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Current Issues in PhD Supervision of Accounting and Finance Students:

Evidence from Australia and New Zealand

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Current Issues in PhD Supervision of Accounting and Finance Students: Evidence from Australia and New Zealand

Abstract

This paper reports on the current trends in accounting and finance PhD supervision in Australia and New Zealand. By examining the various supervision styles adopted by students and supervisors, we identified various tensions, including the influence of performance outcomes that may hinder the vibrant spirit of inquiry that should be intrinsic to the PhD journey and to future academia. Our findings demonstrated both supervisor and student preference for more structured (contractual or directorial) styles of supervision. Changes consistent with this preference include group supervision, the closer alignment of student research topics with supervisor interests, and the preference for certain research paradigms and a focus on journal publications. While students and supervisors regard these changes as key elements in addressing the performance demands associated with PhD outcomes, they present challenges for attaining a balance between product (thesis/contribution to knowledge) and process (students' journeys towards scholarship), together with supervisors' roles therein.

Keywords: Performance standards; PhD supervision; Accounting and Finance; Supervision models; Supervisory styles; Structure and support.

1. Introduction

Research has begun to explore the constituting of accounting knowledge (Humphrey & Gendron, 2015; Khalifa & Quattrone, 2008). Concerns include the effect of factors such as journal rankings (Humphrey & Gendron, 2015; Malsch & Tessier, 2015; Wedlin, 2006), the dominance of quantitative research methods (Khalifa & Quattrone, 2008), the demands placed on academics from increasing numbers of PhD students (Johansson & Yerrabati, 2017) and the concomitant shift in government funding from student numbers to completion rates (Bastalich, 2017).

Evidence suggests that social, political and economic pressures on universities have inevitably affected PhD supervision (Boehe, 2016; Halse & Malfroy, 2010; Johansson & Yerrabati, 2017; Roach, Christensen, & Rieger, 2019) as well as the form and nature of PhD education in the United Kingdom (Åkerlind & McAlpine, 2017; Cheng, Taylor, Williams, & Tong, 2016; Johansson & Yerrabati, 2017), the United States (Brooks & Heiland, 2007), Sweden, the Netherlands and Australia (Bastalich, 2017). Issues identified with PhD supervision and outcomes internationally include student progress and attrition rates (Fenge, 2012; Hopwood & Paulson, 2012; Johansson & Yerrabati, 2017; Loxley & Seery, 2012), 'a focus on a common, narrow notion of knowledge leading to short-term tangible outcomes', (Pelger & Grottke, 2015, p. 117), reduced social inquiry (Prasad, 2015; Raineri, 2015) and the increased need for discipline-appropriate scholarship (Brooks & Heiland, 2007). Some of these issues are evident in Australia, including increased PhD student numbers (McGagh et al., 2016), government funding for PhD programs that is linked to performance outcomes (Kiley, 2017; Spronken-Smith, Cameron, & Quigg, 2018) and increased institutional pressure on academics (Steenkamp & Roberts, 2018).

While prior research has considered the importance of the relationship between the PhD student and supervisor (Roach et al., 2019; Unda, Khosa, Burch, & Wilkin, 2018), a recent review of PhD education research in the United Kingdom, Australia, Sweden and the Netherlands highlights 'the need for a greater emphasis on content and context learning within future research and practice around doctoral education' (Bastalich, 2017, p. 1145). This suggests the importance of exploring the effect of current institutional (government and university) pressures on PhD education, including the balance between product and process. Current empirical research on this topic is limited (Wichmann-Hansen & Herrmann, 2017). Importantly,

there is a need for discipline-specific studies because documented evidence shows disciplinary variations (Wichmann-Hansen & Herrmann, 2017) regarding required competencies, completion rates and student satisfaction related to PhD education (Carroll, 2016; Gardner, 2009; McAlpine, Paré, & Starke-Meyerring, 2009; McGagh et al., 2016). In Australia and New Zealand, while research has shown the importance of the relationship between supervisors and PhD students (Roach et al., 2019; Unda et al., 2018), student satisfaction and attrition rates remain a concern (Carroll, 2016; McGagh et al., 2016;).

Accordingly, the aim of our study is to examine the effects of institutional change and performance standards on accounting and finance PhD education in Australia and New Zealand. We focused on the accounting and finance disciplines because prior research has raised concerns about the quality of PhD supervision in these disciplines (Unda et al., 2018), including the shortage of and pressure on PhD supervisors (Smith & Urquhart, 2018) and decreasing satisfaction rates in Australian business and management PhD students (Carroll, 2016; McGagh et al., 2016).

Given the importance of considering dual perspectives (Halbert, 2015) to identify tensions and opportunities, we interviewed both students and supervisors. We found that both PhD supervisors and students preferred structured approaches to meet milestones and ensure timely completions. For supervisors, more directive supervisory styles were regarded as a means of coping with the increasing number of PhD students while ensuring successful completions. These styles are evident in approaches such as group supervision models, including multiple students focusing on similar topics, aligning student research topics with supervisors' interests and the dominance of certain research paradigms. Moreover, the focus of students and supervisors on journal publications as a means of delivering required contributions to knowledge increases job opportunities, addresses supervisors' performance outcomes, undermines diversity in research topics, limits the process of inquiry and reduces student autonomy. This focus on short-term tangible outcomes carries the risk of narrowing the range of knowledge and reinforcing homogeneity. Our findings reflect the changes seen internationally in doctoral education in business disciplines (Hopwood, 2008; Pelger & Grottke, 2015; Prasad, 2015; Raineri, 2015) and identify the need for Australian and New Zealand accounting and finance doctoral programs to review the balance between product (thesis/contribution to knowledge) and process (students' journey towards scholarship), together with supervisors' roles therein.

The remainder of the paper is organised as follows. The following section details the background of the study, while Section 3 discusses key PhD supervision issues. Sections 4 and 5 present the research methods and results. Section 6 discusses the findings and Section 7 presents the conclusions, study limitations and directions for future research.

2. The Australian and New Zealand doctoral research education landscape

In line with global trends (Maslen, 2013), the number of PhD candidates in Australia and New Zealand has substantially increased in recent decades. Between 2003 and 2017, the number of doctoral student enrolments in Australia increased by 62% (Department of Education and Training [DET], 2004, 2018)[1], while New Zealand experienced a 114%[2] increase between 2000 and 2016 (Sampson & Comer, 2010). Despite the increased enrolments, there are concerns regarding the efficacy and quality of PhD education and supervision. Several studies examining PhD education in Australia and New Zealand (Baker, Robertson, & Toguchi, 1997; Barry et al., 2018; McGagh, et al., 2016; Neumann & Rodwell, 2009; Sampson & Comer, 2010) found that students were dissatisfied with their overall course experience and supervision. For example, a 2015 survey of Australian postgraduate students (Carroll, 2016) showed that only 65.4 % of business and management students were satisfied with the intellectual climate, while 81% were satisfied with the supervision process. This may be attributable to the lack of corresponding increase in the number of PhD supervisors in Australia and New Zealand (McCallin & Nayar, 2012; Pearson, Evans, & Macauley, 2008; Sampson & Comer, 2010). For example, in Australia, while there are some disciplinary variations, student–staff ratios increased from 1:14 in 1990 to 1:21.44 in 2017 (DET, 2018). In particular, despite the increased enrolments (Beattie & Smith, 2012), the accounting and finance discipline has a significant shortage of academics available to supervise PhD students (Irvine, Moerman, & Rudkin, 2010; Smith & Urquhart, 2018). Resultant pressures are evident in debates regarding the supervisory process (Ives & Rowley, 2005; Pearson & Brew, 2002) and reviews of research education (Enders, 2005; Kiley, 2017), including concerns regarding the quality of PhD supervision in accounting and finance (Unda et al., 2018).

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[1] DET data show that 35,875 students were enrolled in doctorate by coursework programs across all Australian higher education institutions in 2003 compared with 58,102 students in 2017 (DET, 2004, 2018).

