The supervised as the supervisor

Abstract

Purpose – The relationship between doctoral students and their supervisors impacts on degree completion rates; faculty research performance; and postgraduate satisfaction with their alma mater. This paper explores the impact of the supervisor on doctoral students/graduates who are also supervisors themselves.

Design/methodology/approach – Forty supervisors who are doctoral students/graduates were approached to participate in the study, and 32 agreed. For each participant, data was collected to explore their development as a supervisor.

Findings – Supervisors seek guidance from textbooks, workshops, peers, colleagues and their doctoral supervisor to develop as a supervisor. Their supervision style emerges as a reaction to both positive and negative experiences of supervision. A recurring theme in the data is that if there is something *missing* in the supervision experience, the student will emphasise this element in their approach to supervision.

Practical implications – The changing nature of doctoral provision is changing the role of the supervisor. This paper explores the relationship between a student and their supervisor. The outcome is that insights are provided into how the experience of doctoral supervision is reflected in the supervisory practices of the supervised.

Originality/value – The impact of the supervisor on the doctoral student's/graduate's subsequent approach to supervision can be mapped against previous research. Additional research is needed to identify the different styles of supervision practised, and how each style is valued within the academic community.

Keywords – Doctoral students, research supervisor, supervision, relationships, difficulties

Paper type – Research paper

Introduction

Barnacle and Mewburn (2010) and Ryland *et al.* (2009) explain that completing a doctorate changes people. Doctoral study involves different people in different contexts from different disciplines who change in different ways. Doloriert *et al.* (2012, p. 753) explain that *t*he process of earning a doctorate is complex and a critical success factor is the supervisory relationship. While this is a given, what can get overlooked is the significance of identity formation within doctoral education. This paper explores the development of doctoral students as new supervisors, as a result of their relationship with their supervisor. This process is assessed in terms of the impact on the doctoral student's subsequent approach to supervision. Understanding how phenomena such as knowledge are required, held, shared and wielded within doctoral learning requires attending to the significant agents impacting on the knowing locations occupied by the candidate (Barnacle and Mewburn 2010, p. 443). Drennan and Clarke (2009) explain that although postgraduate education has undergone extensive growth over the last decade, little is known of students' experience of research supervision; similarly, in the context of this paper, very little is known about the impact of supervision on postgraduates' own approach to supervision later on. Not all individuals have the traits necessary to become a good supervisor/mentor. Individuals who enjoy supporting others, sharing knowledge, and time are best suited to being mentors. The success of a research project rests crucially on the supportive nature and academic capacity of the prospective supervisor (Dietz *et al*., 2006). Academics may have excellent research skills and be highly respected in their field of study. However, there is often little preparation for the role of supervisor, which requires particular communication skills; personal qualities; and the building of a working and a personal relationship with the doctoral student. Amundsen and McAlpine (2009) found that there is minimal systematic

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preparation for supervision. Indeed, Lee (2008) notes that tensions arise for new supervisors in developing their professional and supervisory identities. During this early supervisory experience, the supervisor has the additional pressures of isolation, high stress levels and a lack of role definition (Blass *et al.* 2012), which all have a compounding impact on their supervisory action. Halse and Malfroy (2010) highlight that intellectual and personal changes are intimately tied to one another and to the nature of a student's learning experience. Deep reflection on the content and nature of learning appears to influence changes in personal identity, and, this paper argues, the relationship between the supervisor and the doctoral student. In the doctoral learning process there is an indirect object that concerns how learning and the act of learning are formed and influenced by both the doctoral student and the supervisor (Franke and Arvidsson 2011). This is why previous research has focused on supervision as a blend of pedagogical and personal relationships. The focus in this paper is on the act of learning by the doctoral student (based on the practices of their supervisor) and how this learning is then applied by the doctoral student when they become a supervisor.

