LEADERSHIP AND LEADERSHIP DEVELOPMENT IN PRIMARY EDUCATION

A field experiment on group reflective learning

Ellen Daniëls

Live as if you were to die tomorrow. Learn as if you were to live forever.

Mahatma Ghandi

Cover Image

The cover image, an elephant, symbolizes matriarchal and coaching leadership. This image was chosen because it ties in with leadership in (primary) education.

The matriarch, the oldest female elephant of the herd, indicates the direction and coaches the herd purposefully. The matriarch monitors the mutual cohesion and leads by example. She acts in the interest of the herd, protects the herd and makes decisions.

The elephant symbolizes a coaching leader who takes into account the needs of others. Elephants avoid harming others and have great adaptability. They are intelligent and sensitive. Relationships are very important to these jumbos. They mourn the loss of group members and are happy to see old friends again.

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Completing a multi-year research project is a challenging job. I admit that I am a maverick with ideas, which sometimes deviate from the beaten track. My topic related sometimes more to other fields, than the topics in my research unit. However, I would like to thank some colleagues who were there for me.

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IV

Summary

This summary provides an overview of this book, which is based on a multi-year research project on leadership and leadership development in (Flemish) primary education. The overall aim of the research project was investigating the outcomes of a leadership development programme for school leaders. Researching school leadership and school leadership development matters, because school leaders play a pivotal role in the overall effectiveness of the school. Research demonstrates that school leaders are the second-most important school-based factor influencing pupil achievement, after classroom instruction. Furthermore, school leaders can influence teachers by setting goals and providing support for teachers. Despite the widely recognized importance of school leaders, scholars underexposed research on school leaders' professional development contrasting research on school leadership. This is striking, because school leaders are often 'progressed teachers' and can benefit from appropriate training prior to and on the job. Researching training programmes can contribute to making the profession of school leader more sustainable, which is relevant given the high amount of job turnovers.

Part I

Part I (Chapter 2 & 3) reports on exploratory studies considering school leadership and school leaders' professional development. Chapter 2 provides an overview and insight in school leadership and school leaders' professional development. Reviews providing an overview of school leadership theories and effective professional development of school leaders are rather rare. Therefore, the study questioned what the key characteristics of effective school leadership are and how school principals can effectively develop. The study relied on a systematic review. The findings on the characteristics of effective school leadership show that school leadership is more than focusing on the instructional part. Effective school leaders pay attention to communication, shaping the schools' organizational climate, defining the schools' vision and mission, recognizing and awarding successes, and investing in personnel by hiring and retaining qualified teachers as well. Furthermore, the findings indicate that professional development for school leaders should be (1) designed with attention to prior learning and individual development needs, (2) contextual and experiential, (3) designed with attention to the transfer of acquired knowledge, skills and attitudes into practice, (4) designed including opportunities to network and learn with fellow school leaders and (5) spread over time.

Chapter 3 reports on data from a qualitative and quantitative study considering school leaders' professional development. The study explores how school leaders develop their skills, to which extent they participate in professional development activities and which topics and techniques are preferred. To answer the questions, 16 school leaders were interviewed and a questionnaire was presented to all Flemish primary school leaders (n=2143), resulting in 592 useful responses.

In the interviews, the participants report to participate in formal and informal professional development activities. School leaders participate predominantly in workshops, seminars and conferences (formal learning) and take part in learning in interaction such as asking colleagues for help, advice and feedback, and learn from consulting theory (informal learning). The questionnaire items gauging school leaders' preferences for techniques indicate that school leaders prefer conversations with fellow school leaders, multi-day/year trainings, asking colleagues for advice and feedback, and reflective learning. The preferred topics for professional development are according to the questionnaire: coaching, motivating and supporting teachers, implementing the schools' mission and vision, and educational trends.

PART II

The main aim of the research project i.e. investigating the outcomes of a professional development programme for school leaders, is subject to Part II. Part I provided relevant insights to develop a professional development programme for school leaders in case a group reflective learning programme focusing on coaching teachers. The four studies of Part II (Chapter 4, 5, 6 & 7) research school leaders' perceptions of the group reflective learning programme, effects perceived by teachers, and school leaders' and teachers' perceptions of leadership. To keep the study legible, the findings considering school leaders' perceptions on the group reflective learning were discussed in two intertwined chapters (4 & 5).

Chapter 4 investigated school leaders' perceptions of the group reflective learning programme. School leaders' perceptions were explored using in-depth interviews with 19 school leaders who all completed the group reflective learning programme. The school leaders explained that the group reflective learning programme was an interesting and effective professional development technique and that they enjoyed learning using this technique. School leaders referred in their explanations to the relevance of reflecting on own cases with peers. They valued the presence of peers because they helped them to approach the cases from different viewpoints and made them realize that they are not the only one who encounters such problems. School leaders exemplified that reflecting with peers, soothed their feelings of loneliness. School leaders also expressed three precautions for group reflective learning programmes: (1) a quality trainer who is familiar with the technique, can add relevant theoretical background and prevents superficial conversations, (2) the diversity of the group to widen their point of view and (3) psychological safety in the group.

Chapter 5 is a continuation of chapter 4 and considers school leaders' learning and behavioural changes as a result of the group reflective learning programme. Like chapter 4, chapter 5 relies on 19 in-depth interviews with school leaders who completed the group reflective learning programme. The participants explicated that they gained knowledge in terms of relevant theory, developed their coaching skills and grew their self-confidence. School leaders exemplified to have developed their coaching skills in terms of asking coaching questions. They exemplified

VI

to feel more confident in coaching teachers and carrying out coaching questions. The school leaders also indicated that their way of providing feedback was influenced. They stated that they provide teachers more explicitly and clearly with feedback, and no longer avoid or postpone providing feedback.

The programme contributed, according to the school leaders, to their self-confidence. Their self-confidence grew through seeing that other school leaders experience similar issues, getting insight in how to handle delicate situations, and receiving recognition by peer school leaders.

Chapter 6 examines whether teachers, from which the school leader participated in the group reflective learning programme, experience an effect of their school leaders' participation. The study examines more particular whether teachers perceive a change in the organizational learning climate. To capture teachers' opinions about a possible change in the organizational learning climate, a survey was conducted among teachers. The same survey was administered prior to the group reflective learning programme and after the completion of the programme. The survey yielded 289 useful responses, 190 from teachers appointed in a school from which the school leader participated in the training (experimental group), and 99 from teachers from which the school leader did not participate in the training (control group). The survey results showed a significant positive effect on teacher perceptions of the organizational learning climate. An increase in the perception of the organizational learning climate is interesting because organizational learning climate is known as counteracting negative employee (i.c. teachers) outcomes, such as turnover intentions and work stress, and can increase positive outcomes such as job satisfaction and positive working conditions.

Chapter 7 investigates school leaders' and teachers' perceptions of leadership. This is an additional but relevant study, because it inspires to work towards alignment among school leaders' and teachers' perceptions about leadership. Higher levels of alignment can positively influence school leaders' effectiveness. This study questions more in particular the differences and similarities among school leaders and teachers with regard to the perceptions of leadership behaviour and the quality of the relationship between the school leader and the teachers. To find answers, 24 school leaders were interviewed and 22 focus groups were conducted in the schools of the participating school leaders.

The results of this study show that school leaders and teachers mainly focus on the relational and task-oriented aspect of leadership. The school leaders and teachers involved in the study seem to have the same opinion when it comes to task-oriented leadership. School leaders and teachers are not fully on the same page when considering relation-oriented behaviour. School leaders and teachers both indicate team coaching as an important relation-oriented behaviour. School leaders expand this with consulting teachers, parents and other stakeholders and providing feedback and evaluation, whereas teachers expand team coaching with providing support and encouragement, and recognition of achievements and contribution. The perceptions of school leaders and teachers with regard to the quality of the school leader –

teacher relationship seem to match fairly well. Both school leaders and teachers value trust, openness and contribution.

Contributions and future work

The contributions of the research project to the field of leadership and leadership development in education are threefold. The project contributes to (1) the understanding of leadership in education, (2) insights in school leaders' professional development and (3) the development and use of group reflective learning programmes for school leaders.

First, the contributions to the understanding of leadership are discussed. The insights considering school leaders' and teachers' perceptions of leadership are meaningful in developing effective leadership and putting leadership into practice. School leaders' and teachers' perceptions seem to match fairly well. However, school leaders and teachers differ in perceptions of relational leadership. This insight is relevant because in case school leaders' and teachers' perceptions converge, leadership has a higher potential of being effective. This insight can prompt school leaders and teachers to work towards a shared understanding of leadership. Second, the project shined a light on school leaders' professional development. According to the findings, in developing professional development for school leaders, attention should be paid to school leaders' individual development needs, to school leaders' contexts and experiences, to the transfer of knowledge, skills and attitude into practice, to networking and collegial consulting, and to spreading the professional development over time. School leaders seem to favor among others topics focusing on coaching and motivating teachers, educational trends and implementing the schools' mission and vision. Third, the findings of this research project are inspirational for providers of professional development for school leaders and policy makers in education. Overall, it can be concluded that group reflective learning for school leaders is relevant. The participating school leaders indicated that they improved their knowledge and skills with regard to coaching skills. Moreover, the group reflective learning programme contributed to soothing feelings of loneliness and building confidence in the position of being a school leader.

Finally, I briefly dwell on future scholarly work. The research project investigated whether group reflective learning for school leaders is relevant. Deep case studies integrating the level of the school leaders and teachers can shine a light on possible effects on the organizational level. When zooming in on the teacher level, a deeper understanding of possible coaching effects can be obtained. Moreover, it is relevant to conduct comparative research to fully understand the effects of the group reflective learning technique compared to other professional development techniques. Additionally, longitudinal research dwelling on data measuring the impact of the training in the long end, can contribute to a fuller picture of the effects of group

reflective learning for school leaders. Lastly, it is of interest to research school leaders' informal learning, because studies considering school leaders' informal learning are scarce.

X

Samenvatting

Deze samenvatting geeft een overzicht van dit boek dat gebaseerd is op een meerjarig onderzoek naar leiderschap en leiderschapsontwikkeling in het basisonderwijs in Vlaanderen. Het globale doel van het onderzoeksproject was de resultaten van een trainingsprogramma voor schoolleiders basisonderwijs onderzoeken. Onderzoek naar schoolleiderschap en de ontwikkeling van schoolleiders is belangrijk aangezien ze een rol spelen in de effectiviteit van de school als organisatie. Onderzoek toont aan dat schoolleiders de tweede meest belangrijke factor zijn in het schoolse succes van leerlingen, na de instructiemomenten in de klas. Daarnaast kunnen schoolleiders ook een invloed uitoefenen op leerkrachten door duidelijke doelen te formuleren en ondersteuning aan leerkrachten te bieden. Hoewel het belang van de rol van schoolleider in het onderwijs erkend wordt, is er tot op heden weinig onderzoek beschikbaar over de professionele ontwikkeling van schoolleiders. Dit staat in schril contrast met het grote aantal studies over leiderschap in onderwijs. Het beperkt aantal studies over de professionele ontwikkeling van schoolleiders is eerder opvallend omdat schoolleiders vaak ervaren leerkrachten zijn die niet specifiek opgeleid zijn voor de job. Een inzicht in training voor schoolleiders is daarom belangrijk en kan bijdragen aan de ontwikkeling van training voorafgaand aan de job als schoolleider, maar ook aan training tijdens de job. Inzichten in training voor schoolleiders kunnen ertoe bijdragen dat minder schoolleiders vroegtijdig de job verlaten.

Deel I

Deel I, bestaande uit hoofdstuk 2 & 3, omvat de exploratieve studies over schoolleiderschap en de professionele ontwikkeling van schoolleiders.

Hoofdstuk 2 biedt een inzicht in schoolleiderschap en de professionele ontwikkeling van schoolleiders. Reviewstudies die een overzicht bieden over schoolleiderschap en effectieve professionele ontwikkeling voor schoolleiders zijn beperkt. Daarom werd aan de hand van een systematische reviewstudie gezocht naar de karakteristieken van effectief schoolleiderschap en naar de manier waarop schoolleiders zich effectief kunnen ontwikkelen. De resultaten tonen aan dat schoolleiderschap meer is dan aandacht besteden aan instructie en didactiek. Effectieve schoolleiders besteden aandacht aan communicatie, het vormgeven van het schoolklimaat, het omschrijven en implementeren van de visie en de missie, het erkennen en herkennen van successen, en investeren in personeel door kwalitatief personeel aan te werven en deze in de organisatie te houden. De resultaten tonen ook aan dat professionele ontwikkeling voor schoolleiders (1) best vormgegeven wordt door rekening te houden met eerdere leerervaringen en individuele leernoden, (2) contextueel en op ervaringen gebaseerd is, (3) vormgegeven wordt met aandacht voor de transfer van kennis, vaardigheden en attitudes naar de praktijk, (4) mogelijkheden tot netwerken en leren met collega-schoolleiders voorziet, en (5) gespreid wordt in de tijd.

Hoofdstuk 3 bundelt kwalitatieve en kwantitatieve data over de professionele ontwikkeling van schoolleiders. De studie onderzoekt hoe schoolleiders hun vaardigheden ontwikkelen, in welke mate ze deelnemen aan professionele ontwikkeling en aan welke onderwerpen en technieken ze de voorkeur geven. Om dit in kaart te brengen, werden 16 schoolleiders geïnterviewd en werd aan alle schoolleiders in het Vlaams basisonderwijs (n=2143) gevraagd om een vragenlijst in te vullen. Dit resulteerde in 592 bruikbare antwoorden.

In de interviews geven de deelnemende schoolleiders aan dat ze deelnemen aan formele en informele professionele ontwikkelingsactiviteiten. Schoolleiders blijken overwegend deel te nemen aan workshops, seminaries en conferenties (formeel leren), maar leren ook in interactie met anderen zoals bijvoorbeeld door hulp, advies of feedback te vragen aan collega's en leren door literatuur en theorie te raadplegen (informeel leren). Uit de vragenlijst blijkt dat schoolleiders een voorkeur hebben voor de volgende technieken: gesprekken met collega-schoolleiders, trainingen gespreid over meerdere dagen of jaren, collega's advies en feedback vragen, en reflecterend leren. In de vragenlijst werd ook gepeild naar thema's voor professionele ontwikkeling. Schoolleiders geven aan dat ze graag bijleren hoe ze leerkrachten kunnen coachen, motiveren en ondersteunen, hoe ze de missie en de visie van de school kunnen implementeren en over onderwijskundige trends en nieuwigheden.

DEEL II

Het hoofddoel van het project, de effecten van een trainingsprogramma voor schoolleiders basisonderwijs onderzoeken, staat centraal in Deel II van dit boek. Deel II bouwt verder op de uitkomsten van Deel I. De resultaten van de studies in Deel I boden handvaten voor de ontwikkeling van een supervisietraject voor schoolleiders dat focust op het coachen van leerkrachten. De vier hoofdstukken van Deel II, hoofdstuk 4, 5, 6 en 7, onderzoeken de percepties van schoolleiders over het supervisietraject, gaan in op de effecten die leerkrachten ondervinden van het supervisietraject en bestuderen de percepties van schoolleiders en leerkrachten over leiderschap. Om de studie leesbaar te houden, werden de percepties van de schoolleiders omtrent het supervisietraject in twee aan elkaar verwante hoofdstukken besproken, namelijk hoofdstuk 4 en 5.

Hoofdstuk 4 gaat in op de percepties van schoolleiders over het supervisietraject. De percepties werden onderzocht aan de hand van 19 interviews met schoolleiders die het traject voltooiden. Deze schoolleiders gaven aan dat het supervisietraject een effectieve techniek was en dat ze het aangenaam vonden om aan de hand van supervisie (reflecteren in groep) bij te leren. In de interviews beschreven schoolleiders het belang van samen reflecteren over eigen casussen. De deelnemers waardeerden de aanwezigheid van collega's omdat hen dat helpt om de casussen

vanuit verschillende standpunten te benaderen en omdat ze hierdoor beseffen dat ze niet de enige zijn die te maken krijgen met dergelijke problemen.

De schoolleiders benoemden ook drie voorwaarden voor het welslagen van supervisietrajecten: (1) een kwaliteitsvolle trainer die vertrouwd is met de supervisie/reflectietechniek, die relevante theoretische kennis heeft en ervoor zorgt dat de supervisiesessies meer zijn dan oppervlakkige gesprekken, (2) een diverse groep omdat dit bijdraagt aan een breder inzicht, en (3) psychologische veiligheid in de groep.

Hoofdstuk 5 bouwt verder op hoofdstuk 4 en gaat in op de leer- en gedragsveranderingen bij schoolleiders ten gevolge van de deelname aan het supervisietraject. Hoofdstuk 5 ontleent zijn inzichten net zoals hoofdstuk 4 aan 19 interviews met schoolleiders die het supervisietraject voltooiden.

De deelnemers gaven aan dat ze dankzij het supervisietraject kennismaakten met relevante theorieën, hun coachingsvaardigheden uitbreidden en dat hun zelfvertrouwen vergroot werd. De schoolleiders gaven aan dat ze gerichtere coachingsvragen leerden stellen en dat ze meer vertrouwen ontwikkelden in het coachen van leerkrachten. Daarnaast gaven ze ook aan dat ze duidelijker feedback leerden geven en dat ze het geven van feedback nu minder (lang) uitstellen of vermijden. Het supervisietraject heeft volgens de deelnemers ook bijgedragen aan hun zelfvertrouwen in hun rol als schoolleider. Ze gaven aan dat hun zelfvertrouwen groeide door te zien dat collega-schoolleiders vergelijkbare problemen ervaren, door inzicht te krijgen in het omgaan met moeilijke situaties en door erkenning te krijgen van collega-schoolleiders.