[2] Across all New Zealand higher education institutions, there were 4,458 doctoral enrolments in 2000 compared with 9,580 enrolments in 2017 (Education Counts, 2016).

Motivated by these issues along with the low national completion rate (57% within 5 years of commencing candidature) and high attrition rate (35%) (Kiley, 2011b; Sinclair, 2004), the Australian government has responded by initiating performance and accountability requirements regarding PhD education (Deuchar, 2008; Halbert, 2015; Kiley, 2017). The government's introduction of outcome-driven funding models along with other standards and regulations has imposed various pressures on Australia and New Zealand universities. Previous funding was based on the number of enrolled students. However, under the Research Training Scheme introduced in Australia in 2000, research funding was distributed to universities based on timely completions (i.e. within four years' full-time equivalent study) (Green & Bowden, 2012; Kiley, 2017). Consequently, in 2018, the Australian government provided $1.92 billion to 42 higher education providers through two research block grant subprograms—the Research Training Program and the Research Support Program (DET, 2019a, 2019b). These programs require Australian universities to submit annual research and research training management plans (Kiley, 2011b) that outline their strategies to support research and research training. A similar scenario is evident in New Zealand, where, under the Performance-Based Research Fund (introduced in 2003), subsidies are allocated based on the level of external research income, the number of student completions and the research quality of staff (Boston, Mischewski, & Smyth, 2005).

Australian and New Zealand universities have responded to government regulations with research policies and procedures (Kiley, 2011a; McCallin & Nayar, 2012). These aim to reduce completion times and attrition rates and improve the overall quality of supervision, student satisfaction and research education outcomes (such as development of research skills and number of research publications). In particular, universities have focused on five key areas in their PhD programs: policies, guidelines and structure; student selection, induction and progress; training, support and resourcing; supervisory arrangements and training; and student feedback and evaluation (Kiley, 2011a, 2017). This has implications for supervisors who, in turn, influence student behaviour and performance. For example, supervisors are under pressure to select candidates with certain competencies and to ensure that students complete within a four-year period by scaling research topics and closely monitoring student progress (Kiley, 2011a).

In this context, three factors motivated our study of accounting and finance students and supervisors in Australia and New Zealand. First, Australian and New Zealand institutions

(government and university) require accountable outcomes regarding PhD time frames and completions. Second, despite research into doctoral education emphasising the importance of quality with respect to the relationship between supervisors and students (Roach et al., 2019; Unda et al., 2018), student satisfaction and attrition rates remain a concern (Carroll, 2016; McGagh et al., 2016). Third, evidence suggests that student satisfaction rates with the intellectual climate are particularly concerning for business and management students (Carroll, 2016; McGagh et al., 2016).

3. PhD supervision in changing times

In the context of accounting and finance disciplines in Australia and New Zealand, we investigated the perceptions of PhD students and supervisors by focusing on two broad components of PhD education: *process,* including structure, support and supervision models, and *product,* as evident from scoping the research, research output and focus on publications (Khalifa & Quattrone, 2008; Pelger & Grottke, 2015).

3.1. Structure and support in the supervisory process

In providing effective, quality supervision (Hamilton, Thomas, Carson, & Ellison, 2014) and meeting multiple stakeholder expectations, the nature and scope of the work of the contemporary PhD supervisor is evolving (Powell & Green, 2007). For example, the former master–apprentice relationship has evolved into a collaborative relationship or partnership between the student and the supervisor (Bastalich, 2017; Halse & Malfroy, 2010; Harrison & Grant, 2015; Hemer, 2012), with the supervisor adopting more of a mentoring role (Revelo & Loui, 2016; Roach et al., 2019).

Overall, supervisors face increasing challenges regarding their supervision skills, style and expertise as they fill a wider range of roles (Bastalich, 2017; Deuchar, 2008). These contemporary roles include support and guidance (Bastalich, 2017; de Beer & Mason, 2009; McCallin & Nayar, 2012) to ensure students' intellectual scholarship (Orellana, Darder, Pérez, & Salinas, 2016), managing student progress in terms of quality control and timelines (Roach et al., 2019) and supporting students' wellbeing through pastoral care (Engebretson et al., 2008; Roach

et al., 2019). As a result, supervisors use a range of supervisory approaches and styles[3], adjusting to differing student needs and/or different stages of candidature (Gatfield, 2005; Saleem & Mehmood, 2018).

Research has investigated the efficacy of various supervisory styles to address these diverse demands (see Table 1 below for five key models). Examples include a dynamic model (Gurr, 2001), a dynamic conceptual model (Gatfield, 2005), an integrated competing values framework (Vilkinas, 2008), a model for interpersonal supervisor behaviour (Mainhard, van der Rijst, van Tartwijk, & Wubbels, 2009) and a framework of approaches to research supervision (Lee, 2008, 2018). A common theme relates to the main objective in the supervision process, namely, to ensure that students complete their doctoral studies with enhanced academic and intellectual standing and personal wellbeing (Orellana et al., 2016).

---Insert Table 1 here---

The aforementioned supervisory styles may be categorised into two dimensions— structure and support. The structural dimension relates to management of the research project, which includes meeting key accountability stages (i.e. timelines and milestones) by identifying roles and setting goals, writing progress reports, ensuring supervisor availability and scheduling meetings, colloquiums and conferences. The support dimension is more discretionary and includes sensitivity to student needs, encouragement, informal meetings, mentoring and guidance. Research on the balance between structure and support shows conflicting results— some authors report that high support and structure is optimal for successful and timely completions (Gatfield, 2005), while others demonstrate the need for supervisors to consider a range of approaches (Boehe, 2016; Lee, 2018).

The implication is that both parties on the doctoral journey must establish an effective relationship to produce quality research that contributes to disciplinary knowledge (Halbert, 2015). Therefore, it is important to consider the perspectives of both parties. Research shows some disparity between the views of students and supervisors. For example, one study found that students ranked their desired supervisor roles in order of importance from facilitator to teacher to supporter to manager. In contrast, supervisors ranked their own roles in order of importance from critic to freedom giver to supporter to director (Orellana et al., 2016). Similarly, student preference for support over structure was reflected in a recent study in which students perceived

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[3] Supervisory style refers to the implicit and explicit principles that govern the PhD student–supervisor relationship.

that supervisors' priorities should be 'ethical practice, constructive feedback, open communication, and providing a connected relationship that is caring, understanding, and affirming' (Roach et al., 2019, p. 12).

Applying these different perspectives to the changing academic landscape in which there are increasing numbers of PhD students but a lack of corresponding increase in numbers of PhD supervisors (Irvine et al., 2010; Smith & Urquhart, 2018), it is relevant to review the influence of institutional supervisory performance standards on supervision models (McGagh et al., 2016), timeliness of completion (Kiley, 2017) and journal publications (Gendron, 2008; Prasad, 2015).

3.2. *Supervision models*

In response to the Higher Education Standards Framework (Tertiary Education Quality and Standards Agency [TEQSA], 2015), which requires PhD students to be supervised by a panel that includes a research-active principal supervisor and at least one co-supervisor, Australian universities have instituted changes. For example, the traditional dyadic model of one supervisor per doctoral student (McGagh et al., 2016) has evolved to a panel supervision model. Given that this change has also occurred in New Zealand (Manathunga, 2012) and globally (Hutchings, 2017), the lack of research investigating differences between the dyadic model and collective model of supervision (Cornér, Löfström, & Pyhältö, 2017) is surprising. However, given the identified shortage of PhD supervisors and the increasing use of models that involve two supervisors per student (Nordentoft, Thomsen, & Wichmann-Hansen, 2012) or one supervisor per group of students (Hutchings, 2017), such an investigation is important.

