Professional Development Leadership in Public Organizations

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PhD Dissertation

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Clara Siboni Lund Aarhus, April 2022

Chapter 1. Introduction

Many public managers are responsible for realizing politically legitimate goals via the efforts of professional employees. In this regard, the professionalism of the latter may be both a blessing and a curse. On the one hand, professional employees possess specialized, theoretical knowledge and intra-occupational norms that qualify them to solve complex tasks (Abbott, 1988; Freidson, 2011; Andersen & Pedersen, 2012). On the other hand, professionals may hold different views regarding desirable objectives than do the politicians and managers (Brehm & Gates, 1999; Raelin, 1986; Tummers, Steijn, & Bekkers, 2012). Professional employees who wish to work in other directions than the politically stated goals can therefore challenge the attempts made by frontline managers to realize organizational goals. In other words, frontline managers leading professional employees play an important role in facilitating the integration of organizational and professional principles.

It is generally held to be difficult for managers to influence the practices of professional employees (Brehm & Gates, 1999; Riccucci, 2005; May & Winter, 2007). Nevertheless, the existing research shows that public professionals can integrate their professional principles with organizational principles (Schott et al., 2015). Likewise, professionals in managerial roles can develop hybrid professional—managerial identities that are legitimate in their managerial context (McGivern et al., 2015). However, we have limited knowledge about how public managers influence their followers' integration of professional and organizational principles via leadership; that is, how managers engage in processes of influencing professionals to agree about what must be done in the organization and in processes of facilitating their efforts to accomplish shared objectives (Stogdill, 1950; Yukl, 2006; Silva, 2016).

The aim of this dissertation is to provide a framework for understanding how frontline managers exercise leadership to influence the role of professional norms and knowledge in their efforts to realize organizational goals. To do so, the dissertation synthesizes public leadership theory with an integrative approach to professionalism. This integrative approach stresses that professional and organizational principles are compatible and interact, as professionals must develop professional practices that are linked to organizational objectives to strengthen their legitimacy (Schott et al., 2015: 8). Ethical, budgetary, and service standards, for example, enable public professionals to align clients, costs, and capacities meaningfully (Noordegraaf, 2007: 779). The in-

tegrative approach thus differs from a bottom-up approach, where professionalism is seen as a distinct logic controlling professional work separated from the bureaucracy (Abbott, 1988; Freidson, 2001), and from a top-down approach emphasizing how organizations and managers can use professionalism instrumentally to control professionals (Schott et al., 2015; Evetts, 2011; Mik-Meyer, 2018).

Synthesizing leadership theory and the integrative approach to professionalism can contribute to literature on both public leadership and public professionals. The public leadership literature can benefit from a more nuanced view on professional knowledge and professional norms as resources that public managers may attempt to develop and activate via leadership. The leadership behaviours involved in such endeavours remain underexposed in the public leadership literature. Literature on public professionals can likewise benefit from the synthesis, as it can shed light on how managers can facilitate the integration of organizational and professional logics by their professional employees. Such insights supplement the existing findings on hybridizing work among employees and managers (Schott et al., 2015; McGivern et al., 2015).

To provide a framework for understanding frontline managers' attempts at influencing professional work to realize organizational goals, the dissertation contributes to the development of the concept *professional development leadership* (PDL). This is as a type of leadership that is relevant in frontline managers' attempts to navigate the complex landscape of potentially conflicting organizational and professional logics and dependence on professional norms and knowledge. In broad terms, PDL is aimed at establishing a shared understanding of what constitutes professional quality (Grøn, Bro, & Andersen, 2019: 6). Recently, the Danish Leadership and Management Commission recommended that 'Leaders of professionals should, in dialogue with employees, perform evidence-based professional leadership and management' (Danish Leadership and Management Commission, 2018: 8), and practitioner-oriented works include lively discussions of the importance of PDL (e.g. Dørvig et al., 2016; Ejler, 2017; Nyhlehn, 2009; Voxted, 2016; Væksthus for Ledelse, 2020).

PDL is a conceptually and theoretically under-developed leadership concept, however, and it has not yet truly caught on in the international public leadership literature. If the PDL concept is to help us to understand and analyse leadership aimed at influencing professional norms and knowledge to realize organizational goals, further conceptual development and refinement is required. For the refined conceptualization of PDL to be theoretically relevant, it should clarify the distinctive theoretical basis of PDL and outline its core behaviours so that it becomes clear what PDL entails and how it differs from other leadership approaches. Likewise, it must be measurable and applicable

in empirical research. For the refined conceptualization of PDL also to be practically relevant, it must capture leadership practices that public managers apply in their endeavours to influence professional practices and be related to desirable outcomes. With these criteria in mind, the dissertation investigates the following research questions:

- 1. What is professional development leadership, and how can it be conceptualized and measured?
- 2. What are antecedents and consequences of professional development leadership?

In this dissertation, I suggest that we conceptualize PDL as leadership aimed at facilitating a shared understanding of professional quality within the scope of organizational goals and at influencing the efforts of others to realize this understanding of professional quality in practice. I point to three core PDL behaviours that reflect different aspects of this ambition. The first refers to the attempts at creating alignment between organizational goals and professional norms, the second is attempts to develop professional knowledge, and the third is attempts at activating professional norms and knowledge in practice.

I address the other elements of the research questions, including measurement, antecedents, and consequences, to improve our understanding of PDL and its relevance in frontline organizations. Developing a valid and reliable measurement scale is an important step. One reason is that this allows the inspection of the dimensional structure of PDL, which can deepen our understanding of how different elements of PDL are related to one another, and it makes it possible to compare PDL with other leadership concepts systematically. A valid and reliable measurement scale can also contribute to rigorous survey-based studies of PDL and its' associated antecedents and consequences.

Relatedly, the very identification of how PDL is associated with different antecedents and consequences can help us to understand the nature of PDL and to identify relevant barriers and drivers for succeeding with PDL as well as informing theoretical expectations about the potential performance effects. For the investigation of antecedents and consequences to live up to this purpose, it is important which potential antecedents and consequences are studied, and this dissertation focuses on a number of specific antecedents and consequences. In terms of antecedents, I prioritize organizational and managerial characteristics, which existing research shows are essential for the ability and tendency of managers to exert leadership (Bro, 2016; Kwok et al., 2018; Ibarra et al., 2014). Specifically, I study *span of control* (the number of employees overseen by one manager) (Meier & Bothe, 2003), managers' perceptions of

the suitability of their span of control, and managers' relative *leadership identity* (the degree to which managers see themselves as leaders relative to their identity as members of a profession) (Grøn, Bro & Andersen, 2019).

When the span of control is broad and managers are distant from the work, it may be easy for managers to assume active leader roles, whereas managers of very narrow spans of control are more likely to take part in the day-to-day work as 'one of the employees' (Bro, 2016). The relative strength of these mechanisms related to how managers exercise PDL can help us to understand the relative distance/proximity to the work required by PDL. In addition, span of control is an organizational characteristic that potentially can be adapted based on insights about its relation to managers' leadership practices. Thus, it is of great practical relevance for public organizations and managers to know about the relationship between span of control and PDL.

The relative leadership identity of managers is relevant to study as a potential antecedent of PDL, because it can help us to understand how the characteristics of the individual manager can also be related to their exercise of PDL. The relative identification with the role as a leader or with the profession is particularly interesting from the PDL perspective, as this type of leadership combines professional and leadership logics. It is also of great practical relevance, since organizations may consider leadership identity in their recruitment of public managers, and leadership identity can be developed to fit managers' leadership tasks. Organizations that want managers to exercise PDL can thus benefit from knowing the relative balance of leadership/professional identities that tends to be related to more widespread use of PDL.

I investigate two potential consequences of PDL in the dissertation. Given that the ambition behind PDL is linked to professional quality, it is relevant to study the relationship between PDL and professional quality. Professional quality is an important performance criterion in many public organizations that employ professional employees (Boyne, 2003; Walker et al., 2013; Andersen et al., 2018), and a potential association between PDL and professional quality is a strong indicator of the relevance of PDL in public organizations. The other potential consequence under study here is public professionals' perceptions of external interventions. This is highly relevant to study given how implementing various types of external interventions is a central task for many public managers, and existing research reveals that how public professionals perceive of external interventions has an impact on their motivation – and ultimately also on organizational performance (Frey, 1997; Frey & Jegen, 2001; Jacobsen, Hvidtved, & Andersen, 2014; Pedersen et al., 2018).

In studying the link between PDL and perceptions of external interventions, I distinguish between general PDL and PDL exercised specifically towards an external intervention. In so doing, I acknowledge that leadership is exercised in given situations, and if we want to understand given types of leadership, it can be valuable to consider the respective situations in which they are exercised. In addition to studying PDL as exercised in relation to external interventions, I also provide context to the dissertation by devoting part of it to the study of how PDL is exercised in highly turbulent times, where events, demands, and support interact and change in highly variable and unpredictable ways (Ansell & Trondal, 2018; Ansell, Sørensen, & Torfing, 2020). This contributes to answering the research questions, as studying PDL in critical situations can nuance our understanding of what it entails in practice.

Fulfilling the aim of the dissertation and answering the research questions required a design capable of living up to multiple criteria. First, I needed a research context in which public managers lead professional employees with specialized, theoretical knowledge and intra-occupational norms. Second, I needed a design that rendered it possible to analyse flexibly and in-depth how managers work with the facilitation of professional quality to support the conceptual development and to create empirical illustrations. Third, the design should have the breadth to study antecedents and consequences systematically across multiple organizational units and to apply statistical methods to control for relevant confounders. Finally, based on insights from the self-other agreement literature (Fleenor et al., 2010; Jacobsen & Andersen, 2015), I needed a design that included both managers and employees to obtain a nuanced understanding of how managers exercise PDL.

To meet these criteria and answer the research questions, the dissertation is based on a mixed methods multi-level study carried out on the frontlines of public organizations. It is *mixed-methods* in the sense that I combine the analysis of qualitative interviews with 40 public professionals and their managers and survey studies with more than 4,000 respondents in total. The qualitative interviews serve three main functions in the dissertation. First, they assist the conceptual development of PDL together with theory about public leadership and professionals. Second, I use them to provide empirical illustrations of how PDL is exerted on the frontlines, both in the everyday context and during turbulent times. Third, interviews have supported the development of the measurement scale. The survey studies play two main roles in the dissertation: I use them to validate the measurement scale that I developed and to study the antecedents and consequences of PDL.

The *multi-level* approach implies that I have chosen to include the perspectives of both public professionals and their managers in both qualitative and quantitative study elements. I do so to account for the fact that managers and employees often experience the degrees to which managers perform certain types of leadership differently (Wright & Nishi, 2007), and employees

must perceive the managers' intended leadership for it to influence them (Jacobsen & Andersen, 2015). In addition, the multi-level approach makes it possible to reduce common source bias (Favero & Bullock, 2015) in the analysis of antecedents and consequences, as when I for example apply employee-reported leadership when studying managerial leadership identity as a potential antecedent of PDL.

Furthermore, I have chosen to focus on PDL on the *frontlines of public organizations* (Lipsky, 1980; Riccucci, 2005; Petersen, 2020). As I return to in Chapter 5 when laying out suggestions for future research, other levels in the bureaucracy are relevant for understanding PDL and how public managers attempt to make organizational and professional principles come together. I have chosen to focus on the frontline organizations, however, as they constitute a primary nexus where many public managers work to realize organizational goals together with and through their professional employees. The main focus is on public health and care organizations, such as public hospitals, rehabilitation centres, and nursing homes. In addition, I include job centres in the attempt to validate the measurement scale to ensure that the measurement scale developed here can be applied in both service-producing and service-regulating organizations (Hasenfeld, 1972; Kjeldsen, 2014).

Five different papers cover the different research elements and constitute the dissertation together with this summary. Table 1 reports the full titles of the five papers in the dissertation and describes which of the research questions they each address. Paper A (Concept Paper) develops the refined conceptualization of PDL and provides empirical illustrations of how managers exert PDL on the frontlines of public organizations on a daily basis. Paper B (Measurement Paper) develops a measurement scale of PDL and validates the scale among managers and employees in public service-regulating and public service-producing organizations. Paper C (Antecedents Paper) examines how the span of control and manager's leadership identity are related to employees' perceived level of PDL from their manager. This paper also studies the association between the PDL of the individual manager and how their employees assess the professional quality.

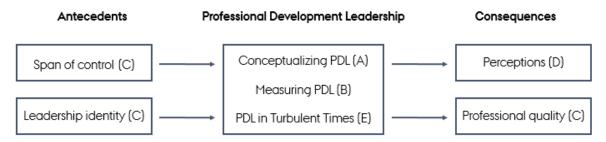
Table 1. Titles of Papers in Dissertation and the Research Questions They Address

	Research Question
PAPER A. Lund, C.S. (2022) Professional Development Leadership in Public Organizations: A Refined Conceptualization. <i>Invited for revise & resubmit.</i>	1
PAPER B. Lund, C.S. (2022) Professional Development Leadership: Scale Development & Validation. <i>Working paper</i> .	1
PAPER C. Lund, C.S. (2021) Professional Development Leadership in Public Organizations: A Multi-level Study of Relevance & Antecedents*. <i>Politica</i> 53(4).	2
PAPER D. Lund, C.S. (2022) Professional Development Leadership: Shaping Public Professionals' Perceptions of External Interventions. <i>Working paper</i> .	2
PAPER E. Lund, C.S., & L.B. Andersen (2022) Professional Development Leadership in Turbulent Times. <i>Forthcoming in Public Administration</i> .	1

Note: *Danish title: Lund, C.S. (2021) Faglig ledelse i offentlige organisationer: Et multi-level studie af relevans og forudsætninger blandt afdelingssygeplejersker og sygeplejersker. Politica Vol. 53, 4.

Paper D introduces the distinction between general and intervention-specific PDL and examines how both are related to how employees perceive external interventions. Paper E investigates how managers exercise PDL during intensity turbulence with shifting parameters, interdependence, and temporal complexity. Model 1 provides an overview of the project structure and illustrates the role of each of the papers in the project as a whole.

Model 1. Project Model and Overview of Papers in Dissertation



Note. Letters in parentheses indicate the papers addressing the given research elements. See Table 1.

This summary of the dissertation is structured in five chapters. The next chapter elaborates the conceptualization of PDL and presents the core theoretical expectations about how PDL is related to the investigated antecedents and consequences. Chapter 3 describes the methodological approaches in the dissertation. I show how I have combined qualitative and quantitative multi-level studies to obtain an in-depth and nuanced understanding of PDL as a concept, validated a new measurement scale, and studied its relations to other concepts. In Chapter 4, I present the key empirical findings of the dissertation. First, I provide empirical illustrations of PDL based on the interviews with public managers and their professional employees. Here, I also illustrate how

studying public managers' use of PDL in turbulent times (due to the Covid-19 pandemic) has assisted the conceptual development of PDL. Second, I present the empirical findings in terms of antecedents and consequences related to PDL. The final chapter summarizes the answers to the research questions based on the findings in the five papers. In this chapter, I also discuss the primary contributions of the dissertation and critical perspectives, the methodological limits of the dissertation, and implications for practice and future research.

Chapter 2. Theorizing Professional Development Leadership

The first part of the theory chapter is devoted to presenting the refined conceptualization of professional development leadership (PDL) and positioning it in the existing literature on public professionals. The second part of the chapter theorizes how PDL is related to relevant antecedents and consequences. In terms of antecedents, I focus on an organizational characteristic (span of control) as well as a manager characteristic (leadership identity), which the existing leadership literature identifies as relevant for the ability of managers to get across with their intended leadership behaviours. As regards the consequences of PDL, I study how it is associated with professional quality and employee perceptions of external interventions, which the existing literature shows to be relevant for motivation and performance. The first section below begins by defining some core concepts.

2.1. Professionals in Public Organizations

Professionalism is a concept with various connotations, and what it means to be 'professional' has been widely contested (Kallman, 2021; Noordegraaf, 2007). I start this theoretical chapter by defining some core concepts and providing a brief overview of central strands of the perspectives in the literature on public professionals, as this is a central step for positioning the PDL concept in the existing literature.

2.1.1. Professionalism: Professional Norms and Knowledge

When referring to 'professionals', I am referring to members of professions. Professions are occupations with specialized, theoretical knowledge and firm intra-occupational norms regulating their conduct (Andersen & Pedersen, 2012). The specialized aspect of professional knowledge implies that it is exclusive; the public and other occupational groups do not have the same knowledge. The theoretical aspect means that the core of professional knowledge is scientific and has an abstract, cognitive base, implying that it cannot be codified. While some of this theoretical knowledge is usually attained through formal education (Parsons, 1939; Abbott, 1988; Freidson, 2001), professional knowledge can also comprise experiential knowledge

shared in communities of practice (Grimen, 2008; Schön, 1983). In accordance with recent research in the field, this dissertation conceptualizes professional knowledge to include both education-based and experience-based knowledge (Cecchini & Harrits, 2021).

Professional norms can be defined as 'prescriptions commonly known and used by the members of an occupation, referring to which actions are required, prohibited, or permitted in a specific situation' (Andersen & Pedersen, 2012: 48). In other words, professional norms describe the understandings shared by the members of a profession regarding which behaviours are deemed suitable in certain situations with respect to 'professionally correct' action. Thus, professional norms play a central role in upholding certain standards of professionals' work and, together with the professionals' specialized training, professional norms are essential for professions to maintain their status in society (Parkin, 1979; Weber, 1978).