In hoofdstuk 6 staan de leerkrachten centraal. Er wordt in dit hoofdstuk bekeken of leerkrachten van wie de schoolleider deelnam aan het supervisietraject, een effect van de deelname opmerken. Meer specifiek wordt in vraag gesteld of er bij de leerkrachten een verandering in de perceptie van het leerklimaat van de school is als gevolg van de deelname van de schoolleider aan het supervisietraject. Er werd daarom bij leerkrachten een vragenlijst afgenomen zowel voor als na het supervisietraject. De survey leverde 289 bruikbare antwoorden op, 190 van leerkrachten van wie de schoolleider deelnam aan het supervisietraject (experimentele groep) en 99 van leerkrachten van wie de schoolleider niet deelnam (controlegroep). Er werd op basis van deze 289 antwoorden een significant positief effect opgemerkt in de perceptie van het leerklimaat. Een positief effect op het leerklimaat in de school als organisatie is een belangrijke vaststelling omdat een positief leerklimaat in een organisatie het potentieel heeft om negatieve effecten op werknemers (i.c. leerkrachten) tegen te gaan. Het heeft bijvoorbeeld een positief effect op jobtevredenheid, de intentie om de organisatie te verlaten en werkgerelateerde stress.

In hoofdstuk 7 worden de percepties van schoolleiders en leerkrachten over leiderschap bestudeerd. Deze studie is relevant omdat een betere overeenstemming tussen de percepties van schoolleiders en leerkrachten een positieve invloed kan hebben op de effectiviteit van de schoolleider. De studie gaat meer specifiek in op de verschillen en gelijkheden tussen

XIII

schoolleiders en leerkrachten met betrekking tot leiderschapsgedrag en de kwaliteit van de relatie tussen de schoolleider en de leerkrachten. De studie baseert zich op 24 interviews met schoolleiders en 22 focusgroepen met leerkrachten.

De resultaten van de studie tonen aan dat schoolleiders en leerkrachten vooral aandacht besteden aan het relatiegerichte en taakgerichte aspect van leiderschap. De schoolleiders en leerkrachten die deelnamen aan de studie blijken op dezelfde lijn te zitten in de perceptie van taakgericht leiderschap. Schoolleiders en leerkrachten vertonen wel verschillen in de perceptie van relatiegericht leiderschap. Schoolleiders en leerkrachten vernoemen team-coaching als een belangrijk aspect van relatiegericht gedrag. Daarnaast benoemen schoolleiders overleggen met leerkrachten, ouders en andere stakeholders, en feedback geven en evalueren, terwijl leerkrachten ondersteuning en aanmoediging, en erkenning krijgen voor bijdragen aan de werking van de school benoemen. De eigenschappen van de kwaliteit van de relatie tussen de schoolleider en de leerkracht komt grotendeels overeen. Zowel de schoolleiders als de leerkrachten waarderen vertrouwen, openheid en een actieve bijdrage aan het schoolgebeuren als bouwstenen voor een goede relatie tussen de schoolleider en de leerkrachten.

Bijdragen van het onderzoeksproject en aanbevelingen voor vervolgonderzoek

De bijdragen van het onderzoeksproject zijn drieledig. Het project levert een bijdrage aan: (1) een beter begrip van leiderschap in het onderwijs, (2) het inzicht in de professionele ontwikkeling van schoolleiders en (3) het ontwikkelen en het inzetten van supervisietrajecten voor schoolleiders.

In de eerste plaats wordt de bijdrage aan een beter begrip van leiderschap in het onderwijs besproken. De inzichten in de percepties van schoolleiders en leerkrachten over leiderschap zijn betekenisvol voor het ontwikkelen van effectief schoolleiderschap, maar ook om dit in de praktijk uit te rollen. De percepties van schoolleiders en leerkrachten komen grotendeels overeen, maar er zijn verschillen in de perceptie van relatiegericht leiderschap tussen schoolleiders en leerkrachten. Dit inzicht is van belang omdat, in het geval er een overeenstemming in percepties rond leiderschap door schoolleiders en leerkrachten is, leiderschap eerder effectief is dan wanneer dit niet het geval is. Verder kan dit inzicht schoolleiders en leerkrachten ertoe aanzetten om te werken aan meer overeenstemming. Een tweede belangrijke bijdrage is dat het project een inzicht biedt in de professionele ontwikkeling van schoolleiders. De resultaten tonen aan dat bij het ontwerpen en ontwikkelen van professionele ontwikkeling voor schoolleiders, aandacht besteed zou moeten worden aan de individuele noden van schoolleiders, aan de contexten en ervaringen van de schoolleiders, aan de transfer van de opgedane kennis, vaardigheden en attitudes naar de praktijk, aan netwerken en overleg met collega-schoolleiders, en aan het spreiden van professionele ontwikkeling over meerdere dagen. Schoolleiders geven de voorkeur aan onderwerpen rond

het coachen, motiveren en ondersteunen van leerkrachten, onderwijskundige trends en het implementeren van de missie en visie van de school.

Een derde en laatste bijdrage van het onderzoeksproject is dat het aanbieders van professionele ontwikkeling voor schoolleiders en beleidsmakers in het onderwijs kan inspireren. Algemeen kan gesteld worden dat supervisietrajecten voor schoolleiders hun nut hebben. De schoolleiders die deelnamen, gaven immers aan dat ze relevante kennis verwierven en nieuwe coachingsvaardigheden ontwikkelden. Daarnaast droeg het supervisietraject ook bij aan het professionele zelfvertrouwen van de schoolleiders.

Als laatste wordt kort stilgestaan bij aanbevelingen voor vervolgonderzoek. Dit onderzoeksproject besteedde aandacht aan de relevantie van supervisietrajecten voor schoolleiders. Diepgaande casestudies die zowel aandacht besteden aan het niveau van de schoolleider als de leerkrachten, kunnen een inzicht bieden in de mogelijke effecten van supervisietrajecten op het niveau van de school als organisatie. Wanneer er dieper ingegaan wordt op het niveau van de leerkrachten, kan er een beter begrip ontstaan van de mogelijke effecten van coachend gedrag van de schoolleiders op de leerkrachten. Verder is het ook relevant om vergelijkend onderzoek uit te voeren om de effecten van supervisietrajecten in vergelijking met andere methodes voor professionele ontwikkeling ten volle te begrijpen. Ook longitudinaal onderzoek dat uitgaat van gegevens die de impact van de training op lange termijn meten, kan bijdragen aan een vollediger beeld van de effecten van supervisie voor schoolleiders. Ten slotte is het ook van belang om in vervolgonderzoek aandacht te besteden aan het informeel leren van schoolleiders, omdat onderzoeken naar informeel leren zeldzaam zijn.

Table of contents

List of figures

List of tables

Chapter 1
Introduction

CHAPTER 1

School leaders play a pivotal role in setting the direction for the overall effectiveness of schools (Leithwood, Louis, Anderson, & Wahlstrom, 2004; Leithwood & Jantzi, 2006; Yavuz & Robinson, 2018). After classroom instruction, they are the second-most important school-based factor influencing pupil achievement (Day, Gu & Sammons, 2016; Gurley, Anast-May, O'Neil & Dozier, 2016, McCarley Peters & Decman, 2016; May, Huff & Goldring, 2012). Apart from the recognized importance of school leaders' role for pupil achievement, school leaders play a vital role for teachers. Effective school leaders can have a powerful impact on their teachers 'by setting smart professional development goals, selecting and supporting accomplished teachers to take on leadership roles, and working one-on-one as mentors for teachers who need guidance and support' (Manna, 2015). Moreover, the satisfaction of teachers and a positive school culture are crucial elements in pupils' learning and performance, and a focal point for school leaders (Devos, Engels, Aelterman, Bouckenooghe & Hotton, 2005). This aligns with some findings of a recent review study (Daniëls, Hondeghem & Dochy, 2019). Effective school leaders establish good relationships, communicate effectively, provide frequent feedback, recognize and award accomplishments, and develop powerful teams through hiring talented teachers and encouraging them to participate in continuous professional development (Daniëls et al., 2019).

School leaders are decisive for pupils and teachers. The rapidly evolving society and the impact of the socio-economic changes, the changing of pupils' existing diverse needs and the expectations of teachers, parents and the community contribute to an increase of the complexity of the position of school leader (Walker & Carr-Stewart, 2006). In the socio-economic landscape of growing diversity, in which teachers have to provide more tailor-made and differentiated instruction, school leaders have to support their teachers and guide teachers' professional development to ensure quality education and achievement. This implies that school leaders need to be supported and provided with appropriate continuous professional development techniques to keep their skills up-to-date, to support teachers and teachers' professional development (Devos et al., 2018; Elmore, 2000; La Pointe & Davis, 2006), to prevent for drop out and/or job related psychosocial issues. Besides, the position of school leader is a specialist profession with specific competencies (Devos et al., 2018). However, most school leaders are 'progressed' teachers and start the profession with a teaching degree. School leaders do not always feel fully prepared for the profession (Daresh & Male, 2000). Furthermore, school leaders tend to struggle with feelings of professional isolation and loneliness when they transition into the role that carries out the ultimate accountability of the school (Spillane & Lee, 2013). MacBeath (2011) states that school leaders often have only a few confidantes, feel isolated by their status, and are rarely confirmed, supported or challenged.

1.1 Reasoning for studying school leadership and school leadership development

In the following paragraphs, the reasoning behind studying leadership and school leadership development is explained. The majority of the literature reports on school leadership, whereas the field of school leadership development is still underexposed.

1.1.1 Studying school leadership

School leaders are decisive for pupils, teachers and the overall effectiveness of the school. They fulfil various and complex assignments that are connected to professional and personal demands (Huber, 2010) and as mentioned, the profession becomes more complex due to the rapidly evolving society. In many countries, school leaders report heavy workloads and job-related stress (Pont, Nusche & Moorman, 2008). Job turnovers are high among school leaders and are also caused by job-related stress. Approximately 40% of the Flemish primary and secondary schools started the school year of 2016-2017 with a newly appointed school leader (Vancaeneghem, 2017). Moreover, it has been noted that an increasing number of school leaders resigns after only two or three years due to administrative workloads and stress-related issues (Vancaeneghem, 2017). This implies among other things a loss of expertise and a team that needs to re-establish relationships with a new school leader, resulting in a period of uncertainty. Furthermore, it is getting harder to find candidates for the position, because potential candidates hesitate to apply for the position because of the high workload, the insufficient preparation, limited career prospects, and inadequate support and rewards (Pont et al., 2008).

The existing body of literature on leadership in education has its roots in the Anglosphere (i.e. USA, UK, Australia and New Zealand) and focuses predominantly on the instructional component of leadership. The vast number of studies about leadership in education still originates from the Anglosphere, though in recent decades, other areas have been on the rise and more studies originating from Europe and Asia are published. Hence, researching school leadership from the Flemish field beyond the instructional component can contribute to a more nuanced insight in school leadership, the issues of keeping the profession attractive and sustainable, and providing an insight in the particular demands and issues of the Flemish field.

1.1.2 Studying school leadership development

In recent years, the interest of policy makers in school leaders' professional development has systematically grown (Darling-Hammond, Chung Wei, Andree, Richardson & Orphanos, 2009). This increased interest aligns with the large body of research showing that school leadership has a significant influence on pupils' achievement (e.g. Branch, Hanushek & Rivkin, 2013; Day et al., 2009; Gurley et al., 2016; Gurr, 2015; McCarley et al., 2016; May et al., 2012) but contrasts with the rather limited attention for school leaders' professional development. The lack of academic research and the literature on school leadership development is a

persisting embarrassment in the field of educational leadership (Hallinger in Leithwood, 2019). Gradually, attention is paid to research on school leadership development. It is important to have access to studies originating from our areas in order to derive relevant recommendations and principles for practices and further research influencing school leaders daily practice in our areas.

The importance of school leaders' development is mentioned and has been explored through research (Devos et al., 2018; Elmore, 2000; La Pointe & Davis, 2006). This contrasts with the limited focus of scholars on how school leaders continuously develop. In particular, the literature on school leaders' development through reflective learning is scarce (Hulsbos, Evers & Kessels, 2016). Little research has been devoted to the outcomes and impact of school leaders' continuous professional development. Research that is based on a need analysis and investigates the effects of a particular development technique for school leaders in-depth is rather rare. Professional development and evaluation of professional development can only be effective if decisions about the development topic, the technique and how to implement and evaluate the professional development are informed by the research information (Salas, Tannenbaum, Kraiger & Smith-Jentsch, 2012; Hulsbos et al., 2016). Furthermore, it is important to make informed decisions about school leaders' professional development, important to know which policies and techniques should be supported and to allocate government resources efficiently, because they are limited (Salas et al., 2012).

Despite the existing body of research on school leadership, there is a lack of knowledge about school leaders' professional development. Providing school leaders systematically with appropriate professional development in order to successfully guide and support their teachers can result in an eventual increase of pupils' performance (Pont et al., 2008). Furthermore, scholars state that school leaders need to be supported and provided with appropriate professional development to keep their skills up-to-date, to prevent for drop out and job related psychosocial issues (Devos et al., 2018; Elmore, 2000; La Pointe & Davis, 2006). Hence, it is of interest to research school leaders' professional development in depth, research the potential outcomes of training programmes, taking into account school leaders' training needs in order to better support current and future school leaders, and make school leadership an attractive position for potential school leaders.

1.2 School leadership in Flanders
This book focusses on school leadership in Flanders, the northern part of Belgium. In Belgium, education is a jurisdiction of the communities. Therefore, the Flemish government is authorized to make decisions on Flemish education autonomously, with the exception of some federal residual educational jurisdictions such as compulsory education and the minimum requirements for diplomas (Flemish Government, 2019).

To be appointed as a school leader in a Flemish primary school, one has to comply with the diploma requirements of the Flemish Ministry of Education and Training. The Flemish Ministry of Education and Training requires at least a bachelor's degree but advises a bachelor's degree in teaching or a bachelor's degree supplemented with a teaching degree (Flemish Ministry of Education and Training, 2019b). Hence, in Flanders, as in many other regions in the world, most school leaders are 'progressed' teachers who start the job with a teaching degree. Devos et al. (2005) warn for the often presumed, but incorrect, assumption that excellent teachers are excellent school leaders. Devos et al. (2005) state that the profile of a school leader should include leadership skills, people management and pedagogical competencies. According to them, a bachelor's degree in teaching (early childhood education or primary education) complies with the pedagogical component in the proposed profile (Devos et al., 2005), though it does not provide proof of leadership skills nor people management skills.

The majority of the newly appointed school leaders follow a programme for newly appointed school leaders. These programmes are organized by the umbrella organizations. Explaining all details about the umbrella organizations and their programmes for newly appointed school leaders is out of the scope of this book. Summarized, Flanders has three major umbrella organizations in primary education: 'GO! Onderwijs van de Vlaamse Gemeenschap' (GO!), 'Katholiek Onderwijs Vlaanderen' (KOV), and 'Onderwijs van Steden en Gemeenten' (OVSG). The programmes differ in duration and content. The programme of KOV covers three years, the programme of OVSG two years and the programme of GO! one year.

The position of the Flemish primary school leader is not clearly described by the Flemish government. Only in art. 165 of the Decree on Primary Education (Flemish Ministry of Education and Training, 1997) something about the task of the school leader is stated. It states that the school leader determines the weekly number of hours and assignments for each staff member. Apart from the decree, the Flemish Ministry of Education and Training states that the school leader leads all the staff members but that the school board is the employer of all staff members including the school leader (Flemish Ministry of Education and Training, 2019a). According to the Flemish Ministry of Education and Training, the school leader is responsible for:

- The selection and recruitment of temporary staff;
- The preparation of permanent appraisals;
- The particular assignments of the staff members associated with the job description, guidance and evaluation of the staff members;
- Mapping the continuous professional development.

The school board is responsible for organizing education (Flemish Ministry of Education, 1997). A member of the school board is someone who can participate in the school board's policy. Depending on the umbrella organization, schools have different boards. In schools of cities and municipalities (OVSG), the board consists of the city or municipal council. GO! has

a central level called 'the council of GO!' but at the local level, the authorithy belongs to a 'school group' in Dutch known as 'scholengroep' consisting of a general manager, a board of directors (Raad van Bestuur), a college of principals (College van Directeurs) and a general assembly (GO!, 2020). School boards can also be a non-profit association consisting of a general assembly and the board of directors (e.g. KOV) (Flemish Ministry of Education, 2020). A school board is responsible for one or more schools.

Nevertheless, in practice the day-to-day management of the school, and hence, organizing education, is carried out by the school leader. Flemish primary school leaders describe their job as a hodgepodge of different activities. A school leader who carried out the job for nearly 20 years described his job as follows: 'I was personnel manager, handyman, IT-manager, financial manager, psychologist and pedagogical director.' (Moens, 2019). Devos, Engels, Aelterman, Bouckenooghe & Hotton (2006) summarize the range of duties of a school leader into three groups: rules and regulations, educational and instructional content, and people management. The aforementioned summary seems too restricted, due to school leaders reporting that they were concerned with practical issues and that their day planning was often confounded through problems that arose throughout the day on multiple instances (e.g. pupils who forgot to pack their sandwiches, medical care of a pupil involved in an accident, mediating in conflicts and suppliers who had issues to deliver materials).