Dyadic arrangements provide benefits such as individualised supervision with specific advice and personal attention (Dysthe, Samara, & Westrheim, 2006). However, one-on-one interactions may lead to relationship difficulties (Lee, 2008; Unda et al., 2018). Alternatively, collective forms of supervision may foster enculturation into the discipline (Lee, 2018), facilitate a wider range of feedback (Cornér et al., 2017) and/or provide broader avenues of support (Hutchings, 2017). While dual supervision provides benefits such as broader perspectives and skills (Nordentoft et al., 2012), its limitations include evident difficulties regarding defined roles (Unda et al., 2018). Group supervision extends this model, with advantages including students' collective engagement regarding their own and other students' work (Nordentoft et al., 2012). Further, group supervision offers economic and social benefits related to managing increased

student numbers (Taylor & Beasley, 2005)—supervisors can use their time more effectively by providing information and guidance to groups rather than to individuals and students may have reduced feelings of isolation (Hutchings, 2017).

3.3.   *Scoping the research and time pressures*

Initiatives by the Australian and New Zealand governments to link funding for PhD programs to completion of doctoral studies within a 3–4-year time frame (Spronken-Smith et al., 2018; Kiley, 2017; McCallin & Nayar, 2012) has increased pressure on supervisors and students to scope and execute doctoral research (Bastalich, 2017). This is compounded by power asymmetry at the start of a supervisory arrangement (Khalifa & Quattrone, 2008) in which supervisors have substantial control over the selection of candidates, research topics and methods and decisions regarding submission times and selection of examiners (Pelger & Grottke, 2015). Evidence shows that this can confine the scope of research and constrain it to dominant paradigms (Bastalich, 2017; Prasad, 2015). Hence, rather than creating opportunities for curiosity and questioning as students begin to engage with disciplinary (or interdisciplinary) knowledge (Khalifa & Quattrone, 2008), authors have noted 'increasing standardization of ways of thinking and behaving, more mimetic work and greater specialization' (Raineri, 2015, p. 99). This may limit deeper intellectual inquiry and foster more standardisation of research (Hopwood, 2008).

3.4.   *Focus on publications*

Linked to the aforementioned issues are accountabilities faced by academics (i.e. supervisors) and future academics (i.e. PhD students) regarding research performance (McGagh et al., 2016). In an increasingly internationalised tertiary education market, accreditation requirements such as those suggested by the Association to Advance Collegiate Schools of Business and business school rankings are being driven by articles in appropriately ranked journals (Khalifa & Quattrone, 2008; Humphrey & Gendron, 2015). This has resulted in doctoral education in German accounting schools moving towards mandatory course programs and a focus on highly ranked academic journals for publishing research (Pelger & Grottke, 2015). Similarly, in Australia and New Zealand, with university hiring preferences being driven by a candidate's research profile, there is pressure for PhD students desiring positions to begin journal

publications during their research training to build a research profile (McGagh et al., 2016; Sampson & Comer, 2010). This may have two consequences—a focus on acquiring the necessary writing skills during doctoral education to publish in top journals (Prasad, 2015; Raineri, 2015) and 'a focus on a common, narrow notion of knowledge leading to short-term tangible outcomes' (Pelger & Grottke, 2015, p. 117) that 'reinforce homogeneity' (Pelger & Grottke, 2015, p. 119) and 'opportunistic behaviours' (Khalifa & Quattrone, 2008, p. 65).

4. Research design and data

To investigate the level of supervisory support and structure used in accounting and finance PhD supervision and the implications for students and supervisors, we undertook face-to-face interviews (Patton, 2002) with accounting and finance students and supervisors in Australian and New Zealand universities. Using semi-structured and open-ended questions, we interviewed 23 PhD students and 16 supervisors between October 2017 and March 2018[4]. In some cases, we were able to interview matching dyads, i.e. the supervisor and his or her respective student.

As reported in Table 2, 30.4% of the students were studying part-time and 69.6% were studying full-time. With respect to gender, 52.2% of students were male and 47.8% were female. In contrast, 68.8% of supervisors were male and 31.2% were female. Research disciplines were classified as either accounting, finance or multidisciplinary. Although all students had two supervisors (a principal and a co-supervisor), our study focused on principal supervisors who had supervised a student to successful completion, with this group having varying degrees of experience in the process.

---Insert Table 2 here---

While separate interview protocols were used for students and supervisors (see Appendices 1 and 2), the common focus was on each party's process/approach and experience. Interviews ranged from 30 to 60 minutes in length and were audio recorded and transcribed verbatim. All transcripts were imported into NVivo 12 qualitative data analysis software and were subject to thematic analysis (Crabtree & Miller, 1992). Themes were generated deductively

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[4] Participants were free to withdraw from the study at any time.

based on prior research (Boyatzis, 1998) and categorised according to the following issues identified in the literature (see Section 3):

- Structure and support in the supervisory process
- Supervision models
- Scoping research and time pressures
- Focus on publications.

To avoid bias, transcripts were coded by more than one researcher, allowing the different perspectives to guide a richer analysis of the interview data (Braun, Clarke, Hayfield, & Terry, 2019). Intercoder agreement on allocation of raw information to the four broad categories listed above was close to 85%. When anomalies were found, coded segments were subsequently re-examined to explore differences. Despite efforts to develop a reliable coding frame, a certain level of subjectivity is unavoidable (Braun et al., 2019), with this being both a limitation and an opportunity for further study.

5. Findings

Our findings, reported below, provide accounts of the PhD student and supervisor interviewees' perceptions regarding the key themes. In accordance with our ethical responsibilities, participants' names and affiliations have been de-identified. Further, data that may have identified participants was not quoted verbatim but was rather used to contextualise the findings.

5.1.   *Structure and support*

To achieve our research aim of investigating whether the pressures of policies and staff shortages have encouraged supervisors to be driven more by outcomes (i.e. tighter structures) or by student needs (i.e. more pastoral and/or flexible styles), we analysed perceptions according to Gatfield's (2005) model, which provides a clear description of the types and styles of supervisor control. Our findings showed that the most preferred supervision style was contractual (i.e. high support and structure), identified in 13 cases, followed by directorial (high structure and low support), identified in six cases. The least preferred supervision styles were pastoral (low

structure and high support) and laissez-faire (low support and low structure), each of which were identified in two cases.

5.1.1. Contractual

The contractual style of supervision is demanding for both supervisors and students, who must be highly motivated and possess exemplary management and interpersonal skills (Gatfield, 2005). Findings showed that supervisors emphasised the students' roles, with consensus that students should take control of their journey and that supervisors act as mentors rather than 'spoon feeders'. For example:

> Our job as supervisors—indeed, our job as educators—should not be to give out fish, it should be to teach people how to fish. We need to know what the right questions are to ask. Once we've worked out the questions, I believe the answers become a lot easier. (Supervisor A)

One supervisor emphasised the importance of students' attitudes:

> … I think students who are motivated will look for ways of making things happen rather than complaining about it's all too hard … The supervisor is not somebody who knows everything. The supervisor has got a whole lot of resources and access to things that will help and inspire. (Supervisor A)

Some students appreciated this style, understanding their roles and appreciating the mentoring and support provided by their supervisors. For example:

> She is very caring, very supportive and she doesn't push her own ideas. It's very much my ideas. If you're not convincing in your ideas, she'll ask you to think about it a little bit more, and maybe give you a couple of pointers of where you might want to look … She'll only do it if you've already got the idea there. (Student A)

Interestingly, this contractual approach is perceived as a learning curve for both students and supervisors. As one supervisor articulated, dialogue with students about research or literature enables discussion and debate and makes both parties consider new aspects or knowledge:

It's amazing how much you learn from PhD students, because they challenge … they've read something and they said, 'Oh, I read this …' and you think, 'Oh, I read that, too, but that's not how I interpreted it', and you have a bit of a talk about that. (Supervisor B).