In some work, scholars distinguish between 'true' professions (e.g., medicine, law) (Abbott, 1988) and semi-professions (e.g., social work, nursing, teaching) (Etzioni, 1969; Brante, 2011). Instead, I apply the understanding of professionalism as the occupational level of specialized, theoretical knowledge and professional norms (Andersen & Pedersen, 2012), viewing for example social work and nursing as professional work but acknowledging that other occupations have higher levels of professionalism (ibid.; Kallman, 2021). Thus, I see professionalism more as a matter of degree than an 'either or'.

In traditional sociology of professions, the functionalistic and neo-Weberian schools represent different views on professional norms and knowledge. Their key difference concerns their respective understandings of professional knowledge as being necessary to fulfil the altruistic motives of professions (Goode, 1957) or a symbolic cover for gaining professional power (Johnson, 1972). The functionalist school sees altruism as a driver of professional norms (Durkheim, 1992; MacDonald, 1995; Freidson, 2001) and professional knowledge as necessary to professions when performing special tasks in society (Sehested, 1996; Goode, 1957). In contrast, the neo-Weberian school emphasizes how professions are collectively self-interested and conceive professional knowledge as a symbolic tool for protecting their powerful societal positions (Sehested, 1996; Weber, 1978; Johnson, 1972).

Public administration literature has emphasized that professional knowledge is often necessary, but that professionals are not expected to follow norms for altruistic reasons alone (Andersen & Pedersen, 2012: 47; Le Grand, 2003; Thomsen & Jensen, 2019). Thus, insights from the functionalist and neo-Weberian schools have been combined, resulting in the understanding of professions as occupational groups with specialized, theoretical knowledge

and intra-occupational norms resting on both collective altruistic and collective egocentric motives.

While the sociological approach to professionalism has been essential in describing core characteristics of professions and the role of professional associations in regulating professional conduct to ensure the professional quality and societal status of professions (Abbott, 1988; Freidson, 2001; Weber, 1922(1978)), it pays less attention to the role of professionalism in organizational settings (Noordegraaf, 2011). Most professional work in contemporary society is carried out in organizations, however, and organizational principles and professional principles may clash. Health care organizations focus on cost-effective treatment, which can conflict with medical professional norms concerning ethical treatment (Reay & Hinnings, 2009). This raises critical questions regarding the compatibility of professional and organizational principles. Three different perspectives on professionalism deliver different answers to the questions of how professional and organizational principles interact in organizational settings (Schott et al., 2015). I briefly outline these perspectives (occupational professionalism, organizational professionalism, and hybridized professionalism) in the following to clarify the dynamic understanding of professionalism underpinning the refined conceptualization of PDL, which I present afterwards.

2.1.2. Approaches to the Compatibility of Professional and Organizational Principles

Occupational professionalism is a bottom-up perspective wherein professional associations regulate professional practice and set objectives and standards themselves (Schott et al., 2015). Professionalism is seen as a distinct way of organizing professional work across organizations (Abbott, 1988), and only 'true' professions with real institutional control are seen as professionals. Freidson's (2001) notion of a 'third logic' exemplifies this perspective, as he describes professionalism as an ideal mechanism of control for complex public services.

Organizational professionalism represents another, more top-down approach to professionalism, arguing that organizations use professionalism instrumentally to control professionals (Schott et al., 2015: 7). In organizational professionalism, professional work is embedded in organizational structures, and organizational principles rather than professional norms set the relevant goals and define employee relations to citizens and set performance goals (Evetts, 2011). The organizations that employ the professionals play a larger

role in certifying and organizing the professionals' work, whereas the professional associations play a less clear role in certifying and controlling the professionals (Larson, 1977).

Finally, *hybridized professionalism* is an integrative approach to professionalism, neither seeing professional control as bottom-up agency by professionals nor a top-down strategy of managers and organizations; professionalism is instead seen as the co-product of both parties (Schott et al., 2015). Noordegraaf (2016), for example, emphasizes that public professions have never been autonomous and that public professionals are accountable to multiple stakeholders in bureaucratic contexts. Thus, the dichotomy between occupational and organizational logics becomes blurred. Hybrid capacities and cooperative skills can even be seen as crucial aspects of professionalism, as they are necessary for reacting to contextual changes in appropriate ways (Schott et al., 2015; Noordegraaf, 2011; 2016). This approach embeds organizing roles and capacities within professional practice and highlights the organizational dimensions of professional work.

The different approaches to professional work imply different views concerning the opportunities to influence and develop professional norms and knowledge in an organizational setting. The traditional sociology of professions argues that professional knowledge is attained through formal training only and that the professional associations are the main providers of codes of ethics and licensing and responsible for controlling competences (Evetts, 2014: 43). Newer strands of literature, including *organizational professionalism* and *hybridized professionalism*, have more dynamic perspectives on professionalism. Professional norms and knowledge are thus seen as something that can be developed in organizational and bureaucratic contexts, potentially leaving room for leadership to influence the expression of professional norms in the organizational work (Torfing et al., 2020; Schott et al., 2015; Noordegraaf et al., 2016).

The refined conceptualization of PDL that I have developed and present below is based on an integrative approach to professionalism. Thus, in addition to seeing professionalism as a matter of a degree, I apply a dynamic understanding of professionalism. This also implies that I do not see professionalism as a purely bottom-up or top-down control logic, viewing professional principles instead as phenomena that can interact with organizational principles. Likewise, I see public managers as actors capable of playing an essential role in supporting how public professionals integrate their professionalism in an organizational context via their leadership behaviours.

2.2 Conceptualizing Professional Development Leadership

Existing research has defined PDL as leadership behaviours focused on facilitating a shared understanding of professional quality in an organizational unit (Grøn, Bro, & Andersen, 2019; Danish Leadership and Management Commission, 2018). However, existing research has not conceptualized this type of leadership more systematically or theorized its behavioural dimensions. To accommodate for this, I have developed a refined conceptualization of PDL in Paper A. To address previous criticisms of leadership concepts (e.g., confounding leadership strategies with their effects), I apply the Jensen et al. (2019) framework for conceptualizing leadership behaviours and thus outline the overall ambition of PDL and three core behaviours.

I define PDL as leadership aimed at facilitating a shared understanding of professional quality within the scope of organizational goals and at influencing others to realize this understanding in practice. This ambition is reflected in three core behaviours, namely attempts to align organizational goals and professional norms, to develop professional knowledge, and to activate professional norms and knowledge in practice (Paper A). In the following, I first describe the theoretical understanding of *leadership* as a broader concept that underpins this definition of PDL. Next, I elaborate the PDL conceptualization further by nuancing its ambition and the core behaviours.

2.2.1. Underlying Understanding of Leadership

Leadership can be described broadly as 'the process of influencing others to understand and agree about what needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives' (Yukl, 2006: 8). This understanding of leadership is underpinning the refined conceptualization of PDL, but it also points to the relevant demarcations that I have drawn in my work with PDL in this dissertation.

First, with this definition, leadership is seen as a *process* and not as a person or trait. Leadership is thus a series of behaviours with a certain end that various persons in principle can exert independently of their position and where they for example employ a formal leadership position. This is reflected in the refined PDL conceptualization in the sense that I do not define PDL as behaviours that only formal managers can exercise, although how public frontline managers exercise PDL is the primary theoretical and empirical focus in this dissertation. I return to this demarcation in Chapter 5 in the discussion of the concept of *distributed professional development leadership*.

I also apply the understanding of leadership as a process in the refined conceptualization in the sense that I specify a group of behaviours with the common *ambition* to facilitate and realize a shared understanding of professional quality within the scope of organisational goals in practice as PDL. By doing so, I avoid conceptualizing PDL by its effects, as some existing leadership concepts have been criticized for doing (Jensen et al., 2019; Judge & Piccolo, 2004; van Knippenberg & Sitkin, 2012).

Second, the leadership definition focuses on *influencing others* to agree about what to do and *facilitating* their *efforts to accomplish shared objectives*. From this perspective, leadership has both a dimension of working with perceptions of what must be done as well as a dimension of facilitating that others work to accomplish this. Again, this is reflected in the refined PDL conceptualization, as it includes both working with the understanding of professional quality in the organization and facilitating others' efforts to achieve it in practice.

Third, the focus on others emphasizes how leadership takes place in collectives; there must be someone to influence – to lead – which also means that the self-leadership concept becomes rather empty in this understanding (e.g., Manz, 1986). However, the definition does not define who these others are or explicates that leadership necessarily takes place in organizational settings with a top-down approach; for example, leadership can also be directed upwards in a hierarchy (e.g. Schilit & Locke, 1982). Similarly, the refined conceptualization of PDL is not demarcated by a specific 'direction' of leadership behaviours. Nevertheless, PDL requires followers with some degree of professional norms and knowledge to be relevant, as it involves leadership behaviours oriented towards aligning, developing, and activating professional norms and knowledge in organizational settings. The primary focus in this dissertation is on the PDL exercised by managers towards their professional employees on the frontlines of public organizations. As I return to in Chapter 5, this does not imply that it may not be relevant to lead upwards in the hierarchy to integrate organizational and professional principles. Such mechanisms are merely outside of the primary scope of this dissertation.

2.2.2. The Core Ambition and Core Behaviours

PDL aspires to facilitate a shared understanding of professional quality within the scope of organizational goals and to influence others to realize this understanding in practice. The ambition of facilitating a shared understanding of professional quality within the scope of organizational goals involves an aim of ensuring an agreement about what constitutes professional quality, which is aligned with organizational objectives. This ambition to facilitate a

shared understanding of professional quality acknowledges that organizational goals and professional norms may clash (Raelin, 1986) and that professionals may have diverse views on main objectives (Andersen et al., 2018; Walker et al., 2013). It taps into the hybridized approach to professionalism that underpins the conceptualization, and it emphasizes that PDL is aimed at integrating organizational and professional principles. The ambition is that the manager(s) and employees within an organizational unit reach agreement about what professional quality means in their unit in a way that is aligned with the politically legitimate goals (Andersen, Boesen, & Pedersen, 2016; Boschken, 1992; Radin, 2006).

The other element of the ambition of PDL is to influence others to realize the shared understanding of professional quality in practice. It emphasizes that PDL is not only about influencing understandings of how the professional work should be done in the organizations; it is also directed at facilitating efforts to realize a shared understanding of professional quality in practice. Thus, the refined conceptualization of PDL differs from and adds some layers to the existing definition (Grøn, Bro, & Andersen, 2019) in its description of the overall ambition with this type of leadership. It adds that the shared understanding of professional quality is not just any understanding but one that is within the scope of organizational goals, and it clarifies that, in addition to facilitating a shared understanding, PDL aims to realize the shared understanding of professional quality in practice.

Together, the ambition of facilitating a shared understanding of professional quality within the scope of organizational goals and influencing others to realize this in practice denotes the reason for grouping certain leadership behaviours together as PDL (Paper A; Jensen et al., 2019). The ambition is reflected in three core behaviours of PDL, namely managers' attempts to: 1) create alignment between organizational goals and professional norms, 2) develop professional knowledge, and 3) activate professional norms and knowledge in practice (Paper A).

Attempts to create alignment between organizational goals and professional norms can involve effort to translate organizational goals in professionally meaningful ways as well as attempts to develop professional norms in the direction of organizational goals (Grøn & Møller, 2019; Torfing et al., 2020). Attempts at developing professional knowledge may concern the development of formal knowledge attained through professional degrees as well as practice-based learning in communities of practice, and attempts to activate norms and knowledge include leadership efforts to ensure that employees follow professional norms and actively use professional knowledge in their work. Importantly, the activation element includes managers' attempts to mobilize as

well de-activate professional resources in the work contingent on the situation, implying that it is not only the efforts to influence professional employees to apply as much knowledge as possible, but efforts to influence that the *right* knowledge and norms be activated in the specific context (Paper E). I return to this point in Chapter 4, where I illustrate some of the empirical findings in the Turbulence Paper for how public managers exercise PDL in turbulent times (Ansell & Trondal, 2018; Paper E).

In line with the hybridized understanding of professionalism that underpins the conceptualization of PDL, the three core behaviours share a focus on influencing the expression of professional norms and knowledge in the organization. But they also emphasize different aspects of influencing professional efforts in the direction of goal attainment. The first core behaviour, which is focused on aligning goals and norms, addresses an essential element of setting direction for the professional work, and this taps into the overall ambition of facilitating a shared understanding of professional quality that is aligned with organizational goals. The second core behaviour addresses the work of developing the employees so that they have the professional competences necessary to attain the given understanding of professional quality. Finally, the third core behaviour emphasizes the effort of also influencing the professional employees to actively use their professional norms and knowledge in practice. The two final core behaviours are thus reflections of the other aspect of the ambition; namely, the ambition to influence others to realize the shared understanding of professional quality in practice.

By including these different layers, the refined conceptualization adds important elements to existing understandings of PDL (Grøn, Bro, & Andersen, 2019). It incorporates the role of organizational goals explicitly and clarifies that PDL is not only about facilitating the shared understanding of professional quality but also facilitating that the employees are capable of attaining it *and* that they work to do so with the active use of their professional resources. Thus, the refined conceptualization also carves out essential core behaviours of PDL in addition to outlining the overall ambition.

2.3. Professional Development Leadership in Turbulent Times

Turbulence is characterized by surprises, inconsistency, unpredictability, and uncertainty (Ansell et al., 2020). Public organizations experience some degree of turbulence at all times due to the unpredictability of the political process with multiple stakeholders (Torfing et al., 2020). Public managers should therefore be ready to reach organizational goals in turbulent times (Barasa et al. 2018; Ansell & Trondal, 2018). By analysing PDL via a critical case with

high-intensity turbulence, Paper E sheds light on how public managers exercise PDL in times characterized by intense levels of turbulence.

In this paper, my co-author and I focus on three dimensions of turbulence; shifting parameters, unexpected interdependence, and temporal complexity (Ansell & Trondal, 2018). Shifting parameters refer to periods when otherwise stable parameters are changing, standard operating procedures are no longer standard (or have different consequences), and new factors can influence goal attainment. *Unexpected interdependence* relates to both horizontal and vertical institutional entanglements in which stakeholders depend on each other in their attempts to attain their goals. Finally, *temporal complexity* manifests itself in multiple and shifting tempos, as when organizations shift from routine programme action to rapid response.

We theorize how managers will exercise PDL consciously in turbulent times by, for example by facilitating that professional employees deactivate professional norms and knowledge that do not match the shifting parameters, hinder interdependence-induced collaboration, or are unsuited to the situational tempo (Paper E). Instead, they can focus on activating professional norms and knowledge that they expect to lead to value creation given the circumstances. Likewise, managers can develop new norms and knowledge to address shifting parameters, to support that that collaboration leads to goal attainment, and to assist employees in developing the ability to assess the tempo to adapt their professional practice to the situation (Paper E).

2.4 Antecedents of Professional Development Leadership

Identifying the antecedents of PDL can be fruitful in terms of developing our theoretical understanding of the concept further. In the following, I present the theoretical expectations to how the perceived level of PDL among employees towards their managers is related to the *span of control* and their managers' *leadership identity*, respectively.

2.4.1 Span of Control

Objective span of control denotes the number of employees overseen by one manager. The existing research sheds light on two opposing mechanisms influencing the relationship between span of control and leadership (see Paper C). On the one hand, a very broad span of control may imply less one-on-one interaction between managers and their employees and thereby reduce the managers' opportunities to get across with active leadership (Gumusluoglu,

Karakitapoğlu-Aygün, & Hirst, 2013). On the other hand, managers risk becoming 'one of the colleagues' rather than assuming their leadership role if their span of control is very narrow (Bro, 2016). These mechanisms are also expected to be relevant to PDL, as it requires public managers to take on an active, facilitating leader role *and* to be relatively close to the core tasks to actively develop and mobilize professional norms and knowledge in practice (Holm-Petersen et al., 2015: 32; Grøn, Bro, & Andersen, 2019; Lund, 2021: 341). I therefore expect employees to perceive higher levels of PDL in organizational units with medium-sized spans of control rather than very broad or very narrow spans of control.

Paper C also theorizes on how managers' own perceptions of the span of control are expected to be relevant to the degree to which public managers get across with PDL. As the paper discusses, various factors, including the diversification of function and stability, may influence whether public managers perceive their span of control as suitable, too broad or too narrow (Gulick, 1937; Meier & Bothe, 2003: 62). The expectation is that if managers perceive their span of control as being too broad, this will be reflected in a sense of excessive distance to the individual employees and to the core tasks, and therefore fewer chances to get across with active PDL (Lund, 2021: 342). Likewise, if managers think the span of control is too narrow, they may become too collegial and neglect to assume the role as a leader and engage in active PDL (ibid.). I therefore expect employees to perceive higher levels of PDL in organizational units where the managers perceive their span of control as suitable rather than too broad or too narrow.

2.4.2 Leadership Identity

Leadership identity denotes the extent to which individuals see themselves as leaders; similarly, occupational identity describes how much an individual identifies with people with a similar educational and occupational background (Day & Harrison, 2007; Grøn, Bro, & Andersen, 2019; Miscenko et al., 2017). In this dissertation, I work with leadership identity as a relative concept contrasted with occupational identity. As managers are expected to answer very affirmatively to questions measuring their leadership identity as 'stronger or weaker', we may obtain more nuanced insights into their leadership identity by asking about their comparative occupational-/leadership identity (Grøn, Bro, & Andersen, 2019). Additionally, recent literature has examined the relationship between comparative occupational-/leadership identity and other types of leadership (ibid.), and we can thus nuance our conceptual understanding of PDL by investigating whether it is related differently to leadership identity than other types of leadership behaviour.