In Flanders, the school structure of primary schools and secondary schools differs considerably. A primary school with a minimum of 100 pupils enrolled has a full-time school leader appointed which is funded by the Flemish government (Crevits, 2018a; Crevits, 2018b). In case primary schools have a smaller number of pupils, it may be the case that school leaders have a teaching assignment as well, depending on how they assign the allocated funds. According to Crevits (2018a; 2018b), in 2018-2019 there were still 88 (0.04% of the total number of schools) school leaders in Flanders leading a school with fewer than 100 pupils.
Primary schools stand out compared to secondary education because of the absence of vice principals and middle management. Almost all secondary school leaders in Flanders are assisted by a vice-principal and most secondary school leaders by middle management positions as well. Moreover, teacher teams in primary education are usually less numerous than in secondary education. Since the structure of the organization can have an influence on leadership and organizational performance (Janicijevic, 2013), but also because the project funding was intended to research leadership development in primary education, the research focuses on leadership and leadership development in primary education in Flanders.

1.3 Introducing the research questions and the research project
The current book reports on studies that were carried out in the framework of a project on leadership development in Flemish primary education. The following paragraphs provide

further explanation on the overall research questions and approach of the project in order to get an orientation on the research project and structure of the book.

1.3.1 Central research questions

The research project aims to make ground for a discussion on the relevance and necessity of school leaders' professional development. Furthermore, the project aims to make recommendations for practitioners. Indeed, on the one hand the project aims to contribute to the literature through enhancing the understanding of school leaders' leadership and leadership development through group reflective learning. On the other hand, the project aims to influence the practice by giving advice. The more is known about the challenges and successes school leaders encounter in their daily practice and professional development activities, the better professional development activities can be constructed for the purposes of enhancing future professional development, guidance and support, and even selection procedures to hire appropriate school leaders.

The starting point of the project was leadership in primary education. Leadership is understood as 'a process of influencing in which an individual exerts intentional influence over others to structure activities and relationships in a group or organization' (Yukl, 2010). However, research on school leaders' professional development is still limited and for the stake of the project, school leaders had to be motivated to participate in a training; hence, in the exploratory studies (see Chapter 3) school leaders' professional development and their professional development needs were explored. School leaders indicated in the exploratory studies among others a preference for reflective learning and coaching teachers. The results of the exploratory studies led to the development of the experimental phase: a group reflective learning programme centred on school leaders experiences with coaching teachers (see 1.5.4 Group Reflective Learning Programme). The experiment gauged in the first place, the impact of the group reflective learning and change in behaviour on the level of the school leaders (see Chapter 4 & 5). Additionally, a study (see Chapter 6) was carried out to measure the impact on the level of the teachers.

The overall research aim of the experimental phase was to examine the possible effects of school leaders participating in a group reflective learning programme.
Hence, room for unexpected effects was left and a predominant qualitative approach that mainly focuses on the level of the school leaders, but also takes into account to a lesser extent the teacher perceptions, was carried out.

The following main research questions are subject of the research project founding this book:

1) How do school leaders perceive the group reflective learning programme?
2) Does the group reflective learning programme contribute to the development of leadership behaviour (coaching behaviour)?

    a. What do school leaders learn because of the group reflective learning programme?

    b. Do school leaders perceive a contribution of the group reflective learning programme to a possible change in their behaviour at the workplace?

3) Which possible other effects are achieved by the group reflective learning programme according to the school leaders?

Two additional research questions are included in the research project as well. Research question 4 and 5 are added because the research project approaches leadership and leadership development in a holistic way. Therefore, the viewpoint of the school leader and the teachers is included. Research question 4 allows searching for answers from the perspective of the teachers, whereas research question 5 includes both perspectives in the same study.

4) Does the group reflective learning programme influence teacher perceptions of the schools' organizational learning climate?

a) Does a group reflective learning programme for school leaders (focusing on coaching skills) result in an improvement of teacher perceptions of the organizational learning climate?

b) Does a group reflective learning programme for school leaders (focusing on coaching skills) result in an improvement of teachers' perceptions of the school leaders' coaching skills?

5) If any, which perception differences can be noted between school leaders' and teachers' perceptions about leadership?

1.3.2 The research project

In the first phase of the project, attention was paid to an exploration of the field fostering the development of the experiment. Hence, three exploratory studies were carried out: a literature review relying on 75 articles, a qualitative study consisting of 16 interviews with school leaders and a quantitative study consisting of a survey of 592 school leaders. The mutual relation of the studies in the exploratory phase and the studies in the experimental phase is shown in figure 1.1. These studies contributed to the insight in school leaders' tasks, characteristics of effective school leadership, characteristics of effective continuous professional development for school leaders, school leaders' current professional development activities and their professional development needs. The literature review was supplemented with empirical data from the qualitative study (16 interviews) and quantitative study (592 surveys). This additional research was done, because the existing literature on leadership contains a vast number of studies from the Anglosphere and some necessary information such as an overview of school leaders' professional development and their professional development needs considering the Flemish context was lacking. Research on leadership in education considering other areas of the world was of course extant, and in recent years, researchers in 'mainland' Europe have started to

focus more on leadership in education. The results of the first phase are explained in Part I of this book (see Chapter 2 & 3; see section 1.6 Structure of the book; figure 1.7 Graphic overview of the book).

Figure 1.1
Mutual relation of the exploratory studies and the main studies of the experimental phase
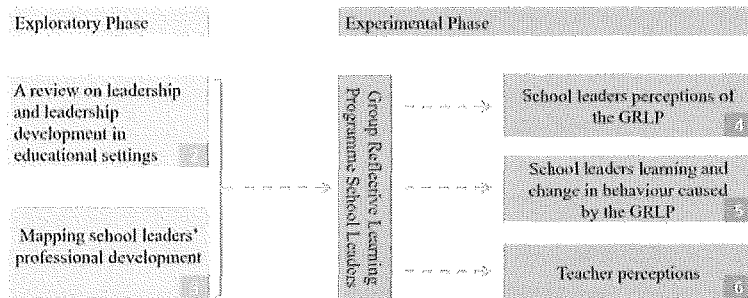
For clarity, the additional study explained in chapter 7 is not included in this scheme. Chapter 7 reports on a study that is not derived from data with regard to the measurements after the training.

Subsequently, an experiment was developed making use of the results of the exploratory studies. Researching a professional development programme (experiment) was a main aim of the research project. The experiment was developed keeping in mind two main principles: (1) the design had to be able to deliver relevant results that could contribute to the literature on leadership and leadership development in primary education (from a Flemish perspective) and (2) the experiment had to be meaningful for the school leaders in order to keep their motivation high to prevent for drop out. The experiment will be explained more in detail in section 1.5.4 Group reflective learning programme and will be discussed in Chapter 4 and 5 as well. 22 school leaders participated and 19 completed the programme. During the group reflective learning programme, each school leader in turn reported on a self-selected case and reflected supported by the trainer (=supervisor) and the peers on the case. Before the sessions took place, the reporting school leader had to share a written report with the group members and the supervisor to make sure that everyone could start the session in a prepared way. The results of the experimental phase are explained in Part II of this book (see section 1.6 Structure of the book and figure 1.7 Graphic overview of the book) and rely on interviews with school leaders before (n=22) and after the group reflective learning programme (n=19) and a survey among teachers (n=289). Furthermore, interviews with school leaders (n=24) and focus groups among teachers (n=22), both taken before the group reflective learning programme, are the foundation for Chapter 7 on School leaders' and teachers' leadership perceptions.

1.4 Methodological approach of the research project
In this part, the methodological choices of the research project are elucidated. The staged development process and the arguments for the methodological approaches are explained. The

intervention is explained in section 1.5 (see 1.5.4 Group reflective learning programme). It is deliberately chosen, for clarity purposes, to discuss the intervention more in detail after the discussion of the relevant constructs.

1.4.1 Determination of the methodology

Developing a research project requires a staged thinking process to eventually formulate a suitable methodology. Saunders, Lewis & Thornhill (2015) elaborated 'the research onion', a useful tool to develop a suitable research methodology. The 'research onion' guides the development of a methodology and is displayed in figure 1.2. The first layer of the 'research onion' considers the determination of the research epistemology. In the present study, a pragmatic perspective is adopted. In pragmatic research, the most determinants of the research design and strategy are the nature of the research questions, the research context and the research consequences (Natasi, Hitchcock & Brown, 2010). Pragmatists also recognize that there are many different ways to interpret the subjects to research and that no single point of view can ever give the entire picture (Saunders et al., 2015). The central endeavour in pragmatism is the combination of methods that helps to answer the research questions. Pragmatists aim to use combinations of research tools to gather strong evidence to support claims and produce provisional and perspectival truths to improve understandings and guide future practice (Hibberts & Johnson, 2012). Although the main epistemology is pragmatism, features of interpretivism shine through. Interpretivism recognizes that humans are different from phenomena because they create meanings, and hence interpretivists study the created meanings of human beings.

In the second layer, the research approaches are determined. Saunders et al. (2015) posit the inductive and deductive approach. An inductive approach involves the development of theory as a result of empirical data, whereas a deductive approach involves the testing of a theory. The present research approach integrates features from the inductive (e.g. chapter 4 & 5) and the deductive approach (e.g. chapter 6 & 7). On the one hand, the project tests if the professional development programme influences leadership behaviour and/or organizational learning climate. The research is based on existing theories to guide the research and to define the relevant factors. On the other hand, the project allows theory to emerge from empiricism through questioning how the professional development programme in particular influences e.g. leadership behaviour using open-ended questions. Besides room for other unexpected variables is left.

Third, the methods are proposed. The project includes several qualitative methods namely interviews, focus groups and a quantitative method, surveys. Hence, the present study is considered a mixed method research. The research questions and the levels of analysis prompted the choice for a mixed method research. The research questions on the level of the school leaders guided the search for answers on how people perceive something and aimed

eliciting rich descriptions. The latter justified the use of a qualitative approach in terms of interviews. The level of the teachers, consisting of far more people than the level of analysis of the school leaders, requested relevant techniques to map the perceptions of large numbers of people. Hence, a survey was used to map teachers' perceptions. Moreover, in the exploratory studies a survey was used to get an overview of Flemish primary school leaders' professional development. Researching school leaders' overall preferences for professional development requested a structured approach and because of the size of the population of Flemish school leaders (n = 2143), a survey was considered as suitable.

In the fourth layer, the general methodology is considered. The present study has an experimental design and more particular the experiment can be considered as a quasi-experiment. In social and behavioural sciences, it is almost impossible to undertake true experiments in laboratories, with random assignment of participants to control and experimental groups (Cohen et al., 2011).

Figure 1.2
Research onion (Saunders et al., 2015)
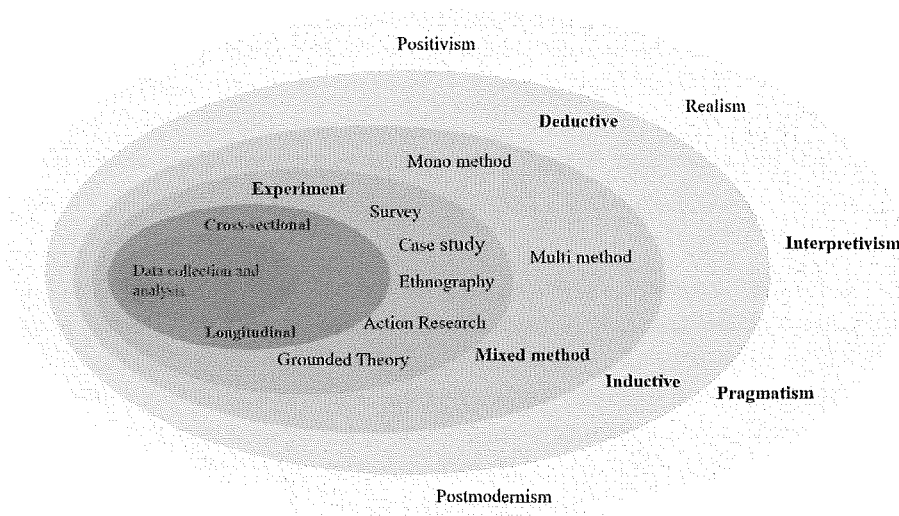
The constructs in bold refer to the constructs relevant for this research project.

In the field of educational research, mostly quasi-experiments are carried out. Quasi-experiments have less control over the conditions of the experiment and exist in several forms. The current research applies a pre-test, post-test design using an experimental and a control group. The research does include a control group, especially with regard to the analysis on the level of the teachers (cf. infra). 22 cases were sampled for the experimental group, whereas 7 cases were sampled for the control group, resulting in data from 19 cases from the experimental

group and 6 cases from the control group. The experimental group was larger, because the study predominantly focused on qualitative and impact data on the level of school leaders. However, the current sample from the experimental and control group allowed performing relevant quantitative analyses (see Chapter 6).

Figure 1.3 provides a schematic overview of the research design, which will be elucidated in the following paragraphs.

Figure 1.3
Schematic overview of the research design
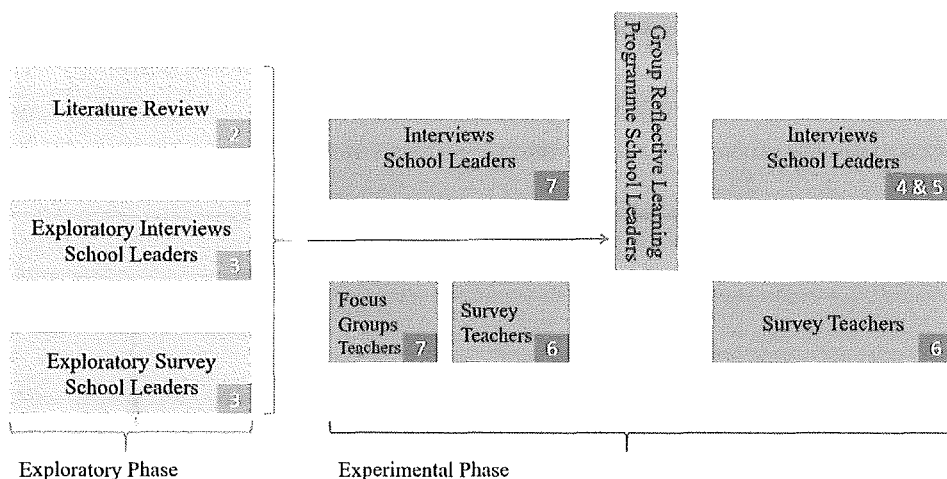
The numbers refer to the respective chapters in which the data will be discussed.
For a more detailed overview of the sample size and the overall structure of the book, figure 1.7 at the end of the chapter can be consulted as well.

First, three exploratory studies were conducted to design the experiment. These studies were conducted during the school year 2016-2017. After designing the training and recruiting participants, a baseline study was carried out. The base line study was carried out between May 2018 and October 2018. The baseline study consisted of interviews with school leaders, and a survey and additional focus groups to measure teacher perceptions. Immediately after the training, which ended in March 2019, the impact study was done. The impact study was conducted between May and June 2019. Hence, in the present study the perceived near transfer i.e. knowledge and skills gained as reported by the participants almost immediately after the group reflective learning programme, are measured. Cheng & Ho (2001) suggest taking a time lapse of three months between training and impact measure. This time lapse should allow the participating school leaders to use newly acquired skills and allow teachers to observe possible changes in behaviour and/ or performance. Throughout the chapters, the particular methods and their features are further elucidated concerning the particular study.

The fifth layer identifies the time horizon. The experimental study is a longitudinal study including two measuring points at two different levels of analysis: school leaders and teachers. However, some chapters (e.g. Chapter 3 & 7) rely on cross-sectional data. The data considering school leaders' perceptions predominantly rely on qualitative data whereas the data considering teachers predominantly rely on multidimensional survey data involving repeated measurements over time. The latter are known as panel data. Panel data contain observations of multiple factors over multiple measurement points for the same. The measurement points lead to the sixth and last layer: the data collection techniques. The study is a twofold study consisting of a predominantly qualitative nature on the level of the school leaders and a predominantly quantitative nature on the level of the teachers. The measurements on both levels include qualitative and quantitative measurement techniques (cf. figure 1.3).

In the previous sections, the level of analysis was referenced a few times. Indeed, the project aims to study the effects of professional development considering the level of the school leader and the teachers, and hence aims to contribute to a thorough understanding of leadership and leadership development. Identifying leadership through self-reported techniques such as interviews is unilateral and too limited, compared to collecting evidence from staff members; 'the proof of leadership lies more in the eye of the led than in the eye of the leader' (Donaldson, Gordon, Bowe & Marnik, 2004). Hence, it is important to include multiple units of analysis, in case school leader and teachers, to obtain a thorough understanding of leadership and the impact of professional development activities (see figure 1.3).

1.4.2 Rationale for applying a mixed method design

In the present study, the research exists of multiple qualitative and quantitative methods. Hence, it is considered a mixed method study. First, a clarification of the concept of mixed method design is provided. Subsequently, the emergence and choice for applying a mixed method design is explained.

Creswell & Plano Clark (2007) describe mixed methods research as follows:

> 'Mixed methods research is a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis and mixture of qualitative and quantitative approaches in many phases of the research process. As a method, it focuses on collecting, analysing and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone.' p.5

Hibberts & Burke Johnson (2012) confirm on Creswell and Plano Clark (2007). They emphasize in their definition of mixed method research that 'mixed methods systematically

combine aspects of quantitative and qualitative research methods into a single study to take advantage of each paradigm's strengths.' p.122.

The study considers two levels of analysis: school leaders and teachers, differing in number dictated by the cases. The use of both quantitative and qualitative approaches allows to capture the perceptions of school leaders and teachers and provides a more holistic understanding of the research subject.