Baker and Lattuca (2010, p. 807) explain that while the purposes of doctoral education are widely debated, the need to better understand how doctoral programmes shape teachers and researchers remains a key concern. Furthermore, Lee and Green (2009) challenge us to think about the how the figure of the supervisor and the doctoral candidate appear in the literature and in stories of experience. In accepting the challenge, this research has engaged doctoral students and collected data on their experience of supervision. Green and Lee (1995, p. 218) suggest that the pre-eminent forms of supervision carry with them powerful overtones of overseeing; that is, of looking over the production and development of

academic knowledge and identity. Belsky and Jalfee (2006, p. 38) report that whereas great effort has been expended on studying the characteristics and consequences of parenting, much less attention has been devoted to studying why parents parent the way they do, and what influence the parenting style they experienced has. Similarly, there is an absence of studies on why supervisors supervise the way they do. Students' perceptions have been studied (Drennan and Clarke, 2009; Walsh *et al.* 2010; Turner and McAlpine, 2011; Green and Bowden, 2012), as has the experience of supervisors (Halse and Malfroy, 2010; Franke and Arvidsson, 2011; Blass *et al.* 2012). Furthermore, Phillips and Pugh (1994) discuss the importance of the supervisor-student relationship and even go as far as to map the closeness of the relationship to that of marriage partners. It is not possible to provide a comprehensive summary of these papers here; however, it remains the case that research on the system/structure of supervision outpaces that on the determinants of supervision. The literature reports supervisors' frustrations with the progress of students and the increasing number of bureaucratic processes. The literature also reveals that students struggle to remain motivated beyond the initial phase when the achievement of award appears relatively close. In this paper, the experience of doctoral students who are also supervisors themselves is explored.

Developing as a supervisor

Earwaker (1992, p. 106) proposes that if we look at contemporary institutions of higher education without being distracted by ideology, we might be struck by the arrogance with which one group of people (academics) suppose that they can help another group (students) in ways that go beyond either their specialist knowledge or the teaching expertise which their job entails. This creates a challenge for the formation of a personal relationship

which, the literature indicates, is an important and significant factor of completion (Malfroy 2005; Manathunga 2007; Deuchar, 2008; Halse and Malfroy 2010). Franke and Arvidsson (2011) explain that deciding how supervision should be conducted within an administrative framework has, to a large extent, been left to the supervisors themselves. However, the prevalence of structured doctoral programmes is placing new demands on supervisors and requires additional evaluation of procedures and schedules.

There is no gold-standard model of supervision which can be applied in all situations, across all disciplines (Beddoe and Egan, 2009). However, Vilkinas, (2002) proposes that *good* supervisors have research knowledge, management and interpersonal skills, and are: innovative; problem solvers; resource-orientated; work-focused; technical experts; decisive; and dependable. The reality of doctoral candidature is that it rarely progresses in an idealised way. Life outside the doctorate continues and has an affect on what happens within the doctoral context (Green and Bowden, 2012 p. 66). Of course, the relationship between the candidate and their supervisor is not the only influence on completion, but it is certainly significant and needs to be explored to address a gap in the literature. Deuchar (2008) proposes that the relationship between doctoral supervisors and candidates is a complex one. The literature (Vilkinas, 2002; Whisker, 2005; Unsworth *et al.* 2010) indicates that supervisors and students see the relationship as having both a professional and a personal dimension. This observation infers that a good supervisor is one who possesses professional knowledge and is capable of exhibiting care and concern for the personal well-being of the student. Wheeler and Birtle (1993, p. 21) explain that while on the surface it may appear that the relationship is a simple dyadic one, many subconscious feelings and desires may complicate the relationship and create unexpected reactions. Indeed, Holligan

(2005, p. 270) proposes that supervisors start with no clear guide as to the assumptions that can legitimately be made about the student's preferred learning styles; pre-existing levels of expertise; and how they construct the wider environment of academia. However, we argue that the supervisor starts with a set of assumptions about *how to* supervise, and that this is based on their experience. This is similar to parents, who may modify their approach for each child but whose overall understanding of parenting is based on their experience with their parents (Belsky and Jalfee, 2006).