Scholars have found that managers with a dominating leadership identity reportedly exercise more transformational leadership than do managers with a balanced or dominating occupational identity (ibid.). My theoretical expectation, which I outline in Paper C, is that employees perceive higher levels of PDL when their managers have a balanced occupational- and leadership identity rather than a dominating leadership identity, because strong identification as a leader as well as with the professional occupation may nurture the capacity of public managers to get across with PDL. To facilitate and engage in the professional discussion about quality, the managers need some insight into the professional knowledge and norms among the employees (Cecchini, Pedersen, & Andersen, 2021). However, the managers must also assume their leadership role and be responsible for facilitating the professional development and establishment of a shared understanding of professional quality (Cecchini, Pedersen, & Andersen, 2021: 241). Thus, I expect employees to perceive higher levels of PDL from leaders with a balanced occupational- and leadership identity.

2.5 Consequences of Professional Development Leadership

This section presents the theoretical arguments for how PDL is expected to be related to *professional quality* and *perceptions of external interventions*, respectively.

2.5.1 Professional Quality

Professional quality is an essential performance criterion in the public sector, and it can be understood differently (Andersen et al., 2018). In this project, I work with professional quality as a performance dimension, which has the professional employee as the primary stakeholder. The level of professional quality thus describes whether professional norms are followed and professional knowledge applied in the work, and the professionals' understanding hereof may relate to the criteria related to input, process, output, and outcome (Andersen et al., 2018; Boyne, 2002; De Bruijn, 2010).

When public managers exercise higher levels of PDL, I expect their employees to perceive the level of professional quality also to be higher, as I expect PDL to increase the *willingness* of public professionals as well as their *capacity* to attain professional quality in public organizations (Lund, 2021: 340; Winther & Nielsen, 2008).

One aspect of the ambition with PDL is to facilitate a shared understanding of professional quality in the organizational unit. This implies that managers attempt to create alignment between organizational goals and professional norms, which is the first behavioural element of PDL (Paper A). Paper C theorizes how this type of congruence can make professional employees more willing to try harder to attain professional quality and to avoid professional employees working to realize different objectives and values (Andersen et al., 2018: 54; Lund, 2021: 340).

Other behavioural elements of PDL are oriented towards supporting that the shared understanding of professional quality is also realized in practice. This is reflected in the attempts to develop professional knowledge and activate professional norms and knowledge in practice (Paper A). As I elaborate in Paper C, I expect these elements of PDL to make professional employees more *capable* of attaining professional quality (Winther & Nielsen, 2008). The managers' efforts to ensure that professional knowledge is developed in the organization supports professional employees having the necessary professional knowledge, and the managers' work to activate professional norms and knowledge supports that the employees not only have the knowledge but also apply it and follow professional norms in the work.

In this sense, I expect PDL to increase the professional quality in public organizations. In the next subsection, I turn the attention to the potential of PDL to influence perceptions of external interventions.

2.5.2 Perceptions of External Interventions

Public managers must implement various sorts of external interventions, such as command systems, incentives, and governance initiatives. We know from the existing literature that they do so in different ways, and this may have implications for how their employees perceive the external interventions (Frey & Jegen, 2001; Jacobsen, Hvitved, & Andersen, 2014; Mikkelsen, Jacobsen, & Andersen, 2015). In Paper D, I investigate how PDL is related to public professionals' perceptions of external interventions. This is important, because when employees perceive external interventions as more supportive, they have higher intrinsic motivation, they have lower levels of illness absenteeism (Andersen, Kristensen, & Pedersen, 2015), and they are more motivated to contribute to goal attainment (Andersen & Pallesen, 2008).

In my investigation of the relationship between PDL and perceptions of external interventions, I introduce another systematized concept of PDL. Thus, in addition to *general* PDL, which is the concept I introduce in Paper A and hitherto have referred to in this summary of the dissertation, I introduce

the concept of *intervention-specific* PDL in Paper D. As with general PDL, intervention-specific PDL is aimed at contributing to professional quality by influencing the development and activation of professional norms and knowledge among others. However, intervention-specific professional development is exercised specifically in relation to a given external intervention. The ambition of intervention-specific PDL is thus to integrate an external intervention in the shared understanding of professional quality for the external interventions to contribute to professional quality (Paper D). Core behaviours include the attempts made by managers to create alignment between a given external intervention and professional norms and to activate professional norms and knowledge of relevance to the work with the given external intervention (Paper D).

A typical example of an external intervention in public organizations is the documentation requirements obligating public professionals to document information, such as patients' well-being and services provided (Andersen, Kristensen, & Pedersen, 2015). When a head nurse exercises intervention-specific PDL related to documentation requirements, she works to integrate documentation practices in how the ward understands professional quality for the documentation ultimately to contribute to the professional quality. In professional discussions about a patient, the head nurse may pose reflective questions to the nurses about the Early Warning System (EWS) information documented in the electronic patient records. This can be a strategy to mobilize professional knowledge about relevant diagnoses and medication in the assessment of the right treatment for the patient.

In Paper D, I elaborate on the theoretical arguments for why general and intervention-specific PDL is expected to be related to more supportive perceptions of external interventions. In short, I expect general PDL to make public professionals feel less controlled, as their professional competencies are acknowledged and supported, which in turn may manifest itself in more supportive perceptions of external interventions. I expect intervention-specific PDL to prevent external interventions from impairing public professionals' self-esteem and self-determination, and therefore to contribute to more supportive perceptions (Frey, 1997; Frey & Jegen, 2001; Paper D).

This chapter has presented a conceptualization of PDL and provided an overview of the dissertation's theoretical expectations about antecedents and consequences related to PDL. The next chapter describes the methodological approaches applied in the empirical studies of both how public managers exercise PDL on the frontlines of public organizations and of the theorized antecedents and consequences.

Chapter 3. Methodological Approach

To investigate the research questions posed in the dissertation, I have adapted a mixed methods approach with both qualitative and quantitative research elements. This chapter presents and discusses some of the most central methodological choices I have made. First, I address why I have chosen to combine qualitative and quantitative research methods. Next, I present relevant choices within the qualitative and quantitative studies, respectively. I discuss case selection, measurement of professional development leadership, and strategies of analysis. More detailed information regarding the methodological procedures can be found in the individual papers.

3.1 Combining Qualitative and Quantitative Approaches in Multi-level Studies

The research questions posed in the dissertation are 1) What is professional development leadership, and how can it be conceptualized and measured? 2) What are antecedents and consequences of professional development leadership? In answering the first research question, I am interested in shedding light on the set of leadership behaviours that can be grouped as PDL and how it is exercised in public organizations. I want to uncover what it looks like when public managers exercise PDL – both according to the managers themselves and in the eyes of their employees. Qualitative interviews allow me to obtain this in-depth understanding of how public managers and employees see leadership attempts to align, develop, and activate professional norms and knowledge with the aim of facilitating a shared understanding of professional quality and influencing others to attain this understanding in the service-delivery. More specifically, qualitative interviews with public managers and their employees allow for thick, in-depth descriptions of their reasoning about how the managers exercise PDL (Schwartz-Shea & Yanow, 2011). These qualitative data are useful in my goal of further developing our conceptual understanding of professional development leadership (Gerring, 2017)

While the qualitative approach is useful for conceptual development and nuanced descriptive analyses of how public managers exercise PDL, it comes at a cost in terms of external validity, and the qualitative approach is not as useful for testing correlations between PDL and the related antecedents and consequences. Here, larger N-studies with quantitative methods are more

useful, as they allow for identification of more general tendencies and statistical associations (Hansen & Lolle, 2020), albeit at the expense of in-depth, flexible descriptions. Thus, to answer the questions most nuancedly with the advantages that qualitative and quantitative methods can each bring, I combine them to ensure both in-depth understanding of how public managers and their employees see PDL to be exercised and the systematic identification of relevant antecedents and consequences related to PDL. Table 3.1 provides a brief overview of the designs adopted in each of the papers comprising the dissertation.

As shown in Table 3.1, a consistent characteristic of the studies that I have conducted for this dissertation is that they are multi-level studies, regardless of whether they are qualitative or quantitative in their research design. This implies that I include both the managers' own and their employees' perceptions of PDL. I have made this choice to account for the fact that managers' own understandings of their leadership practices tend to be different from how their employees perceive their leadership practices (Jacobsen & Andersen, 2015; Wright & Nishii, 2007). How managers perceive and report their own leadership behaviours, for example, may be influenced by leniency and social desirability biases, implying that they focus on positive rather than negative aspects of their own behaviours and are influenced by an awareness of the culturally desirable behaviours (Schriesheim et al., 1979; Crowne & Marlowe, 1964). Likewise, employees' general understanding of the world and their implicit preferences for certain leader traits may influence their perceptions of their managers' leadership behaviours (Lord et al., 1984). Relying exclusively on manager- or employee perceptions will therefore probably lead to biased descriptions. In the following subsections, I elaborate on central choices in the dissertation's qualitative and quantitative studies, respectively, including how I used the multi-level setup to address related challenges.

Table 3.1. Overview of the Paper's Data and Design

Paper	Design	Data	Main variables
A: Concept	Qualitative multi-level study	34 interviews w. public managers and employees	- PDL (Conceptually)
B: Measurement	Quantitative multi-level study	Hierarchical surveys with managers and employees from health and employment. N = approx. 4000 + 6 interviews	- PDL (Operationally)
C: Antecedents	Quantitative multi-level study	Hierarchical surveys with head nurses and nurses. N = approx. 900	 PDL Span of control Leadership identity Professional quality
D: Perceptions	Quantitative multi-level study	Hierarchical surveys with head nurses and nurses. N = approx. 900	PDLPerceptions of documentation requirements
E: Turbulence	Qualitative multi-level study	34 interviews w. public managers and employees	 PDL (Descriptively in turbulent times)

3.2 Qualitative Approaches in the Dissertation

I conducted 34 interviews with public managers and employees to support the development of the conceptualization of PDL and to provide empirical illustrations of PDL. The interviews constitute the data foundation for the two qualitative papers in the dissertation, namely the concept paper (Paper A) and the turbulence paper (Paper E). In the following, I outline selected choices in terms of case selection, the measurement of PDL in the interviews, and analytical strategies.

3.2.1. Data and Case Selection

I collected the 34 interviews (three of which were pilot interviews) with managers and employees in health and care organizations in a medium-sized Danish municipality and the region in which the municipality is located. The specific organizations were nursing homes, rehabilitation centres, nursing centres for elderly and vulnerably citizens, a hospice, a health visitor centre, and a hospital ward. Table 3.2 provides an overview of the distribution of interviewees across the organizations.

¹ I conducted interviews with additional six public professionals and managers for the scale development work in the measurement paper. Please see paper B for more information on this.

Table 3.2. Overview of Interviewees

Type of organizations	Interviewed managers	Interviewed employees
Hospital ward	1 chief physician	1 physician
Health visitor centre working with families with new-borns	1 health visitor manager	1 health visitor,2 coordinators
Hospice	1 nursing manager	1 nurse
Nursing centres	2 nursing managers	1 nurse 1 occupational therapist
Rehabilitation centres	5 rehabilitation managers (from four units in total)	4 physiotherapists
Nursing homes	4 nursing home managers	4 health assistants 2 nurses

Note. Pilot interviews: 1 health assistant, 1 nursing manager, and 1 nursing home manager.

I chose to conduct the interviews in these organizations for a combination of reasons. First, public health and care organizations are accountable to complex organizational goals and primarily employed by professional employees, for which reason they constitute examples of the types of organizations in which I expect PDL to play a relevant role. Second, with this specific combination of organizations and professional groups, I could balance two related criteria; on the one hand, I obtained variation in organizations and professional groups to ensure that the study of PDL would not be too field- or occupation-specific. This was important given the goal of developing the understanding of PDL as a generic type of leadership that is relevant when leading professional employees in general, and not demarcated by or limited to a specific profession. On the other hand, I needed a certain level of saturation of the material within each of the professional groups. This became relevant in terms of shedding light on the professional norms shared among the employees from the respective professions.

3.2.2. Measuring Professional Development Leadership in Interviews

I made several choices to achieve a nuanced understanding of how managers exercise PDL in the investigated organizations, both in their own eyes and those of their employees. While interviews do not give direct access to observing how managers attempt to develop and activate professional norms and knowledge in their leadership conduct, they do give access to the interviewees' views and how they understand leadership practices. The qualitative multilevel setup implied that I interviewed managers and employees from the same

organizational units in dyads (Headley & Clark, 2020). Thus, for each manager describing how they exercise PDL, I also interviewed at least one employee from the same organizational unit about the managers' leadership practices. This enabled me to triangulate the managers' accounts of their own leadership behaviours with an employee perspective on the same type of leadership practices (Miles, Huberman, & Saldaña, 2014: 299). Likewise, this setup allowed for more nuanced insight into how PDL is exercised in the investigated organizations in the eyes of both the 'senders' and 'recipients' of the leadership behaviours (Andersen et al., 2018).

The interviews were semi-structured around elements that I had pre-theorized as being central to the conceptualization of PDL (Brinkmann, 2021: 286). Accordingly, the interview guide was structured around themes of professional quality, professional norms, professional knowledge, and leadership behaviours addressing these themes.² Still, the semi-structured approach also allowed for leeway for following up on perspectives that the interviewees brought to the table that I had not theorized beforehand (ibid.).

I designed the interview guide and approached the interviews with different techniques to ground the interviewees' accounts in practical examples. While most of the questions in the interview guide are very open (see Table 3.3 for examples), I followed up with exemplifying questions, inviting the interviewees to provide specific illustrations of how they or their manager have behaved or reacted in certain situations (Møller & Harrits, 2021: 117). Another specific technique I used to support the interviewees' articulation of their practice was inspired by the 'interview to the double' technique (Nicolini, 2009). I asked the interviewees to imagine that they had a double who would have to replace them at their job the next day. Then I asked them to provide instructions ensuring that the same level of professional quality would be maintained. This technique especially supported the insights into professional norms among the employees and indirectly made the interviewees share their perspectives on relevant (leadership) practices for upholding professional quality.

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² Full interview guides are attached as appendixes to the concept paper (Paper A) and the turbulence paper (Paper E).

Table 3.3. Extract of Interview Guide for Manager Interviews

E1: 'If we were to imagine that it's Monday afternoon and you're about to have a meeting with a new leader who is going to lead an entity identical to yours, what kind of recommendations would you give them to succeed in terms of facilitating professional quality?'

E2: 'What do you do in terms of facilitating a shared understanding of professional quality in the unit? How do you make sure you realize this understanding of quality in practice?'

E3: 'What do you do to ensure that the employees' professional resources – their professional norms and knowledge – aren't just "tools in their backpack" but that they are actually activated and applied in practice?'

E4: 'During COVID, you (like many others) have faced new challenges. What have you done to maintain professional quality in this period?'

The selected questions from the interview guide reported in Table 3.3. illustrate the variation in the openness of the questions. Whereas the interview-to-the-double question and E2 are examples of relatively open questions that do not specifically ask about pre-theorized elements of PDL, E3 is an example of a question asking directly about managers' attempts to *activate* professional norms and knowledge. This combination of interview questions illustrates my combination of deductive and inductive approaches, as I return to below.

I used the final question in Table 3.3 as a 'bridge question'; an in-between question related to PDL and questions asked towards the end of the interview for another study on leadership behaviours oriented towards ensuring organizational resilience (Lund et al., 2021). Material from the bridge question and other material in the interview data that shed light on the role of PDL during the Covid-19 pandemic is used in the turbulence paper (Paper E), as described below. In contrast, the empirical illustrations in the concept paper focus on examples of PDL that the interviewees describe as 'everyday leadership' that take place in situations that are characterized by absence of high intensity turbulence. The following section elaborates the strategy of analysis for the interview-based studies.

3.2.3. Analytical Strategy

As outlined above, the interview questions consisted of questions addressing pre-theorized elements of PDL as well as more open questions leaving room for interviewees' interpretations. Similarly, for the qualitative data analysis, I have approached the interview material with a combination of inductive and deductive strategies of analysis in an iterative and dialectic process (Miles, Huberman, & Saldaña, 2014: 238).

I coded the transcribed interviews in multiple cycles in collaboration with the co-author of the turbulence paper. We prioritized to collaborate on the coding process to increase the reliability of the coding (Campbell et al., 2013). For the concept paper (Paper A), I initially coded four interviews openly. In this process, I coded the interview material very closely to the text and attempted to 'let the data speak' without being strongly bound to initial theoretical ideas. Next, I constructed a preliminary coding scheme in collaboration with the turbulence co-author. We based the preliminary coding scheme on a combination of codes from the first cycle, my initial theoretical ideas about central elements of PDL, and shared analytical reflections across theory and data. We coded another three interviews with the preliminary coding scheme and condensed it further before we coded all of the interviews with the final coding scheme. We defined the codes carefully and we calibrated and compared our coding work continuously with the aim of ensuring reliability and consistency in the coding. I generated queries in Nvivo and condensed them systematically to the selected sections of text that I used as displays in the concept paper analysis.