Yin (2014) posits that an appropriate research design should emerge naturally from the research questions. Research questions considering 'how' and 'why' questions are rather subject to qualitative techniques, whereas 'who, what, to what extent questions' are rather subject to quantitative techniques (Yin, 2014). After the exploratory studies, it became clear that a qualitative approach would be appropriate for the research question considering 'how' primary school leaders perceive the development of their leadership behaviour. Indeed, qualitative methods allow to answer 'how' research questions and get a deeper insight in phenomena. Moreover, it is not possible to determine all possible effects on beforehand. Hence, qualitative techniques such as interviews and focus groups allow theory to emerge from the empiricism are appropriate. Research question 4 (see p.8), at the level of analysis of teachers, desires a quantitative approach because of the nature of the research question and cause of the number of teachers involved. The addition of quantitative techniques admits to (1) investigate more variables among multiple respondents and (2) to detect a potential difference between the baseline study and the impact study on the level of the teachers more easily. In summary, the quantitative techniques will be used to detect a difference between the baseline study and the impact study, whereas the qualitative techniques will be used to search for a possible explanation of the difference.

The choice of the present research design is not only related to the research questions. Several scholars have posited multiple reasons for applying a mixed method design. In what follows, the relevant reasons for the mixed method design of the present study are discussed. The rationales are based on the conceptualisations of Briggs, Coleman & Morrison (2012), Bryman (2006) & Saunders et al. (2015).

Initiation is a first reason to choose for a mixed methods design. Indeed, the first step in the research project consists of exploratory studies to get an insight in the background of the research, to better understand the context and to include relevant variables that otherwise could have been overlooked. Second, the design is developed to enhance the reliability of the research. Findings may be affected by the method used. The use of several methods will downsize this method effect and increase the reliability of the conclusions. This was applied in the exploratory studies. The latter is related to triangulation. If corroboration of results of multiple methods occurs, it adds credibility to the research findings. A fourth motive is to focus. The qualitative techniques are used to focus on the 'how' questions and questions who suppose

to give room to empiricism (e.g. research question 1, 2, 3 & 5) whereas the surveys focus on the quantitative part (e.g. research question 4).

1.5 Central constructs

To provide the necessary background to understand the following chapters, the central constructs of the research project are explained. First, leadership and managerial coaching (5.1), leadership development (1.5.2) and reflective learning (1.5.3) are discussed. Additionally, section 1.5.4 explains the group reflective learning programme, building on and making use of theories from section 1.5.1, 1.5.2 and 1.5.3. Finally, the constructs training evaluation (1.5.5) and learning climate (1.5.6) are explained. In the relevant chapters and the review study (cf. among others Chapter 2), the related constructs are discussed and clarified according to the demand of the particular study.

1.5.1 Leadership and managerial coaching

The widespread assumptions that leadership matters for organizational performance, and that leadership plays a critical role in education e.g. contributing to pupils' achievement and the overall school effectiveness, cause that leadership is an important and popular subject for research in education and beyond (Bass, 2008; Bennis, 2007; Ogawa & Scribner, 2002; Leithwood, Harris & Hopkins, 2008; Leithwood, Harris & Hopkins, 2019; Leithwood, 2019). Through the years, a lot of theories and models have developed. However, this section is limited to explaining the construct. A concise overview of leadership theories relevant for school leadership research can be consulted in Chapter 2.

Leadership is hard to define, but it is often easy to identify leadership in practice (Bennis, 1989). Nonetheless, numerous scholars have researched leadership, yet the existing body of research did not result in an agreed definition. The assumption shared by most definitions is that leadership is a process of influencing, that occurs in groups and involves common goals (Day & Antonakis, 2012; Northouse, 2010; Yukl, 2002). Yukl (2002) provides the following definition: 'leadership is a process of influencing in which an individual exerts intentional influence over others to structure activities and relationships in a group or organization'. Hence, leadership ensures that organizational and human resources are used to fulfil the strategic objectives and leadership facilitates the organizations' alignment with its context (Zaccaro, 2001). Day & Antonakis (2012) supplement Yukl's definition with the most commonly used definitional features to explain the influencing process. They pinpoint to (1) leaders' characteristics, (2) leaders' behaviour, (3) the effects of a leader with regard to goal achievement and performance, (4) the interaction process between the leader and his/her subordinates, and (5) the importance of the context. The current study focuses through the development of managerial coaching skills on school leaders' behaviour, leadership effectiveness and the interaction between school leaders and teachers. Indeed, the previous

approach to leadership is 'leader-centric' and fits the objective of the current study: the development of the school leader. However, leadership is no longer nothing but 'leader-centric'. The increase of leadership executed by teams or the division of leadership assignments across various teachers, shows that distributed leadership becomes gradually popular in education also in Flemish primary education where the school leader is the one in charge of the formal daily management. The advent of teacher leadership and research considering teacher leadership exemplifies the latter.

The group reflective learning programme (see 1.5.4 Group reflective learning programme) focuses on a particular aspect of leadership behaviour, managerial coaching. It was chosen to focus on managerial coaching, because managerial coaching is assumed effective through creating conditions for high performance and facilitating employees' professional development (Ellinger et al., 2011; Tanskanen, Mäkelä & Viitala, 2019; Withmore, 2017). Moreover, Flemish primary school leaders indicated a need for the development of coaching skills (Daniëls, Hondeghem & Dochy, 2017).

Coaching leadership arose in an attempt to enhance performance and employees' professional development. Coaching leadership is based on a helping relationship, which aims to develop the employees' abilities to define goals, improve performance and develop competencies in accordance with the goals of the organization (Bond & Seneque, 2013; Ellinger et al., 2003, 2008). Coaching is about helping an individual or a team making use of active listening and powerful questioning (Withmore, 2017). Using active listening and powerful questioning, the coaching leader aims to provoke the suggestion and development of solutions, and meeting challenges (Rapp-Ricciardi, Garcia & Archer, 2018). Coaching is focused on asking powerful questions, rather than giving advice (Berg & Karisen, 2013; Withmore, 2017). Coaching leaders support employees' acquirement of knowledge and development of skills and behaviours, not by being told or taught, but by discovering from within (Whitmore, 2017). The latter shows that coaching focuses on the ability to develop employees, and is solution- and possibility-oriented. In this way, the coach establishes an action-focused dialogue to activate learning and development, and eventually develop and change thinking and behaviour to maximize the employees' potential. It is true that coaching assumes a certain ability of people being coached to come up with solutions and taking up challenges (Rapp-Ricciardi, Garcia & Archer, 2018).

Developing coaching skills and implementing coaching requires time and prioritising time for coaching and the development of coaching skills can be demanding. However, the idea is that the time spent on coaching will result in time saved in the future (Berg & Karisen, 2013; Withmore, 2017). If something needs to be solved quickly, it is often easy to instruct how to solve the problem, but doing this entails a risk of creating obedient followers. Obedient followers will solve problems to a lesser extent by themselves and will rely more on the leader for solving daily problems, causing a high work load and task diversity for the leader (Berg & Karisen, 2013; Withmore, 2017). Furthermore, it is assumed that coaching will lead to lower

amounts of stress, more confidence, more commitment and motivation, better relationships and fewer conflicts, which may reduce the time spent while efficiency increases (Berg & Karisen, 2013). Tanskanen et al. (2019) warn for the pitfalls of managerial coaching. Managerial coaching can evoke the impression that employees' performance is never good enough, which can lead to an underestimation of the performance, compared to the actual performance.

1.5.2 Leadership development

Research has shown that leadership can be developed. Some people might have a genetic advantage, which is associated with 30% of individual differences in leadership capabilities; though a far larger proportion of the variance is associated with environmental influences and work experiences (Day, 2012). In other words, anyone can improve his/her leadership skills through practice and training, but some people have genetic advantages.

Research claims that leadership contributes in a significant way to the success of organizations. This assumption and the assumption that leadership can be developed through practice and training, has led to numerous training and development initiatives aiming to develop leadership in both education and other fields. Various authors use the constructs training and development interchangeably. In this book, training is understood as a set of activities to develop work-related knowledge, skills and/or attitudes (Blanchard & Thacker, 2011). Development refers to the acquisition of knowledge, skills and attitudes and is the result of learning (Blanchard & Thacker, 2011).

The literature proposes multiple techniques to promote leadership development. The techniques range on the axis of formal learning such as formal classroom trainings, intended non-formal learning e.g. coaching and mentoring to incidental informal interactions at the workplace e.g. feedback from colleagues (Tynjälä, 2013; Goldring, Preston & Huff, 2012; Seidle, Fernandez & Perry, 2016; Varela, Burke & Michel, 2013; Day, Fleenor, Atwater, Sturm & McKee, 2014; Day, 2012). Action learning (cf. infra), which can be subject to formal or non-formal learning and a combination of the previous mentioned methods have shown to be relevant techniques for leadership development (Seidle, Fernandez & Perry, 2016; Day, 2012). Hence, leadership development can be defined as all forms of growth throughout someone's lifecycle that promotes, encourages and assists in one's leadership potential (Brungardt, 1997).

Formal learning comprising training programmes are a popular approach of leadership development. Conger (2010) classifies these structured programmes in four general categories: (1) action learning, (2) individual skill development, (3) socialisation of organizational vision and values, (4) strategic leadership initiatives targeted to address organizational challenges and opportunities.
Because of the relevance for the current research project, action learning is explained more in detail. Action learning is a learning approach based on problem solving. Action learning assumes solving problems, and assumes that learning about leadership occurs through

individual and group reflection. Marquardt, Leonard, Freedman & Hill (2009) suggest several components for maximizing the effects of action learning. Action learning should (1) focus on important problems relevant for the organizations' strategy, (2) take place in groups of four – eight members of diverse backgrounds, (3) emphasize on questioning and reflective conversations, (4) focus on the development of action strategies and the facilitation of the implementation of these strategies, (5) take into account individual and group commitment to learning, and (6) employ a team coach (trainer) to facilitate the learning process (Marquardt et al., 2009). Action learning is intensive and can be powerful in leadership development (Day, 2012). However, action learning requests a major investment in terms of time and other resources to be effective. The trainer is an important factor in ensuring that action learning is effective through keeping the participants focused on solving the problem and learning (Day, 2012), and prevent the emergence of meaningless chitchat sessions.

Summarized, leadership development is the result of various life cycle experiences and (in)formal learning activities. Furthermore, the transfer into daily practice needs to be considered as an essential aspect of leadership development to obtain an effect and to contribute to the sustainable development of leadership skills (Huber, 2013; Day, 2012).

1.5.3 Reflective learning
Reflective learning has been valued as a meaningful learning technique and is recognized as a technique that contributes to professional growth and lifelong learning (Bell, 2001; Karm, 2010). Moreover, reflective learning can help in making informed decisions and acting against mainstream practices if necessary (Karm, 2010). In particular, peer-supported reflecting is identified as an effective technique for the improvement of the educational practice (Bell, 2001). Schön (1983) defined a reflective practitioner as 'someone who engages in a reflective process with his or her own experiences in a way that results in meaningful knowledge'. Reflecting is often considered as a thinking process, but Schön (1987) stated that reflecting is 'a process of thinking and doing in order to acquire new skills'. Hay, Peltier & Drago (2004) indicate three features of a reflection process (1) awareness, (2) critical analysis and (3) change. Through awareness, critical thinking and analysis, reflection aims to elicit learning and change. The aim of reflection is thus acquiring or refining knowledge, skills and/or attitudes (KSA's). Reflection involves theory, practice, thought and action, to elicit the development of KSA's (Osterman & Kottkamp, 1993).

To achieve an effective learning process aiming optimal professional development, Korthagen & Vasalos (2005) propose core reflection. Core reflection and the associated ALACT-model (see figure 1.5) and onion-model (see figure 1.4) were the basic ideas in the reflection process of the group reflective learning programme and hence will be explained to get an insight in the nature of the reflection in the programme. Moreover, Korthagen & Vasalos (2005) state that teacher reflection is often influenced by the specific school culture. In addition, Karm (2010)

draws attention to the assumptions that undergird of how we work. She states that the most effective way to become aware of these assumptions is, to view our practice through different lenses in order to get a picture from our practices from 'outside'. Therefore, two basic principles of the training design were (1) letting the training take place outside the familiar school environment of the school leader, and (2) in presence of peers, to stimulate approaching cases or problematic situations through several lenses. The presence of peers and their feedback facilitates to approach a case or problematic situation from different viewpoints.

1.5.3.1 Core reflection

Core reflection provides a framework that aims to bring out the best in people and promotes the awareness of people's qualities and levels of change. Core reflection focuses on a deep reflection and moves beyond a rather superficial and predominantly rational approach. The deep reflection process assumes a holistic approach including one's thoughts and feelings, and focuses on nurturing the relation between a person's core qualities and experiences in his/her daily (professional) life.

Moreover, core reflection is inspired by positive psychology and aims at building on people's strengths and positive feelings. It is centred on seeing oneself positively and elaborates on people's core qualities as a centre for growth (Korthagen Professional Development, n.d.). Core reflection leaves room for an analysis of the situation or case, but focuses on creating room for new possibilities and considering the ideal situation including the resources that people need to achieve the ideal situation (Korthagen & Vasalos, 2005). The technique of core reflection focuses on people's internal obstacles who limit the enactment of one's inner potential. Instead of fighting these obstacles, core reflection teaches a person to be mindful about their effects and connecting with the will to change (Korthagen Professional Development, n.d.).

Core reflection will be further clarified, explaining the 'onion model' (Korthagen, 2004). The 'onion model' displays the six levels of change in a person that can be influenced through the reflection process. The model is displayed in figure 1.4 and displays the six levels and its corresponding guiding questions. Alignment between the six levels of changes is the key to effective performance (Korthagen Professional Development, n.d.).

Others can observe the outer levels of the onion-model (i.e. environment and behaviour), whereas the inner levels (i.e. competencies, beliefs, identity & mission) are barely observable and come to the surface in among other reflective conversations. The levels will be explained based on Korthagen (2004). The outer levels environment (school, teachers, and pupils) and behaviour focus on problems and cases in the school. The level of competencies (i.e. an integrated body of knowledge, skills and attitudes) is influential for the behaviour level and hence represent the potential for behaviour. Whether behaviour occurs in practice or not, depends on the circumstances. Subsequently, one's competencies are determined by his or her

beliefs. If a school leader for instance beliefs that he or she cannot change anything using coaching techniques, the school leader will probably not develop the competencies nor show the behaviour in practice. The fifth level, identity, considers people's beliefs about themselves. Identity focuses on a persons' perception of his or her professional identity. Professional identity is concerned with what one professionally inspires, and gives meaning and significance to one's professional life. Questions such as 'Which kind of coach do I want to be?', 'Which kind of leader do I want to be?' fit with the development of the professional identity. The sixth and last level, mission reflects on that what moves one to do what he or she does. The mission level is about becoming aware of the meaning of one's own existence and the relationship with others. It refers to one's personal inspiration and in case the calling for becoming a coaching school leader.

Once the connection with one's inner layers is established, one's personal core qualities are triggered, such as enthusiasm, inquisitiveness, decisiveness, flexibility and openness (Korthagen Professional Development, n.d.).

Figure 1.4
Onion-model: A model of levels of change (Korthagen Professional Development, 2018)
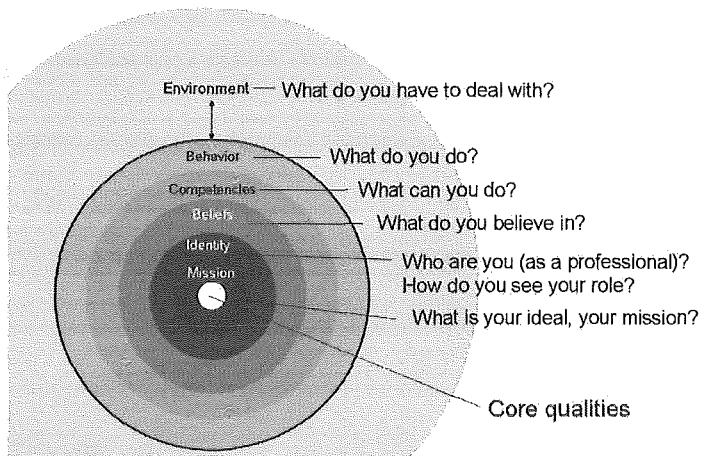
1.5.3.2 The ALACT-model

Apart from the importance of the 'onion-model' for core reflection, a structured approach of reflection is important to improve one's daily practice. Core reflection is often associated and shaped using the ALACT-model (see figure 1.5), which will be further explained in the following paragraphs.

The ALACT-model (Korthagen & Kessels, 1999; Korthagen, Kessels, Koster, Lagerwerf & Wubbels, 2001) arose aiming to structure reflective learning. Reflection often takes place

spontaneously and on an individual level, resulting in less structured reflection. However, in order to improve one's professional practice and support the development of growth competence (i.e. the ability to develop professionally based on self-directed learning), conscious and structured reflection is required (Korthagen et al., 2001; Boud, Keogh & Walker, 1985; Daudelin, 1996). Moreover, it is important to assume critical and deep analysis, to ensure the generation of new understandings and/or insights for change (Karm, 2010).

