be facilitated amongst the student body and supervisory staff to develop loose communities of practice or relationships with the academic community particularly for those in stages 2 and 4 of the model which may need particular focus. Such support networks can take advantage of social media platforms to build networks for those who, unlike those working in laboratory spaces, do not regularly attend campus. However, care is needed in those networks to provide navigable spaces which allow Frequently Asked Questions to be found easily (particularly for Stage 2 students in their first year).

From the '#docconnect' project experience, the notion of critical friendship is proposed as an effective source of non-supervisory support which would imply that there is a role between supervisors and doctoral regulators which academics with supervisory experience could offer. It is not suggested that this is simply another job for academics; the experience of the project was that the benefits of this role depended on facilitation of peer support. This is not a simple fix, facilitating peer groups, both on campus and online, takes time for trust to develop and sharing to happen. It may be that peer group societies can be just as effective, although they too will face the difficulties of bringing in some lone doctoral students who are committed to independent work and study and believe they have no time for anything else. Business and management students studying for PhD are either working or are very much aware of the opportunity cost of their study, needing to progress and achieve for their careers. Those who will go on to academic careers will be setting precedents for themselves and their future students in the manner of their study. This paper argues that a lone and unsupported doctoral journey will neither result in a satisfactory career move nor a well-rounded career academic who is able both to research and teach.

The main limitation of this paper is its lack of empirical research and therefore a means to test the proposed support model. There was an intention to conduct research among doctoral students and supervisors to develop understanding of the use of blended and online support communities in relation to the phases of the doctoral journey proposed in the model but the coronavirus pandemic made this impracticable. It is hoped that the model can be tested at a future date. Meanwhile, the above review of literature relating to support needs of doctoral students and their impact on completion rates, together with the illustrative example of one pilot project to mitigate such needs, will be of interest and practical use for those involved in supporting doctoral students in business and management.

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