For the Turbulence paper (Paper E), we re-coded the interview material. In line with our theoretical understanding of turbulence, we coded the interviews systematically for parts of the text describing interviewees' experiences of *shifting parameters*, *interdependence*, and *temporal complexity*. For the analysis of the turbulence paper, we selected central narratives (Maynard-Moody & Musheno, 2014) that covered sections of text that we had coded as describing elements of both PDL and the turbulence dimensions. Table 3.4 illustrates selected codes from the final coding schemes.

Table 3.4. Extract of Coding Schemes from the Concept and Turbulence Papers

Main codes	Child codes	Description
PDL		Attempts to create a shared understanding of professional quality and realize it in practice
	Aligning goals and prof. norms	Attempts to develop or translate professional norms and/or org. goals.
	Developing prof. knowledge	Attempts to make others have more and/or stronger specialized theoretical and/or experience-based conceptual frameworks and connections (cause/effect) between these
	Activating prof. knowledge and norms	Attempts to make others apply their specialized theoretical knowledge and/or experience-based concepts and connections (cause/effect) between the concepts and/or follow professional norms
Turbulence		Descriptions of inconsistency, unpredictability, and uncertainty during the pandemic
	Shifting parameters	Descriptions of changes in parameters and programme theory due to the pandemic
	Inter-dependence	Descriptions of (sub-)organizations becoming critically dependent on each other during the pandemic
	Temporal complexity	Descriptions of unpredictable changes in the pace

3.3 Quantitative Approaches in the Dissertation

I have collected survey data on PDL in two hierarchical surveys with managers and employees in the healthcare sector and employment, respectively. These surveys constitute the primary data foundation in the work to validate a PDL scale (Paper B) and the two quantitative multi-level studies in the dissertation, in which I investigate antecedents and consequences related to PDL (Papers C and D). In the following, I outline selected choices made in terms of case selection, scale development and validation, and the analytical strategy in the survey-based studies.

3.3.1. Data and Case Selection

To validate a PDL measurement scale and to apply it in studies of antecedents and consequences of PDL, I had a number of criteria for case selection. First, I needed organizations that are accountable to political goals while also employing professional employees. The reason is that it is in organizations like these where I expect PDL to be relevant due to the existence of potential conflicts between organizational goals and professional norms, the managers can attempt to coordinate, and the employees possess professional knowledge and

professional norms that the manager may put effort into developing and activating. Second, as my goal was to validate a generic scale that is applicable across different public organizations with different professional groups, I needed variation in organizational setting and professional groups. Finally and relatedly, I was interested in validating a scale that was relevant in monoas well as cross-professional contexts.

Combining data from hospital wards and job centres made it possible to meet these criteria. While hospitals are primarily responsible for public service production (provision of treatment), job centres are more about regulating public services (e.g., assessing entitlements) (Kjeldsen, 2014). We know from existing research that motivation and leadership-related concepts may work differently in service-producing and service-regulating organizations (e.g., Van Loon, 2015) and that these organizations are therefore relevant to ensure that the scale was applicable across contexts (Williams et al., 2009).

The survey studies carried out in job centres and hospitals included both managers and employees. The individual papers in the dissertation, which apply the survey data, report more detailed information on the survey data, including data collection and sample sizes for the analysis in each paper.

3.3.2. Scale Development and Validation

The dissertation develops and validates two scales to measure PDL. *The dimensional PDL scale* is a 9-item, second-order scale measuring the three dimensions of professional development leadership separately: *aligning, developing,* and *activating. The global PDL scale* is a global scale consisting of four items from the dimensional scale. This section primarily presents selected results of the dimensional PDL scale. For more nuanced insights into the processes of developing an initial list of items, condensing the list of items based on insights from qualitative and quantitative pilot studies, and modifying the scales on the calibration sample, I refer to Paper B. Table 3.5 provides an overview of the items in *the dimensional PDL scale*. The four items with a star are those included in the *global PDL scale*.

Table 3.5: Professional Development Leadership Questionnaire Items

Manager version: As a leader, I ... (Employee version: My leader ...)

1. Actively work(s) to ensure a shared understanding of professional quality in my unit.*

Align

- 2. Strive(s) to align professional norms and organizational goals.
- 4. Seek(s) to translate organizational goals to make them professionally meaningful.

Develop

- 5. Actively contribute(s) to the employees being professionally up to date.
- 6. Work(s) to ensure the employees' professional development.*
- 7. Prioritize(s) resources for the employees to acquire new professional knowledge.

Activate

- 9. Take(s) part in ensuring the professional quality of the work.*
- 10. Actively support(s) that the employees mobilize professional knowledge in the work.*
- 12. Work(s) to ensure the professional reflection in the work.

Note: * indicates that the item is included in the global PDL scale. See Paper B.

Likert-type format: $1 = strongly\ disagree$, $2 = somewhat\ disagree$, $3 = neither\ agree\ nor\ disagree$, $4 = somewhat\ agree$, $5 = strongly\ agree$.

Table 3.6 presents descriptive statistics of the two PDL scales in the four validation samples with managers and employees from service regulation and service production. The table reports the same statistics for validated scales of transformational and transactional leadership (Jensen et al. 2019) in the same samples. Comparing the dimensional and global PDL scales, their descriptive statistics are relatively similar when examining the regulations/production managers and regulation/production employees, respectively. Service production managers, for example, have a mean of 0.88 (std. dev. 13) on the dimensional PDL scale and a mean of 0.90 (std. dev. 0.14) on the global PDL scale.

Managers on average tend to report much higher levels of PDL (> 0.80) compared to their employees (< 0.70) and have lower standard deviations, whether looking at the dimensional or global PDL scale. On average, the managers also report higher levels of transformational and transactional leadership than do their employees, and it is well-described in the literature how managers may be influenced by leniency and social desirability biases in their self-reporting of leadership behaviours (Jacobsen & Andersen, 2015; Nishii, Lepak, & Schneider, 2008; Wright & Nishii, 2007).

Table 3.6 Descriptive Statistics of Leadership Scales

Managers				Employees						
		Mean	Std.dv.	Min	Max		Mean	Std.dv.	Min	Max
	Dimensional PDL	0.82	0.11	0.42	1	Dimensional PDL	0.65	0.23	0	1
Service Regulation	Global PDL	0.85	0.11	0.38	1	Global PDL	0.67	0.24	O	1
Ser Regu	TFL	0.80	0.14	0.06	1	TFL	0.66	0.25	O	1
	TSL	0.83	0.15	0.17	1	TSL	0.67	0.29	0	1
		Mean	Std.dv.	Min	Max		Mean	Std.dv.	Min	Max
Service Production	Dimensional PDL	0.88	0.13	0	1	Dimensional PDL	0.64	0.24	0	1
	Global PDL	0.90	0.14	O	1	Global PDL	0.66	0.24	O	1
	TFL	0.79	0.16	O	1	TFL	0.61	0.24	O	1
	TSL	0.83	0.16	0	1	TSL	0.55	0.29	0	1

Note. TFL = Transformational Leadership. TSL = Transactional Leadership.

Table 3.7 shows the correlations between the three dimensions in the dimensional PDL scale. The three dimensions are strongly correlated for employee-reported leadership in both service regulation and service production (coefficients ≥ 73 , p < 0.001), which mirrors how the three dimensions reflect the same latent construct. Still, the more moderate correlations among the managers (coefficients ≥ 36 , p < 0.001) illustrate that the dimensions reflect different behavioural intentions of the ambition of PDL.

Table 3.7 Correlations between PDL Dimensions in Dimensional Scale

Managers					Employees			
		Align	Develop	Activate		Align	Develop	Activate
Service Regulation	Align	1			Align	1		
	Develop	0.40***	1		Develop	0.73***	1	
	Activate	0.48***	0.50***	1	Activate	0.81***	0.79***	1
		Align	Develop	Activate		Align	Develop	Activate
e	Align	1			Align	1		
Service Production	Develop	0.54***	1		Develop	0.75***	1	
Se Pro	Activate	0.36***	0.77***	1	Activate	0.81***	0.81***	1

Note: *p < 0.05, **p < 0.01, ***p < 0.001.

3.3.2.1. Convergent Validity and Measurement Invariance

As part of the validation process, I carried out confirmatory factor analysis on the four different subsamples including employees and managers from service regulation and service production, respectively. The results show that the three dimensions converge on the same latent factor, as specified in the theoretical PDL concept. Across the four validation samples, the *dimensional PDL scale* demonstrates high and significant factor loadings (> 55, p < 0.001), high reliability (Cronbach's alpha > 0.80), and adequate to good fit indices (RMSEA < 0.08, CFI > 0.95, TLI > 0.94, SRMR < 0.09) (Paper B).

Formal tests of measurement invariance demonstrate that the properties underlying the measurement model are consistent across service regulation and service production. Specifically, I tested whether the pattern of factors and indicators is the same (configural invariance) and whether the relationship between individual items and factors is equivalent (metric invariance) across service regulation and service production (Jensen et al., 2019: 16–17). In sequential steps, I compared models with different levels of restrictions to assess the changes in fit indices.

Comparing a model with all parameters constrained to be equal with a model where only the factorial structure and pattern of loadings are constrained to be equal across service regulation and production suggested configural invariance given the small changes in fit indices ($\Delta RMSEA = 0.004$, $\Delta CFI = 0.075$, $\Delta SRMR = 0.008$) (Paper B). In addition, comparing the model with constrained factorial structure and pattern of loadings with a model also restricting factor loadings to be equal suggested metric invariance ($\Delta RMSEA = 0.003$, $\Delta CFI = 0.001$, $\Delta SRMR = 0.002$) (Paper B). Thus, following Chen (2007) and Jensen and colleagues (2019), these results indicate configural and metric invariance across service regulation and service production, given that differences in RMSEA are less than 0.015, less than 0.01 in CFI, and less than 0.03 between the compared models.

3.3.2.2. Discriminant Validity and Criteria-related Validity

PDL correlates with but also discriminates from other types of leadership. Table 3.8 reports correlations between PDL and transformational and transactional leadership. As discussed in Paper B, it is worth noting that the correlation coefficients are higher for employees than for managers. This may suggest that employees do not distinguish between different types of leadership behaviours to the same degree when rating their managers' leadership behaviours.

Table 3.8 Correlations between PDL and Other Leadership Types

	M	anagers	Employees			
e		TFL	TSL		TFL	TSL
Service Regulation	Dimensional PDL	0.37***	0.34***	Dimensional PDL	0.70***	0.64***
Se Reg	Global PDL	0.34***	0.32***	Global PDL	0.68***	0.63***
e ion		TFL	TSL		TFL	TSL
Service Production	Dimensional PDL	0.21**	0.19**	Dimensional PDL	0.66***	0.62***
S. Pro	Global PDL	0.19**	0.16*	Global PDL	0.65***	0.61***

Note: p < 0.05, p < 0.01, p < 0.001. Transformational leadership and transactional leadership are measured with validated scales (Jensen et al. 2019).

Paper B also reports on a formal test of discriminant validity by comparing the average variance extracted by latent variables with squared correlations among the latent variables. It shows how the average variance extracted by professional development leadership is higher than the squared correlations with transformational and transactional leadership, suggesting discriminant validity (Mehmetoglu, 2015; Paper B). This suggests that the PDL scales succeed in capturing unique variation in leadership behaviour, which differs from transformational and transactional leadership.

Finally, Paper B reports tests the PDL scales' criteria-related validity by correlating PDL with four motivation-related criteria with which PDL is expected to correlate. The analyses show that the PDL scales correlate significantly with employee-reported professional quality, intention to quit, intrinsic motivation, and work engagement (Paper B).

3.3.2.3. Discussion of PDL Measurement

The different variants of the PDL scales have different advantages and disadvantages. The dimensional scale provides the most nuanced measure of the theoretical concept and allows for analysis of the individual dimensions. However, this scale also takes up more space in surveys and, depending on the purpose of measuring PDL in a given survey, it may be desirable to include a shorter scale as provided with the global scale.

It is also important to consider whether manager- and/or employee-reported PDL is most suitable for specific research purposes. As discussed, some important considerations concern social desirability bias and common source bias. The measurement paper and the analyses reported above provide additional insights that are worth considering in this regard. Given that managers

seem to distinguish more between different types of leadership, manager reports may for example be more suitable in studies that wish to compare different types of leadership.

The PDL scales supplement the qualitative measurement in the dissertation that contributed to the conceptual development and constituted the basis for making empirical illustrations of *how* PDL unfolds on the frontlines. The PDL scales are better suited for measuring the *level* of PDL that managers themselves and their employees think that managers perform.

3.3.3. Analytical Strategy

In the antecedents paper (Paper C), I apply a multi-level random intercept analysis strategy to account for the potential auto-correlation that the nested structure of the data can lead to (Rabe-Hesketh & Skrondal, 2008). In the analysis of the antecedents of PDL, I use employee-reported PDL as the dependent variable (Paper C) for two reasons. Substantially, it is more relevant to identify the antecedents of employee-perceived PDL, as leadership is more likely to influence their behaviour and ultimately organizational performance if the employees perceive it (Jacobsen & Andersen, 2015). In addition, this is a strategy aimed at limiting the influence of common source bias, as some of the investigated antecedents are manager-perceived variables, namely their perceptions of the suitability of their span of control and their relative professional/leadership identity. Tests of interclass correlations indicate that nurses on the same wards resemble each other considerably in terms of perceived levels of PDL (ICC = 24%) (Lund, 2021: 345), and I therefore adopt the multi-level strategy of analysis.

When I investigate perceptions of external interventions as a potential consequence of PDL in the perception paper (Paper D), I use OLS with cluster robust standard errors on the ward level as the primary strategy of analysis. In contrast to the results for PDL, nurses on the same wards do not resemble each other as much in terms of their perceptions of documentation requirements (ICC = 2%). As a robustness check, I have also run the perception analyses with multi-level models, but doing so does not substantively change the standard errors for any of the primary variables of interest, whether I use OLS with cluster robust standard errors or multi-level analysis.

Chapter 4. Empirical Findings

The dissertation's key empirical findings are structured in three main groups. In the following, I first provide a condensed overview of the empirical illustrations of what PDL practices look like on the frontlines of public organizations (Papers A and E). Second, I report the findings on antecedents related to employee-perceived PDL, focusing on span of control and leadership identity (Paper C). Finally, I describe the results for the investigated potential consequences of PDL in terms of professional quality (Paper C) and perceptions of external interventions (Paper D).

4.1 Empirical Illustrations of Professional Development Leadership

The interviews with public professionals and their managers illustrate how PDL is a prevalent and highly prioritized type of leadership in the investigated organizations. Public managers prioritize and invest essential effort into aligning, developing, and activating professional norms and knowledge with the aim of facilitating a shared understanding of professional quality within the scope of politically legitimate goals and realizing it in practice. Likewise, professional employees value when their managers engage in PDL. In the following, I provide empirical illustrations drawn from the concept paper (Paper A) of the three core PDL behaviours; namely, managers' attempts to create alignment between organizational goals and professional norms, to develop professional knowledge, and to activate professional norms and knowledge in practice. I will thereafter present empirical illustrations of how the managers used PDL to deal with turbulence resulting from the Covid-19 pandemic (Paper E).

4.1.1. Aligning

The most prevalent pattern in managers' attempts to create alignment between organizational goals and professional norms relates to their attempts to bridge organizational goals of rehabilitation and more care-oriented norms among the employees. The rehabilitation goal implies that the health professionals should work towards empowering the citizens and enabling them to be as independent as possible in their everyday activities. The managers and employees describe a conflict between this goal regarding rehabilitation and professional norms among the health assistants, which call them to focus more on providing care and delivering compensating services. These employees find

it more professionally correct to nurse citizens and resolve challenges for them as opposed to enabling them to take care of themselves more independently. This clash leads the managers to attempt to create alignment between the rehabilitation goal and more care-oriented norms.

The managers' attempts to create alignment are part of a dual process; they attempt to translate the rehabilitation goals in ways that are meaningful to the employees with more care-oriented norms, and they attempt to develop the expression of their professional norms to fit the organizational setting. This is exemplified in the story of a rehabilitation centre manager. She tries to speak to the 'Big Hearts Club', as she calls the health assistants, by highlighting how the rehabilitation approach will benefit the citizens who need it most; in other words, she attempts to make the goal of rehabilitation tap into the health assistants' internalized desire to take care of the weakest citizens, thereby translating it in a manner that is professionally meaningful to the health assistants. In addition, she describes how she also attempts to develop their professional norms in the organizational setting. The manager organizes work routines that naturally incorporate the rehabilitation agenda; for example, meetings focused on the citizens' personal goals. By placing such meetings early in each workflow with a new citizen, she attempts to make the health assistants internalize the rehabilitation agenda. These mechanisms are illustrated in Box 4.1.

Box 4.1. Rehabilitation Manager on Aligning Rehabilitation and Care-oriented Norms

A rehabilitation centre manager describes how the health assistants (the 'Big Hearts' Club') feel sorry for the citizens and tend to focus on compensating services. She attempts to communicate the rehabilitating approach in ways that are aligned with their care-oriented norms. As she describes, 'If we want to prioritize our resources for the weakest citizens, we must make the slightly less weak citizens take responsibility for themselves'. The manager also attempts to structure work processes for further rehabilitation; for example, with meetings about the citizens' personal goals: 'Every time we initialize a citizen, we begin Day One by talking about where the citizen is supposed to be in three months', she explains.