The ALACT-model refers to five self-explanatory actions (see figure 1.5) (1) Action, (2) Looking back on the action, (3) Awareness of essential aspects, (4) Creating alternative methods of action and (5) Trial. In addition to these actions, Korthagen & Vasalos (2005) provide some guiding questions for the trainer during the reflection process. The questions gauge the context, what one did, wanted, was thinking and felt. Apart from that, they also suggest questions exploring what the involved people (in case teachers) wanted, did and felt. Korthagen & Vasalos (2005) propose these questions for the trainer. Asking these questions and especially asking non-suggestive and appreciative questions were taught during the sessions. The latter enabled the participants to be capable to contribute to group reflective learning and increased their coaching skills, the scope of the training, as well. The proposed questions exemplify the holistic approach of reflection focusing on thinking, feeling, wanting and acting, whereas in many other approaches reflection is predominantly centred on a rational analysis (Korthagen & Vasalos, 2005). Especially in action 3 'Awareness of essential aspects', the holistic approach appears. This action explicitly focuses on the awareness of the non-rational aspects concerning among others feelings.

Figure 1.5
ALACT-model (Korthagen Professional Development, 2019)
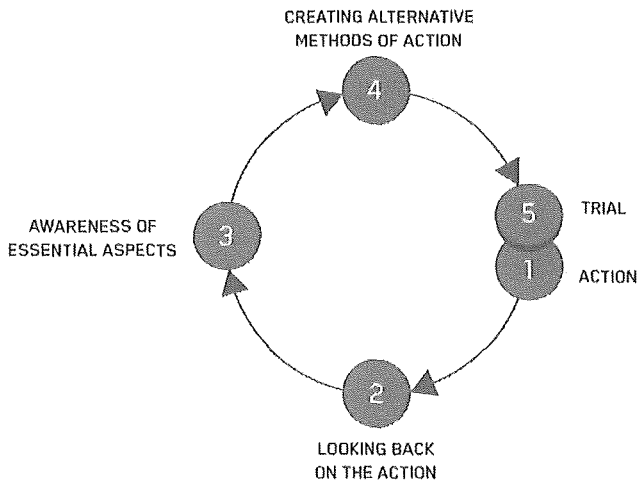
In summary, core reflection assumes a deep reflection including a holistic approach. The holistic approach means that one's feelings and thoughts, one's inner and outer levels of

changes (see figure 1.4) are subject to the reflection process. A harmonious alignment between these levels of changes are the key to effective performance (Korthagen Professional Development, n.d.). Furthermore, a structured approach such as proposed in the ALACT-model is important to elicit sustainable deep reflective learning.

1.5.4 Group reflective learning programme
The group reflective learning programme developed for this study is central in the research and has been cited previously without revealing details. The programme was developed based on the outcomes of the exploratory studies and fine-tuned based on the experience of the team of the provider of the training (Arteveldehogeschool). They are experienced in using group reflective learning among (working) students in (advanced) bachelors' in education. This section explains the elaboration of the group reflective learning programme, taking into account among others the previous explained principles of leadership development and reflective learning.

The programme is described as a 'group reflective learning programme', capturing the main features of the programme: learning using reflective learning in presences of peers and a trainer. In Dutch, this technique is well-known as 'supervisie'. The construct 'supervision' is more reminiscent of leadership and influencing, and hence differs strongly from the Dutch meaning of 'supervisie'. In this book, the constructs 'group reflective learning' and 'group reflective learning programme' (GRLP) will be used. Reflective learning was described in the previous section.

Before further explaining the details of the programme, the construct 'group' will be illustrated. According to Raes, Kyndt, Decuyper, Van den Bossche & Dochy (2015) groups can be broadly defined as collections of individuals that share a common social categorisation and identity, in case school leaders. Gilley & Kerno (2010) draw the attention to the fact that groups consist of individuals who perform similar or complementary tasks as different individuals. Subsequently, group learning can be defined as 'learning activities through which individuals acquire, share and combine knowledge through experience with one another' (Argote, Gruenfeld & Naquin, 2001). Edmondson (1999) is more particular in defining group learning and considers group learning as 'an ongoing process of reflection and action, characterized by asking questions, seeking feedback, experimenting, reflecting on results and discussing errors'. In the current study, a group is approached as a collection of individuals because the participants originate from various organizations. Apart from assuming that the participants are individuals from various organizations, the focus on the process of reflection and action by asking questions and seeking feedback is recognized as another relevant dimension of group learning as well. This aligns with Argote's (1999) conceptualisation suggesting that 'group learning involves processes through which members can share, generate, evaluate and combine knowledge'. Additionally, the group size was set on 7-8 in alignment with the ideal size of a group in order to be effective (Wheelan, 2009). Aas & Vavik (2015) state that a group size of

six to seven members is suitable to develop context-based competences and to build a safe atmosphere for sharing personal experiences and feelings. To elicit learning and allow school leaders to construct approaches through various lenses, various school leaders with regard to experience, age and umbrella organization were sampled. However, it is true that the sample was homogeneous for the school leader – teacher ratio ranging from 1:20 – 1:35.

In figure 1.6, the design of the training is clarified and discussed with attention to the ALACT-model (see figure 1.5). To avoid too much repetition, I refer to Chapter 4 (see section 4.2.3 The group reflective learning programme) for more information about the design of the group reflective learning programme as well.

The group reflective learning programme consisted of three phases. The first phase was designed to explain the design of the programme and to allow the participants to get familiar with each other and build some trust, which is necessary to share difficult or problematic situations. In the second phase, the reflective learning focusing on school leaders' coaching of teachers is central. In phase 2, the school leaders alternately presented a case on which they liked to reflect. As the topic of the group reflective learning programme was set on school leaders' coaching of teachers, the reported case had to deal with a coaching issue. The presented cases or problematic situations comprised for instance: (1) dealing with underperforming teachers, (2) dealing with teachers who have assignments in the same class but cannot collaborate in a proper way, (3) dealing with a teacher who has a permanent appraisal in a school, left due to conflicts, but will come back, or (4) how to guide and motivate teachers in implementing new methods/ways of working. In figure 1.6 the three phases with their corresponding reflective activities of the group reflective learning programme are displayed.

These sub phases are linked to the previous described ALACT-model (Action, Looking back on the action, Awareness of the essential aspects, Creating alternative methods and Trial see figure 1.5) for structuring reflective learning. The Action-component and the Trial-component from the ALACT-model take place at the workplace, and hence are not directly subject of the programme. However, the presenting school leader 'Looks back on the action' in the activities 1-4 of a session in phase 2. Activities 4-6 are designed to elicit the presenting school leaders' 'Awareness of the essential aspects' of the particular situation, whereas activities 6-8 focus on 'Creating alternative methods'. Phase 3 consisted of an overall wrap up, and allowed to the school leaders to reflect on their overall learning process.

Figure 1.6
Design of the group reflective learning programme

Phase 1 Session 1	Phase 2 Session 2 – 7	Phase 3 Session 8

- Acquaintance
- Introduction in technique

1. Case report prior to the session in which school leaders alternately present a case

2. Lie of the land by presenting school leader

3. Asking questions by participants and trainer

4. Think and write

5. Participants and trainer share insights with the presenting school leader

6. Presenting school leader reports on shared insights

7. Participants and trainer share reflections

8. Wrap up – Reflection on learning and transfer by presenting school leader

- Overall wrap up

Every participant writes a reflection report after each session to facilitate learning. The reflection reports are shared via a learning platform and briefly discussed at the start of the session by the trainer.

1.5.5 Training evaluation

Figuring out how effective and valuable a training was, is the purpose of training evaluation (Hopkins, 2016). Therefore, any attempt to obtain feedback on the effects of the training and assessing the value of the training in the light of that information for improving future training, is considered as training evaluation (Hamblin, 1970). Training evaluation can have different functions and can be carried out among others to adjust or improve training or training elements, to justify the value of the training and/or to provide policy advice. Alvarez, Salas & Garofano (2004) define training evaluation as 'a technique, which assesses the extent to which a training programme meets the intended goals'. Therefore, the measurement of a training programme's success or failure focuses on the content, design, changes in learners and organizational benefits (Alvarez et al., 2004).

Different models are available to evaluate training programmes. A well-known and widely used framework for evaluation is Kirkpatrick's Four Levels Model of Training Evaluation. The Kirkpatrick model was first introduced in the 1950's. Kirkpatrick's model includes trainees' reactions on the programme, their learning of knowledge, skills and/or attitudes, the resulting changes in job behaviour and the results for the organization. The four levels of the Kirkpatrick model are displayed in table 1.1.

49

Table 1.1

The four levels of the Kirkpatrick model and the corresponding definitions (Kirkpatrick, 1994)

Level	Definition
Level 1 Reaction	The degree to which participants find the training favourable, engaging and relevant to their jobs.
Level 2 Learning	The degree to which participants acquire the intended knowledge, skills, attitude, confidence and commitment based on their participation in the training.
Level 3 Behaviour	The degree to which participants apply what they learned during the training when they are back on the job.
Level 4 Results	The degree to which targeted outcomes occur as a result of the training and the support and accountability package.

The Kirkpatrick model is used in the current study because it allows evaluating training programmes in a systematic way and it allows approaching the rather complex process of evaluating trainings in a simple way (Bates, 2004; Reio, Rocco, Smith & Chang, 2017). The model guides the development of conclusions about training outcomes to take into consideration when taking decisions for continuation and/or improvement of the training. According to Steensma and Groeneveld (2010), the four levels are also useful to assess the internal and external validity of a training programme. Level 1 'Reaction' and Level 2 'Learning' measure the internal validity of the training; i.e. the extent to which a conclusion based on the particular training programme is justified. Level 3 'Behaviour' and Level 4 'Results' refers to the external validity; i.e. the extent to which training results can be generalized and will be transferred back to the job and/or organization (Berry, 1998). As all models, the Kirkpatrick model has some limitations. The model does not include individual or contextual influences in the evaluation of training (Bates, 2004). Another critique is that the model focusses on evaluation at the end of the training and does not relate to formative evaluation (Reio, Rocco, Smith & Chang, 2017).

Even though the Kirkpatrick model is a widely used and popular model, scholars have criticized the model and their critiques resulted in the development of other training evaluation models over time. Tamkin, Yarnall & Kerrin (2002) group these models in two categories: 1) the descendants, building on Kirkpatrick's model adding levels paying attention to the economical aspect of training, including the organizational context and/or models that include the training needs or variables prior to the training, and 2) the alternative models.

Critical approaches of Kirkpatrick's model resulted in the descendant models or modified models, which include elements before assessing reactions and after examination of organizational results (Tamkin et al., 2002). Including contextual and training input levels informs and guides the future evaluation strategy. In addition, including elements that provide a wider view on the organization, leads to a more explicit focus on the organizational needs and how they are or can be related to the training programme (Tamkin et al., 2002). Two models belonging to this group of training evaluation models will be included as an example. However,

a review of the training evaluation models is not the aim of the current paragraphs and beyond the scope of the research project. For relevant reviews on training evaluation models, I refer among others to the studies of Reio et al. (2017) and Tamkin et al. (2002).

Models paying attention to the economical aspect of training often include the principle of return of investment. They advocate for training who is relevant to the organization and relevant in relation to the investment in terms of money spent on the training. Two models that belong to this approach are the model of Hamblin (1974) and the Return On Investment (ROI) model of Phillips (2001). Both models are an extension of Kirkpatrick's model. Hamblin (1974) divided Kirkpatrick's fourth level into two separate levels and states that it is important to distinguish between the economic and non-economic outcomes. Level 4 was described by Hamblin as the functioning level and considers the quantification of the training preferably in terms of cost-benefit/ return on investment analysis, whereas level five, the ultimate value level, describes the effect on the ultimate profitability and the survival of the organization. In addition, Phillips elaborated on the Kirkpatrick model and added a fifth level considering the Return On Investment (ROI) of the training. According to Phillips (2001), training can influence and effect the organization level, but the expenses might be excessive compared to the effects. The fifth level added by Phillips, searches for answers on the question: 'Can the effort, time spent, and expenditure incurred for the training be justified?' If it can be justified, the expenditure is assessed and treated as a valuable investment to enhance employees' knowledge, skills and/or attitudes. Phillips & Phillips (2007) continued to develop the model and proposed a more detailed model. For a detailed explanation of this model, I refer to Phillips & Phillips (2007).

The 'alternative' models who do not built on Kirkpatrick's model can be grouped in three groups: the models focusing on the purpose of evaluation, the models that suggest to use different measurements and the ones focusing on new technology delivery. Tamkin et al. (2002) state that the 'alternative' models draw attention to a clear focus on the different types of outcomes, and to tailor the technique to the organization in order to ensure that the approach suits the culture and values of the organization. These models also emphasize the non-financial and indirect returns on all the aspects of the organization. According to Tamkin et al. (2002) the descendant models, indicate to specify the reasons for training evaluation and they state that the evaluation tools and techniques alter depending on why the evaluation takes place and for whom it is intended. An example of an evaluation model that focuses on the purpose of evaluation is the 'Responsive evaluation model' of Pulley (1994). Pulley developed a tool for communicating evaluation results more effectively by tailoring it to the needs of the decision-makers. Therefore, the decision-makers, their stake in the use of the information, and their information needs have to be identified, and have to be reckoned with when collecting qualitative and quantitative data. The collected data need to be transformed into meaningful information and should communicated on an ongoing basis with the decision-makers.

Summarized, the Kirkpatrick model, offers sufficient tools and guidance to evaluate the training programme subject to the current study. First, the model is a straightforward and easily understood model that allows evaluating a training programme on four different levels. The clear and systematic structure ensures communication across academics and non-academics. Second, the model can help to evaluate a training across several organizations, because it does not focus on the features of the particular organization. However, I recognize that the features of an organization can affect the transfer of learning and the change in behaviour and hence the effectiveness of the training. Third, the model leaves enough room to adjust the evaluation to the particular aims and type of training. This fits with the predominant qualitative approach of the training evaluation (see Chapter 4 and 5). Lastly, some models arose as a critique on Kirkpatrick's model and pointed to the importance of the phase prior to the training. I have considered this critique and carried out exploratory work considering school leaders training needs and professional development preferences to tackle this critique (see Chapter 3).

1.5.6 Organizational learning climate
In the literature, organizational learning climate and learning climate are used interchanged. Because learning climate is investigated in an educational context, preference is given to the use of organizational learning climate to avoid confusion with pupils' learning. Organizational learning climate focuses in this book on teacher perceptions of the schools' learning climate in terms of employees' learning, in this case teachers' learning, and does not include pupils' learning nor learning climate among pupils.

Organizational learning climate is approached as the entire set of perceptions of work settings that helps or hinders work-related learning (Nixon, 1991; Mikkelsen, Saksvik & Ursin, 1998). Nikolova, Van Ruysseveldt, De Witte & Van Dam (2014) define organizational learning climate as employees' perceptions of organizational policies and practices, aiming to facilitate, reward and support employee learning behaviour. The first sub construct, facilitating learning climate, describes the level to which the workplace supports, provides and facilitates learning opportunities for their employees. The second sub construct, appreciation-learning climate, refers to the degree in which the work environment rewards learning behaviour. The last sub construct, error-avoidance learning climate, describes the extent to which a workplace focuses on avoiding mistakes (Nikolova et al., 2014).

In an educational context, organizational learning climate can be defined as 'the school's effort to turn learning into an integral part of work performance and providing opportunities for ongoing learning and growth' (Marsick, Watkins, Callahan & Volpe, 2009). With regard to more specific professional development activities, organizational learning climate can be expressed as the school's effort in creating a climate which encourages inquiry and listening, feedback, collaboration, out-of-the-box thinking, involving staff in the collective vision, encouraging team learning, and in leaders who act as role models (Dam & Blom, 2006; Eldor & Harpaz, 2016; Osborn, 2006). Hence, organizational learning climate in education refers to a wide range of professional development activities in which teachers and school leaders have

the opportunity to expand and develop their knowledge, skills and attitudes constantly in order to provide effective education (Mikkelsen & Grønhaug, 1999). In describing organizational learning climate, Hallinger (2003) points to the importance of providing incentives for teachers, providing incentives for learning, promoting professional development and maintaining high visibility.

Research findings show that learning and development opportunities, and adjoining organizational learning climate, have an influence on several factors of interest for organizations and schools. Organizational learning climate influences the retention of talented employees (Echols, 2007; Herman, 2005; Rodriguez, 2008; Walker, 2001). Hence, establishing and investing in a supportive organizational learning climate is important for schools in view of lowering job turnovers for school leaders and teachers eventually contributing to pupils' learning, teachers' and school leaders' well-being, and the overall school effectiveness. Furthermore, organizational learning climate and employees' learning have been recognized as crucial for the ability to adapt to changes (Armstrong & Foley, 2003; Mikkelsen & Grønhaug, 1999) and showing innovative behaviour and performance (Sung & Choi, 2014). This is relevant for schools given todays' rapidly evolving society in which they need to operate. In alignment with the latter, organizational learning climate turns out to be a precursor for a positive attitude towards learning, employees' professional development intentions and participating in professional development activities (Armstrong-Stassen & Schlosser, 2008; Govaerts, Kyndt, Dochy & Baert, 2011). Lastly, research has shown that organizational learning climate predicts job related stress and job satisfaction (Egan et al., 2004; Govaerts et al., 2011; Mikkelsen et al. 1998). To conclude, based on the previous cited studies, there is no doubt, that organizational learning climate is an interesting and relevant construct to research with regard to provide recommendations for theory and practice; organizational learning climate is crucial for pursuing high teacher outcomes (Shoshani & Eldor, 2016). Nevertheless, studies researching or including organizational learning climate in the field of compulsory education are scarce.

1.6 Structure of the book

This book consists of two parts. Part I reports on the exploratory studies which were necessary to prepare the experiment (i.e. the group reflective learning programme) and Part II reports on the perceived results of the group reflective learning programme according to the school leaders (see Chapter 4 and 5) and the teachers (see Chapter 6). Part I includes chapter 2 and 3 whereas Part II includes chapter 4, 5, 6 and 7. Chapter 8 is a separate chapter that presents the overall discussions and conclusions.