According to Holligan (2005, p. 276), one view of doctoral study is that it is essentially a system of training in both technical and intellectual skills, the possession of which will ultimately lead to original contributions. In addition, doctoral studies regularly result in supervision duties; therefore, the system/structure of doctoral programmes must reflect the need to develop a supervision skillset. Guiding a new scholar into a specialism is intrinsically rewarding, and the best way to ensure that an academic work echoes down to the next generation and beyond (Delamont *et al.* 1997); furthermore, providing a supervision style that is replicated is also rewarding and creates a positive legacy. This is what Appel (2003) describes as the *apprentice model*. However, research training has become more formalised and has migrated away from the traditional apprenticeship model. Indeed, Chiang (2003) reports that although doctoral students are still expected to work at the front line of knowledge, the training process has become more structured. An impact of this is that doctoral graduates are expected to be professionally trained researchers, rather then purely academic scholars. But there is a need to provide training in research supervision beyond the understanding of supervision that emerges from the student's experience of their relationship with their supervisor.

Hasrati (2005, p. 558) proposes the concept of cognitive apprenticeship, whereby supervisors *model* by making explicit their tacit knowledge; *coach* by supporting students in doing tasks; and *fade* when they have empowered students to continue independently. The concept of a cognitive apprenticeship is further explored by Halse and Malfroy (2010, p. 80), who suggests that doctoral supervisors actively fashion students' development to address deficits in expertise; deliberately intervene to ensure timely completion; provide purposeful assistance to minimise the risk of financial distress and withdrawal; and deploy personal networks to facilitate completion and ensure employment. This is a positive picture. But the manner and tone of this fashioning and intervention must have a significant impact on the doctoral student, and the experience must impact on their subsequent approach to supervision.

In the doctoral learning process there is an indirect object that concerns how learning and the act of learning are formed and influenced by both the doctoral student and the supervisor (Franke and Arvidsson 2011, p. 8). Grant and Graham (1999) propose that a fundamental assumption of high-quality relationships in supervision is that both the doctoral student and the supervisor are active constructors of the relationship. This may not always be the case. The participants in this study were often passive, and through a mixture of respect, reverence, focus on completion, and occasionally intimidation allowed the relationship to be controlled by the supervisor. Baker and Lattuca (2010, p. 809) highlight that intellectual and personal change are intimately tied to one another, and to the nature of students' learning experiences.

Three research questions emerge from the review of literature: What are the sources of learning for new supervisors? What are the attitudes of new supervisors towards supervision? How is a student's experience of supervision reflected in their own supervisory practices? By exploring these questions this paper provides insights into how the experience of doctoral supervision is reflected in the supervisory practices of the supervised. Furthermore, this paper emphasises the impact of the supervisory experience, and particularly the impact that the style of supervision experienced has on the process of intellectual and personal change. Holligan (2005) reflects that the supervision process allows supervisors to induct students into the *academic game*, thus empowering them. Therefore, we can conclude (supported by the literature) that supervision is an evolving, multidimensional process that is dependent upon multiple factors which determine success, and that good supervision should result in improved personal and professional capabilities (Beddoe and Egan, 2009; Drennan and Clarke, 2009).

Method

In line with Foley (2008) and Stephens (2013), the snowball sampling method was used to identify respondents. Forty supervisors, who are all doctoral students/graduates, were approached, and 32 agreed to participate in the study. The supervisors work in the UK and Ireland and their PhD studies are/were at higher education institutions in the UK and Ireland. The experiences of supervisors and doctoral students differ widely depending on what stage they are at in their research education in terms of the organisation of their thesis work, and thus related supervision. This creates a challenge for researchers who wish to understand these experiences. A further challenge is evident from research on parenting, which consistently relies on retrospective assessments of parents and, as a consequence,

reveals overly positive associations between parenting across generations (Kendler *et al.*, 1992; Belsky and Jalfee, 2006; Smith, 2010). To address this issue, this paper provides evidence from doctoral students who are at different stages of their PhD study (four were in year one/two; four were in year two/four; four were in year five+; and 20 had graduated). While some academics argue that different disciplines require different forms of supervision, and that it is not possible to provide a generic framework for doctoral supervision, others point out that supervision is generic in nature (Vilkinas, 2002). Indeed Mainhard *et al.* (2009) developed a model of the supervisor-student relationship based on only a sample of educational research students. In designing this project, I decided to explore the role of supervisors across five disciplines. This provides an improved understanding of the role of supervisors across different tribes and territories. In this study, therefore, the participants can be classified as follows: Humanities (8); Social sciences (12); Natural sciences (4); Formal sciences (4); and Professions/Applied sciences (4). Although there is limited research on supervision at Masters level the findings of Armitage (2007) do not indicate any significant differences in supervision practices at Masters and Doctoral levels. All 32 participants currently supervise Masters students. Sixteen of those who have completed their doctoral studies are involved in doctoral supervision. The remaining four graduates have not engaged in doctoral supervision because there is no doctoral education in their faculty/institution.