Note. From interview with the manager of rehabilitation centre 4. Applied in Concept Paper (Paper A).

4.1.2. Developing

The interviews illustrate how developing professional knowledge is a high priority for the managers and employees alike, and even though there are examples of employees who think it is mostly their own responsibility, others describe it as frustrating and de-motivating if their manager does not engage sufficiently in facilitating opportunities for developing professional knowledge.

The managers work to develop professional knowledge in various ways, as reflected in their efforts to ensure that the employees have access to continuing education and formal courses, where they can add new layers to their existing knowledge from their formal education and professional experience. Likewise, managers attempt to develop professional knowledge attained through education to fit the organizational context and transform it into practical knowledge, and the managers facilitate internal knowledge sharing in the organizations so that employees can learn from one another. Box 4.2 illustrates these different layers in managers' attempts to develop professional knowledge with stories from a health visitor centre. The manager there has prioritized considerable resources for the health visitors to attend a course on the screening of children's social contact. As both she and her employees describe, the manager facilitates routines to ensure that the knowledge gained from the course is maintained and practiced within the organization. For example, she supports the theoretical knowledge being turned into practical know-how in the service delivery by organizing meetings between the health visitors and that they practice the newly acquired approaches to screening children.

Box 4.2. Health Visitor Manager on Developing Knowledge Internally

A health visitor provides an example of how her manager supports the development of professional knowledge: 'Last year, we all attended a screening course about children's social interactions. It was an expensive course, and our manager is very focused on how we can maintain those competences [...] We have made a rotation system, where we meet once a month to ensure that we don't lose those competences. She often reminds us, "Don't waste this!"". The manager emphasizes the same endeavours: 'Each group has to produce small videos and practice with each other. Because, we had to implement this method, but it isn't something you do over night. When you were certified, you had to go home and practice [...] and that's how I support it as a leader – like, it's OK to spend time on this. It's actually a "need-to" task'.

Note. From interviews with a health visitor unit manager and employee. Applied in Concept Paper (Paper A).

4.1.3. Activating

The managers apply various strategies with the aim of activating the employees' professional norms and knowledge in practice. They organize routines that ensure that employees have time to meet and discuss cases and bring different professional perspectives to the status of citizens and relevant treatments or approaches to improving their situation. On hospital wards, this is reflected in case conferences (Chief Physician 1), and in nursing homes it is seen in 'interdisciplinary rehabilitation meetings', which are forums for collective professional reasoning where the interdisciplinary teams meet and discuss the status of the citizens (Nursing Homes 1–4). In addition to organizing how the PDL routines take place, the managers can also support the activation of professional norms and knowledge in these meeting or in the service delivery more broadly. As illustrated with two examples in Box 4.3, the managers can for example attempt to facilitate evidence-based reasoning and support their employees to avoid basing decisions on personal opinions instead of professional reasoning. One example of how they do so is by adopting a slightly provocative role, asking critical and reflective questions aimed at increasing the quality of the work and basing it on knowledge.

Box 4.3. Managers about Attempts to Activate Professional Knowledge and Norms

The **manager of a nursing centre** explains: 'I often raise questions like: "Do you have any evidence for this?" Or: "Have you thought about this?" I don't know what to call these questions, but like ... externally imposed questions. The purpose is to improve the level of professional quality'.

One of the **nursing home managers** reports how she tries to avoid arguments based on 'personal opinions' at case meetings. Instead, she attempts to make the assistants bring forward 'what we know works and has an effect based on our education and professional experience.'

The **chief physician** describes how he insists on facilitating processes that bring evidence to the table when they are deciding on new ward guidelines. 'I try to be the one insisting that we discuss things. I'm the one facilitating that the discussion is a professional discussion. [...] We need evidence, and we need to discuss what's really going on'.

Note. Based on interviews with a nursing centre manager 2, nursing home manager 3, and chief physician 1. Applied in Concept Paper (Paper A).

4.1.4. Professional Development Leadership in Turbulent Times

Public organizations are expected to be resilient and to adapt to high intensity turbulence to continue creating public value and attaining organizational goals (Stewart & O'Donnell, 2007; Barasa et al., 2018). In the Turbulence Paper, my co-author and I illustrate how public managers exercise PDL considerately during highly turbulent times with shifting parameters, unexpected interdependency, and temporal complexity (Paper E).

Shifting parameters during the first waves of the Covid-19 pandemic in Denmark meant that face-to-face contact, which was usually perceived as essential for upholding professional quality (e.g., when communicating bad news to a patient or nurse in a hospital), now had undesirable consequences. The pandemic meant that physical contact suddenly changed from being thought of as a driver of professional quality to being a potential risk for employees and citizens alike. Our analyses illustrate how managers reacted by working systematically to deactivate 'old' norms, prescribing as much face-to-face contact as possible, developing knowledge about other approaches, and

activating new norms that are adapted to the shifting parameters. This is exemplified in Box 4.4, where a rehabilitation manager describes her approach to handling these challenges.

Box 4.4: Illustrations of PDL during Shifting Parameters at Rehabilitation Centre

In an intensely turbulent situation, a rehabilitation centre manager was pressed to deactivate an internalized norm among the physiotherapists: 'As physiotherapists, we used to think that always having the clients in our hands is good quality'. Covid-19 has challenged this understanding. Being in-person with the clients was no longer equated with high quality. As the manager explains: 'Corona disrupted this understanding'. She exercised activation PDL to ensure that the physiotherapists deactivated the norm prescribing the necessity of physical meetings with clients. Meanwhile, she exercised developmental PDL to facilitate the sharing of the therapists' experiences from working remotely with the clients. This process provided new insights into the usefulness of making some clients train more independently, and she has invested effort into transforming this new knowledge into a new norm prescribing that the physiotherapists urge citizens to train more independently when possible: 'Now it's completely OK to apply this. And some of our clients can actually follow a training programme independently'. In other words, she facilitated that they could bring the experiences from working in new ways during the pandemic into new norms. She experienced that this process has fundamentally changed their view on professional quality: 'This view of what's the "right training" - well, it has really developed us. Now, we think this is the right thing to do'.

Note. Based on interview with Rehabilitation Manager 3. Box 1 in Paper E.

The narrative in Box 4.4 illustrates how PDL can be exercised flexibly to meet challenging and unexpected conditions in turbulent times, and it adds a relevant layer to the existing illustrations in the sense that it points to the activation behaviours being a matter of both activating and de-activating contingently on the context. It is a tendency that we see across the three dimensions of turbulence under which we study PDL, and more illustrations can be found in Paper E.

In the following, I turn to the antecedents and consequences related to PDL as identified in the antecedents and perception papers (Papers C and D).

4.2 Antecedents of Professional Development Leadership

Paper C investigates whether the span of control (objectively and as perceived by the head nurses) and leadership identity are related to how the employees perceive how much PDL their managers exercise based on the survey data from head nurses and nurses in Danish hospitals. Here, PDL is measured on a 0–1 scale. The results are described in the following.

4.2.1. Span of Control

In the analysis of the *objective* span of control, I apply the distinction in existing research between narrow (< 12), medium-sized (12–20), and broad (> 20) spans of control (Bro, 2016). When considering how hospital wards are generally characterized by relatively large spans of control, I have also run a robustness test in the appendix of the antecedents paper in which broad spans of control are calculated as the third of the investigated wards with the broadest spans of control (> 43). The results reveal a tendency for nurses on hospital wards with narrow spans of control (< 12) to perceive lower levels of PDL from their head nurses compared to nurses on wards with medium-sized spans of control (12–20) (coefficient = -0.18, p < 0.1). There are no indications of significant or sizable differences in how nurses perceive levels of PDL on wards with broad spans medium spans of compared to nurses on wards with medium-sized spans of control (coefficient -0.056, p > 0.1) (Paper C: Table 3).

The robustness analysis, however, shows that nurses tend to perceive slightly lower levels of PDL on wards where the head nurse has a span of control larger than 43 compared to wards where the span of control is between 12 and 43 (coefficient = 0.07, p < 0.01). While these findings do not show strong relationships between span of control and employee-perceived levels of PDL, together this lends some support to the expectation that the employees perceive higher levels of PDL in organizational units with a medium-sized span of control.

For the subjective measure of span of control, the head nurses have reported whether they find their span of control 'all too narrow', 'slightly too narrow', 'suitable', 'slightly too broad', or 'all too broad'. The variable is recoded as two dummy variables having 'suitable' as reference category ('o') and '1' indicating 'too small' and 'too large' span of control, respectively. Here, the results are slightly clearer. Nurses on hospital wards where the head nurse reports having a suitable span of control perceive higher levels of PDL than do employees on wards where the head nurse reports their span of control to be 'too small' (-0.189, p < 0.05) or 'too large' (0.058, p < 0.05) (Paper C: Table 3). This supports the expectation that employees perceive more PDL in units where the managers perceives their span of control as suitable.

4.2.2. Leadership Identity

While leadership identity is often operationalized in terms of more or less (Day & Sin, 2011; Miscenko, Guenter, & Day, 2017; Kwok et al., 2018), I have contrasted leadership identity with professional identity in line with recent research, as few formal leaders will report to having a weak or no leadership identity (Grøn, Bro, & Andersen, 2019). Thus, the head nurses reported their

relative leadership identity on a scale from 0–10, 'o' indicating a 'very dominating professional identity', '5' indicating a 'balanced professional and leadership identity', and '10' indicating a 'very dominating leadership identity'. The variable is recoded as two dummy variables, with the reference category 'o' indicating a 'balanced professional and leadership identity', and '1' indicating a 'dominating professional identity' and 'dominating leadership identity', respectively.

I do not find any significant differences in how nurses perceive PDL when comparing wards where the head nurse has a balanced professional and leadership identity versus wards where the head nurse's professional identity dominates (coefficient 0.034, p > 0.1). Here, it is notable that only 6% of the head nurses have reported having a dominating professional identity. However, I do find that nurses in wards where the head nurse has a dominating leadership identity perceive lower levels of PDL than do nurses in wards where the head nurse has a balanced professional and leadership identity (coefficient = -0.059, p < 0.05) (Paper C: Table 3).

In sum, I find that employee-perceived PDL tends to be higher if the span of control is neither too broad nor to narrow, and if managers have a balanced professional and leadership-identity compared to a dominating leadership identity.

4.3 Consequences of Professional Development Leadership

In the following, I describe the empirical findings on the investigated potential consequences of PDL; namely, the nurses' assessments of the professional quality of the work together with how they perceive of the external interventions. These analyses can be found in Papers C and D, respectively.

4.3.1. Professional Quality

The nurses have assessed professional quality on a 0–10 scale, where '0' indicates 'very low professional quality' and '10' indicates 'highest professional quality'. It would also have been relevant to measure professional quality with more objective performance measures. However, register data has not been accessible for this study for the sake of the anonymity of the participating hospital wards, and the professional employees' assessments of the professional quality are also relevant given their understanding of professional standards (Andersen et al., 2016: 857; Boyne, 2003).

Paper C documents how nurses tend to assess the professional quality to be higher in wards where the head nurses report that they exercise higher levels of PDL (coefficient = 1.7, p < 0.01) (Table 2, Paper C). This supports the expectation that PDL is related to higher levels of professional quality.

4.3.2. Perceptions of External Interventions

For the study of the relationship between public professionals' perceptions of external interventions and PDL, I focus on how the nurses perceive the documentation requirements, and I apply a previously applied measure of perceptions of documentation requirements (Andersen, Kristensen, & Pedersen, 2015). The scale measures the degree to which employees 'consider documentation as a sign of lack of trust', 'think that documentation can contribute to raise the quality', and 'consider documentation as a sign of lack of trust' (reversed). These items are summarized in an index scaled from 0-100. As accounted for in Chapter 2 and Paper D, I investigate the role of general PDL as well as intervention-specific PDL. While general PDL is measured using the validated scale from Paper B, including items such as 'As a leader, I take part in ensuring the professional quality of our work', intervention-specific PDL is measured using a PDL scale exercised specifically in relation to documentation. For example, it includes an item saying: 'As a leader, I make an effort for documentation to contribute to the professional quality'. Both variables are measured on a scale from 0-100.

The key findings of Paper D are that PDL is positively associated with more supportive perceptions of documentations requirements but that the robustness of this finding varies across general and intervention-specific PDL. For general PDL, it is only the individual nurses' perceptions (coefficient = 0.205, p < 0.001) and the wards' means (coefficient = 0.240, p < 0.01) of perceived PDL that are related to more supportive perceptions of documentation requirements (Table 5 in Paper D). In contrast, intervention-specific PDL is significantly related to more supportive perceptions, whether it is reported by individual nurses (coefficient = 0.177, p < 0.001), calculated as ward means (coefficient = 0.159, p < 0.05), or reported by managers (coefficient = 0.108, p < 0.05) (Table 6 in Paper D).

These findings are robust across a long line of control variables, including control for other types of leadership behaviour (transformational and transactional leadership). These also reveal some interesting results. While general PDL as reported by the head nurses is not significantly related to perceptions,

manager-reported general transformational leadership is significantly associated with perceptions.³ However, neither transformational leadership as reported by the individual nurses or calculated as ward means are related to perceptions, as is the case for general PDL. As I return to in the discussion, these findings point to the relevance of thinking of employee-perceived and manager-intended leadership as distinct phenomena and concepts, as suggested in the existing literature (Jacobsen & Andersen, 2015; Wright & Nishii, 2007).

In sum, the dissertation reveals that PDL is positively related to how professional employees assess the professional quality and their perceptions of external interventions. For the latter, the results are particularly robust for PDL exercised specifically in relation to the investigated external intervention.

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³ However, this finding is not robust across estimation strategies. Manager-reported transformational leadership becomes insignificant when I apply a multi-level estimation strategy, which is shown in the appendix of Paper D.

Chapter 5. Concluding Discussion

The dissertation set out to answer the following research questions: 1) What is professional development leadership, and how can it be conceptualized and measured? 2) What are antecedents and consequences of professional development leadership? In this chapter, I summarize and discuss the dissertation's answers to these questions. First, I present a synthesis of the conceptual and empirical findings and discuss the theoretical contributions. Next, I evaluate the methodological strengths and limitations of the dissertation and discuss critical perspectives regarding the potential dark sides of PDL. Finally, I outline suggestions for future research and the practical implications of the dissertation.

5.1. Synthesis of Findings

With this dissertation, I suggest that we think of PDL as leadership with the ambition to facilitate a shared understanding of professional quality within the scope of organizational goals and of influencing others to realize this in practice. I outline three core PDL behaviours; namely, attempts to create alignment between organizational goals and professional norms, to develop professional knowledge, and to activate professional norms and knowledge in practice (Paper A).

Attempts by managers to create alignment between organizational goals and professional norms can be a two-way mechanism, as seen when managers attempt to align rehabilitation goals and care-oriented norms. One rehabilitation manager attempts to translate the rehabilitation goal in a manner so it is meaningful from a care-oriented perspective by emphasizing how a rehabilitating approach saves resources for compensating services and care for the most vulnerable citizens. At the same time, she puts effort into pushing and developing the care-oriented professional norm by incorporating rehabilitation and goal-setting conversations in the work routines (Paper A).

The attempts made by managers to develop professional knowledge can manifest themselves in the facilitation of opportunities for employees to acquire theoretical and practice-based knowledge via further education and knowledge sharing. Likewise, it can be seen in efforts to further develop theoretical knowledge to fit the specific practice context, as when a health visitor manager organizes group work in which the health visitors practice and share experiences with new screening techniques to assess the social abilities of new-borns (Paper A).

Managers' attempts at activating professional norms and knowledge in practice manifest themselves in how professional deliberation is organized, such as case meetings where 'multi-professional' teams meet and discuss measures for a citizen. They can also be reflected in managers' active facilitating roles in such deliberations, as for example when a chief physician facilitates that the 'discussion becomes a professional discussion' or a nursing home manager supports that health assistants base their decisions on evidence rather than 'personal opinions' (Paper A).

The three core behaviours are closely related, and their different intentions sometimes lead to similar actions, which is also reflected in the statistical analyses of the correlations between the dimensions of PDL (Paper B). Confirmatory factor analyses show how the three behavioural dimensions reflect the same latent construct in the developed second-order reflective scale measuring PDL. PDL as measured with this *dimensional PDL scale* and the *global PDL scale* is correlated with (yet discriminates from) other types of leadership behaviours, such as transformational and transactional leadership. It is also correlated with employee outcomes such as intrinsic motivation and work engagement. The PDL scale thus reveals discriminant and predictive validity (Paper B).

Regarding antecedents, the dissertation reveals how employees tend to perceive higher levels of PDL in organizational units where the span of control is medium-sized (compared to very narrow (< 12) or very broad (> 43)) and in organizational units where the manager perceives the span of control to be suitable (compared to too narrow or too broad) (Paper C). In addition, employees perceive higher levels of PDL from their managers in units where the manager has a balanced professional–leadership identity compared to units where the manager has a dominating leadership identity (Paper C).

In terms of consequences, the dissertation reveals how employees assess the professional quality to be higher in organizational units where managers exert higher levels of PDL (Paper C). Likewise, in units where managers exert more PDL, their employees tend to have more supportive perceptions of external interventions. This finding is particularly robust when focusing on PDL specifically exerted in relation to the work with the given external intervention (Paper D).

