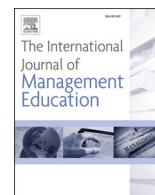


Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

The International Journal of Management Education

journal homepage: www.elsevier.com/locate/ijme

Doctoral supervision as an academic practice and leader–member relationship: A critical approach to relationship dynamics

Maija Vähämäki ^{a,*}, Essi Saru ^b, Lauri-Matti Palmunen ^a

^a Turku School of Economics, University of Turku, Rehtorinpellonkatu 3, 20500, Turku, Finland

^b Turku School of Economics, Pori Unit, University of Turku, Pohjoisranta 11 A, 28101, Pori, Finland

ARTICLE INFO

Keywords:

Doctoral supervision relationship
Leader–member exchange theory
Learning environment
Power dynamics
Quality of supervision
Well-being in academic work

ABSTRACT

Recent rationalisation of academic work has challenged the role of traditional supervision, which still plays a significant part in students' experiences of their doctoral studies. Accordingly, we give a voice to doctoral students' lived experiences and trace how relationship dynamics are constructed during encounters between the supervisor and supervisee in the contemporary academic context. We approach the topic with interview data and written stories from 33 doctoral students. First, aided by the LMX theory, our findings demonstrate supervisory relationships to be leader–follower relationships that contain imbalanced power relations. Second, a narrative reading of our data helped us identify the critical moments and encounters that pushed relationships towards either a fruitful co-operation or a destructive endeavour. Our findings add a critical view to the mainstream pedagogical research on supervising practices. In addition, we contribute to the research on doctoral students' wellbeing by demonstrating how a combination of intertwined elements explain the overall satisfaction and experience of the supervision.

1. Introduction

The supervisory relationship is considered fundamental to doctoral students' success in their studies (Deuchar, 2008; Ives & Rowley, 2005; Parker-Jenkins, 2016). The gradual development of the supervisory relationship occurs through encounters during which supervisors and supervisees evaluate each other in terms of ideologies, values and behaviour as well as tones and manners of communication (Lee & Green, 2009). In positive cases, the quality of the supervisory relationship contributes to the candidates' overall well-being, satisfaction (Stubb et al., 2011; Zhao et al., 2007) and progress with regard to research (Leijen et al., 2016; Sverdlík et al., 2018). In less fortunate cases, a tense supervisory relationship can lead to distress and dropouts (Leijen et al., 2016; Lynn, 2017). The problems associated with this relationship have been attributed to, for example, supervisory styles (Lee, 2008), interpersonal compatibility (Gatfield, 2005; Mainhard et al., 2009), incompatibility of topic (Ives & Rowley, 2005), conflicting expectations (Zhao et al., 2007), and paternalistic supervisory style (Manathunga, 2007).

Recent reforms in doctoral education have strived to enhance the quality of supervision. These reforms refer to, for example, organising training for supervisors and sharing the supervisory burden with the wider academic community (McCallin & Nayar, 2012; Taylor, 2012), often in the form of doctoral schools. This enables the faculty to save on teaching resources and allows the supervisors to concentrate on the delivery of subject-specific knowledge and practices of research. At the same time, however, these changes have brought administrative regulations, a competitive culture and productivity measurements to academia (Knights & Clarke, 2014; Kallio

* Corresponding author.

E-mail addresses: maija.vahamaki@utu.fi (M. Vähämäki), essi.saru@utu.fi (E. Saru), lauri-matti.palmunen@utu.fi (L.-M. Palmunen).

et al., 2016). These developments have been criticised in the name of well-being, and a more supportive atmosphere has been called for in the academic learning environment (Litalien & Guay, 2015; Ratle et al., 2020). Still, the importance of having access to academic communities (Stubb et al., 2011), research cultures (Deem & Brehony, 2000), student networks (Pilbeam & Denyer, 2009), communities-of-practice (Wenger, 2000; Wisker et al., 2007) and other collective forms of supervision remains (Malfroy, 2005), as earlier literature has underlined.

Based on these insights into the supervisory relationship and its contemporary academic context, we perceive the supervisory relationship as not only a knowledge-based research teaching effort but also as a mentorship kind of co-operation (Ugrin et al., 2008) that brings two individuals together to work over a period of several years. This relationship gradually develops over the encounters between the pair (Graen & Uhl-Bien, 1995) and in the context of local practices and the global academic frame. However, the imbalanced power dynamic inherent in the supervisory relationship creates a challenge. The tone of an individual relationship is mainly determined by the supervisor's behaviour (Deuchar, 2008), whereas the supervisee takes on the role of a subordinate. This, however, has rarely been taken into account in past studies.

Drawing on the theory of work-related well-being and performance (Guest, 2017), we assume that well-being is a relevant aspect to pursue in supervisory relationships as well as in the wider academic community (Ratle et al., 2020). Recently, studies on the relationship between doctoral students' well-being and the completion of their degree indicate a need for in-depth examinations that would depict a consolidated picture of the factors that lead to productive and destructive doctoral study experiences (Leijen et al., 2016; Sverdlik et al., 2018). Accordingly, many recent studies have called for better inclusion of power and reproduction of dominance in the research of supervision pedagogy (Ratle et al., 2020; Bradbury-Jones et al., 2007; Bartlett & Mercer, 2000) and in organisational learning (Collien, 2018). A similar need for more in-depth examinations has been noted by, among others, Manathunga (2007), who argues that supervisors need to be conscious of the prevalence of the unequal power dynamics in postgraduate supervision despite their best intentions.

Consequently, the purpose of this article is to explore the dynamics of the supervisory relationship in its local and contemporary academic context and pay attention to the manifestations of power in supervisory practices and in encounters between supervisors and supervisees. Specifically, our research objectives are: 1) to identify critical events and practices that affect the experience of the supervisory relationship and 2) to identify how the diversified pathways to productive co-operation or a destructive relationship are constructed.

To attain these objectives, this qualitative and descriptive study draws on doctoral students' interviews and written stories (25 + 8) regarding their supervisory relationship. The students are from two faculties from a Finnish university. Hence, the context and culture of the students are the same, but we selected the students in such a manner that they represented both of these faculties, different sexes, and varying stages of research and maturity. Their stories were first inductively analysed with content analysis and then categorised with the help of the leader-member exchange (LMX) theory (Graen & Uhl-Bien, 1995). Further, a narrative reading of the stories uncovered the plot of the doctoral journey, along with the ups and downs, the dynamics and the tensions inherent to the relationship. These descriptive narratives also informed us about their feelings of inclusion or exclusion in the academic environment.

As a result, this study adds to the contextual understanding of supervisory relationship dynamics. We argue for a gradual development of this process and underline the role of power in the encounters of the pair and, furthermore, the manifestations of power residing in the administrative structures. Specifically, we make the following three contributions to previous studies. First, we contribute to the understanding of the elements that contribute to the diversification of either productive or destructive supervisory relationships (Cornér et al., 2017; Leijen et al., 2016; Wisker et al., 2007) by corroborating previous results by describing the diversified pathways to either high-quality or low-quality relationships. Second, previous studies on doctoral students' well-being (e.g. Litalien & Guay, 2015; Sverdlik et al., 2018) have identified that a supportive environment and relationship with the supervisor have an impact on students' progress and the overall experience of the doctoral journey. We contribute to these studies by proposing that contextual factors have received extremely little attention in previous studies in relation to the interactions of the supervisor-supervisee pair. Yet, these together explain the overall satisfaction with and experience of the supervision. Third, the inclusion of power in our examination adds a critical view to the mainstream pedagogical research on supervising practices. We contribute to the critical discourse on doctoral education (Deuchar, 2008; Bastalich, 2015; Parker-Jenkins, 2016) and propose that the power inherent in all social relationships might prevent a balanced negotiation of roles in the supervisory relationship.