Chiang (2003) sought to measure doctoral education using two perspectives: the individual and the aggregate. However, the focus in the present paper is on the approach to supervision; therefore, the questionnaire was designed with a focus on the individual. The questionnaire was circulated during face-to-face meetings. The design and structure of the

questionnaire was guided by Mainhard *et al.* (2009); Walsh *et al.* (2010); and Green and Bowden (2012). A mix of Likert scales, rank-order rating scales and open-ended questions were used. Robson (2002) and Tight (2003) explain that the most common Likert scale is that which has five fixed-alternative expressions. The answering options were strongly agree; agree; not sure; disagree and strongly disagree. The results presented in Tables 2, 4 and 5 are an aggregate of the agree/strongly agree options based on a set of answering option drawn from the literature. Narrative structuring (Kvale, 1996) was used to create a coherent story based on the supervisors' responses to the open-ended questions.

The questionnaire was field-tested with eight supervisors, and revised to improve the clarity of purpose – a consequence of which was that the number of questions was reduced. For each participant, data was collected under the following themes: data characterising the supervisor; the history of the respondent, especially in terms of reconstructing the process of evolution; enablers and disablers facilitating development; expectations of the student; and the supervisor's standing within the academic community. These themes can be mapped to the three research questions: What are the sources of learning for new supervisors? What are the attitudes of new supervisors towards supervision? How is a student's experience of supervision reflected in their own supervisory practices? Specifically, the questionnaire explored: sources of learning; desirable characteristics of supervisors and doctoral students; how the respondents' approach to supervision was influenced by the supervisory approach they experienced; the activities of a supervisor (the list of activities were drawn from the literature: Delamont *et al.* 1997; Hughes 2004; Denicolo, 2004; Halse and Malfroy 2010; Platow, 2012); attitudes towards undertaking supervision; and approaches to dealing with difficulties. The section on difficulties is in line

with a study by Abidin (1992), who explored the determinants of parenting with a focus on dealing with difficulties in the parent-child relationship.

Findings

The first section of the questionnaire asked respondents to identify five sources of information they use to guide their development as a supervisor. The responses were as follows: textbooks (42.8%); workshops (71.4%); peers (57.1%); colleagues (100%); and supervisors (57.1%). The results indicate five primary sources of information, with all 32 respondents consulting colleagues and 18 respondents consulting their own supervisors. The figure (57%) for supervisors indicates that in addition to the impact of supervision the respondents engage with their supervisors to develop as supervisors. The figure is evenly distributed between participants who have completed and those who are still completing their studies.

The next section of the questionnaire asked the respondents to identify five desirable characteristics in a supervisor. The characteristics are presented in Table 1.

Table 1. Desirable characteristics in a supervisor

The respondents identify 11 characteristics. The two characteristics most frequently identified are *organised* and *enthusiastic*. Research knowledge develops over time and may be a measure of the experience of the supervisor. I would argue that the other four characteristics manifest themselves in the style of supervision being delivered – and, of course, the relationship will be framed by the interpersonal skills of both the supervisor and the doctoral student. The other characteristics can be loosely mapped against those in the literature (research knowledge; management; and interpersonal skills) with being

sympathetic a possible new addition. There was no significant difference in the answers received from participants who have completed and those who are still completing their studies.

Next, the respondents were asked about the professional activities associated with a supervisor. The answers were provided via a five-point Likert scale. An answer of one indicated that the respondent strongly disagreed with the need for the activity, and five indicated that they strongly agreed. The activities are presented in Table 2.