Some students established a relationship agreement, negotiating the appropriate levels of support and structure. For example, one full-time domestic student commented:

Starting the PhD, we did a supervisor agreement. So, we set out the terms, what I could expect from them in terms of them being on board with me, helping me, giving guidance and advice and what their role was, and also what they expected of me. (Student B)

However, as one student observed, this contractual style requires mutual commitment that is not always evident:

It [meetings] has been set all the way … it's structured … The person who is supervising me doesn't know actually what I am doing … Meeting is not about for the sake of meeting. I mean, you can put it every single week, but that meeting is not productive unless both of us know actually what we need to focus on. (Student C)

It also places more onus on students' intrinsic motivation (Dobrow, Smith, & Posner, 2011) because it allows students to build their independence and capabilities while retaining options to turn to their supervisors for assistance during difficult times:

He had expectations on me, and I wasn't going to let him down. And so, I would make sure that I kept my nose to the grindstone because I wouldn't like to—I think the right word is sort of disappoint him in what he expected I was capable of … I felt that I had to make sure that I justified his belief in me. (Student D)

5.1.2. Directorial

The directorial style of supervision assumes candidates need support to manage their research project but not to assist with their personal needs (Taylor & Beasley, 2005). Our findings show some consistency between supervisors' and students' perceptions regarding this

approach to structure and control. Analysis suggests that supervisors believed that PhD students should acquire the necessary skills and knowledge themselves but were willing to offer more structure to minimise uncertainty when students struggled to manage their projects: 'Initially, it's always left to the student. But if … it's not working or the student's floundering, then I think you've got to step in and just start scheduling more regular meetings to get the student back on [track]' (Supervisor C).

Some supervisors acknowledged that the changing conditions had put them under pressure to be more directive to ensure accountability and the timely completion of PhDs. For example:

> I'm a lot more structured now than I used to be. I think just the more professionalisation of the academic environment … the need to document things … I think previously I would have been more relationship based about getting on with the student … but I think it's changed over time. I've got a more formal approach with more setting of deadlines, establishing boundaries. (Supervisor C)

Overall, students appeared to not only seek structure but also support regarding various aspects of their candidature and research projects. Hence, the directorial style does not necessarily suit all circumstances and care must be taken: 'Sometimes he behaves like a boss … supervisors should give the scope to the student. Supervisors should be available and provide constructive feedback' (Student E).

5.1.3. Pastoral

The pastoral style of supervision assumes students may need personal support and attention in managing their research (Taylor & Beasley, 2005), as exemplified by a supervisor:

> The supervisor plays a much more advisory role in a sense that you sit there and support on the need basis, as demanded by the candidate … it's very autonomous, obviously, because the candidate has to do that on their own. (Supervisor D)

Despite this style not necessarily translating into task-driven directive capacity (Gatfield, 2005), overall, the two international students in the earlier stages of their doctoral studies who perceived this as their form of supervision appeared to prefer it because of the nurturing relationship and trust they developed with their supervisors while ensuring task progress:

He's like my family now. We are quite close. Like the others. When I talk to my friends and I tell them that I went to my supervisor's house for dinner, for Christmas, they say, we don't have that experience. (Student F)

They can tell you what's normal and what's not normal, so they can see that basically you're not feeling normal, they try to push you back to the normal side of things so you can stay productive and be happy. Yes, I do really appreciate it. (Student G)

Hence, while this approach was not common, it generated the most student satisfaction.

5.1.4. Laissez-faire

In the laissez-faire approach to supervision, supervisors are characterised as being non-directive and uncommitted to high levels of personal interaction, thus appearing to be uncaring and uninvolved (Gatfield, 2005). This was the case for one early-stage PhD student:

I asked him how often we are going to meet up and whether I have to prepare a report or something regularly. He doesn't require that stuff. … we don't have any meetings or anything. I think he just wants the results. (Student H)

This student also alluded to the isolation, vulnerability and independence experienced because of the supervisor's approach: 'I'm doing everything on my own … I just don't think that he cares ... I had to figure out my topic on my own, find new things, so it was very awful for me to do this' (Student H).

Even those students who partially favoured this approach had concerns and would seek help from their peers: 'The relaxed nature [of my supervisor] helps me partially, in that it makes me become independent and I come out with my own ideas … but it becomes too much … since the PhD is time bound' (Student I).

Overall, students receiving a laisse-faire supervision approach experienced difficulty with the limited support and structure provided by their supervisors.

5.1.5. Student and supervisor initiatives regarding structure

To adapt to the doctoral environment and combat the perceived lack of support and structure from their supervisors, many student participants had instigated meeting agendas and

student–supervisor agreements to provide structure and efficiency to meetings, including pre-warning supervisors about items and issues to be addressed. One student explained: 'Usually we would have an agenda for our next meeting so we talk about what will be discussed the next week, after each meeting … so everyone pretty much got something prepared for the discussions' (Student J).

Another student explained how her imposed structure changed the supervisor's style from being relational to being more contractual:

> When I first introduced the agenda, they were a bit like, okay, if that's what you want to do, that's fine, but it's not something that we usually see … I need to be more organised because my time is so precious. (Student K)

The 'right' structure is likely to be dependent on the stage(s) of the doctoral study and the personalities of the parties involved. Hence, communication is important. One student who failed to negotiate a change in supervisory style expressed dissatisfaction: 'If I was to do a PhD again, I don't want to go with my previous supervisor' (Student E).

Many supervisors implied that institutional pressures for their students to meet timelines were at the forefront of their considerations. Thus, findings showed that while students may initiate structure, supervisors also incorporated more structure when students failed to meet timelines. In this regard, one supervisor whose style was naturally supportive changed in response to a student's lack of progress, justifying this as 'empowering the candidate, providing the means for the candidate to nourish but if needed … I can be a different person' (Supervisor D). Students appeared to agree on the need for structure, with a typical comment being, 'I like the way she is supervising me because this is quite systematic, structured. So, there is less uncertainty' (Student L). This pragmatic approach may reflect the influence of the current environment that emphasises timely completions.

5.2. *Supervision models*

Our analysis shows that supervisors changed their supervisory approach, including using more group supervision. This relates both to government requirements for at least two supervisors (TEQSA, 2015) and the documented shortage of PhD supervisors in accounting and finance (Irvine et al., 2010; Smith & Urquhart, 2018). Some supervisors indicated their

involvement in supervising up to ten students and having to cope with the demands of multiple students by 'exploring ways [to deliver] … a PhD program with large numbers at minimum costs' (Supervisor E). To achieve this, some required multiple students to work on similar or overlapping research projects. One accounting supervisor acknowledged that having ten students, each with different projects that required management, resulted in him having serious health issues. Consequently, he changed his 'strategy to have three or four in the same sort of area … everything just overlapped, and at the same time all I have to manage is that their contribution is separated' (Supervisor E).

Findings show that by using group supervision, the supervisor could share experiences and support with the students, with advantages for both parties. For example:

> Every week there is a presentation … they'll share it with every other PhD student in
> my group … we all start discussing what will happen, then if they tell me that they have
> a bit of a problem, my workgroup will take care of it … another PhD student will act as
> a mentor … so that then I can tackle new and more effective problems that we get.
> (Supervisor E)

Additional benefits of group supervision for both the student and the supervisor were highlighted:

> There are a lot of synergies. Let's say, a literature review—if one's got 100 papers, the
> next group of people have got 100 papers ready for them to just start in the first week
> … You read that over a period of a month, come back, you find another paper, you tell
> us in our PhD group and everybody gets to know about it and that's how we move very
> quickly, lots of people working on a common cause. (Supervisor F)

This has implications for PhD supervision and students' research progress because these synergies may restrict independent research scope and inquiry. Indeed, some recognised a disadvantage:

> I would suggest less number of students for every single supervisor … the supervisor
> should know actually what I am doing. He should go through my chapters … his level

of direction is very general. It is not specific and might not be the right track, but I take

it because it is coming from a supervisor. (Student C)

However, other students mentioned that when they were treated as a member of a group with a common research area, they received more sustained support. This included new PhD students learning from experienced students, which is particularly important in the earlier stages when students may feel unsure about the direction of their PhD. One reserved student said he found it easier to work under the group supervision model because it provided him with a confined and safe space.

Further, the limitations associated with multiple supervisions were acknowledged. For example, as a consequence of this close working environment, one student became distressed when her idea was taken by one of her peers without her permission or acknowledgment. Further, there were evident issues regarding efficiency agendas, including restricting the scope of topic selection and research methods to obtain a homogenous approach.