The remainder of the article is structured as follows: In the following section, we frame our study using previous research on the supervisory relationship and the learning environment of doctoral studies. Then, we proceed to discuss the methodological issues related to our research objectives and describe our data collection and analysis. After that, we give a voice to the interviewees in order to illuminate the critical encounters and moments that influenced the emergent relationships. Finally, in the last section, we discuss the main findings of the study and contemplate their implications for previous research.

2. Supervisory relationships and the learning environment in doctoral studies

In this section, we discuss the supervisory relationship and the learning environment in doctoral studies, which both participate in the experience of doctoral learning and academic work. We pay special attention to the studies on the tensions influencing the doctoral learning experience. The development of the supervisory relationship is tightly linked to local academic practices (Lee, 2008; Lee & Green, 2009), but also to the global tendency of rationalisation (McCallin & Nayar, 2012; Taylor, 2012). The recent shift in academic culture towards a more managerial administration (Bastalich, 2015; Parker-Jenkins, 2016) are prevalent in this study as well. Throughout this article, by supervisory practices, we mean meetings and research seminars. Postgraduate training practices refer to doctoral schools, their funding opportunities and evaluation and monitoring of the doctoral supervision process. With structural

frames, we emphasize especially the administrative and employment conditions.

Recent economic pressures and efficiency discourse can be seen in the development of doctoral education, and a lively discussion has taken place about the transition from the Humboldtian ideology towards a more rational image of postgraduate learning and training for the researcher profession (Bastalich, 2015; Parker-Jenkins, 2016). Following that, some recent educational studies have reconsidered the position of the academic supervisor's role. The expert-novice relationship has been criticized, and a less hierarchical relationship has been called for (Bastalich, 2015; Harrison & Grant, 2015; Manathunga, 2007).

Despite the calls for a less hierarchical division of supervisory practices (Leijen et al., 2016; Lynn, 2017), previous studies agree that the supervisory relationship remains a relevant part of doctoral students' progress in their studies (Deuchar, 2008; Ives & Rowley, 2005; Parker-Jenkins, 2016; Zhao et al., 2007). Sverdlík et al. (2018), for example, identify several internal and external factors that affect doctoral students' experience and argue that the supervisory relationship is among the most influential factors. They underline that positive experiences are beneficial for completion rates and overall well-being. Arguably, doctoral schools are supposed to offer horizontal support for doctoral students. Therefore, supervisees' needs for both individual and social contact with supervisors and belonging to a scholarly community have remained.

A joint understanding between the supervisor and supervisee is important in terms of student well-being, and contradictory expectations between the student and supervisor are seen as one of the obstacles in the efficient completion of doctoral studies (Mainhard, 2009; Moxham et al., 2013; Parker-Jenkins, 2016; Pyhältö et al., 2015; Wisker et al., 2007). As a lack of appreciation and trust signals problems in the supervisory relationship (Scandura & Pellegrini, 2008; Sue-Chan et al., 2012), this understanding between supervisor and supervisee should be negotiated as early in their relationship as possible and renegotiated during the long journey of doctoral studies (Benmore, 2016; Hughes & Tight, 2013; Moxham et al., 2013). However, the student may not feel equal enough to change or shake the roles supervisors have introduced in their behaviour (Devine & Hunter, 2017). A failure to do so leads to unspoken wishes, which can also be caused by an unbalanced power dynamic in the supervisor-supervisee relationship (Moxham et al., 2013). This challenge is proposed to be even greater among mature postgraduates, who possess a diversity of overlapping personal, academic and professional identities (Leijen et al., 2016). For them, the language and customs that illuminate academic power games are difficult to deal with (Manathunga, 2007). Being treated as novices despite their previous or parallel role in practical work can cause confusion and insecurity, which hinders them from acting naturally (Devine & Hunter, 2017). In the worst cases, the students end up without supervision, as doctoral orphans (Wisker et al., 2007).

Additionally, manifestations of power are not restricted only to the dyad of supervisor and supervisee: doctoral studies occur in a certain local context in which diverse manifestations of power are faced during postgraduate training practices. Recently, previously recognized emotional burdens on doctoral students have increasingly been attributed to academic reforms and domination cultures (Bristow et al., 2017; Ratle et al., 2020; Zawadzki & Jensen, 2020). Also, feelings of isolation from the community (Ali & Kohun, 2007; Deem & Brehony, 2000) or institutional neglect (McAlpine et al., 2012) may jeopardize the completion of studies (Bastalich, 2015; Golde, 2005). When these negative feelings prevail, students may experience distress at work, which then accentuates the likelihood of discontinuing their studies (Cornér et al., 2017; Leijen et al., 2016; Stubb et al., 2011; Sverdlík et al., 2018).

Hence, the supervisory relationship and the academic community are relevant in terms of pedagogic support, but we argue that the amount of guidance or the intellectual capacity of the individuals are not all that matter if the encounters are tense or loaded with mistrust and unspoken wishes. Therefore, we are interested in uncovering the hidden signals communicated and interpreted between the pairs when trying to understand how some supervisory pairs seem to end up in discrepancies whereas others seemingly work well together. In this study, we try to give a practice-based understanding of power in supervisory relationships and postgraduate training practices according to stories narrated by doctoral students. We describe our methodological choices more specifically in the next section.

3. Research setting and methodology

In order to trace how relationship dynamics are constructed in encounters between the supervisor and supervisee, we selected participants from two distinct faculties of the University of Turku (UTU) – the Faculty of Social Sciences and the School of Economics (TSE). In both of these faculties, doctoral studies are conducted independently and not as part of a research group, which is common in natural sciences. Also, the tradition of writing monographies was prevalent in these faculties until recently, and the article publication form has only been applied in the past 10–15 years. These two faculties belonged to separate universities until 2011, when the latter merged with UTU. Consequently, we regard these groups of students as samples from distinct but similar academic cultures.

We sent an invitation to participate to all enrolled doctoral students in these two faculties (approximately 400 doctoral students). We aimed to reach a balance of both older and younger students and part-time and full-time students from diverse disciplines and at different phases of their doctoral journeys. We received 40 answers from students who volunteered for this study. After careful selection, we found a variety of eligible participants. We conducted open interviews with 25 doctoral students and received eight written stories from students whom we could not interview.

After collecting the data, we proceeded with a content analysis method. We were not looking for models or similarities in the process. Instead, we sought the diversified and manifold paths through which the relationship either fostered students' research or created obstacles or emotional barriers that hindered their progress. Specifically, the content analysis answered the following question: What did the students tell us about their supervisory relations and about their experiences of either belonging to the academic community or being an outsider?