Finally, the dissertation illustrates that frontline managers exercise PDL flexibly during turbulent times with shifting parameters, unexpected interdependency, and temporal complexity. During the first waves of Covid-19 in

Danish health organizations, managers contingently facilitated the development and (de)activation of professional norms and knowledge among their professional employees in response to the current conditions (Paper E).

5.2. Theoretical Contributions

The main theoretical contribution of the dissertation comes from the refined conceptualization of PDL, which nuances and adds new elements to our theoretical understanding of processes of leading professionals. The PDL concept synthesizes theoretical insights from the integrative perspective on professionalism in public administration literature (Noordegraaf, 2007; Schott et al., 2015) and leadership theory (Yukl, 2006; Jensen et al., 2019). It provides a framework for understanding and analysing leadership behaviours, addressing professionalism in an organizational context with the aim of facilitating a shared understanding of professional quality in alignment with organizational goals and influencing efforts to realize this in practice.

This framework constitutes a contribution to the public leadership literature and literature on professions. It is a contribution to the public leadership literature in the sense it provides a framework for theorizing and studying how professional norms and knowledge constitute resources that public managers can address actively via leadership. By drawing on the integrative approach to professionalism, the framework thus illustrates how we can move beyond seeing professionalism and leadership as antipoles, instead studying the attempts made by managers to align, develop, and activate professional norms and knowledge to attain professional quality and to support goal attainment.

The PDL concept represents a contribution to the literature on professions inasmuch as it adds new layers to the integrative approach to professionalism (Noordegraaf, 2007; Schott et al., 2015). It supplements research on public professionals and managers' respective hybridization with a framework to understand how public managers facilitate the coming together of organizational goals and employees' professionalism in public frontline organizations.

These contributions should be seen as virtues of the conceptual advancement of PDL and the empirical results produced by the dissertation. The next section briefly elaborates on the conceptual advancements of the suggested PDL conceptualization before I account for some of the theoretical contributions from the studies of antecedents and consequences related to PDL.

5.2.1. Conceptual Advancement

The suggested conceptualization of PDL adds important layers to the existing definitions (Grøn, Bro, & Andersen, 2019; Danish Leadership and Management Commission, 2018). First, it theoretically develops the use of politically

legitimate goals to set the direction for professional work. The Danish Leadership and Management Commission hinted at this dimension of PDL in their operationalization but did not clarify the theoretical meaning. In subsequent empirical analyses, this part of the operationalization was not applied due to its low correlation with other elements of the old PDL measure (Grøn, Bro, & Andersen, 2019: 10). Thus, with the systematic inclusion of the role of organizational goals in PDL, the refined conceptualization theoretically develops an essential aspect of PDL.

Second, the conceptualization adds nuance to the existing definitions in the sense that it clarifies that the ambition is not only to facilitate a shared understanding of professional quality; it is also relevant to consider it a defining element of the ambition with PDL to influence others' efforts to accomplish the professional quality in the work.

Third, the refined conceptualization of PDL outlines core behaviours. This is essential in clarifying what we mean when we talk about PDL. Moreover, the behavioural focus of the conceptualization is essential in terms of avoiding confounding PDL from its potential effects, which is useful in empirical analyses (Van Knippenberg & Sitkin, 2013; Jensen et al., 2019). The refined conceptualization suggests that the behavioural elements of PDL include leadership efforts oriented towards aligning, developing, and activating professional norms and knowledge in the organizational setting. These three core behaviours capture the relevant leadership behaviours in the managerial ambition to facilitate a shared understanding of professional quality within the scope of organizational goals and influencing others to realize this in practice. The first core behaviour addresses the need to shape agreement about how the professional work should be in alignment with professional and organizational principles. Thus, it reflects the direction-setting aspect of leadership. The second core behaviour reflects the developmental aspect of leadership and addresses the need to ensure that the employees have the professional knowledge necessary to deliver the desired professional quality. The third core behaviour addresses the processes of influencing others to bring their professional competencies into play so they also work actively to realize the professional quality in practice. Thus, theoretically, the three core behaviours are logical parts of the same leadership concept. In addition, the qualitative analyses in the dissertation illustrate how these core behaviours describe different ways frontline managers influence (the roles of) professional norms and knowledge in their organizations (Paper A; Paper E).

A final relevant conceptual layer added to our understanding of PDL comes from the clarification of not only seeing activation as a matter of mobilizing more and more professional norms and knowledge in the work; rather,

it is a matter of activating the relevant professional norms and knowledge contingently on the context and situation. Thus, managers' attempts to activate can for example also include an element of *de*activating professional norms that are not valuable to follow in a given situation (Paper E).

5.2.2. Contributions from Studies of Antecedents and Consequences

The empirical findings in this dissertation regarding antecedents and consequences related to PDL also lead to theoretical contributions and further nuance the understanding of PDL as a leadership concept. The findings about span of control and leadership identity suggest, on the one hand, that PDL is a type of leadership that requires some degree of proximity to the professional work, which can for example be facilitated with spans of control that are not too broad and managers having balanced professional and leadership identities. On the other hand, the findings also indicate that PDL is not just about being a professional expert or the first among equals, as also discussed by Grøn and colleagues (2019: 5). Succeeding in getting across with professional development requires that managers take on their roles as leaders and facilitate understandings of the desirable and efforts to accomplish goals, which may be easier with the balanced leadership identity and a span of control that is not too narrow.

The positive associations identified between PDL and both professional quality and perceptions of external interventions give further nuance to the PDL concept. This suggests that the efforts managers put into PDL potentially may result in improved quality in the eyes of the professionals themselves, which is an essential performance dimension in many public organizations (Boyne, 2013; Andersen, Boesen, & Pedersen, 2016; Andersen et al., 2018).

Likewise, the findings in the perceptions paper indicate that PDL can also have some support-building qualities. These findings contribute particularly to the strand of the public leadership literature focusing on how managers can influence perceptions and build support for external interventions (Mikkelsen, Jacobsen, & Andersen, 2015; Andersen, Boye, & Laursen, 2018; Podsakoff et al., 1982). This strand of literature is motivated by the tendency for how employees perceive of external interventions to influence motivation and performance in public organizations (Frey, 1997; Bellé, 2015; Pedersen et al., 2018). In addition to suggesting that PDL can be a relevant ingredient in support-building leadership, the dissertation points to the relevance of distinguishing between general leadership behaviours and intervention-specific leadership behaviours. The relative robustness of the identified correlation be-

tween intervention-specific PDL compared to general PDL suggests that future research should keep in mind the distinction between general and intervention-specific leadership practices; also for types of leadership other than PDL.

5.3. Strengths and Limitations

The dissertation clearly holds some methodological strengths and limitations, and the above-described results should be read in this light. In this section, I evaluate the primary strengths and limitations of the dissertation as a whole.

Three primary strengths stand out. The dissertation combines qualitative and quantitative research approaches, delivering both in-depth analysis of what PDL entails on the frontlines of public organizations and systematic identification of related antecedents and consequences via statistical methods across multiple organizational units, which is a strength given the complex research question (Gilad, 2019; Gerring, 2017). The qualitative approach applied in the theory and concept-building elements of the dissertation contributed to the development of a leadership concept that resonates with practice and captures leadership behaviours that public managers leading professional employees prioritize. This is illustrated in the interviews with managers and public professionals when explaining their reasoning about the importance of the managers' engagement in processes of aligning, developing, and activating professional norms and knowledge to realize a shared understanding of professional quality. Likewise, the interviews contributed with practice-near illustrations of how PDL is exerted on the frontlines of public organizations, making it clearer what PDL entails in practice and thereby addressing Research Question 1 in a rather nuanced manner.

The multilevel structure in both the qualitative and quantitative research elements of the dissertation has several advantages. Interviewing both managers and employees provided more nuanced illustrations of how frontline managers exercise PDL and allowed for the triangulation of the managers' own accounts of their leadership practices (Miles, Huberman, & Saldaña, 2014: 299). The parallel surveys of managers and employees made it possible to validate the measurement scale for both groups and investigate the gaps in intended and perceived leadership. The multilevel structure also limits the common source bias in the analyses of the antecedents and consequences of PDL (Favero & Bullock, 2014; Wright & Nishii, 2007).

Finally, the comprehensive work put into developing a reliable and valid PDL scale nuances the theoretical understanding of PDL as a concept. It also constitutes a good foundation for studying PDL rigorously in quantitative analysis, as is the case in the perception paper.

The dissertation is obviously not without its limitations, however, and I want to emphasize three essential methodological limitations here. First and foremost, we should be very cautious before drawing causal interpretations of the results of the dissertation. I have applied several measures to increase the internal validity of the studies (e.g., in terms of limiting common source bias and including relevant third variables), but I cannot fully exclude problems of endogeneity and selection bias given the cross-sectional nature of the studies in the dissertation (Antonakis et al., 2014; Angrist & Pischke, 2008). This also implies, for example, that we cannot simply conclude that PDL causes more supportive perceptions of external interventions. In principle, the causal direction could be (partly) reversed, making public managers more inclined to engage in PDL related to specific external interventions if their employees have supportive perceptions of this external intervention. Likewise, confounders, such as available resources (financial and personnel), for which it has been impossible to control, could influence both managers' exercise of PDL and their employees' assessments of the professional quality.

Another limitation of the work in hand is that I have only been able to apply subjective performance measures. Even though professionals are the most important stakeholders in terms of professional quality, how professional employees assess the professional quality in their own organizational unit can be prone to measurement error, including influence from social desirability and leniency biases (Crowne & Marlowe 1964; Schriesheim et al., 1979).

Finally, there are limitations to the generalizability of the findings in this dissertation. Even though it has been possible to validate the measurement scale of PDL across service-regulating and service-producing organizations, the studies making up the dissertation have mostly been conducted in public health organizations in Denmark. This does not necessarily mean that the findings are not relevant in other contexts, as key characteristics of the investigated units (e.g., decentralized frontline organizations with professionalized employees) are similar to many other public organizations. As I return to below, however, it will be useful to study PDL in other contexts, such as organizations with other types of services than health and care services and among employees who are even more professionalized than the groups of employees primarily under study in this dissertation.

Here, it is also relevant to address the question about whether PDL is only relevant in the context of the public sector. Given that the dissertation only studies PDL in public organizations, it only provides empirical evidence for its relevance in such organizations. However, the conceptualization of PDL is not sector-specific, and given that many private organizations employ professional employees, PDL is expectedly also relevant in these organizations. Still, the differences between public and private organizations may influence that

the specific behaviours aimed at aligning, developing, and activating the professional norms and knowledge to realize a shared understanding of professional quality manifest themselves differently across sectors. Public organizations are for example often described by their multiple and vague goals, while private organizations have profit maximization as the primary goal (Farnham & Horton, 1996; Boyne 2002). While this may be a rather simplistic distinction to draw between public and private organizations (Chandler, 1991), it nevertheless illustrates the relevance of considering how PDL potentially unfolds differently in private organizations given the differences in organizational goals, values, and structures.

5.4. Addressing Critical Perspectives

The dissertation moves beyond the archetypal understanding of professionalism as a modus of control that is completely separated from the hierarchical control in public organizations with political principals (Freidson, 2001; Miller & Whitford, 2016: 144). Instead, it synthesizes integrative perspectives on professionalism that emphasize that professional principles and organizational logics interact in public organizations (Schott et al., 2015) and leadership theory (Yukl, 2006; Jensen et al., 2019), and it analyses how public managers attempt to align professional norms and organizational goals and influence professional employees to achieve organizational goals. This makes it relevant to raise critical perspectives to the suggested understanding of PDL, and I discuss some of these in the following.

Based on the premises that political principals formulate the legitimate goals of public organizations, this dissertation suggests seeing PDL as form of leadership with an ambition to facilitate professional quality within the scope of organizational goals. Professionalism has traditionally been seen as essential in public organizations, however, as it imposes a distinct logic of control over professional work distinct from hierarchical control (Freidson, 2001; Moe, 1987). Some even highlight that professionalism acts as a check on the power of the principals to subvert the social good and to commit political principles to avoid their own type of moral hazard (Miller & Whitford, 2006: 231). In this perspective, professions are seen to be more stable than politicians and thus constitute ideal vehicles of credible commitment. As Miller and Whitford comment in an illustrative example: 'If and only if professionals are in the driver's seat at the central bank will investors not have to worry about politicians manipulating monetary policy for their reelection purposes' (2016: 153).

This function of professionalism dissolves if managers simply align professional norms to fit organizational goals, and it points to an essential question: Do (and should) public managers leading professional employees always

use organizational goals to set direction for professional work? Or do (and should) their leadership attempts to integrate organizational and professional principles also involve pushback and attempts to influence goal setting to be aligned with professional norms?

While the aim of the dissertation is not to answer these questions, I raise them because the answers to these questions potentially have strong normative implications for the relevance of PDL in public organizations. In addition, these questions illustrate the conceptual boundaries of PDL and clarify how the concept does not necessarily capture all of the relevant leadership behaviours for public managers' attempts to make organizational goals and professional norms come together. Two characteristics are central for the focus in this dissertation on PDL. First, I have mainly studied PDL as it is exercised by frontline managers. Second, I have focused on their vertical leadership behaviours directed towards their followers. As I illustrate below, other types of 'profession-oriented leadership' could be exercised on other hierarchical levels and in other directions (e.g., upwards in the hierarchy or outwards to mobilize professional associations).

To illustrate; one of the organizational goals studied in this dissertation concerns rehabilitation in local health and care organizations. I have shown how frontline managers attempt to translate the rehabilitation agenda to make it meaningful for care-oriented professional employees and to organize the work in ways that push their care-oriented norms. Imagine a situation where politicians introduce significant cutbacks in similar organizations. Imagine also that the professional employees experience that the reduction takes place on the pretext of having rehabilitation as a goal to empower the citizens, and the professionals find that it prevents them from living up to basic professional standards.

This line of thought illustrates the importance of balance in the attempts to create alignment between organizational goals and professional norms, which is inherent in PDL. When public managers exert this type of leadership, it is important that they weigh different considerations. How much can they 'translate' organizational goals to make them professionally meaningful without diluting the political intentions? And how much can they attempt to push the professional norms without dissolving essential professional accountabilities? These practices require awareness and consideration, which the public managers I have interviewed also demonstrate.

Furthermore, in cases as the one just illustrated, public managers may find it relevant to raise professional concerns, which might involve various measures that are not captured in the refined conceptualization of PDL. Managers may attempt to lead outwards and to engage in dialogue with professional associations, patient associations, and other relevant organizations to

mobilize reactions. Likewise, they may use different strategies for channelling professional concerns upwards in the hierarchical bureaucracy to influence the goal-setting agenda (Miller & Whitford, 2016).

Thus, other types of efforts are part of public managers' attempts to make political goals and professionalism come together in public organizations; just as other types of leadership that are not engaged with professional norms and knowledge are part of the efforts of public managers to attain political goals and public interest. In practice, different leadership approaches are combined, and PDL cannot stand alone; neither when it comes to public managers' exercise of leadership in practice nor to the attempts made by public leadership scholars to understand frontline leadership. The qualitative analyses of the dissertation have also emphasized this point by illustrating how frontline managers often combine different types of leadership. In sum, PDL is an act of balance that requires consideration; and as with any other type of leadership, PDL is not and should not be performed or studied in a vacuum.

5.5. Implications for Research and Practice

I will wrap up this dissertation by addressing the steppingstones that the dissertation lays out for future research and discussing the implications to be drawn for practitioners.

5.5.1. Suggestions for Future Research

The dissertation provides a theoretical framework for thinking about PDL and identifies the antecedents and consequences related to this type of leadership. Thus, it fills essential gaps in the public leadership literature, but the dissertation also raises new questions and lays out steppingstones for future research. There is much more work to do, both in terms of theory building and empirical studies in other contexts and with other designs. I start by outlining ideas for substantial themes that future research on PDL should address and then turn to suggestions for how future research could supplement this dissertation with other research designs.

This dissertation has focused on how frontline managers exercise PDL in relation to their professional employees. It has also studied some potential antecedents at the unit and manager levels (Paper C), but it has not included antecedents at other levels in the hierarchy. As discussed above, however, the (leadership) work oriented towards integrating politically legitimate goals and professional principals takes place at more hierarchical levels in the public sector and in other directions than towards frontline professionals. It is therefore useful to study the antecedents of PDL on other levels. In line with Jakobsen's work (2021), for example, it is relevant to study how the character of

political goals and alignment across levels in the hierarchy influence the conditions under which frontline managers exercise PDL. In a similar vein, future research could benefit from investigating how frontline managers lead upwards in the hierarchy to influence the conditions for exercising PDL, such as by channelling how different professions understand desirable objectives.

Shifting the focus downwards in the hierarchy, the qualitative analyses of the dissertation illustrated how PDL can be shared with employees (Paper A: Paper E). The turbulence paper illustrates how public managers may find it relevant to collaborate with their employees about PDL to respond flexibly to turbulence (Paper E: 16-17). This taps into the increased attention that the public leadership literature is paying to distributed and collaborative leadership approaches (Orazi, Turrini, & Valotti, 2013; Ospina, 2017 1182; Jakobsen, Kjeldsen, & Pallesen, 2021), and it illustrates how 'followers are active participants rather than passive recipients in the leadership process' (Vogel & Masal, 2015: 1181). Public professionals certainly play an essential role in PDL processes, and it is relevant for future research to address the distributed professional development leadership concept. Sharing the facilitation of professional development and activation with employees is, for example, expectedly relevant in addressing challenges from cross-professional working environments or very broad spans of control, which may limit the opportunities available to managers to get PDL across to all employees (Paper A). However, distributed PDL may indeed also come with challenges; for example, in cases of misalignment, where employees take on leadership tasks without having the competences or intentions to do so in line with stated organizational goals (Jakobsen, Kjeldsen, & Pallesen, 2021: 6-7; Leithwood et al., 2007: 40-42). I therefore encourage future research to investigate the role of distributed PDL and to shed light on its' drivers, barriers, and potentials.