Chapter 2 provides an insight in the most frequently used leadership theories in the field of education, the characteristics of effective school leadership and the features of effective professional development activities for school leaders. Chapter 3 reveals the results of a qualitative and quantitative exploratory study considering school leaders' professional

development preferences. In chapter 4, school leaders' responses to the group reflective learning programme are reported whereas in chapter 5, school leaders' learning and behavioural changes resulting from the group reflective learning programme are described. Chapter 6 considers teachers perspectives and investigates teacher perceptions about learning climate prior to the training and after the training. Chapter 7 is a side-study and somewhat detached from the other chapters because it doesnot rely on data linked to the experiment as such, i.e. the group reflective learning programme. The chapter studies school leaders' and teachers' differences and similarities concerning leadership perceptions. Yet it fits in the overall research design that takes into account the perceptions of school leaders and teachers regarding leadership and leadership development.

The chapters that are part of Part I and Part II can stand on its own because they are designed as independent but intertwined studies. This approach was chosen to meet the article-based approach and to aim a scientific outreach. So far, 4 articles have been published (Chapter 2, 4, 5, 7). The chapters contain a chapter specific theoretical framework, research design, methodology, results, and conclusion and discussion to ensure that the chapters can be read independently. Hence, some repetition occurs in the appropriate chapters (Chapter 2, 4, 5, 7). The measuring instruments on which this research project (book) is based can be requested from the author. For clarity purposes, the overall methodological approach and the central constructs were explained in section '1.4 Methodological approach of the research project' and section '1.5 Central constructs'. Figure 1.7 provides a graphic overview of the book.

Figure 1.7
Graphic overview of the book

Chapter 1 Introduction

PART I Exploratory Studies

Chapter 2 Leadership and Leadership Development: A Review Study Review Study (articles n=75)	Chapter 3 Mapping School leaders' Professional Development Qualitative (n=16) and Quantitative Study (n=592)

PART II Impact Studies

Chapter 4 Developing school leaders: Responses of school leaders to group reflective learning Qualitative Study (n=19)	Chapter 5 Do school leaders learn from a group reflective learning programme? Qualitative Study (n=19)	Chapter 6 Does leadership training improve organizational climates? Quantitative Study (n=289)	Chapter 7 School leaders' and teachers' leadership perceptions: Differences and similarities Qualitative Study (interviews, n=22; focus groups n=24)

Chapter 8 General Conclusions

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Chapter 2

A review on leadership and leadership development in educational settings

Exploratory Phase	Experimental Phase	
A review on leadership and leadership development in educational settings 2	Developing school leaders: Responses to group reflective learning 4	Do school leaders learn from a group reflective learning programme? 5
Mapping school leaders' professional development 3	Does leadership training improve organizational learning climates? 6	School leaders' and teachers' leadership perceptions: Differences and similarities 7

Abstract

Leadership gained a lot of attention during the past decades because of school principals' growing responsibilities and the accountability-driven context they work in. However, reviews providing a general overview of effective school leadership theories and effective professional development are rare. The present review was conducted to summarise the existing literature and discover lacunae in school leadership research in preschools, primary and secondary schools. 75 studies focusing on leadership theories, characteristics of effective school leadership and school leaders' professional development were included and analysed. The present article provides an overview of main leadership theories such as instructional leadership, situational leadership, transformational leadership, distributed leadership and Leadership for Learning. Second, the article focuses on the characteristics of effective school leadership and lastly, the review offers features of effective professional development activities for school principals.

Keywords: school leadership, leadership development, Leadership for Learning, school effectiveness, leadership, professional development

2.1 Introduction

Leadership in education often stands in the spotlight, mostly because of growing responsibilities for school principals and the accountability-driven context they work in (Hitt & Tucker, 2016; Muijs, 2010; Leithwood, 2010). The management of schools is of vital importance to public administration as in OECD-countries (Organisation for Economic Co-operation and Development) on average 13% of total public expenditures is spent on education (OECD, 2013). The literature emphasizes the impact of leadership on the effectiveness of schools. Principals have a considerable potential in creating learning environments for teachers and students, in enhancing student-learning outcomes through their influence on teachers, and in organisational policy and processes (Hallinger, Bickman & Davis, 1996; Hallinger & Heck, 1998; Hitt & Tucker, 2016). For decades, leadership in education has been subject to research and resulted in numerous approaches of leadership e.g. instructional leadership, situational leadership, transformational leadership, and distributed leadership. Several leadership theories emerged as a critique on previous theories or as an extension or aggregation of existing theories. By summarising the evolvement of school leadership theories, the characteristics of effective leadership and prescriptive elements for the development of school principals' leadership, the study provides directions for future research. Starting from a narrative review approach, an overview of the leadership theories in education will be provided. Then, based on a systematic review of the literature, the paper focuses on effective leadership practices and school principals' leadership development.

2.2 Leadership in education

To provide an overview of leadership theories in education, leadership is first defined. Defining leadership unambiguously is not easy as there is no agreed definition available in the literature. Numerous scholars have researched leadership and most of them stipulate leadership in different ways. The assumption shared by most definitions is that leadership is 'a process of influencing in which an individual exerts intentional influence over others to structure activities and relationships in a group or organisation (Yukl, 2002)'. Bush & Glover (2003) emphasize that Yukl's use of an individual must be seen in a wider perspective. In education, teams as well as individuals (Bush & Glover, 2003) may exercise leadership. What emerges in various definitions of leadership in education, is the particular focus on the core process and goals of education: teaching and learning, and student achievement (see f.i. Bush & Glover, 2003; Devos & Bouckenooghe, 2009; Grissom & Loeb, 2011).Though, leadership studies in education have often been criticised for solely focusing on cognitive student outcomes (Devos et al., 2009). Bush & Glover propose a definition of school leadership and recap school leadership as follows:

> Leadership can be understood as a process of influence based on clear values and beliefs and leading to a 'vision' for the school. The vision is articulated by leaders who seek to

gain the commitment of staff and stakeholders to the dream of a better future for the school, its students and stakeholders. (Bush & Glover, 2003, p. 31)

Additionally, Bush & Glover (2003) propose three dimensions of leadership: (1) leadership is a process of influence to structure and organise the processes in the organisation, (2) leadership is related to organisational values and committing people to these values and (3) vision is an essential feature of effective leadership.

Grissom and Loeb (2011, p. 1119) describe effective school leaders as leaders who manage to combine and understand the instructional needs of the school, have the ability to allocate resources where they are needed, hire and manage qualitative personnel and keep the school running.

For the sake of the present review study, leadership will be approached from a broader perspective than the instructional perspective. This allows getting a general insight in leadership in education and therefore, the following definition will be used:

> Leadership in education is a process of influencing teachers, pupils, parents, and other stakeholders towards achieving common goals, and is not necessarily limited to a single person. The process of influence ideally leads to an effective learning climate, which all stakeholders (such as pupils, teachers, parents, society) experience as an added value and keeps all the organisational processes in the school (among others, monitoring the instructional process, managing personnel and allocating resources) running smoothly (Bush & Glover, 2003; Grissom & Loeb, 2011; Yukl, 2002).

2.3 Research questions and aims
Reviews providing an overview of effective school leadership theories and effective professional development are rather rare, as well as studies investigating principals' professional development. Therefore, in order to map the existing literature and eventually construct a theoretical framework that can serve other studies on school leadership and school leadership development in preschools, primary and secondary schools, the present review was conducted. The general aim of this literature review is to identify lacunae in the literature, to eventually focus on relevant research topics aiming to contribute to the knowledge of school principals' leadership and the development of their leadership. Reviewing the evolvement of theories allows to understand past practices, which serve to understand and shape our present practices in a qualitative way. Moreover, the study aims to provide guidance for future research in school leadership and the development of effective leadership in practice. The present review raises three research questions:

(1) How did theories on school leadership evolve over time?
    Particular attention will be paid to the past 20 years.

(2) What are the key characteristics of effective leadership in an educational setting?

(3) How can school principals effectively develop their leadership?

2.4 Method

In order to answer the research questions, a narrative review was conducted on theories of school principals' leadership and a systematic review on the effectiveness of school leadership and professional development of school principals. The guiding questions from Hallingers' conceptual framework for conducting research reviews (Hallinger, 2013) provided guidance for the review study and are provided in table 2.1.

Table 2.1
Guiding questions for systematic reviews (Hallinger, 2013) applied to the present study

Constructs based on the guiding questions from Hallingers' conceptual framework (Hallinger, 2013)	Application in the present study
Central topics, research questions and goals	*Central topics* Recent developments in school leadership theories Effective school leadership School principals' professional development Preschools, primary and secondary schools *The research questions (RQ's) in the present study* (1) How did theories on school leadership evolve over time? Particular attention will be paid to the past 20 years. (2) What are the key characteristics of effective leadership in an educational setting? (3) How can school principals effectively develop their leadership? *Goal* The review aims to draw together and synthesise the literature in order to contribute to a better understanding and to provide an overview of what is currently known about school leadership. This review also aims to identify lacunae in the research field of leadership in an educational setting in order to focus on relevant research topics in future research.
Conceptual perspective	The present review synthesises the literature on leadership theories in an educational setting and further considers: the characteristics of effective school leadership and the professional development of school principals. The present review syntheses the literature on leadership theories in educational settings and considers the following concepts: leadership theories with a wide conceptualisation of leadership not solely studying a particular aspect of leadership, characteristics of effective school leadership and professional development of school leadership.
Sources and types of data	In order to select appropriate studies several search engines and databases such as ERIC (Educational Resource Information Centre), Google Scholar and Limo were searched. Limo is a discovery service and searches among others the following databases: Psychlit, Econlit, Web of Science, Scopus and Taylor, Francis and LIBISnet, a scientific library network with access to collections of over 80 libraries. Subsequently, Educational Research Review, Review of Educational Research and School Leadership & Management, were hand searched. Over 2000 abstracts and introduction sections originating from peer-reviewed journals were scanned, using the

	below mentioned criteria for in- and exclusion. The reference sections of all included studies were searched for more relevant studies as well. Eventually, 75 studies that met our criteria were selected to answer the three interrelated RQ's of the present review.
Nature of data evaluation and analysis	A systematic review is characterised by the use of techniques to minimise bias and by following criteria for searching for relevant studies (Cohen, Manion & Morrison, 2011). Hence, the following selection criteria for inclusion were determined: (1) predominantly focusing on: school leadership, characteristics of effective school principals and school principals professional development; (2) recent articles: the searches were limited to articles published between 1996 and 2017; The answer on RQ 1 provides an historical overview of leadership in an educational setting. Therefore, some publications published before 1996 and a few books were included in order to provide a fuller picture of the early theories. (3) articles originating from peer-reviewed journals considering research in an educational setting. The following criteria for exclusion were determined: (1) predominantly focusing on teacher leadership; (2) originating from development studies or developing countries; (3) Asian studies for the sake of major contextual and cultural differences; (4) studies evaluating outcomes of particular local training programmes or strongly focusing on a particular local context (hazardous for generalisations); (5) solely reporting about research methods, research models or the use of measurement scales; (6) studies considering higher education and university education; (7) absence of a clear definition of leadership or the leadership theory.
Major results	(1) An insight in the evolvement of school leadership. (2) An overview of the characteristics of effective leadership and professional leadership development in an educational setting. (3) An overview of the lacunae in the research field of effective school leadership and school leadership development. The research questions serve research on the further development of school leadership theories. The overview of theories support studies on the contextualisation and validation of existing theories for specific regions, which is meaningful, though currently, gets limited attention. The research questions considering the characteristics of effective school leaders and leadership development offer for instance a starting point for research on the development of effective school principals and studies on the transfer of effective professional development for school principals.

Relevant articles were identified based on the criteria for in- and exclusion as clarified in table 2.1. Same articles were sometimes identified in different databases. Therefore, only the number of unique articles selected from the particular search of the database are shown in table 2.2. This explains the decreasing trend of selected articles. An overview of the main key search terms, the associated hits and the number of selected articles per main search word are also provided in table 2.2. The search words used, were determined starting from established

theories. All search terms served the search for articles for the three interrelated research questions. A limited number of search words that still covers all selected articles are presented in table 2.2. Therefore, it may seem that with regard to RQ 1, the researchers only sought for a limited number of search words. However, all presented search words have served the search for articles to answer the three RQ's of the present study.

At least the first 200 abstracts per search word per database were carefully read. Thereafter, relevance often decreased and further reading of abstracts was based on the estimation of the authors. In case articles originate from searches in the reference sections of articles, they are indicated at the bottom of the row of the respective research question and are described as 'snowballing'. An asterisk in the reference list indicates the selected articles.

Table 2.2
Overview of hits and selected articles per main search words per database

	Limo			Google Scholar			ERIC		
RQ 1 Leadership theory	Hits	Scanned	Se-lected	Hits	Scan-ned	Se-lected	Hits	Scanned	Se-lected
Effective school leadership	245 368	213	1	1 270 000	209	3	*1 868*	223	-
Instructional school leadership	52 114	238	7	261 000	269	-	3 562	229	-
Leadership for Learning	353 974	210	9	5 600	201	-	5 008	218	-
Distributed Leadership	178 188	212	8	1 020 000	243	-	982	200	-
Snowballing			1						
RQ 2 Effective school leadership	Hits	Scanned	Se-lected	Hits	Scan-ned	Se-lected	Hits	Scanned	Select-ed
Effective school leadership	245 368	213	4	1 270 000	209	-	1 868	223	-
Instructional school leadership	52 114	238	4	261 000	269	-	3 562	229	-
Effective leadership education	318 749	200	5	1 370 000	200	-	25 583	216	-
Effective school principals	52 157	212	1	144 000	231	-	898	200	-
Principal + student achievement	28 396	207	2	18 100	223	-	1 186	213	-
Leadership + student achievement	77 643	204	1	654 000	245	-	1 948	201	-

	Hits	Scanned	Selected	Hits	Scanned	Selected	Hits	Scanned	Selected
Transformational leadership + learning	24 849	200	3	75 800	224	- -	330	210	1
Personality traits of effective school leaders	11 530	202	1	17 600	200	-	2374	200	-
Snowballing			1						
Hand searches: Review of Educational Research			1						
Journal of School Leadership & Management			1						

RQ 3 School leadership development	Hits	Scanne d	Se-lected	Hits	Sca nne d	Se-lected	Hits	Scanne d	Selec ted
School leaders professional development	165 513	202	5	1 400 000	202	2	15 634	200	-
School leaders learning	194 373	210	3	1 530 000	215	-	2 226	201	-
School leadership development	346 553	200	5	1 460 000	212	-	4 304	209	1
Leadership studies education	394 221	203	-	1 400 000	211	1	6 279	206	-
Snowballing			1						

The present study aims to draw together the literature on school leadership theories and school leadership development. Hence, the analyses were conducted inductively in order to let theory emerge from the selected articles (Cohen et al., 2011). RQ 1 was answered based on a narrative analysis. It was chosen to start with a narrative analysis because a narrative review is helpful in the initial phase of a research (Popay, Roberts, Sowden, Petticrew, Aria, Rodgers et al., 2006). Indeed, a narrative review facilitates the exploration of the field, guides the next steps in the research and the choice of appropriate methods (Popay et al., 2006). The selected articles to answer the first research question were carefully read and summarised. The articles used to answer RQ 2 (What are the key characteristics of effective leadership in an educational setting?) and RQ 3 (How can school principals and supervisors effectively develop their leadership?) were analysed using NVivo 11. The full text of the articles was analysed. However, especially fragments in the results, discussion and conclusion sections were the most relevant for coding. First, the selected articles were accurately read to get a general overview of the articles. Based on this exploratory reading, a preliminary coding tree was constructed. Second, to further explore the selected articles, the articles were inductively coded to identify constructs and characteristics. During the development of the coding tree and the determination

of the constructs, the determined constructs were clarified. Some construct clarifications are determined by the authors, whereas some clarifications build on existing definitions. Clarifications are helpful to structure the coding process and minimise bias. The development of the coding tree and the clarifications of the constructs were refined and adapted during the coding process. The clarification of the constructs can be consulted in the appendices (see 2.9 Appendices). Third, the articles were coded. The codes considering RQ 2 & RQ 3 were coded on the level of the school leader, because school leaders are the main focus of the present article. The construct clarifications guided whether or not to encode a particular fragment. Throughout the study, 322 fragments were coded to tackle RQ 2 and 117 fragments to tackle RQ 3. Fourth, the results from the open coding process were carefully investigated and eventually similar codes were merged. The frequencies of the codes were counted to determine the most frequently emerging codes. Besides, the coded fragments were summarised. The latter guided the eventual description of the findings. In the findings, the characteristics of effective leadership and the prescriptive elements for school leaders' professional development are presented. A detailed description of the coding constructs after the merge can be found in table 2.5 in appendix A and table 2.6 in appendix B (see 2.9 Appendices).

2.5 Findings
In this part, the evolvement of school leadership literature will be presented. Second, we focus on the key characteristics of effective school leadership and third, we discuss the development of principals' leadership.

2.5.1 Developments in leadership theories in educational settings
The current paragraph answers the first research question: How did the theories of school leadership evolve over time? In the first subparagraph, the early theories are discussed whereas the recent theories are discussed in the second subparagraph.