Following the first readings of our data, we adopted the leader-member exchange (LMX) theory as our analytical tool. LMX theory describes an exchange relationship between a leader and a follower, in which both parties bring their share to the relationship and

receive something in return (Graen & Uhl-Bien, 1995). The exchange occurs with currencies that include different resources, trust between the parties and mutual respect (Sparrow & Liden, 1997; Schyns & Day, 2010). The leaders and followers evaluate how one another use currencies during their mutual encounters – especially in the beginning of the relationship (Dulebohn et al., 2012; Engle & Lord, 1997). The relationship is seen to develop in stages – from getting acquainted (the beginning), to building trust (the middle stage), and then through to the deepest form of interaction and respect (the final stage) (Graen & Uhl-Bien, 1995; Breukelen et al., 2006). The quality of the relationship depends on the level of exchange and can vary from low to high (Hooper & Martin, 2008). The followers with a high-level relationship form a so-called in-group, and lower-level relationships refer to being in the leader's out-group (Graen & Uhl-Bien, 1995; Henderson et al., 2009).

Our decision to utilize LMX theory as our analytical tool was based on three insights from data. First, many of the interviewed doctoral students compare the practices at the university with those they encounter in professional life. Second, they position themselves as followers in relation to superiors and act according to that positioning, even if the professor is not their formal superior. Third, they categorize their peer students as either part of the supervisor's in-group or out-group. Consequently, we considered that LMX theory offers a clear structure for understanding the nuances of the supervision process: how a supervisor develops individual relations with each supervisee and how in- and out-groups of privileged and less privileged students take shape.

During the second readings of our data, we sought specifically 1) indications of LMX relationships, 2) accounts containing positive and negative aspects of the supervisory relationship, and 3) accounts containing the power aspect of the supervisory relationship. After this step, we were able to recognize the various relational positions of supervisors and supervisees, which we demonstrate in Fig. 1 and describe in the Findings section.

The third reading of our data was a narrative examination. We scrutinised the previously found relational positions of supervisors and supervisees and confirmed the expressions of trust, feelings of belonging in the academic community and manifestations of power. Specifically, we analysed the data to determine how power was portrayed in the narratives. Such indications contained, for example, mentions of powerlessness, confusion and having no relational agency, or how the student had actively contributed to improving open communication with his/her supervisor. Further, we examined whether the students acknowledged any problematic considerations associated with power in the micro-practices of doctoral supervision. These observations are combined into Table 1, which illustrates our notes for ten (of 33) participants.

Table 1 contains the following items: 1) a code for each participant, 2–6) background information related to doctoral studies, 7–8) notes on a broken relationship, 9) the frequency of supervisory meetings, 10–11) positive and negative aspects of the relationship, 12) the overall quality of the relationship, 13) typical indications of an LMX relationship, 14) feeling of belonging to the academic community, 15) our conclusions about whether the students feel that they belong to an in-group or out-group, and 16) expressions of manifestations of power. In the next section, we take a more detailed look at our findings.

4. Findings

In this section, we present doctoral students' experiences of their relationships with their supervisors and the academic community. Fig. 1 illustrates the different relational positions we identified in the students' stories. The level of quality of the supervisory relationship refers here to trust in the supervisors and their knowledge and being appreciated by the supervisors. The feeling of inclusion or exclusion was often connected to feelings of trust towards the supervisor. Similarly, trust was indicative of the level of co-operation with the supervisor. Fig. 1 especially clarifies the extreme ends of the types of relationships. The orphans ended up in a destructive supervisory relationship, whereas the students working together with their supervisor experienced the most encouraging and supportive research atmosphere.

Next, we present how the pathways to these relational positions are formed in the everyday practices of postgraduate study. In particular, we uncover from the excerpts how the experience of supervision is present in the feeling of being regarded as a member of the academic community. Additionally, we trace the power relations intermingled in students' experiences. We group the findings into three subcategories: 1) critical moments of the emerging relationship, 2) feelings of being inside or outside and 3) manifestations of power inherent in the relationship.

4.1. Knocking on the door and entering the scene with great expectations

Due to individuals' diverse backgrounds and expectations and the framework of academic conventions, the development of supervisor-supervisee relationships is shaped differently during the journey of doctoral learning. Interaction in this relationship is framed by hierarchical organisation and structures, traditional forms, habits and language use, as well as restricted resources. University actors are ruled and controlled more by hierarchies, budgets and auditing than by relational approaches to leadership. Whereas these practices are taken for granted by academic employees and professors, postdoctoral students enter the context as novices and learn the rules and language gradually (Lave & Wenger, 1991). They experience the unspoken rules and habits of academia in either a soft or a hard way. Supervisors, however, do not always know what supervisees do not know. Thus, their acquaintance starts in a position of unbalanced power. The following excerpts (from a student) shed light on the emotional and rationally explained experiences within a tentatively progressing relationship.

I might have had quite a rosy picture of academic work – to be able to freely dedicate myself to ethically useful work and so ... [laughing] ... and research is indeed ... those wonderful moments when you discover something and understand something.

Table 1

Excerpt from our analysis table.