As discussed, the dissertation also holds some methodological limitations, which future research can benefit from addressing. First, even though the qualitative interviews have given access to detailed descriptions of the accounts of PDL provided by public managers and their professional employees as it is exercised on the frontlines of public organizations, the dissertation does not actually include direct observations of PDL. However, PDL – like other behaviour types – may involve 'taken-for-granted norms and behaviours' about which managers and employees are not fully conscious and therefore have difficulties elucidating in interviews (Gilad, 2019: 11–12). Thus, future research can benefit from adopting ethnographic observations and shadowing to study PDL even closer to practice.

Second, it will be useful to study PDL with designs that are better suited to causal identification; designs based on panel data, for example, can address challenges of endogeneity (e.g., An et al., 2020). Third, future research should

investigate the potential of PDL with more objective and various performance measures to account for the complex nature of performance in public organizations (Boyne, 2013; Maynard-Moody & McClintock, 1987). Finally, it will be relevant to study PDL in other contexts, e.g. in other public organizations with core tasks that are not related to health and care and among other professionals to obtain a more nuanced understanding of PDL as a general leadership concept that is not demarcated to specific professional groups. Likewise, a job for future research is to study how PDL is also relevant in the private sector.

5.5.2. Practical Implications

How is this dissertation relevant to practitioners? When I provide three related answers to this question in the following, practitioners should read the suggestions in the light of their own context and consider the methodological limitations of the dissertation, some of which are discussed above.

First, I hope that public managers can use the refined conceptualization of PDL (Paper A) to think systematically about how they influence the role of professionalism in their units. They may use it as a framework to think about whether all three behavioural elements are part of their own leadership conduct and whether they think it should be. Do they work with *aligning*, *developing*, and *activating* professional norms and knowledge to fulfil a shared understanding of professional quality within the scope of organizational goals? If managers find all these elements relevant in their own organizational context, I hope the empirical illustrations provided in the dissertation can inspire their thinking about how they can exercise PDL in different ways.

The dissertation can hopefully also inspire public managers to a conscious awareness about whether they get across with PDL as intended. In line with existing research (Wright & Nishi, 2007; Jacobsen & Andersen, 2015), I find that managers tend to feel that they exercise more or higher levels of PDL than their employees perceive from them (Paper B). And I add another nuance to this by illustrating that a manager's general focus on facilitating a shared understanding of professional quality in an organizational unit and realizing it in practice do not necessarily mean that the employees see these efforts in relation to specific command systems or given work practices. I show how nurses' supportive perceptions of documentation requirements are related to head nurses' PDL efforts that are specifically related to documentation practices but not as robustly to general PDL practices (Paper D). Thus, managers should not only consider thinking systematically about whether they get across with general leadership behaviours; they should also consider if they direct the leadership efforts to specific contextual situations, where they want

their leadership to influence others (e.g., in their work with a given command system).

Finally, the dissertation reveals a positive relationship between how front-line managers exercise PDL and their professional employees' assessments of the professional quality (Paper C). I hope that this positive correlation will motivate public organizations and managers to use the findings of the dissertation regarding the antecedents related to PDL to reflect on the conditions they have for exerting PDL so that the employees perceive the intended leadership. If managers wish to get across with PDL, the dissertation illustrates how they may potentially benefit from considering both organizational characteristics (e.g., span of control) and managerial characteristics (e.g., leadership identity) (Paper C). In this regard, managers may for example consider if the spans of control in their organization are too broad for them to be close enough to the professional work to hold on to their balanced professional/leadership identity and to influence the role of professional norms and knowledge in the work; or if the spans of control are too narrow for the managers to take on their role as leaders and actively exert PDL.

In sum, I hope that the dissertation opens new perspectives and provides insights that can inspire considerations and discussions among practitioners.

English Summary

Many public managers lead professional employees, who are members of professions with specialized, theoretical knowledge and intra-occupational norms. To ensure organizational performance, these managers depend on the professional employees to do their work based on professional norms and knowledge. However, professional employees may define 'desirable objectives' differently than do the politicians and their managers. The purpose of this dissertation is to improve our understanding of leadership oriented towards making organizational goals and professional norms and knowledge come together in public frontline organizations. To fulfil this aim, I present a refined conceptualization of *professional development leadership* (PDL) and study the potential antecedents and consequences.

The ambition of PDL is the *intent* to facilitate a shared understanding of professional quality within the scope of organizational goals and influence others to realize it in practice. This ambition is reflected in three core behaviours: attempts to *align* organizational goals and professional norms, attempts to *develop* professional knowledge, and attempts to *activate* professional norms and knowledge in practice. This conceptualization draws on theory of public professionals and public leadership and is refined in an iterative process based on analysis of qualitative interviews with public professionals and their managers. In two in-depth qualitative studies, I illustrate how public managers exercise PDL on the frontlines — in the everyday and in turbulent times when parameters shift, interdependence becomes critical, and tempos change unpredictably.

I develop a measurement scale of PDL and validate it for managers and employees in service regulation and service production organizations. The dissertation identifies three antecedents related to PDL. Employees perceive higher levels of PDL in organizational units where the span of control is medium-sized (compared to units with narrow (< 12) or broad (> 43) spans of control). Likewise, employees perceive higher levels of PDL in units where the manager perceives the span of control to be suitable (compared to units where the manager perceives the span of control as *too narrow* or *too broad*). Finally, employees perceive higher levels of PDL in units where the manager has a balanced professional- and leadership identity (compared to units where the manager has a dominating leadership identity).

The dissertation finds two potential consequences related to PDL. First, I show that in organizational units where managers exercise higher levels of PDL, employees assess the professional quality to be higher. Second, I find

PDL to be positively related to more supportive perceptions of external interventions. Specifically, I find that nurses have more supportive perceptions of documentation requirements in hospital wards where the head nurse exercises higher levels of PDL. This finding is particularly robust for PDL when exercised specifically towards documentation practices. Thus, it illustrates the relevance of distinguishing between general and intervention-specific leadership practices.

The main contribution of the dissertation is the conceptual framework provided by the refined conceptualization of PDL. This framework helps us to understand how public managers address professional norms and knowledge in their leadership practices, and it is a theoretical lens that is relevant for the literatures on professions and on public leadership. It is a contribution to the literature on professions as it further develops the integrative approach to professional and organizational principles by shedding light on managers' attempts to influence the integration of professional and organizational principles by their professional followers. The PDL framework represents a contribution to the public leadership literature, as it provides a framework to understand and study how the attempts made by public managers to influence others and facilitate agreement about shared objectives via leadership also involve efforts directed towards the employees' professional norms and knowledge.

Dansk resumé

Mange offentlige ledere har medarbejdere, der er medlemmer har professioner med specialiseret, teoretisk viden og professionelle normer. For at sikre organisatorisk performance er disse ledere afhængige af, at de professionelle medarbejdere gør deres arbejde baseret på professionelle normer og faglig viden. Men professionelle medarbejdere kan have andre forståelse af ønskværdige målsætninger end politikere og deres ledere. Formålet med denne afhandling er at forbedre vores forståelse af ledelse orienteret mod at integrere organisatoriske målsætninger og professionelles normer og viden i offentlige organisationer. På den baggrund, præsenterer afhandlingen en teoretisk ramme for begrebet *faglig ledelse* og studerer relaterede årsager og konsekvenser.

I afhandlingens forståelse er formålet med faglig ledelse at facilitere en fælles forståelse af faglig kvalitet inden for rammerne af organisatoriske målsætninger og influere andre til at indfri denne forståelse i praksis. Denne ambition er reflekteret i tre kernehandlinger: forsøg på at skabe overensstemmelse mellem organisatoriske målsætninger og professionelle normer, forsøg på at udvikle faglig viden og forsøg på at aktivere professionelle normer og faglig viden i praksis. Denne konceptualisering trækker på teori om fagprofessionelle og offentlig ledelse og er udviklet i en iterativ proces baseret på analyse af kvalitative interviews med offentligt ansatte fagprofessionelle og deres ledere. To kvalitative studier i afhandlingen illustrerer, hvordan offentlige ledere udøver faglig ledelse på frontlinjen – til hverdag og i turbulente tider kendetegnet ved skift i programteorier, gensidig afhængighed mellem aktører og temporal kompleksitet.

Afhandlingen udvikler en skala til at måle faglig ledelse og validerer den blandt stikprøver af både ledere og medarbejdere i offentlige organisationer der arbejder med hhv. service regulering og service produktion. Afhandlingen identificerer tre potentielle årsager relateret til faglig ledelse. For det første, medarbejdere oplever højere niveauer af faglig ledelse i enheder hvor ledelsesspændet er mellemstort sammenlignet med medarbejdere fra enheder med et smal (< 12) eller bredt (> 43) ledelsesspænd. For det andet, medarbejdere oplever højere niveauer af faglig ledelse i enheder, hvor lederen opfatter sit eget ledelsesspænd som passende sammenlignet med enheder, hvor lederen opfatter sit ledelsesspænd som for stort eller for småt. For det tredje, medarbejdere oplever højere niveauer af faglig ledelse i enheder, hvor lederen har en balanceret faglig- og lederidentitet sammenlignet med enheder hvor lederen har en dominerende lederidentitet.

Afhandlingen finder to potentielle konsekvenser, der er relateret til faglig ledelse. For det første, i enheder hvor ledere udøver højere niveauer af faglig ledelse, vurderer medarbejderne af den faglige kvalitet er højere. For det andet, faglig ledelse er positivt relateret til medarbejderes opfattelse af eksterne interventioner. Konkret viser afhandlingen, at sygeplejersker opfatter dokumentationskrav som mere understøttende på hospitalsafdelinger, hvor afdelingssygeplejersken udøver mere faglig ledelse. Dette fund er særligt robust for faglig ledelse, der er specifikt rettet mod dokumentationspraksissen.

Den teoribaserede konceptualisering af faglig ledelse udgør afhandlingens hovedbidrag. Denne ramme bidrager til forståelse af, hvordan offentlige ledere kan adressere professionelle normer og faglig viden i deres ledelsespraksis. Og den giver en teoretisk linse, der er relevant for litteraturen om fagprofessionelle såvel som offentlig ledelseslitteratur. Det er et bidrag til litteraturen om fagprofessionelle, fordi faglig ledelsesbegrebet videreudvikler den integrative tilgang til professionalisme ved at belyse lederes bestræbelser på at influere deres medarbejderes integration af professionelle og organisatoriske principper. Faglig ledelsesbegrebet bidrager til ledelseslitteraturen i kraft af den ramme, det giver til at forstå og undersøge, hvordan offentlige ledere forsøger at facilitere og indfri en fælles forståelse af faglig kvalitet gennem ledelse orienteret imod deres medarbejderes professionelle normer og faglig viden.

References

- Abbott, A. (1988) *The system of professions*. Chicago, IL: University of Chicago Press.
- An, S. H., Meier, K. J., Ladenburg, J., & Westergård-Nielsen, N. (2020) Leadership and job satisfaction: Addressing endogeneity with panel data from a field experiment. *Review of Public Personnel Administration*, 40(4), 589-612.
- Andersen, L. B., & Pallesen, T. (2008) Not Just for the Money? How Financial Incentives Affect the Number of Publications at Danish Research Institutions. *International Public Management Journal* 11(1): 28–47.
- Andersen, L. B. & Pedersen, L. H. (2012) Public service motivation and professionalism. *International Journal of Public Administration*, 35(1), 46–57.
- Andersen, L. B., Kristensen, N., & Pedersen, L. H. (2015) Documentation Requirements, Intrinsic Motivation, and Worker Absence? *International Public Management Journal* 18(4): 483–51.
- Andersen, L. B., Boesen, A., & Pedersen, L. H. (2016) Performance in public organizations: Clarifying the conceptual space. *Public Administration Review*, *76*, 852-862.
- Andersen, L. B., Bjørnholt, B., Bro, L. L., & Holm-Petersen, C. (2018) Achieving high quality through transformational leadership: A qualitative multilevel analysis of transformational leadership and perceived professional quality. *Public Personnel Management* 47 (1): 51–72.
- Angrist, J. D., & Pischke, J. S. (2008) *Mostly harmless econometrics*. Princeton university press.
- Ansell, C., & Trondal, J. (2018) Governing turbulence. *Perspectives on Public Management and Governance*, 1(1), 43–57
- Ansell, C., Sørensen, E., & Torfing, J. (2020) Covid19 as a game changer for public administration and leadership. *Public Management Review*, Online First.
- Antonakis, J., Bendahan, S., Jacquart, P., & Lalive, R. (2014) Causality and endogeneity: Problems and solutions. In D.V. Day (Ed.), The Oxford Handbook of Leadership and Organizations (pp. 93-117). New York: Oxford University Press.
- Barasa, E., Mbau, R., & Gilson, L. (2018) What is resilience and how can it be nurtured? A systematic review of empirical literature on organizational resilience. *International Journal of Health Policy and Management*, *7*(6), 491–503.
- Bass, B. & Avolio, B.J. (1993) Transformational Leadership and Organizational Culture. *Public Administration Quarterly* 17(1): 112–21.
- Bellé, N. (2015) Performance-related pay and the crowding out of motivation in the public sector: A randomized field experiment. *Public Administration Review*, *75*(2), 230-241.
- Boschken, H. L. (1992) Analyzing Performance Skewness in Public Agencies: The Case of Urban Mass Transit. *Journal of Public Administration Research and Theory* 2 (3): 265 88.

- Boyne, G. A. (2002) Concepts and indicators of local authority performance: An evaluation of the statutory framework in England and Wales. *Public Money and Management*, 22, 17-24.
- Boyne, G. A. (2003) What is public service improvement? *Public Administration* 81 (2): 211-227.
- Brante, T. (2011) Professions as science-based occupations. *Professions and Professionalism*, 1(1), 4–20.
- Brehm, J. O., & Gates, S. (1999) *Working, shirking, and sabotage: Bureaucratic response to a democratic public.* University of Michigan Press.
- Brinkmann, S. (2021) Unstructured and Semi-Structured Interviewing. Chapter 14 in The Oxford Handbook of Qualitative Research. Oxford Library of Psychology. Editied by Patricia Leavy.
- Bro, L. L. (2016) Små, store eller maske rettere mellemstore organisationer? En undersøgelse af sammenhængen mellem ledelsesspand, ledelsesidentitet og brugen af transformationsledelse i danske daginstitutioner. *Politica* 48 (2): 158-178
- Campbell, J.L., C. Quincy, J. Osserman, & O.K. Pedersen (2013) Coding In-depth Semistructured Interviews: Problem of Unitization and Intercoder Reliability and Agreement. Sociological Methods & Research 42(3) 294-320
- Cecchini, M., & G. S. Harrits. (2021) The Professional Agency Narrative Conceptualizing the Role of Professional Knowledge in Frontline Work. *Journal of Public Administration Research and Theory*.
- Cecchini, M., L. D. Pedersen & L. B. Andersen (2021) Lederidentitet god ledelse i offentlige organisationer, kapitel 13 i Karsten Mellon (red.), *God ledelse*. København: Hans Reitzels Forlag.
- Changler, J. (1991) Public administration and private management: is there a difference?' *Public Administration*, 69, 385–92.
- Crowne, D. P., & D. Marlowe (1964) *The Approval Motive: Studies in Evaluative Dependence*. New York: Wiley.
- Danish Leadership and Management Commision (2018) Put citizens first. Leadership and management in the public sector with focus on operational development. https://ledelseskom.dk/files/media/recommendations-uk.pdf
- Day, D. V. & M. Harrison (2007) A multilevel, identity-based approach to leadership development. *Human Resource Management Review* 17 (4): 360–373.
- Day, D. V. & H. Sin (2011) Longitudinal tests of an integrative model of leader development: Charting and understanding developmental trajectories. *The Leadership Quarterly* 22 (3): 545-560.
- De Bruijn, H. (2010) Managing professionals. London, England: Routledge.
- Durkheim, E. (1890) 1992. *Professional Ethics and Civic Morals*. London: Routledge
- Døving, E., Elstad, B., & Storvik, A. (2016). *Profesjon og ledelse*. Bergen: Fagbokforlaget.
- Ejler, N. (2017) *Faglig ledelse: Mellem kerneopgave og styring.* København: Jurist- og Økonomforbundets Forlag.