Table 2. Key activities of a supervisor

Of the ten activities, the need to maintain a *publications record* was the only one with which all 32 strongly agreed. The other activities with which there is strong agreement include: the ability to develop theory and theoretical perspectives; expertise in the discipline; excellence in teaching; and the development of scholarship. Respondents were unsure about the need for supervisors to: secure funding; have an international reputation; engage in consultancy; be of a higher academic rank; and to be an active citizen in their organisation. This indicates that doctoral students place significant value on the contribution of their supervisor to academic knowledge. This must impact how the students accept advice, criticism and direction on work plans. It may also impact the tolerance of the student to poor supervision. It is possible that a student would ignore failings if they believe their supervisor will add value to their final award and act as a gatekeeper to future research activity and career development.

Next, the respondents were asked to identify desirable characteristics in a research student. The characteristics are presented in Table 3.

Table 3. Desirable characteristics in a research student

The respondents report eight characteristics. Being *motivated*, *organised* and *hard working* ranked highest. This is unsurprising, and the literature (Wheeler and Birtle 1993; Whisker 2005; Sambrook *et al*. 2008) indicates that a student considering undertaking a postgraduate research must have these qualities. Two (*enthusiasm* and *organisation*) are also desirable qualities in a supervisor, and are identified by Green and Bowden (2012) as essential to the *completion mindset*. *Creativity* is identified in the literature as a characteristic of supervisors, and is identified by respondents in this study as desirable in students. The need for creativity and a suite of transferable skills is examined by Walsh *et al.* (2010).

The next section of the questionnaire asked respondents about their attitude to being a supervisor. The respondents were asked to rate 12 attitudes. The attitudes emerged following a review of the literature (Delamont *et al.* 1997; Holligan 2005; Lee and Green 2009; Hopwood 2010). The responses are presented in Table 4.

Table 4. Attitude to being a supervisor

All 32 respondents want to be a *good* supervisor. None of the 32 avoid engaging with their students. There was an absence of consensus about whether: a student's performance reflected the approach of their supervisor; and if supervisors should be accountable for their students' performance. The respondents were unsure if their level of job satisfaction is linked to student success; and if their students will accomplish more than they have. The

respondents did not feel that it was important to be *close* to their students, or that being a supervisor made them feel important. There was no significant difference in the answers received from participants who supervise at doctoral level and those who do not.

Zeegers and Barron (2012) explain that while isolated examples of good practice offer models with suggestive possibilities of their own, they do not tackle the problem of what happens when the supervisory relationship goes wrong. Therefore, the respondents were asked about the action(s) they take when they encounter difficulties in their supervision activities. The answering options are loosely based on Abidin (1992), who used a similar set of options when studying the approaches used by parents when they encounter difficulties with their children. Table 5 presents the responses.

Table 5. Actions taken when encountering difficulties

The respondents do seek *help*. All 32 ask fellow supervisors, and develop a plan and take action based on past experience. Less popular actions include: reading a text; blaming themselves; and thinking problems are to be expected. Just over one in four of the supervisors: seek advice at staff meetings; ask their old supervisor; and pray. There is a discrepancy between these responses and the sources of information used for development indentified by respondents. It is possible that respondents do not want to make colleagues and their supervisor aware that they are having difficulties. Finally, the respondents were asked about their standing as a supervisor. The majority (57.1%) felt that they were not perceived as a *good* supervisor by their colleagues. This may be because they are genuinely not perceived well by their colleagues, or because they feel in someway inferior to other supervisors in their department, which may be because the majority (75%) of respondents believe that they approach supervision in a different way to their colleagues. However, 75%

believe their colleagues are good supervisors, and 80% believe that their students view them as good supervisors. There was no significant relationship between supervision experience and answers on the respondents standing as a supervisor.

Open-ended questions

The final section of the questionnaire involved open-ended questions. The respondents were asked to reflect on the supervisory characteristics they possess that are an outcome of the supervision style(s) they have experienced. There is evidence of supervision styles which are a reaction to the style encountered. The first quote describes the supervisor as a *realist,* whereas respondent 11 adopts an *encouraging* approach:

> *My supervisor was too much of a … realist … and our meetings involved her emphasising what I hadn't done. I try to encourage and start with the work that has been completed successfully* (respondent 11, graduated in Natural Sciences, now supervising two doctorates)*.*

Respondent 23 expressed the view that their supervisor wasn't prompt enough with feedback and advice. Therefore, they have developed a supervisory style which emphasises the timing and quality of their responses to students:

> *I spent a lot of time waiting for feedback on my work and even simple answers to queries I had sent by email. As a supervisor I really try to be responsive … both timely and appropriate … I think this is incredibly important at critical stages* (respondent 23, graduated in Humanities, now supervising Masters by Research)*.*

Respondent 8 reports an over-reliance on their supervisor for structure. Although there is value in having a level of structure (being organised and management were identified as key

characteristics of a supervisor), in this case the respondent reports a reduced sense of creativity:

> *My supervisor provided too much structure, I was working to one of his templates … this was helpful at the start but now I am struggling to make original claims. For me it is important to allow students space to make their own decisions and develop their own understandings* (respondent 8, year 4 in engineering, supervising two Masters by Research)*.*

Creativity is identified as important in this study and by Walsh *et al.* (2010), so supervisors need to create a balance between ensuring a structured process and facilitating students' freedom to be creative in the search for new knowledge and an original contribution. The literature and the respondents in this study emphasise the value of interpersonal skills. For example, the respondents (as indicated in Table 1) identify the need for a sympathetic approach, as highlighted in the following quote:

> *I think it is important to be sympathetic to life circumstances … when I have difficulties my supervisor makes me feel worse and I really feel the pressure of deadlines* (respondent 29, in final year of a Humanities PhD, currently supervising one Masters by Research and one MA students)*.*

The next quote captures the importance of supplementing a student's understanding of the process and the associated regulations involved in achieving an award:

> *I have researched my university policies and procedures and I am keeping abreast of changing regulations. As a doctoral student my main source of advice on these matters was my supervisor* (respondent 6, in third year of a business PhD and supervising four MBS students)*.*

The final quote captures the desire of the respondents to get their work published:

Starting out we all wanted to get publishing but it was disappointing that I didn't bring my [doctoral] work to publication with my supervisor's help.. He encouraged me but I wanted help to develop articles but he didn't have the time and/or enthusiasm. Now this is a key focus of my work – getting the student thinking about publication (respondent 1, graduated in Natural Sciences and is now supervising a PhD student and a Masters by Research)*.*

This quote highlights a recurring theme in the data collected for this paper: if there is something *missing* in the supervision experience, the student will emphasise this element in their approach to supervision.

Conclusion

The role of the doctoral supervisor is complex and challenging. The changing nature of doctoral provision, particularly the proliferation of structured programmes, is changing the role of the supervisor. The pedagogic experience of being supervised during a doctorate is not just about learning how to become a researcher, but is also about learning aspects of teaching and learning that transfer into practices. This paper has explored the relationship between the experience of supervision and subsequent supervision practices. The findings of this research support the assertion by Doloriert *et al.* (2012) that supervisors appear to learn about supervision through reflecting upon how they were supervised as students. The findings indicate that supervisors seek guidance from textbooks, workshops, peers, colleagues and their doctoral supervisor. Guidance is sought to help them develop as a supervisor, but not necessarily in response to encountering difficulties. There is evidence that characteristics which are desirable in a supervisor are also desirable in doctoral students: both the student and the supervisor need to be motivated and organised, and

possess good interpersonal skills. The supervisor must balance the need for structure with the risk of limiting the creativity of students. The findings offer insights into how the supervision experience influences the student's approach to supervision. There is evidence that the subsequent supervision style emerges as a reaction to both positive and negative experiences. The respondents enjoy the challenge of supervision and aspire to engage with their students and to be good supervisors. Additional research is needed to assess the impact that *structured* doctorates and *professional* doctorates have on the relationship between student and supervisor. Research is also needed to identify the different styles of supervision practised, and how each style is valued within the academic community and experienced by students. The findings from this research are an addition to existing research will help new supervisors to indentify and develop key characteristics that will improve their experience of supervision, and hopefully that of their students as well. The gaps and problems identified should influence training for new supervisors. Perhaps doctoral candidates could complete a profiling questionnaire which would indicate to their potential supervisor the style of supervision they require. Some students may need help with creativity and originality for others it may be the need for a structure to support their numerous ideas. As outlined by Dietz (2006) higher education institutions need to develop a mentoring scheme to improve knowledge transfer from experienced supervisors to those new to supervision. This is best supported by informal interaction where the new supervisors can over time access the tacit knowledge of their peers.

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