| 1. Students code | FH1K | FH2Y | FH4K | MH5K | FH6Y | FH7Y | MH8Y | FH9Y | FH10K | FH11K |
|--------------------------------|--|---|---|---|--|---|--|---|---|--|
| 2. Progress estim. | Beginning | Middle | Beginning | Middle | Middle | End | End | Middle | Beginning | Middle |
| 3. Liaison with the university | Part-time, non-academic work, mature | Done 8 years, now works at uni mature | Young, career in university | Non-academic work, academic project | Full-time | Part-time, works at the university | Part-time, Non-academic work, uni transfer | Work at the university, mature | Young career in university, master's→phD | Supervisor has changed, mature |
| 4. DS/funding | No | Yes(begin) | No | partly | ? | Yes | No | partly | Yes | No |
| 5. Uni employee | No | Yes | yes | No | No | Yes | No | Yes | Yes | No |
| 6. FT/PT student | Part-time | Part-time | Full-time | Part-time | Full-time | Part-time | Part-time | Both(it varies) | Full-time | Part-time |
| 7. Orphan | Yes | Yes | No | No | No | No | Yes | No | No | Yes |
| 8. Broken relation | Yes | Yes | No | No | No | No | Yes, (change) | No | No | Yes, (change) |
| 9. Meeting freq. | 1/year | – | Daily, big 2/year | Bi-weekly | Rarely, 2/year | Team oft no SV | Rarely“wait” | Daily, big 2/year | Of, co-project | – |
| 10. Positives | Courses→learning from others, trainings | Courses, freedom | Relationship with both | Real relationship with supervisor | Equal relationship, doctoral school, community | Employment, team, relationship | Nothing in the supervisory relationship | Everything, expect money | Ok relationship with supervisor, being in project | – |
| 11. Negatives | Supervisor change (no supervisor), zero information, system doesn't work | Supervising mess, lack of time, faded passion | No problems, clear relationship | No problems, trust, enthusiasm | Supervisor has no time, other has no substance knowledge, regret | Lack of time, faculty responsibilities take time from research, SV reads sketchy | No trust, no connection, outsider, bad interaction | Funding | Wishes more guidance to herself, will take a maternity leave for 2nd time | Lonely grinding, supervisor changed, new relationship doesn't work |
| 12. Quality of relationship | No relationship at the moment, ok meetings but few, low trust | Submissive, work has no value, only supervision | Good, open, trust, reciprocity, familiarity | Friendship, doing to gether, other one collects points | Equal(ok), no trust because they do not give comments | Trusting, independent | Unfair, repressive, humiliating, no speaking terms | Independent, “natural” | Ok | Had an emotional connection to 1st sv, now no trust |
| 13. LMX | Frequent questions when having meetings, waiting for supervision, outsider→not equal info | Works a lot but gets no appreciation, grant = more supervision, has learnt to ignore SV's commenting style. | Follows instructions, master's→phD, speak same language, long history together, trust on both sides | Working together, ideas and doing→SV revises, similarity, both like each other, process, one step at the time | No trust, no true help from supervision, loose relationship, not much supervising | Expanded SV Team (3+prof.), independent work, asks supervision→gets supervision, active, supportive | Published, productive, new SV shoots down everything, outsider because old, suspicion, standed | Independent, not much exchange, seeks help if needed, daily conversation | Wishes more comments from the other supervisor | Does not value academic community, fights, competition, was not informed about the SV change |
| 14. Community feel | No | No | Yes | Yes | Yes | Yes | No | Yes | Yes | No |
| 15. In/out-group | Out-group | Out-group | In-group | In-group | Out-group | In-group | Out-group | In-group | In-group | Out-group |
| 16. Power | At the mercy of the system, no info about supervisor change, university dosen't give enough info about practices | Progress relies solely on SV, no motivation, not respected, pushed around, SV's arbitrary behaviour | Submission, acceptive, no bullying, trust | Co-working, started with tinkering, together, trust | No hierarchy in supervision, “the university evaluates us”, we are being evaluated by publishing recorded only | Trust, support, group, equality, team of five, own reception | Completely suppressed, desperate, SV can ignore everything, “academic temples”, no trust | No threshold, same work community, easy interaction, fitted roles, recommendations dependency | Equality, good communication young age can have an influence on how fitted the roles feel | Should cooperate instead of competing, conflicted community, “I am merely a pawn” |

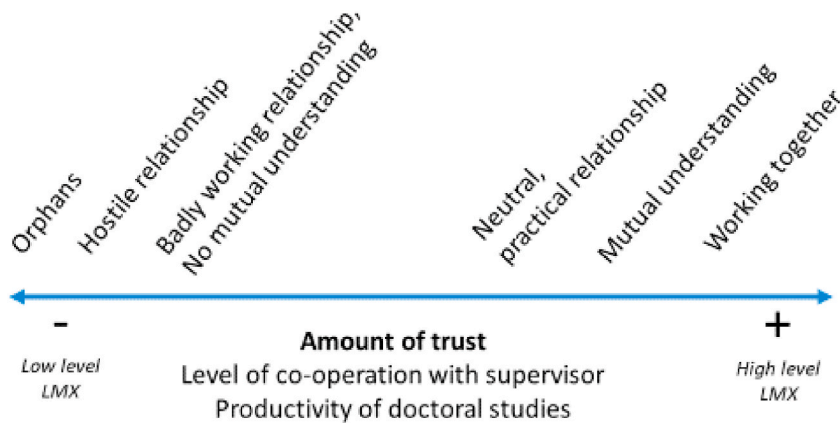


Fig. 1. The relational positions of supervisor and supervisee and feeling of trust in supervisor.

When I began my studies, I had a strong feeling that ... hmmm ... the practical knowledge I had was not appreciated – was either not appreciated or not understood ... I worked very hard so that I would learn the academic language.

I'm interested in theory and science, but I'm strongly a practitioner, and the people I encounter have a strong scientific background. For many years, I have felt that we talk past each other.

Many interviewees described the part-time students' difficulties in understanding their supervisors and the academic jargon. The practitioners were not familiar with the academic jargon, even though they might have been very competent in their own fields. The first disappointment was the way in which their previous knowledge was undermined as they assumed the position of apprentice.

This student was more realistic than the previous one and considered the compatibility of their habits and communication:

Well ... if I go back to the moment when I applied for the doctoral position ... he [the supervisor] asked if I had considered applying ... so I said to him, 'I have been thinking or I have to think if we get along' ... that was the thing I was wondering and thinking if his strict style would suit me and how I would cope. (This student was continuing directly after finishing her master's studies and knew the supervisor beforehand.)

The likelihood that a relationship will progress depends on its quality. Students are not always able to choose their supervisors, but as the previous pedagogical literature (Ives & Rowley, 2005; Zhao et al., 2007) suggests, the relationship would have a smoother beginning if the working style of the supervisor and supervisee match.

How long is it reasonable to wait for the development of common language and mutual communication between the parties? One student said that it had taken three years. He not only described both the atmosphere of the meetings and his feelings of not understanding, but also the winning feeling when he finally understood the name of the game.

I would say ... it took about three years before I could enjoy meeting my supervisor and could say to myself, 'Now it starts rolling!' Not until then did I feel that I had something to say. And those moments in these meetings were rewarding when I noticed that he [the supervisor] didn't know about everything and my knowledge had progressed. Then it might have started to feel better.

4.2. Inside or outside?

Feelings of belonging and of being an outsider are mainly attributed to the dyad relationship, but also to the feeling of being different from other students.

In some ways, I am very lonely. I am not alone, but I am lonely with my thesis work.

I do not work at the university but study in my free time and have a day job elsewhere ... so the problem in writing the dissertation is that you do not feel like you belong to the academic community.

The interviewees made categorisations of other students as well. They did not necessarily articulate themselves as belonging to the out-group, but discussed how other students were more privileged if they had employment contracts at the university, worked temporarily on projects, or were granted scholarships. Students also considered their physical distance from campus to be relevant when it came to meeting their supervisors.

I get less guidance since I'm not working there.

... You need to find the people that talk about the same things that you do and then connect with them ... In some departments, the supervisor knows the right people and can include you in the group and make the connections. But in general, it is up to you, and you need to attend conferences and create your own contact network ... The meaning of a network has become very evident ... more than I thought in the beginning.

I personally make sure that I come to the university regularly ... I attend courses and try to get to know colleagues. Honestly, I do not expect informal discussions over coffee from the supervisor ... These informal occasions open a possibility for in-the-moment realizations or insights. When people are together and talking informally, it may result in certain aha moments for all.

Postgraduate studies are perceived as independent work and thus a lone venture. However, Wisker et al. (2007) illustrated the obvious benefits of communities of practice in enhancing the learning of doctoral students. In our data, many mature part-time students reported loneliness and a desire to get feedback and to have somebody to talk with. The supervisor is often their only link to academia, and, lacking time, the professor is not available often enough.

In our analysis table, students' feelings of trust are prominent in multiple rows. Furthermore, one row is dedicated to feelings of belonging to the community. Those who regarded themselves as insiders reported feelings of trust in supervising. By contrast, distrust was expressed in feelings of not being appreciated or in a lack of encouragement or feedback.