5.3.   *Scoping the research and time pressures*

Evidence shows that performance standards create tensions related to research quality and the chosen methodologies. A number of supervisors felt troubled about time pressures affecting the quality of PhD research. One supervisor expressed concerns about the declining expectations for a PhD, while another had similar reservations about the ability to produce a quality PhD project in a three-year time frame. Many supervisors alluded to the fact that institutional pressures to meet timelines were at the forefront of their supervisory considerations. In some cases, supervisory style was shaped by the student's ability to respond to time pressures, with one supervisor commenting 'that if something does go wrong [with a student's progress], that you've done what would be expected in that situation' (Supervisor C).

These pressures appeared evident regardless of whether quantitative or qualitative methodologies were employed in the research. In light of the short time frames, one accounting supervisor who was a qualitative researcher felt that doctoral education is no longer characterised by opportunities to pursue reflexive social inquiry, and that time frames affect methodology:

Time frames for PhDs makes it really hard to give students the space to just come up

with things … so I think it leads to a real narrowing of what students end up doing.

Because, especially now, getting on-time completions is really even more important than what it used to be … then you think, well, we'll just do something that's much more closely related to what I'm doing, because that's easier for me. (Supervisor G)

Similarly, an accounting supervisor who was a quantitative researcher stated that he 'direct[s] them to projects and topics where I can add value' (Supervisor H), thereby acknowledging the complex interplay between the tensions of quality research outcomes and efficiency of timely completions. He also highlighted the importance of the supervisor's role to 'encourage a broader range of thinking on different topics' (Supervisor H).

There was some evidence that where the research stance involves critical accounting, the embedded culture is more resistant to change because of its methodological tradition of enquiry (Prasad, 2015; Whitelock, Faulkner, & Miell, 2008):

My school is quite a critical thinking school … so when we go in for our meetings, we do talk a lot about how what happened back then, and the theory I'm working on is so applicable today to the refugee situation … so, for me, the big picture is always there and it's going to form part of the thesis as well. (Student K)

However, analysis shows the dominance of certain research methods, which limits knowledge diversity. Several accounting and finance supervisors commented that current academic governance favours positivist research and quantitative methods, acknowledging difficulties with more time-consuming qualitative methods: 'Especially for most of my research, and my students would be doing qualitative field work, and that doesn't really fit those [milestones] … It's all very linear, doesn't work that way' (Supervisor G). Similarly, one student felt pressured:

He [the supervisor] wanted me … to use secondary data to write my whole PhD and I knew that wasn't right … I just found that he was looking out for himself and what's easier for him rather than investing his time in developing something that I was interested in. (Student M)

5.4. A focus on publications

The focus on efficiency and the resultant narrowing of research scope has manifested in the impact of journal rankings on the assessment of academic performance and issues of academic tenure and promotion globally (Carmona, 2006; Khalifa & Quattrone, 2008). Our findings provide evidence that Australian and New Zealand accounting and finance supervisors and students are also becoming embedded in the culture of 'publish or perish'. Apart from supervisors being required to meet their own performance criteria by publishing a certain number of papers of a specified ranking, students appear to be increasingly required to publish if they wish to enter and remain in academia. Our findings indicate that this focus on publishing has a number of effects on the PhD supervisory process and the conduct of PhD research.

First, journal publications are being used to help students make significant progress on their PhD. The motivation for this appears to be twofold. Partly it relates to efficiency, as evident from the comment of one student: 'Get[ting] one paper submitted to a journal every year helped me a lot to be able to finish my PhD on time … I finished my thesis writing in three months' (Student J). Similarly, a finance supervisor directed students to structure their PhD project in terms of three research papers so that 'it moves at a faster pace, which means you can get to finish one project and then move onto the second one' (Supervisor I). This was perceived by some students as a way to minimise risk: 'One big theme … can get a bit tiring after three years and it might not work and that's the worst thing. After two years you realise, oh gosh, I'm not going to get the results' (Student G).

Second, there is evidence that the focus on publications relates to academic performance outcomes. One supervisor's comment that '[students] get a degree that helps them on their way, and I get a publication, which helps me on my way' (Supervisor J) illustrates some reliance on PhD students for publications to meet performance standards. One student expressed this as 'he [the supervisor] thinks whether he can get a publication from my paper … nothing else' (Student E). Moreover, there is evidence that students are expected to contribute in ways beyond the scope of their PhD. For example: 'I'm working with my supervisor and two other authors on a research project that is not my PhD topic. Recently, we got the second round of revision and it's quite promising for my career' (Student N).

In contrast, there was evidence of some supervisors prioritising PhD studies over journal publications, creating tensions for students seeking to fast-track their research outcomes:

I think it's just the way this particular supervisor operates … I've had to cut back my research in terms of what I'll be able to achieve before the end of the PhD. So that was a bit frustrating. And I haven't been able to progress publications that I had in mind. (Student O)

Overall, the focus on publications appeared to have a significant impact on the next generation of researchers and their perceptions of research. One student who was 'influenced a lot by my supervisor … pushing me to do a lot of writing, a number of papers and book chapters' (Student F) now followed this approach as an academic, delegating tasks to produce papers:

I have a group of students do the research with me. One person going to do literature review, one person to do the data collection, one to write the paper, we just push them to do so, that's where I gained my project management skills. (Student F)

In summary, our findings suggest that higher student–supervisor ratios and the increased emphasis on timely completions and publications are changing the focus of PhD studies. One student acknowledged the loss as 'we should learn what the philosophy of the research is, but most of my colleagues or myself could not get a chance to learn' (Student E).

6. Discussion

In an environment characterised by accountabilities for timely and successful PhD completion, our investigation into the level of structure and support involved in accounting and finance PhD supervision demonstrates a range of supervisory styles. A common element concerns the strong focus on structure, with contractual and directorial styles being preferred in 19 of the 23 supervision examples investigated. The preference for directed approaches as a pathway to successful outcomes is in accordance with Gatfield (2005), who reports that a supervisory approach involving high support and structure is optimal in achieving successful and timely completions. Indeed, our findings revealed five cases of supervisors shifting from a relationship-based style to a more directive style to enable an explicit focus on boundaries and structure. Supervisory styles favouring high degrees of structure are characterised by weekly meetings, focusing on milestones and convening panel meetings to monitor progress. Students indicated their positive responses to this style, clearly favouring and being proactive in

generating high structure over low structure, with many recognising the need to structure the PhD process through regular meetings, setting agendas and relationship agreements and focusing strongly on academic tasks, performance and timely completion. In contrast, few students expressed their satisfaction with the pastoral supervision style. Thus, our findings regarding the focus on performance-driven contractual and directorial styles support those of a prior study in which students saw supervisors as primarily being facilitators, teachers, supporters and managers, while supervisors viewed themselves as critics, supporters and directors (Orellana et al., 2016).

In contrast, with respect to enculturation, our findings differ from prior research i.e., '[s]upporting candidates to manage time and career pressures whilst learning how to do academic work' (Lee, 2018 p. 88). Herein Lee (2018) shows enculturation as being of lesser importance than supervisory approaches that foster functional, critical thinking, emancipation/mentoring and development of quality relationships. In contrast, our findings suggest that both students and supervisors regard enculturation as a key component to the PhD process. Rather than critical thinking, emancipation and/or quality relationships, our findings indicate an enculturation focus that relates to: (1) timelines; (2) group supervision that in part relates to increased student numbers and the lack of a corresponding increase in supervisors; and (3) performance outcomes for students and supervisors. In this regard, given evidence of student pressure for more structured supervision, more risk-averse methodologies and publications as a component of the PhDs, our findings suggest that institutional (government and university) pressures concerning accountability correlate with students' and supervisors' own agendas.