2.5.1.1 Early theories on leadership in education
In this paragraph instructional, situational, transformational and distributed leadership are discussed.
Instructional leadership, which focusses on the impact of teaching and learning, is since long considered as an important component of effective schools (Grobler, 2013; Hallinger, 2005; Robinson, Lloyd & Rowe, 2008). The concept of instructional leadership originates from the effective school studies in the 70s and 80s (Hallinger, 2005). Instructional leadership emphasises the improvement of teaching and learning and focuses on the behaviour of teachers as they engage in activities directly influencing student achievement (Hallinger, 2003). Several conceptualisations of instructional leadership exist, but the most common conceptualisation is the one of Hallinger (2003) who defines instructional leadership using three dimensions: defining the school mission, managing the instructional programme and developing the school learning climate. Hallinger (2003) delineated these dimensions into ten instructional leadership functions. Defining the school mission is delineated in framing the school goals and

73

communicating these goals (Hallinger, 2003). The functions coordinating the curriculum, supervising and evaluating instruction and monitoring the student process comprise managing the instructional programme (Hallinger, 2003). The last dimension, developing the school learning climate, is defined in the following functions: protecting the instructional time, providing incentives for teachers, providing incentives for learning, promoting professional development and maintaining high visibility (Hallinger, 2003).

Instructional leadership is defined as centred on the school principal (Aas & Brandmo, 2016; Nedelcu, 2013). It can be characterised as a top-down approach to school leadership because it mainly focuses on the principal and their tasks in coordinating and controlling instruction (Aas & Brandmo, 2016). Nedelcu (2013) states that Hallinger sees instructional leaders as hands-on principals, strongly focusing on the curriculum and unafraid of working with teachers on the improvement of teaching and learning. Instructional leadership is criticised by some scholars as being paternalistic and dependent on obedient followers (Marks & Printy, 2003).

Although instructional leadership caught a lot of attention, other theories arose and instructional leadership faded more to the background. Leithwood (1992) explains this fade as a cause of the original narrow focus on the practices in the classroom. Nevertheless, instructional leadership nowadays regains more attention. Instructional leadership remains crucial because it focusses on the core process of schools: the quality of teaching and learning. Contemporary instructional leadership focuses on influencing processes of teaching and learning, but also recognises that leadership has to consider the organisational conditions for teaching and learning (Piot, 2015).

The effective school studies in the 70s and 80s focused on urban elementary schools in challenging circumstances. Some scholars questioned if and how the results of these urban school studies could be generalised to a wider population of schools (Bossert, Dwyer, Rowan & Lee, 1982). This critique implicitly recognises that the school context represents an important factor in school leadership and school effectiveness (Bossert et al., 1982) and is consistent with the situational leadership theories, which emerged in the 70s. Situational leadership states that employees should be treated according to the particular dynamics of the situation and that leaders should be aware of opportunities to improve employees' skills and confidence (Thompson & Glasø, 2015). Situational leadership theories rather focus on behaviour and attitude of the employee and on characteristics of the organisation e.g. the staff characteristics, task structure, hierarchy and power relations. Since the 70s, the belief that the outcomes of leadership are influenced by the context are generally accepted. All the same, Bass and Riggio (2006) acknowledge that situational factors can influence the effectiveness of leaders. After a period of declined attention to situational leadership, the relationship between the school context and leadership has recently raised again (Hallinger, 2011).

The concept of transformational leadership arose in the 80's and emphasises that leaders should motivate followers to work towards transcended goals and towards achievement and self-

actualisation (Sun & Leithwood, 2012). It aims to foster capacity building and higher levels of personal commitment to organisational goals, leading to increased effort and productivity (Bass & Avolio, 1994). Leithwood (1992) adapted the general model of transformational leadership into a model of transformational leadership in an educational setting. This model consisted of seven components: individualised support, shared goals, vision, intellectual stimulation, culture building, rewards, high expectations and modelling. Later Leithwood & Jantzi (1999) developed a more comprehensive transformational school leadership model based on six leadership dimensions and four management dimensions. These leadership dimensions include building school vision and goals, providing intellectual stimulation, offering individualised support, symbolising professional practices and values, demonstrating high performance expectations and developing structures to foster participation in school decisions (Leithwood & Jantzi, 1999). The management dimensions include staffing, instructional support, monitoring school activities and community focus (Leithwood & Jantzi, 1999). Additionally, Marks & Printy (2003) emphasise that transformational school principals motivate teachers and students by raising their consciousness about the organisational goals.

Transformational leadership contrasts with instructional leadership as it is described as a shared leadership model and aims to create change through bottom-up actions (Aas & Brandmo, 2016). Hence, transformational leadership is related to leadership models, which focus on collaboration. Indeed, Hallinger (2003) states that instructional leadership focusses on how to manage and control staff in the direction of the defined goals and thereby characterises instructional leadership as a top-down approach (Aas & Brandmo, 2016). Transformational leadership is more important for school improvement and student achievement (Leithwood & Jantzi, 1999; Leithwood & Sleegers, 2006; Sun & Leithwood, 2012). Obviously, some transformational leadership practices make much larger contributions to student achievement than others. Sun & Leithwood (2012) state that especially building collaborative structures and providing individualised consideration make large contributions to student achievement. In addition, Sun & Leithwood (2012) argue that in educational settings, the inclusion of instructional management dimensions makes transformational school leadership more relevant for schools.

Transformational leadership attenuates the importance of the context and situational effects. By claiming that transformational leadership is valid across situations and cultures, Bass downplayed the importance of situational effects (Yu, Leithwood & Jantzi, 2002). Nevertheless, evidence concerning this claim in school contexts is not conclusive.

In the late 80s, a new trend in leadership models developed. Leadership models oriented towards collaboration and organisational learning, such as distributed leadership, shared leadership, team leadership and democratic leadership emerged (Hallinger, 2003). The emergence of these models indicated dissatisfaction with instructional leadership that mainly focuses on the power and authority of the principal and suggests that teachers are just obedient followers (Nedelcu, 2013). Distributed leadership recognises that leadership can be distributed

along all school members. So far, no agreed definition of distributed leadership exists (Harris, 2013). Spillane (2006) states that distributed leadership is stretched over a number of individuals and tasks are accomplished through the interaction of multiple leaders. Harris & De Flaminis (2016) posit that distributed leadership considers leadership by teams and groups that is shared within, between and across organisations. Distributed leadership emphasises interactions rather than actions and states that leadership is not restricted to those with a formal leadership position at the top of the organisation (Harris & De Flaminis, 2016). So multiple individuals share the leadership responsibilities to guide and complete leadership tasks that vary in size, complexity and scope (Harris & De Flaminis, 2016). This implies that different individuals can be in charge at different times depending on the specific challenge and the specific context (Gronn, 2002). Robinson (2008) has suggested that the nature of distributed leadership encompasses two main concepts: (1) distributed leadership as task distribution and (2) distributed leadership as distributed influence processes. Distributed leadership highlights the benefits of collaboration, shared purpose and shared ownership but much of its effect depends on how leadership is distributed, and the intentions behind it (Harris, 2013). Mascall, Leithwood, Strauss and Sacks (2008) stress the responsiveness of distributed leadership to its context.

Heck & Hallinger (2010) indicate that the impact of distributed leadership in schools is achieved through improved communication of mission and goals, better alignment of resources and structures to support students, more active engaged professional learning among staff, and the ability to maintain a focus on innovations in teaching and learning. This has clearly similarities with instructional leadership, which emphasises defining the school mission and the development of a learning climate. Leithwood, Harris & Hopkins (2008) indicate the importance of distributed leadership for pupils and schools achievement. They state that the influence of distributed leadership on schools and pupils is enhanced when school leadership is widely distributed. Nedelcu (2013) and Penlington, Kington and Day (2008) point the importance of teacher participation in distributed leadership, wherein teachers are seen as experts to be involved in the school improvement process.

In the previous paragraphs, an overview of main leadership theories was provided. Before the more recent theories are discussed, a summary of the common constructs in the discussed leadership theories is displayed in table 2.3.

Table 2.3
Overview of common constructs in the discussed leadership theories

	Instructional Leadership	Situational Leadership	Transformational School Leadership	Distributed Leadership
Mission, vision, goals	X		X	X
Communicating mission, vision	X			X
Focus on instructional programme	X		X	
Professional Development	X			
Top-down	X			
Bottom-up			X	X

Context	X		X
Characteristics of the organisation (staff, hierarchy, power)	X		
Motivating staff towards achievement and self-actualisation		X	
Collaboration			X
Leadership by multiple leaders, teams and groups			X

2.5.1.2 Recent leadership theories

Leadership in education was often investigated from the narrow perspective of a single theory itself or solely from the point of the principal. The fact that school principals are hold accountable for the learning of their pupils, the multiple tasks they need to fulfil and the increasing pressure on school principals, implicates that leadership today is distributed or seen as a collective activity (Leithwood et al., 2008). Furthermore, scholars paid a lot of attention to instructional leadership. Piot (2015) states that the theory on instructional leadership and how to turn this into practice, is vague and therefore advices to integrate other relevant theories. Marks & Printy (2003) state that when instructional leadership, transformational leadership and shared leadership are integrated, the influence on school performance and student achievement is meaningful. Robinson et al. (2008) note that successful school leadership coexists with a focus on instructional leadership, because instruction as a specific process is lacking in more general leadership theories such as transformational leadership (Robinson et al., 2008). Thus, it is fruitful to extend instructional leadership with other theories in order to get a deeper insight in the effect of school leadership on student achievement. Finally, the school context in school leadership research is currently considered again (Hallinger, 2011).

Nowadays leadership in education is mainly investigated on the basis of previously discussed theories: instructional, distributed and/or transformational leadership. Though, recently 'Leadership for Learning' (LfL) emerged in school leadership research. Given the fact that instructional, distributed and transformational leadership are discussed more extensively in previous paragraphs, the following paragraphs focus on LfL. Leadership for Learning integrates different aspects of previous theories, for instance instructional leadership, situational leadership, transformational leadership and distributed leadership. In addition, LfL aligns with scholar's above-mentioned suggestions to use multiple theories in school leadership research. Hence, LfL is elucidated in the following paragraphs.

Leadership for Learning (LfL) arose as a reaction to the perceived limitations of instructional leadership (Bush, 2013). Initially, LfL was a phenomenon of interest in Northern America, but in the past 15 years, LfL became a global phenomenon receiving substantial attention from leading scholars (Hallinger & Huber, 2012; Marsh, 2015). LfL mainly appears in research in education. Although 'Leadership for Learning' has gained popularity in recent research on school leadership, there is no solid definition of LfL. LfL is often understood as the process in

which the whole school community actively participates in the improvement of learning (Marsh, 2012). Hallinger (2011) on the other hand, emphasises that LfL refers to the actions school leaders enact to achieve school outcomes, especially with regard to student learning. Murphy, Elliott, Goldring and Porter (2007) state that LfL is especially visible in high performing schools. They formulate the following touchstones for the conception of LfL: first, staying focused on learning, teaching, curricula, and instruction and second, making all the other dimensions of schooling (e.g. administration, organisation, finance) work, aiming to improve student learning (Murphy et al., 2007).

They further capture leadership for learning under eight major dimensions: vision for learning, instructional programme, curricular programme, assessment programme, communities of learning, resource acquisition and use, organisational culture and advocacy (Murphy et al., 2007). Especially the dimensions vision for learning, instructional, curricular and assessment programme align with the earlier mentioned functions of instructional leadership and are further elucidated in table 2.4.

Table 2.4
Elucidated dimensions of Leadership for Learning adapted from Murphy et al. (2007) p. 182

Dimensions of Leadership for Learning
1. Vision for Learning
A. *Developing vision:* crafted and supported by the school community
B. *Articulating vision:* translating the vision into specific and measurable results
C. *Implementing vision*
D. *Stewarding vision*
2. Instructional Programme
A. *Knowledge and involvement*
B. *Hiring and allocating staff:* values and competencies have to align with the mission and culture
C. *Supporting staff:* in teaching and learning and by providing sufficient materials
D. *Instructional time:* making sure that a maximum of time is devoted to instruction
E. *Providing recognition and rewards* for qualitative teaching
3. Curricular Programme
A. *Knowledge and involvement*
B. *Establishing high expectations and standards*
C. *Maximizing the learning opportunities* for all pupils
D. *Curriculum alignment:* ensuring the coordination of objectives, instruction, materials and assessments
4. Assessment Programme
A. *Knowledge and involvement*
B. *Monitoring assessment procedures*
C. *Monitoring instruction and curriculum*
D. *Communication and use of data* with regard to improvement
5. Communities of Learning
A. *Promoting staffs professional development*
B. *Nurturing the growth of communities of professional practice*
6. Resource Acquisition and Use linked to the schools' mission and goals
A. *Acquiring resources*
B. *Allocating resources*
C. *Using resources*

7. Organisational Culture
A. Creating a high performance organisation with focus to the core processes
B. Establishing a safe learning environment
C. Ensuring personalised environments: creating multiple options for meaningful student engagement
D. Ensuring continuous improvement

8. Social Advocacy
A. Stimulating and maintaining stakeholders engagement
B. Recognising and utilising cultural, ethnical and economic diversity
C. Actively employing the environmental context
D. Living up to professional codes of ethics

Leadership for Learning as conceptualised by Murphy et al. (2007) integrates features of instructional leadership, transformational leadership, distributed leadership and situational leadership. Moreover, LfL describes several approaches of leadership to school achievement with a specific focus on learning for students and for teachers as well. Figure 2.1 clarifies our interpretation of the relation between instructional, transformational, distributed and situational leadership on the one hand and LfL on the other hand. Figure 2.1 was constructed based on the narrative review conducted to answer the first research question.

Figure 2.1
Relation between Instructional, Transformational, Distributed and Situational Leadership and Leadership for
Learning
(The figure was constructed based on Aas & Brandmo, 2016; Bass & Riggio, 2006; Gronn, 2002; Hallinger, 2003; Hallinger, 2011; Harris & De Flaminis, 2016; Murphy et al., 2007; Robinson, 2008; Spillane, 2006; Sun & Leithwood, 2012; Thompson & Glasø, 2015)
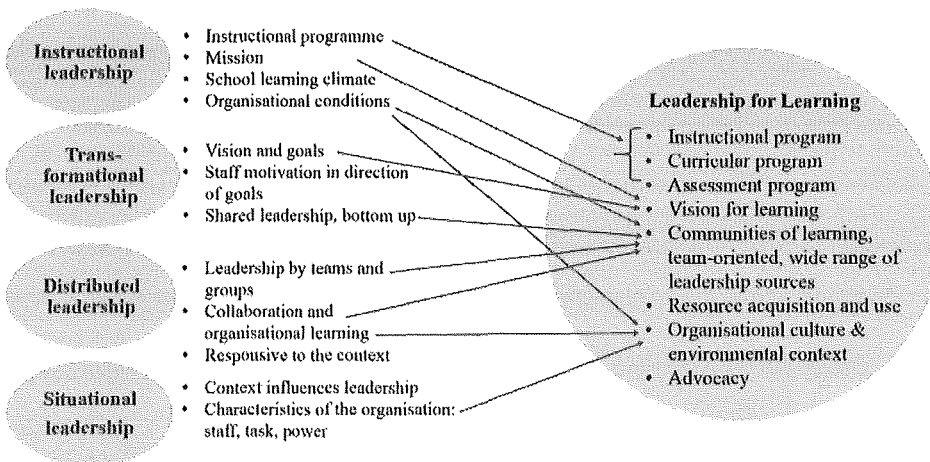
The conceptualisation of LfL is not restricted to Murphy et al. (2007). The conceptualisation of other authors is additionally discussed to get a nuanced picture of the existing literature on

LfL. The literature is summarised based on the five recurrent features emerging from our literature review.

(1) Leadership for Learning assumes a wide range of leadership sources, which contrasts with leadership mainly centred on the principal in instructional leadership (Aas & Brandmo, 2016; Marsh, Waniganayake & De Nobile, 2013; Nedelcu, 2013; Townsend, Acker-Hocevar, Ballenger & Place, 2013). LfL is team-oriented and collaborative and refers to school-wide leadership by those in formal management roles f.i. principals, assistant principals or coordinators and by those in less formal management roles f.i. teachers, parents or students (Marsh et al. 2013). The collective nature of LfL aligns with distributed leadership. LfL is a process in which the whole school community actively engages in purposeful interactions that nurture relationships focused on improving learning (Marsh, 2012).

(2) LfL is designed to create learning at all levels within a school system: student learning, teacher learning, organisational learning and leadership learning (Townsend et al., 2013; Hallinger & Heck, 2010). Learning is especially influenced when schools are intentional about the language they use for both learning and leadership (Marsh et al., 2013). Furthermore, Marsh et al. (2013) conceptualise LfL as a relational and learning focused activity.

(3) The third feature, capacity building, subsumes according to Fullan (2006) policy, strategy or actions to increase the collective efficacy. Collective efficacy aims to improve student achievement through knowledge development, enhanced resources and a greater motivation on the part of the people working individually and together. Hence, capacity building is linked with student achievement. The capacity building perspective is supported by findings from studies of transformational school leadership (Leithwood & Jantzi, 1999; Marks & Printy, 2003).

(4) LfL is result-oriented, has an explicit focus on student achievement (Hallinger, 2011) and aims to influence school performance (Hallinger & Heck, 2010) through creating and sustaining a school wide focus on learning. Murphy et al. (2007) define a wider approach of achievement and name the importance of staying focused on the core technology of schooling, learning, teaching, curriculum development and assessment. Besides, they emphasise that one should work on all other dimensions of schooling f.i. administration and finance, in view of improved student learning. Townsend et al. (2013) further argue that focusing on learning for all stakeholders is the best way to improve outcomes, because improving relies on interacting comprehensively with one's environment. More specific, LfL stresses the importance of individual skill development f.i. instructional strategies and self-awareness. Besides, LfL stresses the group process and relational skills as openness and conflict approaching (Townsend et al., 2013).