... When I have sent my writings to him [the supervisor] and asked 'Could you please comment' ... from one of my supervisors I never got any answer. That kind of weakened my ... researcher self-confidence. Why can he not even answer? Was this so terrible and a bad piece of work that he can't afford any time for it?

A lack of feedback and encouragement was common, which lowered motivation:

You just don't get any encouragement ever. You have to read it between the lines and imagine it somehow to be there.

LMX research has suggested that appreciation shown by supervisors strengthens relationships with supervisees and opens the possibility of building trust (Howells et al., 2017). A supervisory relationship based on mutual exchange cannot proceed towards a high-quality relationship if trust is not present and the parties do not show signals of cooperation.

Our data demonstrated multiple signs that doctoral students felt neglected: supervisors were unavailable, did not answer questions, did not talk about their research and were nonchalant in their answers. Supervisors did not read texts that students had sent them, seemed to care about others more than them, and never asked about anything – not even 'how are you?' These are the most common expressions of being left alone in the supervisory relationship, a situation that leaves students feeling powerless as they are dependent upon their professors.

Orphaned students constitute extreme cases of exclusion (Wisker & Robinson, 2013). In one example, the supervisor left the university, and no one informed their doctoral students ('My main supervisor just slipped out of this'). Even if a student is appointed a new supervisor, he/she might be unwilling to supervise another professor's student. Then the student did not really get a new supervisor.

One orphan-like situation occurs when a student still has a supervisor but feels as though he/she has been left alone without supervision. For whatever reason, the student feels that the supervisor no longer cares about his/her progress. Lepp et al. (2016) described this as a wait-and-see attitude among supervisors. We could call these 'cold cases'.

Some of these cold cases work at the university. They teach and do administrative tasks and, therefore, have hardly any time for research. At first, both the supervisor and the student believe it is a temporary arrangement. Nonetheless, the student passes slowly into the role of an employee and ends up losing motivation to conduct research after working hours. Slowly, both start to avoid talking about the progress of his/her research and live in a false reality, waiting for the time to come 'when I have time to do research'. The doctoral student who ends up in this organisational trap might project the fault onto the supervisor, who did not protect his/her space for research and started to see him/her as an assistant. The situation might feel comfortable for the professor, who now has a trustworthy assistant, even if he/she knows it is unfair. In contrast, the student feels pressure to finish his/her studies in the ideal, standard timeframe but cannot change the unfair situation:

Am I entitled to be upset, or should I be happy to have an academic workplace? I can't even talk about this without appearing as a grumbler.

Gradually, the student might lose his/her self-confidence when comparing themselves to other doctoral students with different workloads.

Such a situation can be seen as an example of violent innocence (Vince & Mazen, 2014, referring to; Bollas, 1993). In this situation, the leader behaves in a destructive way when he/she avoids admitting the working trap in which the doctoral student is caught. The supervisor does not resolve the situation, as it might have become a silently accepted practice in other parts of the university as well. Bollas (1993) called these 'structures of innocence'. Everyone working in a university recognises the contradiction between the pressure of effective delivery of doctorates and a lack of resources, but nobody works to solve the problem. Avoiding thinking and speaking openly about it further worsens the emotional struggles of working doctoral students.

This orphan-like situation due to a working trap is not uncommon, and we treated such doctoral students as part-time students in our data. This situation is tied to the structural arrangements of the university; faculties need more teaching and assisting staff and as a result, they let doctoral students work for them more than is recommended. As both parts of the supervisory relationship can legitimate the situation by blaming the structure, this inconvenient practice does not necessarily harm the relationship. However, it results in more personal stress and feelings of unfairness, which might have consequences for the doctoral student's wellbeing (Stubb et al., 2011).

It has been indicated that employees evaluate the quality of their relationships with their leaders by the nature of their employment relationship; therefore, that should be taken into account when evaluating the role of a supervisor (Audenaert et al., 2017). Students finance their studies in various ways. Some study part-time and have day jobs elsewhere. Others are employed by the university, and some have full grants and no other duties beyond their own research. Despite their different employment situations, the expectations of the university and supervisors are the same for all doctoral students, which is experienced as unfair treatment.

A more unpleasant form of deserting a doctoral student occurs when supervisors insult them in communications. This dark side of

supervision is rarely discussed in research on supervisory relationships. It is mentioned, however, in the leadership literature (Harvey et al., 2014; Xu et al., 2015), which is growing, probably due to increasing burnout, depression, and other costly consequences of the hardening working life. The following excerpt describes the darker side of academia:

Q: How do you experience this academic community?

A: As very shitty! [laughter] ... it is full of contradictions ... totally full of contradictions. It is intriguing that with intelligent people, you can learn a lot, but also learn wrong things. Competitiveness is the biggest challenge ... I have thought that we are all in this together ... we experience the same things ... but the insane competition – that I compete with my colleague over a two-month employment contract ... that is insane; it does not work! It does not work!

Students who continue their studies directly after completing their master's degrees already know their supervisors and have developed their relationships before beginning their doctoral journeys. Because of this proximity to the academic world, they also have a more realistic picture of the nature of academic work. Usually, they are younger and, as beginners, they are understandably treated better. Taylor (2012) and Deem and Brehony (2000) highlighted unequal positions due to students' different backgrounds (international students, part-time students, and students studying at a distance) and argued that students may be treated unfairly by their supervisors – whether intentionally or not – depending on their backgrounds. Feelings of unequal treatment affect the way students feel in terms of being part of the scholarly community and their well-being – well-being is not just the absence of distress (Stubb et al., 2011). Part-time students are not equally aware of the demands of academic work compared to full-time doctoral students, especially if they have been practitioners for a longer time and do not have experience in the academic world. They might still expect their supervisors to guide their research projects and provide them with practical advice. In contrast, supervisors expect mature doctoral students to already be familiar with expectations of independence, the responsibilities that characterise research and local academic habits.

4.3. Power embedded in academic supervisory practices

Feelings of belonging to an out-group or in-group are mingled with diverse uses and sites of power.

The most obvious manifestation of power in our data is students' feelings of powerlessness. It could be traced both between people and residing in structures (control, evaluation, grant systems, employment contracts, etc.).

After the first readings of the interviews, it became clear that some students consider the manifestations of power more strongly than others, who pay almost no attention to power issues. Younger students assumed supervisors would have power and did not see it as a problem.

I see them as hierarchically above me. I respect them a lot because they are such respected scientists in their fields.

Those with the best coworking relationships with their supervisors did not mention power-related situations at all, but rather described participative and empowering encounters. However, in contrast, when confronting annoying, confusing or unfair situations, postgraduate students felt a lack of power either vis-à-vis the system and practices (habits and conventions) or concerning the behaviour of their supervisors. The postgraduate students often estimated their own positions to be so weak that they could not tell their supervisors about their dissatisfaction. They may have misjudged their situations and assumed roles as unsure novices at the beginning and then found themselves unable to change this in encounters with their supervisors. Only one of the mature part-time students had actively negotiated a better position in relation to the supervisor. Most postgraduate students based their self-evaluations on their inferior academic knowledge.