As evident from the pressure for regular meetings, productive agendas, shared literature searches, a focus on quantitative methods and restricting the scope of topic selection, supervisors and students both emphasised the importance of time frames. A number of these issues also relate to the current practice of group supervision, which has structural benefits such as peer support for PhD students and improved manageability for supervisors. However, group supervision also has identified limitations, including a reduced focus on independent thinking and even poaching of ideas because of the close working environment.

Similarly, the shared focus on publications being a key ingredient of the PhD journey was significant, which is in accordance with identified directions for PhD research in business disciplines internationally (Pelger & Grottke, 2015; Prasad, 2015; Raineri, 2015). This appears to

be driven partly by the motivation of supervisors to meet personal performance goals with respect to journal publications and partly by students acknowledging the importance of publishing. Thus, student motivation appears to be twofold. First, students regard publications as being an efficient means of generating a PhD thesis and demonstrating a contribution to knowledge during the course of their studies, thereby reducing the risk of concurrent studies 'trumping' their contribution. Second, students identified the need to publish papers to facilitate their entry into academia.

In summary, an outcome of these pressures appears to be a closer alignment between students' research and supervisors' interests, the preference for certain research paradigms and a focus on journal publications. There is some limited evidence that students are already incorporating these strategies into their own academic practice by adopting a group approach rather than employing individual inquiry to construct academic papers. This focus on short-term tangible outcomes may lead to the risk of narrower notions of knowledge and reinforcement of homogeneity (Pelger & Grottke, 2015). While a dual focus on purpose or intention is intrinsic to doctoral education and the related skills and abilities of supervisors (Åkerlind & McAlpine, 2017), our findings suggest the need to challenge the implications of how these are currently constituted. Ideally, investigation should be instilled through training individuals and academics to be open, interdisciplinary, unafraid of diversity and, above all, not being politically instrumental in 'playing the game', the rules of which are now clear to many (Khalifa & Quattrone, 2008).

7. Conclusion

Overall, by providing empirical evidence regarding the nature and practice of PhD supervision from the perspectives of both supervisors and students, our study contributes to the limited body of literature on the effects of current performance standards on supervision (Wichmann-Hansen & Herrmann, 2017). In examining this, we acknowledge the limitations of our study, including our discipline-specific focus (accounting and finance), the contextualisation to Australia and New Zealand, our inability to interview all supervisors and students as dyads and the potential bias associated with deriving conclusions from qualitative data. These provide opportunities for future research.

Rather than research being an uncertain process undertaken to discover an unknown, our findings suggest that supervision of accounting and finance PhD students in Australian and New Zealand is tempered by a mutual desire for certainty related to performance outcomes. This is evident in practices such as the culture of group productivity, restricted research objectives, domination of certain research methods and a focus on publications. In particular, there appears to be a broad agreement between students and supervisors with respect to structured supervisory styles (contractual and directorial) and a focus on timelines to deliver performance outcomes (timely PhD completions and publications). In part, these pressures appear to relate to group supervision practices that have arisen from government direction, growing numbers of PhD students and a corresponding shortage of supervisors. In this regard, our findings reflect the identified changes internationally regarding doctoral education in business disciplines, which may affect the essence of future academic research. Thus, our identified themes and issues suggest some need for Australian and New Zealand accounting and finance doctoral programs to review the balance between product (thesis/contribution to knowledge) and process (students' journey towards scholarship), together with supervisors' roles therein, in order to enhance a vibrant spirit of inquiry that should be intrinsic to the PhD journey.

References

Åkerlind, G., & McAlpine, L. (2017). Supervising doctoral students: variation in purpose and pedagogy. *Studies in Higher Education, 42*(9), 1686–1698.

Baker, M., Robertson, F., & Toguchi, H. (1997). *The Australian Postgraduate Research Award Scheme: An evaluation of the 1990 cohort*. Canberra, ACT: Department of Employment, Education, Training and Youth Affairs, Higher Education Division.

Barry, K., Woods, M., Warnecke, E., Stirling, C., & Martin, A. (2018). Psychological health of doctoral candidates, study-related challenges and perceived performance. *Higher Education Research & Development, 37*(3), 468–483.

Bastalich, W. (2017). Content and context in knowledge production: A critical review of PhD supervision literature. *Studies in Higher Education, 42*(7), 1145–1157.

Beattie, V., & Smith, S. J. (2012). *Today's PhD students—Is there a future generation of accounting academics or are they a dying breed? A UK perspective*. Edinburgh, Scotland: Institute of Chartered Accountants of Scotland.

Boehe, D. M. (2016). Supervisory styles: A contingency framework. *Studies in Higher Education, 41*(3), 399–414.

Boston, J., Mischewski, B., & Smyth, R. (2005). Performance-based research fund: Implications for research in the social sciences and social policy. *Social Policy Journal of New Zealand, 24*(1), 55–84.

Boyatzis, R. E. (1998). *Transforming qualitative information: Thematic analysis and code development*. London: Sage.

Braun, V., Clarke, V., Hayfield, N., & Terry, G. (2019). Thematic analysis. In P. Liamputtong (Ed.), *Handbook of research methods in health social sciences* (pp. 843–860). Singapore: Springer.

Brooks, R. L., & Heiland, D. (2007). Accountability, assessment and doctoral education: Recommendations for moving forward. *European Journal of Education, 42*(3), 351–362.

Carmona, S. (2006). Performance reviews, the impact of accounting research, and the role of publication forms. *Advances in Accounting, 22*, 241–267.

Carroll, D. (2016). *Postgraduate research experience 2015: A report on the perceptions of recent higher degree research graduates*. Melbourne, VIC: Graduate Careers Australia.

Cheng, M., Taylor, J., Williams, J., & Tong, K. (2016). Student satisfaction and perceptions of quality: Testing the linkages for PhD students. *Higher Education Research & Development, 35*(6), 1153–1166.

Cornér, S., Löfström, E., & Pyhältö, K. (2017). The relationship between doctoral students' perceptions of supervision and burnout. *International Journal of Doctoral Studies, 12*, 91–106.

Crabtree, B. F., & Miller, W. F. (1992). A template approach to text analysis: Developing and using codebooks. In B. F. Crabtree & W. L. Miller (Eds.), *Doing qualitative research* (pp. 93–109). Thousand Oaks, CA: Sage.

de Beer, M., & Mason, R. B. (2009). Using a blended approach to facilitate postgraduate supervision. *Innovations in Education and Teaching International, 46*(2), 213–226.

Department of Education and Training. (2004). 2004 Student summary tables—student numbers. Retrieved 14 May 2019 from https://docs.education.gov.au/node/34373

Department of Education and Training. (2018). 2017 student summary tables. Retrieved 15 May 2019 from https://docs.education.gov.au/node/51311

Department of Education and Training. (2019a). Research block grants. Retrieved 15 May 2019 from https://www.education.gov.au/research-block-grants

Department of Education and Training. (2019b). Research training program. Retrieved 15 May 2019 from https://www.education.gov.au/research-training-program-frequently-asked-questions-students

Deuchar, R. (2008). Facilitator, director or critical friend? Contradiction and congruence in PhD supervision styles. *Teaching in Higher Education, 13*(4), 489–500.

Dobrow, S. R., Smith, W. K., & Posner, M. A. (2011). Managing the grading paradox: Leveraging the power of choice in the classroom. *Academy of Management Learning & Education, 10*(2), 261–276.

Dysthe, O., Samara, A., & Westrheim, K. (2006). Multivoiced supervision of master's students: A case study of alternative supervision practices in higher education. *Studies in Higher Education, 31*(3), 299–318.

Education Counts. (2016). Profile & Trends: New Zealand's Tertiary Education Sector. Retrieved 20 May 2019 from https://www.educationcounts.govt.nz/publications/series/2531

Enders, J. (2005). Border crossings: Research training, knowledge dissemination and the transformation of academic work. *Higher Education, 49*(1–2), 119–33.

Engebretson, K., Smith, K., McLaughlin, D., Seibold, C., Terrett, G., & Ryan, E. (2008). The changing reality of research education in Australia and implications for supervision: A review of the literature. *Teaching in Higher Education, 13*(1), 1–15.