- Fleenor, J.W., J. W. Smither, L. E. Atwater, P. W. Braddy, & R. E. Sturm (2010) Self-other rating agreement in leadership: A review. *The Leadership Quarterly* 21(6), 1005-1034,
- Etzioni, A. (1969) *The semi-professionals and their organization: Teachers, nurses and social workers.* New York: Free Press.
- Evetts, J. (2011) Sociological analysis of professionalism: Past, present and future. *Comparative Sociology*, 10(1), 1–37
- Evetts, J. (2014) The Concept of Professionalism: Professional Work, Professional Practice and Learning. In *International Handbook of Research in Professional and Practice-Based Learning*, edited by S. Billett, C. Harteis, and H. Gruber, 29–56. Dordrecht: Springer Netherlands.
- Farnham, D. & Horton, S. (1996) Managing public and private organizations. In Farnham, D. & Horton, S. (Eds), *Managing the New Public Services*. London. Macmillan.
- Favero, N., & Bullock, J. B. (2015) How (not) to solve the problem: An evaluation of scholarly responses to common source bias. *Journal of Public Administration Research and Theory*, *25*(1), 285-308.
- Freidson, E. (2001) Professionalism. The third logic. Cambridge: Polity Press.
- Frey, B. S. (1997) Not Just for the Money: An Economic Theory of Personal Motivation. Cheltenham, UK: Edward Elgar Publishing.
- Frey, B. S., & R. Jegen (2001) Motivation Crowding Theory. *Journal of Economic Surveys* 15(5): 589–611.
- Gerring, J. (2017) Qualitative methods. Annual Review of Political Science, 20(1), 15–36.
- Gilad, S. (2019) Mixing Qualitative and Quantitative Methods in Pursuit of Richer Answers to Real-World Questions. *Public Performance & Management Review*, 1-25.
- Goode, W. J. (1957) Community within a Community: The Professions. *American Sociological Review* 25 (6): 902–914
- Grimen, H. (2008) Profesjon og kunnskap. In A. Molander & L.I. Terum (Eds), *Profesjonsstudier* (pp. 71–86). Oslo: Universitetsforlaget
- Grøn, C.H., L. L. Bro & L. B. Andersen (2019) Public managers' leadership identity: concept, causes, and consequences. *Public Management Review*. doi: 10.1080/14719037.2019.1645875.
- Grøn, C. H., & A. M. Møller (2019) Faglig ledelse: Hvad er det? Og hvordan ser det ud i praksis? *Ledelse i Morgen* 1
- Gulick, L. (1937) Notes on the theory of organization, pp. 191-195 i Luther Gulick and Lyndall Urwick (red.), *Papers on the Science of Administration*. New York: Institute of Public Administration, Columbia University.
- Gumusluoglu, L., Z. Karakitapoğlu-Aygüna & G. Hirst (2013) Transformational leadership and R&D workers' multiple commitments: Do justice and span of control matter? *Journal of Business Research* 66 (11): 2269-2278.

- Hansen, K. M & H. Lolle (2020) Lineær regression. Chapter 17 in *Metoder i Statskundskab*. 3rd Edition. Edited by Kasper Møller Hansen, Lotte Bøgh Andersen, and Sune Welling Hansen.
- Hasenfeld, Y. (1972) People Processing Organizations: An Exchange Approach. *American Sociological Review* 37(3): 256–63.
- Headley, M. G. & V. Clark (2020) Multilevel Mixed Methods Research Designs: Advancing a Refined Definition. Journal of Mixed Methods Research 2020, Vol. 14(2) 145–163.
- Holm-Petersen, C., L. B. Andersen, B. Bjornholt, M. Højbye-Mortensen, L. L. Bro & V. N. Andersen (2015) *Ledelsesspænd på daginstitutionsområdet størrelse, ledelsesstil, faglig kvalitet og trivsel.* KORA.
- Ibarra, H., Wittman, S., Petriglieri, G., & Day, D. V. (2014) Leadership and identity: An examination of three theories and new research directions.
- Jacobsen, C. B., J. Hvidtved, & L. B. Andersen (2014) Command and Motivation: How the Perception of External Interventions Relates to Intrinsic Motivation and Public Service Motivation. *Public Administration* 92(4): 790–806.
- Jacobsen, C. B., and L. B. Andersen (2015) Is Leadership in the Eye of the Beholder? A Study of Intended and Perceived Leadership Practices and Organizational Performance. *Public Administration Review* 75(6): 829–41.
- Jakobsen, M. L., Kjeldsen, A. M., & Pallesen, T. (2021) Distributed leadership and performance-related employee outcomes in public sector organizations. *Public Administration*.
- Jakobsen, M. L. (2021) At få dansen til at flyde: kommunalpolitikere bør skabe gode rammer for faglig ledelse. I *Kommunalpolitisk lederskab: tæt på borgerne i de lokale fælleskaber*. Red. Ulrik Kjær & Lotte Bøgh Andersen. Copenhagen. Hans Reitzels Forlag, 2021. pp. 169-185.
- Jensen, U.T., Andersen, L.B., Ladegaard, L., Bøllingtoft, A. Eriksen, T., Holten, L.A., Jacobsen, C.B., Ladenburg, J., Nielsen, P.A., Salomonsen, H., Westergård-Nielsen, N., Würtz, A. (2019) Conceptualizing and Measuring Transformational and Transactional Leadership. *Administration & Society*. 51 (1): 3-33.
- Johnson, T. (1972) Professions and Power. London: The Macmillan Press.
- Judge, T. A., & Piccolo, R. F. (2004) Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89, 755-768.
- Kallman, M. E. (2021) Encapsulation, Professionalization and Managerialism in the Peace Corps, International Public Management Journal, 24:6, 943-972.
- Kjeldsen, A. M. (2014) Dynamics of public service motivation: Attraction—selection and socialization in the production and regulation of social services. *Public Administration Review*, *74*, 101-112.
- Kwok, N., S. Hanig, D. J. Brown & Winny Shen (2018) How leader role identity influences the process of leader emergence: A social network analysis. *The Leadership Quarterly* 29 (6): 648-662.
- Larson, M. S. (1977) *The Rise of Professionalism: A Sociological Analysis*. Berkeley: University of California Press.

- Le Grand, J. (2003) *Motivation, Agency, and Public Policy: Of Knights and Knaves, Pawns and Queens.* Oxford: Oxford University Press.
- Leithwood, K., Mascall, B., Strauss, T., Sacks, R., Memon, N. & Yashkina, A. (2007) Distributing leadership to make schools smarter: taking the ego out of the system. *Leadership and Policy in Schools*, 6, 37–67
- Lipsky, M. (1980/2010) *Street-level bureaucracy: Dilemmas of the individual in public service.* Russell Sage Foundation.
- Lord, R. G., Roseanne J. Foti, & Christy L. De Vader (1984) A Test of Leadership Categorization Theory: Internal Structure, Information Processing, and Leadership Perceptions. *Organizational Behavior and Human Performance* 34(3): 343–78.
- Lund, C. S. (2021) Faglig ledelse i offentlige organisationer: Et multilevel studie af relevans og forudsætninger blandt afdelingssygeplejersker og sygeplejersker. *Politica*, 53(4) 335-357.
- Lund, C.S., Hvilsted, L.H., Salomonsen, H.H., & Andersen. L.B. (2021). Organisatorisk resiliens: Hvad offentlige ledere gør for at sikre fortsat målopfyldelse under drastiske forandringer. *Politica*, 53(4), 429-454
- MacDonald, K. M. (1995) *The Sociology of the Professions*. London: Sage Publications.
- Manz, C. C. (1986) Self-leadership: Toward an expanded theory of self-influence processes in organizations. *The Academy of Management Review*, 11(3), 585–600.
- May, P. J., & Winter, S. C. (2009) Politicians, managers, and street-level bureaucrats: Influences on policy implementation. *Journal of Public Administration Research and Theory*, 19(3), 453-476.
- Maynard-Moody, S., & McClintock, C. (1987) Weeding an old garden: Toward a new understanding of organizational goals. *Administration & Society*, *19*(1), 125-142.
- Maynard-Moody, S., & Musheno, M. (2014) Stories for Research. In D. Yanow & P. Schwartz-Shea (Eds.), *Interpretation and Method* (pp. 328-352). New York: Routledge.
- McGivern, G., Currie, G., Ferlie, E., Fitzgerald, L., & Waring, J. (2015) Hybrid manager-professionals' identity work: The maintenance and hybridization of medical professionalism in managerial contexts. Public Administration Vol. 93(2) 412–432.
- Mehmetoglu, M. (2015) <u>CONDISC: Stata module to perform convergent and discriminant validity assessment in CFA</u>. <u>Statistical Software Components</u> S458003, Boston College Department of Economics
- Meier, Kenneth J. & John Bothe (2003) Span of control and public organizations: Implementing Luther Gulick's research design. *Public Administration Review* 63: 61-70.
- Miller, G. J., & Whitford, A. B. (2006) The principal's moral hazard: Constraints on the use of incentives in hierarchy. *Journal of Public Administration Research and Theory*, 17(2), 213-233.

- Miller, G. J., & Whitford, A. B. (2016) *Above politics*. Cambridge University Press.
 Mikkelsen, M. F., C. B. Jacobsen, & L. B. Andersen (2015) Managing Employee Motivation: Exploring the Connections between Managers' Enforcement Actions, Employee Perceptions, and Employee Intrinsic Motivation. *International Public Management Journal* 20(2): 183–205.
- Mik-Meyer, N. (2018) Organizational professionalism: social workers negotiating tools of NPM. *Professions and Professionalism*, 8(2).
- Miles, M. B., A. M. Huberman, & J. Sandaña (2014) Qualitative Data Analysis: A Methods Sourcebook and The Coding Manual for Qualitative Researchers. Third Edition. Sage Publications.
- Miscenko, D., H. Guenter & D. V. Day (2017). Am I a leader? Examining leader identity development over time. *The Leadership Quarterly* 28 (5): 605-620.
- Moe T. (1987) Interests, institutions and positive theory. In *Studies in American Political Development*, ed. K Orren, S Skowronek, 2:236–99. New Haven, CT: Yale Univ. Press
- Moynihan, D. P., S. K. Pandey, & B. E. Wright. 2012. Setting the Table: How Transformational Leadership Fosters Performance Information Use. *Journal of Public Administration Research and Theory* 22(1): 143–64.
- Møller, A. M., & Harrits, G. S. (2021) Forskningsinterview: en praktisk og metodisk introduktion. Djøf Forlag.
- Nicolini, D. (2009) Articulating Practice through the Interview to the Double. Management Learning Vol. 40(2): 195–212. 1350–5076.
- Nishii, L. H., D. P. Lepak, & B. Schneider (2008) Employee Attributions of the "Why" of HR Practices: Their Effects on Employee Attitudes and Behaviors, and Customer Satisfaction. *Personnel Psychology* 61(3): 503–45.
- Noordegraaf, M. (2007) From "Pure" to "Hybrid" Professionalism: Present-Day Professionalism in Ambiguous Public Domains. Administration & Society 39 (6): 761–85.
- Noordegraaf, M. (2011) Risky Business: How Professionals and Professional Fields (Must) Deal with Organizational Issues. Organization Studies 32 (10): 1349–1371.
- Noordegraaf, M. (2016) Reconfiguring Professional Work: Changing Forms of Professionalism in Public Services. *Administration & Society* 48 (7): 783–810.
- Noordegraaf, M., M. M. E. Schneider, E. L. J. Van Rensen, & J. P. P. E. F. Boselie (2016) Cultural Complementarity: Reshaping Professional and Organizational Logics in Developing Frontline Medical Leadership. Public Management Review, 2016 Vol. 18, No. 8, 1111–1137.
- Nylehn, B. (2009) Ledelse som profesjon? In *Profesjonsledelse og kunnskapsorganisering*, Bergen: FORPRO
- Orazi, D.C., Turrini, A. & Valotti, G. (2013) Public sector leadership: new perspectives for research and practice. International Review of Administrative Sciences, 79, 486–504.

- Ospina, S. M. (2017) Collective leadership and context in public administration: bridging public leadership research and leadership studies. Public Administration Review, 77, 275–287.
- Parkin, F. (1979) *Marxism and class theory: A bourgeois critique*. London: Tavistock Publications.
- Parsons, T. (1939) The professions and social structure. *Social Forces*, 17(4), 457–467.
- Pedersen, L. B., Andersen, M. K. K., Jensen, U. T., Waldorff, F. B., & Jacobsen, C. B. (2018) Can external interventions crowd in intrinsic motivation? A cluster randomised field experiment on mandatory accreditation of general practice in Denmark. *Social Science & Medicine*, *211*, 224-233.
- Perry, J. L. (2017) The 2017 John Gaus Award Lecture: What if we took professionalism seriously? *PS: Political Science & Politics* **51**:93–102.
- Petersen, N. B. G. (2020) Whoever has will be given more: The effect of performance information on frontline employees' support for managerial policy initiatives. *Journal of Public Administration Research and Theory*, *30*(4), 533-547.
- Podsakoff, Philip M., and Dennis W. Organ (1986) Self-Reports in Organizational Research: Problems and Prospects. *Journal of Management* 12(4): 531–44.
- Rabe-Hesketh, S. & A. Skrondal (2008) *Multilevel and longitudinal modeling using Stata*, 2. udg. College Station: Stata Press.
- Radin , B. A. (2006) Challenging the Performance Movement : Accountability, Complexity and Democratic Values . Washington, DC: Georgetown University Press.
- Raelin, J. A. (1986) The Clash of Culture. Boston, MA: Harvard Business School Press.
- Reay, T., & C. R. Hinings (2009) Managing the Rivalry of Competing Institutional Logics. Organization Studies 30 (6): 629–652.
- Riccucci, N. (2005) How Management Matters: Street-Level Bureaucrats and Welfare Reform. Washington: Georgetown University Press.
- Schilit, W. K., Locke, E. A. (1982) A study of upward influence in organizations. Administrative Science Quarterly, 27, 304-316.
- Schön, D. (1983) *The reflective practitioner: How professionals think in action.* New York: Basic Books.
- Schott, C., van Kleef, D. & Noordegraaf, M. (2015) Confused professionals? Capacities to cope with pressures on professional work. *Public Management Review*, 18(4), 583–610.
- Schriesheim, Chester A., Angelo J. Kinicki, and Janet F, Schriesheim (1979) The Effect of Leniency on Leader Behavior Descriptions. *Organizational Behaviors* and *Human Performance* 23, 1-29.
- Schwartz-Shea, P., & Yanow, D. (2011) *Interpretive research design: concepts and processes.* In *Routledge series on interpretive methods.* .
- Sehested, K. (1996) *Professioner og offentlige strukturændringer*. Copenhagen: AKF Forlaget.
- Silva, A. (2016) What is Leadership? Journal of Business Studies Quarterly, 8(1).

- Stewart, J., & O'Donnell, M. (2007) Implementing change in a public agency: Leadership, learning and organizational resilience. *International Journal of Public Sector Management*, 20(3), 239–25.
- Stogdill, R. M. (1950) Leadership, membership, and organization. *Psychological Bulletin*, Vol. 47(1), Jan 1950, 1-14.
- Thomsen, M. K., and U. T. Jensen (2019) Service Professionals' Response to Volunteer Involvement in Service Production. *Journal of Public Administration Research and Theory* 30(2): 220–39.
- Torfing, J., L. B. Andersen, C. Greve, & K. K. Klausen (2020) *Public Governance Paradigms: Competing and Co-Existing*. Policy, Administrative and Institutional Change series. Cheltenham, UK: Edward Elgar.
- Tummers, L., Steijn, B., & Bekkers, V. (2012) Explaining the willingness of public professionals to implement public policies: Content, context, and personality characteristics. *Public Administration*, *90*(3), 716-736.
- Van Knippenberg, D., & Sitkin, S. B. (2013) A critical assessment of charismatic— Transformational leadership research: Back to the drawing board? *The Academy of Management Annals*, 7(1), 1-60
- Van Loon, Nina M. (2015) Does Context Matter for the Type of Performance-Related Behavior of Public Service Motivated Employees? Review of Public Personnel Administration 2017, Vol. 37(4) 405–429
- Van Wart, Montgomery (2013) Administrative Leadership Theory: A Reassessment after 10 Years. *Public Administration* 91(3): 521–43.
- Vogel, R. & Masal, D. (2015) Public leadership: a review of the literature and framework for future research. Public Management Review, 17, 1165–1189.
- Voxsted, Søren (2016) *Faglig ledelse i den offentlige sektor*. København: Hans Reitzels Forlag.
- Væksthus for Ledelse (2020) *Fællestræk i faglig ledelse. Hvad karakteriserer faglig ledelse på tværs af opgavesøjler?* www.lederweb.dk
- Walker, R. M., Jung, C. S., & Boyne, G. A. (2013) Marching to different drummers? The performance effects of alignment between political and managerial perceptions of performance management. *Public Administration Review*, *73*, 833-844.
- Weber, M. (1978) *Economy and society. An outline of interpretive sociology*. Ed. G. Roth & C. Wittich. Berkeley, CA: University of California Press. Originally published in 1922.
- Williams, L. J., Vandenberg, R. J., & Edwards, J. R. (2009) Structural equation modeling in management research: A guide for improved analysis. *The Academy of Management Annals*, 3(1), 543-604.
- Winter, S. & V. L. Nielsen (2008). *Implementering af politik*. Aarhus: Academica. Wright, P. M., & L. H. Nishii (2007) Strategic HRM and Organizational Behavior: Integrating Multiple Levels of Analysis. CAHRS Working Paper no. 468, Cornell University, School of Industrial and Labor Relations, Center for Advanced Human Resource Studies

- Yukl, G. (2006) Leadership in Organizations. 6^{th} edition. Upper Saddle River, NJ: Pearson Education.
- Yukl, G., Gordon, A., & Taber, T. (2002) A hierarchical taxonomy of leadership behavior: Integrating a half century of behavior research, *Journal of Leadership and Organizational Studies*, *9*, 15-32.