Power in doctoral supervisory relationships was experienced in multiple ways. It was nearly unarticulated in the interviews but expressed clearly in emotional statements, such as 'we are evaluated as to our degree of academic obedience', meaning that it felt like it was more important to follow the format of a publication than to produce high-quality content. This refers to the system, which expresses the Foucauldian thought of power regimes producing subjects who desire to become certain sorts of agents (Gordon, 2009). The doctoral students are autonomous and free to make decisions about their research and what to present to their supervisors, but their currency is not appreciated until they are knowledgeable enough to produce texts in a suitable style and form.

Every single time I phoned him ... I had an uneasy feeling, like going cap in hand to beg for help, although I had real things, my research, to discuss.

... There is a difference of perspective ... but he has a lot of power in these matters. This professor is not someone you walk over ... if he wants something, his decision stands.

Here, the critical point is the supervisors' power over the decision of what counts as right or wrong. How does the supervisor communicate the gap between his/her judgement and that of the student? The delivery of this knowledge – how to produce a suitable piece of work – requires that the supervisor make an effort to understand and respect students' starting points and skills. If it is a challenge to translate practical skills into academically useful knowledge, it is similarly challenging to guide novices to perceive the learning path towards academic values.

One crucial manifestation of power is a disrespectful manner of speaking to the supervisee, which is felt as humiliating and as a personal insult.

I can imagine that many doctoral students have a high threshold to contact their supervisor and regarding the things you can ask him.

There was a tense atmosphere in our meetings, and I was scared to go there.

I would expect a more civilised manner to talk.

Leadership research has openly criticized inappropriate manners or abusive management behaviour in leader-follower relationships, especially in ethical and sustainable leadership research. However, this has rarely been highlighted in the educational research literature. Still, it does exist and should be taken seriously in order to build an effective academic learning environment.

5. Discussion and conclusions

The purpose of this article was 1) to identify the critical events and practices that affect the experience of the dynamics in the supervisory relationship and 2) to identify how the diversified pathways to productive co-operation or destructive relationship are constructed. Regarding the first objective, we found several varying situations and micro-practices that the students reported as meaningful for their relationship development. These might have happened in encounters with the supervisor, but also in seminars, or they might have faced neglect or pressures from the university's administration. Whereas the supervisor-supervisee relationship (Cornér et al., 2017) and belonging to the academic community (Wisker et al., 2007) corroborate the results of previous studies, there has been much less research about the effects of the doctoral student's employment relationship in the academic learning literature (see Clouder et al., 2020). Our findings suggest that all three elements should be evaluated in connection to each other.

As an example, we noticed two intertwined paths relating to the employment relationship. On the one hand, the university employment contract adds stability to funding and a sense of belonging to the academic community, which have positive ramifications for the supervisor-supervisee relationship. On the other hand, the university employment contract can lead to an organisational trap in which teaching and administrative tasks consume time that could be spent on research. In such cases, employed doctoral students compare their progress with other doctoral students, which creates stress and projections of negative feelings towards their supervisors. These findings are consistent with those of Clouder et al. (2020), who found that, compared to doctoral students who are not employed by the university, employed doctoral students benefit from better resources and social networks but suffer from excessive workload and lack of time for research. On a more general level, this finding combines the structural elements provided by the university with the social relations between the dyad and between the student and the academic community. If they are considered separately, their mutual influence remains overlooked. That, in turn, might result in a distorted picture and form a wrong basis for evaluating the productivity of a student or supervisor. In our data, this separate consideration resulted in feelings of injustice.

Regarding the competitive environment, our findings also raise the question of the impact it has on doctoral students' trust and collegial values building with their student colleagues (Kallio et al., 2016). We can assume that, even more than before, postgraduate students need individual relationships with their supervisors to safeguard their own positions against the other postgraduates. Consequently, power games among postgraduates emerge due to local structural circumstances. This, in turn, is contrary to the purpose of developing doctoral schools – that is, making the learning more general, empowering and equal.

An interesting feature in our data was the discrepancy between the benefits of doctoral schools providing general research skills and those of the old master-apprentice relation. Even if the new forms of doctoral supervision were appreciated, they did not replace the importance of individual supervising. Doctoral schools might offer opportunities to create cohort learning and access to social networks, but the expectations of the role of supervisors remain and reproduce traditional sources of power, such as position or superior academic knowledge. However, the traditional norm of supervision emphasizes the independence of the student, whereas today, a more supportive style of supervision is demanded (Bastalich, 2015). This contradiction emerges when they develop roles and agency in the relationship and if they have different expectations of the amount of guidance.

Our second research objective was to identify *how the diversified pathways to productive co-operation or destructive relationship are constructed*. Regarding this, we found that the positive outcomes of a productive supervisory relationship – such as trust, support, respect and co-operation with the supervisor – empower the doctoral student and lead to an increased feeling of self-esteem and self-worth. This finding supports LMX research, suggesting that appreciation shown by supervisors strengthens relationships with supervisees and opens the possibility of building trust (Howells et al., 2017). The high-quality LMX relationship combined with the structural frame – such as a secure employment relationship – signals to the students that their work is meaningful.

Concerning low-quality relationships, our study emphasised both the structural and personal pitfalls of supervising. Both of these pitfalls were present in the lowest-quality relationships. We observed the structural pitfall in a situation in which the supervisor had left the university but no one had informed the doctoral student about the change. The personal pitfall, in turn, was evident in situations where supervisors had stopped caring about doctoral students' progress. Both of these findings complement previous research on doctoral orphans (Wisker & Robinson, 2013).

Furthermore, previous studies on doctoral student well-being (e.g. Cornér et al., 2017; Litalien & Guay, 2015; Sverdlík et al., 2018) have identified that social life and personal factors have an impact on students' motivation and their overall experiences of the doctoral journey. Interpersonal trust has positive effects on the quality and dynamics of the relationship (Brower et al., 2000). Therefore, we suggest that a lack of trust leads to a low-quality relationship, lower motivation among students and worse evaluations of their own work; when the situation is prolonged, it eventually leads to distress.

The quality and style of supervision communication are tightly connected to the supervisor's personality, experience and behaviour. Despite structural changes and attempts to streamline doctoral studies, supervisors have the freedom and power to conduct supervision autonomously. Communication skills and personal interest in supervising work vary among professors but also between diverse relationships. We hope to have shed light on the consequences of malfunctioning relationships for doctoral students' motivation and self-confidence by describing their experiences in this article. As a practical contribution, this could aid in understanding and developing supervisory relationships at universities. On a more theoretical level – relating this back to the LMX theory – we have contributed to the understanding of how relationships are formed in the micro-practices and encounters of supervisory relationships.

Arguably, this study also contributes to the practice-based studies of organisational learning (Gherardi, 2009) by highlighting the specific pitfalls of managing and controlling academic work at universities.