Fenge, L. A. (2012). Enhancing the PhD journey: The role of group supervision in supporting collaborative learning and creativity. *Studies in Higher Education, 37*(4), 401–414.

Gardner, S. K. (2009). Conceptualizing success in doctoral education: Perspectives of faculty in seven disciplines. *Review of Higher Education, 32*(3), 383–406.

Gatfield, T. (2005). An investigation into PhD supervisory management styles: Development of a dynamic conceptual model and its managerial implications. *Journal of Higher Education Policy and Management, 27*(3), 311–325.

Gendron, Y. (2008). Constituting the academic performer: The spectre of superficiality and stagnation in academia. *European Accounting Review, 17*(1), 97–127.

Green, P., & Bowden, J. (2012). Completion mindsets and contexts in PhD supervision. *Quality Assurance in Education, 20*(1), 66–80.

Gurr, G. M. (2001). Negotiating the 'Rackety Bridge'— a dynamic model for aligning supervisory style with research student development. *Higher Education Research & Development, 20*(1), 81–92.

Halbert, K. (2015). Students' perceptions of a 'quality' advisory relationship. *Quality in Higher Education, 21*(1), 26–37.

Halse, C., & Malfroy, J. (2010). Retheorizing PhD supervision as professional work. *Studies in Higher Education, 35*(1), 79–92.

Hamilton, J., Thomas, M., Carson, S., & Ellison, E. (2014). *Good practice report: Postgraduate research and coursework degrees*. Sydney, NSW: Australian Government Office for Learning and Teaching.

Harrison, S., & Grant, C. (2015). Exploring of new models of research pedagogy: Time to let go of master-apprentice style supervision? *Teaching in Higher Education, 20*(5), 556–566.

Hemer, S. R. (2012). Informality, power and relationships in postgraduate supervision: Supervising PhD candidates over coffee. *Higher Education Research & Development, 31*(6), 827–839.

Hopwood, A. G. (2008). Changing pressures on the research process: On trying to research in an age when curiosity is not enough. *European Accounting Review, 17*(1), 87–96.

Hopwood, N., & Paulson, J. (2012). Bodies in narratives of PhD students' learning and experience. *Studies in Higher Education, 37*(6), 667–681.

Humphrey, C., & Gendron, Y. (2015). What is going on? The sustainability of accounting academia. *Critical Perspectives on Accounting, 26*(C), 47–66.

Hutchings, M. (2017). Improving PhD support through group supervision: Analysing face-to-face and technology-mediated strategies for nurturing and sustaining scholarship. *Studies in Higher Education, 42*(3), 533–550.

Irvine, H., Moerman, L., & Rudkin, K. (2010). A green drought: The challenge of mentoring for Australian accounting academics. *Accounting Research Journal, 23*(2), 146–171.

Ives, G., & Rowley, G. (2005). Supervisor selection or allocation and continuity of supervision: PhD students' progress and outcomes. *Studies in Higher Education, 30*(5), 535–555.

Johansson, C., & Yerrabati, S. (2017). A review of the literature on professional doctorate supervisory styles. *Management in Education, 31*(4), 166–171.

Khalifa, R., & Quattrone, P. (2008). The governance of accounting academia: issues for a debate. *European Accounting Review, 17*(1), 65–86.

Kiley, M. (2011a). Developments in research supervisor training: Causes and responses. *Studies in Higher Education, 36*(5), 585–599.

Kiley, M. (2011b). Government policy and research higher degree education. *Journal of Higher Education Policy and Management, 33*(6), 629–640.

Kiley, M. (2017). Reflections on change in doctoral education: An Australian case study. *Studies in Graduate and Postdoctoral Education, 8*(2), 78–87.

Lee, A. (2008). How are doctoral students supervised? Concepts of doctoral research supervision. *Studies in Higher Education, 33*(3), 267–281.

Lee, A. (2018). How can we develop supervisors for the modern doctorate? *Studies in Higher Education, 43*(5), 878–890.

Loxley, A., & Seery, A. (2012). The role of the professional doctorate in Ireland from the student perspective. *Studies in Higher Education, 37*(1), 3–17.

Mainhard, T., van der Rijst, R., van Tartwijk, J., & Wubbels, T. (2009). A model for the supervisor–PhD student relationship. *Higher Education, 58*(3), 359–373.

Malsch, B., & Tessier, S. (2015). Journal ranking effects on junior academics: Identity fragmentation and politicization. *Critical Perspectives on Accounting, 26*, 84–98.

Manathunga, C. (2012). Supervisors watching supervisors: The deconstructive possibilities and tensions of team supervision. *Australian Universities' Review, 54*(1), 29–37.

Maslen, G. (2013). More countries are asking whether they produce too many Ph.D.'s, says new report. Retrieved from https://www.chronicle.com/article/Report-Examines-the-Global/138439

McAlpine, L., Paré, A., & Starke-Meyerring, D. (2009). Disciplinary voices: A shifting landscape for English doctoral education in the twenty-first century. In D. Boud & A. Lee (Eds), *Changing practices of doctoral education* (pp. 54–65). Oxford, UK: Routledge.

McCallin, A., & Nayar, S. (2012). Postgraduate research supervision: A critical review of current practice. *Teaching in Higher Education, 17*(1), 63–74.

McGagh, J., Marsh, H., Western, M., Thomas, P., Hastings, A., Mihailova, M., & Wenham, M. (2016). *Review of Australia's research training system: Final report*. Melbourne, VIC: Australian Council of Learned Academies.

Neumann, R., & Rodwell, J. (2009). The 'invisible' part- time research students: A case study of satisfaction and completion. *Studies in Higher Education, 34*(1), 55–68.

Nordentoft, H. M., Thomsen, R., & Wichmann-Hansen, G. (2012). Collective academic supervision: A model for participation and learning in higher education. *Higher Education, 65*(5), 581–593.

Orellana, M. L., Darder, A., Pérez, A., & Salinas, J. (2016). Improving doctoral success by matching PhD students with supervisors. *International Journal of Doctoral Studies, 11*, 87–103.

Patton, M. Q. (2002). *Qualitative research and evaluation methods*. Newbury Park, CA: Sage.

Pearson, M., & Brew, A. (2002). Research training and supervision development. *Studies in Higher Education, 27*(2), 135–150.

Pearson, M., Evans, T., & Macauley, P. (2008). Growth and diversity in PhD education: Assessing the Australian experience. *Higher Education, 55*(3), 357–372.

Pelger, C., & Grottke, M. (2015). What about the future of the academy? Some remarks on the looming colonisation of doctoral education. *Critical Perspectives on Accounting, 26*, 117–129.

Powell, S., & Green, H. (2007). The doctorate worldwide. Maidenhead, UK: McGraw-Hill Education.

Prasad, A. (2015). Liminal transgressions, or where should the critical academy go from here? Reimagining the future of doctoral education to engender research sustainability. *Critical Perspectives on Accounting, 26*, 108–116.

Raineri, N. (2015). Business doctoral education as a liminal period of transition: Comparing theory and practice. *Critical Perspectives on Accounting, 26*, 99–107.

Revelo, R. A., & Loui, M. C. (2016). A developmental model of research mentoring. *College Teaching, 64*(3), 119–129.

Roach, A., Christensen, B. K., & Rieger, E. (2019). The essential ingredients of research supervision: A discrete-choice experiment. *Journal of Educational Psychology*. Advance online publication. https://doi.org/10.1037/edu0000322

Saleem, T., & Mehmood, N. (2018). Assessing the quality of supervision experiences in the different research stages at postgraduate level. *Journal of Education and Educational Development, 5*(2), 8–27.

Sampson, K. A., & Comer, K. (2010). When the governmental tail wags the disciplinary dog: Some consequences of national funding policy on PhD research in New Zealand. *Higher Education Research & Development, 29*(3), 275–289.

Sinclair, M. (2004). *The pedagogy of 'good' PhD supervision: A national cross-disciplinary investigation of PhD supervision*. Canberra, ACT: Department of Education, Science and Training.