Overall, our study calls for clear requirements of social and communication skills and the ethical behaviour of supervisors. This is seen as a precondition for encouraging and motivating doctoral students' learning, and a lack of it is dysfunctional and even destructive to the progress of student's doctoral studies. Reciprocal respect is crucial to building this relationship (Howells et al., 2017), and the imbalance of power in the relationship is an obstacle in the process (Moxham et al., 2013). The doctoral learning process takes several years, and it is highly situated in the scene of actors, organisations and their practices (Parker-Jenkins, 2016). Therefore, this study emphasizes how universities should be more aware of the quality of supervision, not only in terms of scientific skills but also professors' leadership and 'interpersonal skills'. The balance between formal and informal supervision practices can be seen as essential in building trust and overcoming the traditional expert-novice type of academic supervision (Hemer, 2012). In addition, supervisory practices – attached to the structures and ways of organising the studies – should be examined from the students' perspective not only to educate them in science but also to help them become ethically responsible citizens.

Declaration of competing interest

None.

References

- Ali, A., & Kohun, F. (2007). Dealing with social isolation to minimize doctoral attrition - A four stage framework. *International Journal of Doctoral Studies*, 2, 33–49.
- Audenaert, M., Vanderstraeten, A., & Buyens, D. (2017). When affective well-being is empowered: The joint role of leader-member exchange and the employment relationship. *International Journal of Human Resource Management*, 28(15), 2208–2227. <https://doi.org/10.1080/09585192.2015.1137610>
- Bartlett, A., & Mercer, G. (2000). Reconceptualising discourses of power in postgraduate pedagogies. *Teaching in Higher Education*, 5(2), 195–204.
- Bastalich, W. (2015). Content and context in knowledge production: A critical review of doctoral supervision literature. *Studies in Higher Education*, 42(7), 1145–1157. <https://doi.org/10.1080/03075079.2015.1079702>
- Benmore, A. (2016). Boundary management in doctoral supervision: How supervisors negotiate roles and role transitions throughout the supervisory journey. *Studies in Higher Education*, 41(7), 1251–1264.
- Bollas, C. (1993). *Being a character: Psychoanalysis and self-experience*. London, UK: Routledge.
- Bradbury-Jones, C., Irvine, F., & Sambrook, S. (2007). Unity and detachment: A discourse analysis of doctoral supervision. *International Journal of Qualitative Methods*, 6(4), 81–96.
- Breukelen, W., Schyns, B., & Le Blanc, P. (2006). Leader-member exchange theory and research: Accomplishments and future challenges. *Leadership*, 2(3), 295–316.
- Bristow, A., Robinson, S., & Ratle, O. (2017). Being an early-career CMS academic in the context of insecurity and 'excellence': The dialectics of resistance and compliance. *Organization Studies*, 38(9), 1185–1207. <https://doi.org/10.1177/0170840616685361>
- Brower, H. H., Schoorman, F. D., & Tan, H. H. (2000). A model of relational leadership: The integration of trust and leader-member exchange. *The Leadership Quarterly*, 11(2), 227–250.
- Clouder, L., Billot, J., King, V., & Smith, J. (2020). Friend or foe: The complexities of being an academic and a doctoral student in the same institution. *Studies in Higher Education*, 45(9), 1961–1972.
- Collien, I. (2018). Critical-reflexive-political: Dismantling the reproduction of dominance in organisational learning processes. *Management Learning*, 49(2), 131–149.
- Cornér, S., Löfström, E., & Pyhältö, K. (2017). The relationships between doctoral students' perceptions of supervision and burnout. *International Journal of Doctoral Studies*, 12. <https://doi.org/10.28945/3754>, 091–106.
- Deem, R., & Brehony, K. J. (2000). Doctoral students' access to research cultures-are some more unequal than others? *Studies in Higher Education*, 25(2), 149–165. <https://doi.org/10.1080/713696138>
- Deuchar, R. (2008). Facilitator, director or critical friend?: Contradiction and congruence in doctoral supervision styles. *Teaching in Higher Education*, 13(4), 489–500. <https://doi.org/10.1080/13562510802193905>
- Devine, K., & Hunter, K. H. (2017). PhD student emotional exhaustion: The role of supportive supervision and self-presentation behaviours. *Innovations in Education & Teaching International*, 54(4), 335–344. <https://doi.org/10.1080/14703297.2016.1174143>
- Dulebohn, J. H., Bommer, W. H., Liden, R. C., Brouer, R. L., & Ferris, G. R. (2012). A meta-analysis of antecedents and consequences of leader-member exchange: Integrating the past with an eye toward the future. *Journal of Management*, 38(6), 1715–1759.
- Engle, E. M., & Lord, R. G. (1997). Implicit theories, self-schemas, and leader-member exchange. *Academy of Management Journal*, 40(4), 988–1010.
- Garfield, T. (2005). An investigation into PhD supervisory management styles: Development of a dynamic conceptual model and its managerial implications. *Higher Education Policy and Management*, 27(3), 311–325.
- Gherardi, S. (2009). Introduction: The critical power of the 'Practice Lens'. *Management Learning*, 40(2), 115–128.
- Golde, C. M. (2005). The role of the department and discipline in doctoral student attrition: Lessons from four departments. *Journal of Higher Education*, 76(6), 669–700.
- Gordon, R. (2009). Leadership and power. In S. R. Clegg, & M. Haugaard (Eds.), *The sage handbook of power* (pp. 196–202). London: The SAGE Publishing Ltd.
- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The Leadership Quarterly*, 6(2), 219–247. [https://doi.org/10.1016/1048-9843\(95\)90036-5](https://doi.org/10.1016/1048-9843(95)90036-5)
- Guest, D. E. (2017). Human resource management and employee well-being: Towards a new analytic framework. *Human Resource Management Journal*, 27(1), 22–38.
- 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. <https://doi.org/10.1080/13562517.2015.1036732>
- Harvey, P., Harris, K. J., Gillis, W. E., & Martinko, M. J. (2014). Abusive supervision and the entitled employee. *The Leadership Quarterly*, 25(2), 204–217. <https://doi.org/10.1016/j.leafqua.2013.08.001>
- Hemer, S. R. (2012). Informality, power and relationships in postgraduate supervision: Supervising PhD candidates over coffee. *Higher Education Research and Development*, 31(6), 827–839. <https://doi.org/10.1080/07294360.2012.674011>
- Henderson, D. J., Liden, R. C., Glibkowski, B. C., & Chaudhry, A. (2009). LMX differentiation: A multilevel review and examination of its antecedents and outcomes. *The Leadership Quarterly*, 20(4), 517–534.
- Hooper, D. T., & Martin, R. (2008). Beyond personal leader-member exchange (LMX) quality: The effects of perceived LMX variability on employee reactions. *The Leadership Quarterly*, 19(1), 20–30.
- Howells, K., Stafford, K., Guijt, R., & Breadmore, M. (2017). The role of gratitude in enhancing the relationship between doctoral research students and their supervisors. *Teaching in Higher Education*, 22(6), 621–638. <https://doi.org/10.1080/13562517.2016.1273212>
- Hughes, C., & Tight, M. (2013). The metaphors we study by: The doctorate as a journey and/or as work. *Higher Education Research and Development*, 32(5), 765–775.
- Ives, G., & Rowley, G. (2005). Supervisor selection or allocation and continuity of supervision: Ph.D. students' progress and outcomes. *Studies in Higher Education*, 30(5), 535–555. <https://doi.org/10.1080/03075070500249161>