Smith, S. J., & Urquhart, V. (2018). Accounting and finance in UK universities: Academic labour, shortages and strategies. *British Accounting Review, 50*(6), 588–601.

Spronken-Smith, R., Cameron, C., & Quigg, R. (2018). Factors contributing to high PhD completion rates: A case study in a research-intensive university in New Zealand. *Assessment & Evaluation in Higher Education, 43*(1), 94–109.

Steenkamp, N., & Roberts, R. (2018). Does workload and institutional pressure on accounting educators affect academia at Australian universities? *Accounting & Finance*. Advance online publication. https://doi.org/10.1111/acfi.12340

Taylor, S., & Beasley, N. (2005). *A handbook for PhD supervisors*. New York, NY: Routledge.

Tertiary Education Quality and Standards Agency. (2015). *Higher Education Standards Framework (Threshold Standards) 2015*. Canberra: ACT: Author.

Unda, L. A., Khosa, A., Burch, S., & Wilkin, C. (2018). Sustainability of the accounting and finance academic profession: Students' and supervisors' views about the PhD supervision process. *Accounting & Finance*. Advance online publication. https://doi.org/10.1111/acfi.12376

Vilkinas, T. (2008). An exploratory study of the supervision of Ph.D./research students' theses. *Innovative Higher Education, 32*(5), 297–311.

Wedlin, L. (2006). Ranking business schools: Forming fields, identities and boundaries in international management education. Edward Elgar Publishing.

Whitelock, D., Faulkner, D., & Miell, D. (2008). Promoting creativity in PhD supervision: Tensions and dilemmas. *Thinking Skills and Creativity, 3*(2), 143–153.

Wichmann-Hansen, G., & Herrmann, K. J. (2017). Does external funding push PhD supervisors to be more directive? A large-scale Danish study. *Higher Education, 74*(2), 357–376.

Table 1
Key studies investigating supervisory styles

Study	Details regarding supervisory styles
Gurr (2001)	Student status (dependent/completely autonomous) and supervisor style (hands-on/hands-off).
Gatfield (2005)	By combining the two poles of the structure and support dimensions, four supervisory styles were identified: laissez-faire, pastoral, contractual and directorial.
Vilkinas (2008)	Supervisory roles were envisaged as comprising two foci (internal and external) with four competing values (developer, innovator, monitor/deliverer and broker).
Mainhard, van der Rijst, van Tartwijk, & Wubbels (2009)	Interpersonal supervisor behaviour was modelled as two axes (proximity and influence) related to eight types of supervisor behaviour on a continuum from strict to student freedom.
Lee (2008, 2018)	Five supervisor approaches: functional, critical thinking, enculturation into the discipline, emancipation/mentoring and development of quality relationships.

Table 2
Interviewee profiles

Students		% Male (*n* = 12)	% Female (*n* = 11)	% Total (*n* = 23)
Gender		52.2	47.8	100
Discipline	Accounting	75	81.8	78.3
	Finance	16.7	18.2	17.4
	Multidisciplinary	8.3	0	4.3
PhD stage	Confirmation	16.7	18.2	17.4
	Mid-candidature	50.0	36.4	47.8
	Pre-submission	0	36.4	17.4
	Submitted	33.3	0	17.4
Enrolment status	Full-time	75	63.6	69.6
	Part-time	25	36.4	30.4
Domestic or international	Domestic	36.4	80	52.4
	International	63.6	20	47.6
Supervisors		**% Male** (*n* = 11)	**% Female** (*n* = 5)	**% Total** (*n* = 16)
Gender		68.8	31.2	100
Discipline	Accounting	63.6	60	62.5
	Finance	36.3	40	37.5
Academic position	Lecturer	0	20	6.2
	Senior lecturer	18.1	0	12.5
	Associate professor	27.2	40	31.2
	Professor	54.5	40	50

Appendices

Appendix 1: Interview Questions Used for PhD Supervisors

1. What has been your experience with the PhD supervision process over the course of your career?

   Cues: are you happy with the quality or/and performance of your student/s or/and requirements for timely and successful completion of PhD thesis?

   a. Are you satisfied with the quality of the supervisory process? Or has it been affected? What factors have influenced it?

   b. Do you freely choose your PhD students or is there some pressure to take students?

2. Would you say you have a particular supervisory style (i.e., facilitator, director, critical friend)?

3. Have you considered if that supervisory style suits all students?

4. How would you manage a situation where there is no alignment between your style and your student's needs? Do you have an example where you have ever negotiated styles with a student?

5. Do you think it is important to discuss supervision styles with students from the beginning?

6. Do you vary the supervision support you provide depending on the stage of the PhD?

7. At which stages of the PhD journey (e.g., literature review, data analysis, etc.) do you think it is critical to give more support to a student?

8. With respect to feedback:

   a. Would you say you provide critical and constructive feedback to your PhD students?

   b. Do you have an example of the type of critical and constructive feedback you provide to your students?

   c. How often and how timely do you provide feedback to students? Do you feel you have time constraints—academic work pressures, too many PhD students, et cetera?

9. Has the relationship between you and your PhD students been built around pastoral or emotional support?

   a. What benefits do you perceive flow from providing pastoral/emotional support to your students?

   b. Or do you think pastoral care is not part of your PhD supervisor responsibilities?

10. Can you give me an illustration of when your student has had a personal problem and you stepped in to provide appropriate support?

    Cues:
    - *take an interest in the personal life of a student*
    - *cares about the student as a whole person, not just as a scholar*
    - *provides emotional support when required*
    - *is sensitive to the student's needs*
    - *has the student's best interests at heart*
    - *would support the student in any career path they might choose.*

11. Could you improve the supervision process? If yes, how would you do so?

Appendix 2: Interview Questions Used for PhD Students

1. Over the course of your PhD studies, what has been your experience with the supervision process?

   a. Are you satisfied with the supervision you have received?

   b. If no, what aspects are you not satisfied with and why?

2. How would you describe the supervisory style of your PhD supervisor—facilitator, director, critical friend, etcetera?

   a. Does that style of supervision align with your needs? If no, what changes would you like to see?

3. With respect to your PhD supervision meetings:

   a. How often do you meet with your PhD supervisor?

   b. How long do these meetings last?

   c. In advance of the meeting, do you provide materials to your supervisor for them to review and comment on? Does your supervisor read the material beforehand and provide useful feedback?

4. With respect to the supervision you have received to date in your PhD:

   a. Have you noticed a change in the level of supervision provided over the years?

   b. Have you found at times that there has been a lack of or insufficient support provided to meet your needs? Can you elaborate? Do you know why? Prompts: academic too busy, academic shows lack of interest, academic supervises too many PhD students, etcetera.

5. At what stages of the PhD journey (e.g., literature review, data analysis, etc.) do you think it is critical to get appropriate support from your supervisor?

6. With respect to feedback on your PhD:

   a. Would you say your supervisor provides critical and constructive feedback to you?

   b. What type of feedback do you commonly ask for?

   c. How often do you ask for feedback?

   d. How timely is the feedback you receive?

7. Has the relationship between you and your supervisor been built around pastoral or emotional support?

   a. If yes, what benefits do you perceive from receiving pastoral/emotional support from your supervisor?

   b. If not, what has prevented you to develop such a pastoral relationship?

8. Can you give me an illustration of when you have had a personal problem and your supervisor stepped in to provide appropriate support?

   Cues:
   - *takes an interest in my personal life*
   - *cares about me as a whole person, not just as a scholar*
   - *provides emotional support when I need it*
   - *is sensitive to my needs*

- *has my best interests at heart*
- *would support me in any career path I might choose.*

9. Do you think there are opportunities for improvement in the supervision you currently receive?

    a. If yes, what are these improvements?

    b. What impact would these improvements have on your PhD?

    c. What impact would these improvements have on developing your skills?

10. If you were to start your PhD over again, would you select a different supervisor (yes, no, maybe)? Why?