- Kallio, K. M., Kallio, T. J., Tienari, J., & Hyvönen, T. (2016). Ethos at stake: Performance management and academic work in universities. *Human Relations*, 69(3), 685–709.
- Knights, D., & Clarke, C. A. (2014). It's a bittersweet symphony, this life: Fragile academic selves and insecure identities at work. *Organization Studies*, 35(3), 335–357.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, England: Cambridge University Press.
- Lee, A. (2008). How are doctoral students supervised? Concepts of doctoral research supervision. *Studies in Higher Education*, 33(3), 267–281.
- Lee, A., & Green, B. (2009). Supervision as metaphor. *Studies in Higher Education*, 34(6), 615–630.
- Leijen, A., Lepp, L., & Remmik, M. (2016). Why did I drop out? Former students' recollections about their study process and factors related to leaving the doctoral studies. *Studies in Continuing Education*, 38(2), 129–144. <https://doi.org/10.1080/0158037X.2015.1055463>
- Lepp, L., Remmik, M., Leijen, A., & Leijen, D. A. J. (2016). Doctoral students' research stall: supervisors' perceptions and intervention strategies. *SAGE Open*, 6(3), 1–12. <https://doi.org/10.1177/2158244016659116>
- Litalien, D., & Guay, F. (2015). Dropout intentions in PhD studies: A comprehensive model based on interpersonal relationships and motivational resources. *Contemporary Educational Psychology*, 41, 218–231. <https://doi.org/10.1016/j.cedpsych.2015.03.004>
- Lynn, M. (2017). Building on success? Future challenges for doctoral education globally. *Studies in Graduate and Postdoctoral Education*, 8(2), 66–77. <https://doi.org/10.1108/SGPE-D-17-00035>
- Mainhard, T., Van Der Rijst, R., Van Tartwijk, J., & Wubbels, T. (2009). A model for the supervisor–doctoral student relationship. *Higher Education*, 58(3), 359–373.
- Malfroy, J. (2005). Doctoral supervision, workplace research and changing pedagogic practices. *Higher Education Research and Development*, 24(2), 165–178. <https://doi.org/10.1080/07294360500062961>
- Manathunga, C. (2007). Supervision as mentoring: The role of power and boundary crossing. *Studies in Continuing Education*, 29(2), 207–221. <https://doi.org/10.1080/01580370701424650>
- McAlpine, L., Paulson, J., Gonsalves, A., & Jazvac-Martek, M. (2012). 'Untold' doctoral stories: Can we move beyond cultural narratives of neglect? *Higher Education Research and Development*, 31(4), 511–523. <https://doi.org/10.1080/07294360.2011.559199>
- McCallin, A., & Nayar, S. (2012). Postgraduate research supervision: A critical review of current practice. Retrieved from <http://doi.org/10.1080/13562517.2011.590979>, 17(1), 63–74.
- Moxham, L., Dwyer, T., & Reid-Searl, K. (2013). Articulating expectations upon commencement: Ensuring supervisor/student 'best fit'. *Journal of Higher Education Policy and Management*, 35(4), 345–354.
- Parker-Jenkins, M. (2016). Mind the gap: Developing the roles, expectations and boundaries in the doctoral supervisor–supervisee relationship. *Studies in Higher Education*, 1–15.
- Pilbeam, C., & Denyer, D. (2009). Lone scholar or community member? The role of student networks in doctoral education in a UK management school. *Studies in Higher Education*, 34(3), 301–318. <https://doi.org/10.1080/03075070802597077>
- Pyhältö, K., Vekkaila, J., & Keskinen, J. (2015). Fit matters in the supervisory relationship: Doctoral students and supervisors perceptions about the supervisory activities. *Innovations in Education & Teaching International*, 52(1), 4–16.
- Ratle, O., Robinson, S., Bristow, A., & Kerr, R. (2020). Mechanisms of micro-terror? Early career CMS academics' experiences of 'targets and terror' in contemporary business schools. *Management Learning*, 51(4), 452–471. <https://doi.org/10.1177/1350507620913050>
- Scandura, T. A., & Pellegrini, E. K. (2008). Trust and leader-member exchange: A closer look at relational vulnerability. *Journal of Leadership & Organizational Studies*, 15(2), 101–110.
- Schyns, B., & Day, D. (2010). Critique and review of leader–member exchange theory: Issues of agreement, consensus, and excellence. *European Journal of Work & Organizational Psychology*, 19(1), 1–29.
- Sparrow, R. T., & Liden, R. C. (1997). Process and structure in leader-member exchange. *Academy of Management Review*, 22, 522–552.
- Stubb, J., Pyhältö, K., & Lonka, K. (2011). Balancing between inspiration and exhaustion: PhD students' experienced socio-psychological well-being. *Studies in Continuing Education*, 33(1), 33–50 (Retrieved from).
- Sue-Chan, C., Au, A. K. C., & Hackett, R. D. (2012). Trust as a mediator of the relationship between leader/member behavior and leader-member-exchange quality. *Journal of World Business*, 47(3), 459–468. <https://doi.org/10.1016/j.jwb.2011.05.012>
- Sverdlik, A., Hall, N. C., McAlpine, L., & Hubbard, K. (2018). The PhD experience: A review of the factors influencing doctoral students' completion, achievement, and well-being. *International Journal of Doctoral Studies*, 13, 361–388. <https://doi.org/10.28945/4113>
- Taylor, S. E. (2012). Changes in doctoral education: Implications for supervisors in developing early career researchers. *International Journal for Researcher Development*, 3(2), 118–138.
- Ugrin, J. C., Odom, M. D., & Pearson, J. M. (2008). Exploring the importance of mentoring for new scholars: A social exchange perspective. *Journal of Information Systems Education*, 19(3), 343–350.
- Vince, R., & Mazen, A. (2014). Violent innocence: A contradiction at the heart of leadership. *Organization Studies*, 35(2), 189–207. <https://doi.org/10.1177/0170840613511924>
- Wenger, E. (2000). Communities of practice and social learning systems. *Organization*, 7(2), 225–246.
- Wisker, G., & Robinson, G. (2013). Doctoral 'orphans': Nurturing and supporting the success of postgraduates who have lost their supervisors. *Higher Education Research and Development*, 32(2), 300–313.
- Wisker, G., Robinson, G., & Shacham, M. (2007). Postgraduate research success: Communities of practice involving cohorts, guardian supervisors and online communities. *Innovations in Education & Teaching International*, 44(3), 301–320.
- Xu, A. J., Loi, R., & Lam, L. W. (2015). The bad boss takes it all: How abusive supervision and leader–member exchange interact to influence employee silence. *The Leadership Quarterly*, 26(5), 763–774. <https://doi.org/10.1016/j.leaqua.2015.03.002>
- Zawadzki, M., & Jensen, T. (2020). Bullying and the neoliberal university: A co-authored autoethnography. *Management Learning*, 51(4), 398–413. <https://doi.org/10.1177/1350507620920532>
- Zhao, C.-M., Golde, C. M., & McCormick, A. C. (2007). More than a signature: How advisor choice and advisor behaviour affect doctoral student satisfaction. *Journal of Further and Higher Education*, 31(3), 263–281.