(5) Lastly, unlike earlier models as instructional leadership or transformational leadership, LfL emphasises the relationship between school leadership and the organisational and environmental context (Hallinger, 2011).

2.5.2 Characteristics of effective school leadership

While scholars have long recognised that the situation is a critical consideration in studying leadership and management (Bossert et al., 1982), from a distributed perspective, aspects of the situation do not simply 'affect' what school leaders do or moderate the impact of what they do. Rather, the situation is one of the three core constituting elements of practice. At the same time, aspects of the situation are a product of practice. Viewed this way, the practice of leading and managing is an emergent phenomenon (Gronn, 2000).

Scholars from diverse research fields have concluded that leadership is central in organisational performance (Murphy et al., 2007). In addition, the literature on school development emphasises the impact of leadership on the success and the effectiveness of schools (Murphy et al., 2007; Salo, Nyland & Stjernstrøm, 2015; Simkins, 2005). School effectiveness refers to the extent of achieving the outcomes the school intends to achieve, and mainly considers the schools' impact on pupils' educational achievement (Hobbs, 2016). Principals have a considerable potential to enhance student achievement through their influence on teachers and organisational processes (Grissom, Loeb & Master, 2013; Hallinger et al., 1996). The effect of principals on student achievement is often indirect and mediated through e.g. the principal-teacher relation and quality of instruction (May, Huff & Goldring, 2012). Nevertheless, research has shown that the impact of leadership on student achievement ranges from rather weak to strong (Kondakci & Sivri, 2014; May et al., 2012; Robinson et al., 2008; Witziers, Bosker & Krüger, 2003). Yet, recognising that principals have an influence differs from 'how' principals can influence student achievement (Grissom & Loeb, 2011). As principals can have an influence on the effectiveness of schools including student achievement, the second research question: 'What are the key characteristics of effective leadership in an educational setting?' is tackled in the following paragraphs.

Reviewing the literature, six main categories of effective school leadership raised and are presented according to their ranking.

(1) Effective schools have school leaders who focus on curricula and instruction. This appears to be the most mentioned characteristic of effective school leadership in the consulted literature. Focusing on curricula and instruction includes f.i. spending time on the development of the educational programmes, overseeing the educational programmes developed by teachers, and monitoring instruction and student achievement (Dös & Savas, 2015; Grissom et al., 2013; Kondakci & Sivri, 2014; Malone & Caddell, 2000; Parylo & Zepeda, 2014; Pashiardis, 1998; Supovitz, Sirinides & May, 2010; van der Werf, 1997). An active support of instruction positively influences the development of a positive school climate and culture (Supovitz et al., 2010).

(2) Second, effective communication and maintaining good internal and external relations came out. Communication is often linked to communicating the vision and achievement standards, which contributes to commitment to the organisation, and the development of school

climate and culture (Dös & Savas, 2015; Grissom & Loeb, 2011; Kruger, 2009; Land, 2002; Leithwood & Jantzi, 2005; May et al., 2012; Ross & Gray, 2006; Sahenk, 2010). Effective communication and relationships is not just about a one-way communication but gives a voice to teachers (Schneider & Burton, 2005). It creates opportunities to involve teachers in policy and decision-making (Schneider & Burton, 2005). Involvement in the decision-making process itself, not solely as an outcome of qualitative communication, is also often cited as a feature of effective school leadership (Kondakci & Sivri, 2014; May et al., 2012). Furthermore, maintaining good internal and external relations includes representing the school and its members and maintaining good relations with the differing stakeholders: staff, parents and other relevant external and internal stakeholders (Grissom & Loeb, 2011; Kondakci & Sivri, 2014; Land, 2002; Malone & Caddell, 2000; Parylo & Zepeda, 2014; Pashiardis, 1998; Sahenk, 2010).

(3) The ability of a school principal to shape the organisational climate and culture and some related constructs such as trust and collaboration, are the third most mentioned characteristics of effective school leadership. The organisational climate influences the behaviour of people in the organisation and distinguishes the organisation from other organisations (Hoy & Miskel, 2013). Hoy & Clover (1986) defined climate as 'a relatively enduring quality of the school environment that is affected by the principals' leadership, is experienced by teachers, influences members' behaviour and is based on collective perceptions'. On the other hand, culture is considered as the whole of norms, values and rituals that hold the organisation together and give the organisation a distinctive identity (Heck & Marcoulides, 1996; Schein, 1996). Several studies identify principals as a central shaper of the school culture (Dös & Savas, 2015; Malone & Caddell, 2000; Supovitz et al., 2010). In clarifying the (learning) culture of a school organisation, trust and collaboration are mentioned (Marsh, 2015; Supovitz et al., 2010). The organisational culture and climate are explained emphasising the mutual trust between teachers and in the relation between the principal and the teachers (May et al., 2012; Supovitz et al., 2010). More specifically, school principals who build trust with their staff, contribute to improved student achievement (May et al., 2012; Supovitz et al., 2010). Facilitating collaboration is an aspect of the schools' culture as well and has a positive effect on student achievement (May et al., 2012).

(4) The principals' involvement in defining and sustaining the schools' vision and mission, but also effectively implementing the schools' vision and mission, influences school improvement (Dös & Savas, 2015; Kruger, 2009; Kurland, Peretz & Hertz-Lazarowitz, 2010; May et al., 2012; Sahenk, 2010). Effective school principals hold high expectations for their staff and students (Pashiardis, 1998; Sahenk, 2010; Supovitz et al. 2010), are also fully aware of the needs of their faculty, and help them reaching their goals (Grissom et al., 2013; Sahenk, 2010). In order to achieve the mission and vision, school leaders need to motivate the organisation members to ensure they contribute to the achievement of the mission and vision as well.

(5) Effective school principals provide frequent feedback, and recognise and award accomplishments (Dös & Savas, 2015; Ross & Gray, 2006; Sahenk, 2010; Supovitz et al., 2010). They reward success, significant achievements and important contributions to the school organisation (Dös & Savas, 2015). School principals are likely to be particularly influential when they attribute school outcomes to particular teachers and the actions they undertook (Ross & Gray, 2006). Feedback and recognition lead to the improvement of teachers' self-efficacy and their commitment to the organisation (Ross & Gray, 2006).

(6) Lastly, the ability to invest in personnel by hiring and retaining qualified teachers is important (Hitt & Tucker, 2016; May et al., 2012; Odhiambo & Hii, 2006). Retaining qualified teachers includes that principals encourage teachers to dedicate time to continuous professional development and enable them to learn through creating a supportive organisation for learning (Hitt & Tucker, 2016; May et al., 2012; Sahenk, 2010). By all means, the gained knowledge and skills should be used to tackle the needs and demands of the environment in order to contribute to the effectiveness of the school.

In addition, the school context is explicitly alleged. The school context itself is not a characteristic of effective leadership, but is mentioned by several scholars as an influencing factor on the action principals take to successfully improve teaching and learning and the overall school performance (Grissom et al., 2013; Kruger, 2009; Malone & Caddell, 2000; Simkins, 2005; Supovitz et al., 2010). Therefore, the school context has to be taken into account as well while investigating effective school leadership.

Little research has focused on school leaders' personality traits or personal competences to engage in effective leadership (Robinson, 2010; Leithwood et al., 2008). Nevertheless, some scholars name the importance of personality traits or competences that indicate why some principals are more effective than others (Grissom et al., 2013). Besides, Kruger (2009) names the importance of competences and more in particular higher-order thinking. Kruger (2009) describes higher-order thinking as 'the ability of a school leader to act between the differing factors that influence student achievement: vision, school's community, the context and the organisational and cultural characteristics of the school.' Leithwood et al. (2008) indicate the importance of commitment to data-based decision-making, an open-minded attitude and the readiness to learn from others, as important aspects of effective school leaders. Yet, there is no list of conclusive personality traits for school leaders. One of the reasons for the latter can be the influencing role of context on the necessary personality traits in school leadership.

2.5.3 School principals' leadership development

The vast majority of school principals in elementary schools previously used to be a teacher. Even so some of them did not follow a leadership training before entering the role of principal and often acquire skills while they are performing the job. Hence, school leaders' in-service

professional development is of interest. In this part, the third research question: 'How can school principals effectively develop their leadership?' is answered.

The literature provides several interchangeable concepts of in-service professional development. The most used concepts are continuous professional development (CPD) and workplace learning. Both concepts explain professional development (PD) which can be structured and organised in a number of different ways including many different forms of professional development in face-to-face and online contexts (Peterson, 2002; Stevenson, Hedberg, O'Sullivan & Howe, 2014) aiming to keep knowledge, skills and/or attitudes up to date. Professional development activities range from formal training sessions to informal interactions at the workplace (Goldring, Preston & Huff, 2012). Tynjälä (2013) identified three modes of workplace learning: incidental and informal learning, intentional but non-formal learning and formal training. Incidental and informal learning are side effects of work. Non-formal learning is related to work and occurs f.i. as coaching or reflecting about a work experience. Formal trainings include lectures, trainings, workshops and courses. Distinguishing between the concepts of incidental and informal, intentional but non-formal and formal learning does not mean that these interrelated concepts have to be approached as a strict trichotomy. Informal learning opportunities around formal events are often responsible for unexpected and influential transformations (Cramp, 2016). Cramp (2016) investigated school leadership development through an international study visit and found among others that school leaders indicate informal discussing as fruitful. Informal conversations allow testing out views and opinions they would not have shared with larger and more formal groups because they appoint to feel more eased in informal conversations (Cramp, 2016). Another example of incidental and informal learning in Cramp's study was that participants started to make school action plans during travelling and social time (Cramp, 2016). Yet, informal learning opportunities are often undervalued and under researched in the context of school principals' professional development (Cramp, 2016; Hulsbos, Evers & Kessels, 2016).

Besides Tynjälä's trichotomy of workplace learning, we mention Hubers approach to school leaders' professional development. Huber (2011) distinguishes regarding to school leaders' PD, between cognitive theoretical ways of learning, cooperative and communicative process-oriented procedures, and reflexive methods. Cognitive theoretical learning includes among others lectures and self-study, cooperative and communicative process-oriented procedures include f.i. group and project work, and reflexive methods contain methods such as feedback and supervised group reflective learning.

In the present study, we opt to use the term professional development as a collective noun to indicate all learning activities that aim to contribute to one's professional development.

Research on how effective leadership development takes place is still in its infancy. Studies providing an overview of the undertaken professional development activities of principals' and school principals' needs or preferences for professional development activities are hard to find.

Most studies focus on formal trainings, often aiming to train aspiring or novice principals, or on a particular technique such as mentoring. Research results regarding the effectiveness of the various types of school principals' professional development learning are lacking as well (Nicolaidou & Petridou, 2011; Helsing, Howell, Kegand & Lahey, 2008). Especially research about informal workplace learning of school principals is rare (Hulsbos et al., 2016; Zhang & Brundrett, 2010). Consequently, a clear and useful framework about qualitative professional development for school principals is missing (Goldring et al., 2012; Wright & da Costa, 2016). However, the literature offers common prescriptive elements to consider while developing professional development activities for school principals. These common elements will be elucidated in the following paragraphs and are presented in a logical order of development of PD. The ranking of the categories are displayed in table 2.6 (see 2.9.2 Appendix B). It was chosen to discuss the five most cited categories. Some of the categories are the result of a merging of codes because of their mutual connection. In case codes are merged, it is mentioned in the relevant paragraph.

First, professional development curricula should be carefully designed and sequenced with attention to prior learning and must consider the individual development needs of the principal (Goldring et al., 2012; Huber, 2013; Peterson, 2002; Simkins, 2012; Wright & Da Costa, 2016). PD activities should also consider the working experience of principals and take into account the needs of aspiring, novice and experienced principals (Peterson, 2002).

Second, professional development for school principals should be contextual and experiential (Gunter & Ribbins, 2002; Goldring et al., 2012; Reeves, Forde, Casteel & Lynas, 1998, Wright & Da Costa, 2016). This paragraph is a result of the merging of the codes 'considering the context and own practice', 'experiential learning', 'reflective learning' and 'action research' because these codes all refer to learning linked to own practices and experiences. The first part of the current paragraph pays attention to the context whereas the second part focuses on experiential learning. Professional development influences and is influenced by the organisational context in which it takes place and must be aligned to the particular context (Goldring et al., 2012; Wright & Da Costa, 2016). Gunter & Ribbins (2002) and Simkins (2012) emphasise the importance of authentic experiences in school environments. Zhang & Brundrett (2010) state that external training programmes are not able to prepare and develop effective leaders without support from the school context itself. Successful professional development programmes are embedded in authentic school environments to allow participants to apply what they have learned (Goldring et al., 2012; Simkins, 2012) and strengthen learning on the individual and organisational level (Aas, 2016). Apart from the context, experiential learning is a focus in this paragraph. Zhang & Brundrett (2010) especially value the techniques of mentoring, coaching and apprenticeship. In addition, Aas (2016), Aas & Vavik (2015) and Mac Beath (2011) emphasise the importance of coaching and reflective learning. Scott (2010) appoints mentoring as a fruitful way to develop school principals and especially values mentoring in combination with peer coaching. According to Zhang & Brundrett (2010) school

principals prefer mentoring and experiential learning rather than formal courses. Hulsbos et al. (2016) state that school principals mostly value workplace learning through working on improvement and innovation through reflection. Also Wright & Da Costa (2016) point to reflection and state that reflection takes the form of problem solving and theory building and appreciates each unique situation through different perspectives. Additionally, Aas (2016) states that leadership development can occur through action research of school principals' own leadership practices (Aas, 2016). According to Aas (2016) development programmes should learn to tackle tensions, by learning to reflect on these tensions to eventually be able to effectively implement changes in daily practice (Aas, 2016).

Third, to obtain an effect of leadership development activities, the transfer of knowledge, skills and attitudes to practice is crucial (Aas, 2016; Huber, 2013). This paragraph was compiled based on the interrelated codes 'transfer of learning' and 'variety of techniques'. Huber (2011; 2013), Goldring et al. (2012), Forde, McMahon and Gronn (2013) and Simkins (2012) propose the use of a range of learning activities in various formats. The range of learning activities comprises theoretical ways of learning f.i. via courses and lecturers, group work, projects and reflexive methods such as (peer) feedback and self-evaluation (Forde et al., 2013; Huber, 2011). Huber (2013) emphasises the importance of the fit between the didactic approach of a programme and the participant needs in order to facilitate transfer from PD activities into principals' daily practice and consequently having a higher sustainability.

Fourth, networking and collegial consulting emerged. School principals learn when spending time networking with fellow principals by sharing ideas and through reactivating existing knowledge and practices (Goldring et al. 2012; Mac Beath, 2011). Networking and collegial consulting is meaningful in easing the feeling of loneliness which school principals often report (MacBeath, 2011) and contributes to greater confidence (Aas & Vavik, 2015). Aas & Vavik (2015) state that school leaders develop greater confidence through personal and contextual feedback from other school leaders. Huber (2011) relates professional learning networks to reflection. He states that professional learning networks are central components in school leaders' professional development and posits that they provide chances for intensive reflection on one's own action and behaviour. Hulsbos et al. (2016) confirm that networks allow school leaders to reflect in a peaceful and stable way.

Lastly, Goldring et al. (2012), Peterson (2002) and Wright & Da Costa (2016) emphasise that effective professional development is spread over time. MacBeath (2011) stresses the benefit from ongoing support because it helps to extend and redefine their daily experiences (MacBeath, 2011).

2.6 Discussion
The literature provides a myriad of articles about leadership. However, leadership theories considering educational settings are less likely. In recent years, school leadership research also gained much more attention from researchers spread over Europe and other areas in the world. The following parts of this paragraph summarise and discuss the findings with regard to the research questions in this study.

2.6.1 Leadership in an educational setting
Instructional leadership emerged about four decades ago as a leadership theory focusing on leadership in educational settings. Instructional leadership approaches leadership rather narrow: centred on the principal and mainly considering instruction and learning. All the same, leadership is meanwhile approached as going beyond the principal and seen as a process spread over several members of the whole school community. Furthermore, several scholars suggest to approach leadership in education from an integrative perspective, i.e. integrating various theories to get a thorough understanding of leadership and its effect on school performance. In addition to the integrative approach of leadership in an educational setting, it is important to consider instruction as a particular core process. Hence, Leadership for Learning was suggested in the context of leadership research in an educational setting. Leadership for Learning integrates features of instructional, transformational, distributed and situational leadership and can be linked to our analysis of the literature of effective school principals (see figure 2.1).

2.6.2 Effective school leadership
Reviewing the literature, we have determined characteristics of effective school leadership in preschools, primary schools and secondary schools. Effective school leaders focus on the schools' core process: curricula and instruction. An additional characteristic is effective communication and maintaining good relations. Effective communication contributes to two other characteristics: shaping climate and culture, and defining and sustaining the school mission. Lastly, human resource management in terms of recognising and awarding successes and investing in personnel by hiring and retaining qualified teachers were noted in the literature. It is striking that non-material characteristics such as effective communication and the ability to shape climate and culture are ubiquitous and on the other hand investigating the management of resources, finance and infrastructure are barely mentioned or investigated in school leadership. Little research has focused on school leaders' personality traits or competences they should possess to be effective. Hence, exploring school leaders' personality traits and competences, and investigating finance and infrastructure are suggested as subject for future research. A better understanding of school leadership is important because it is generally accepted that school leadership affects student achievement and the overall school performance.

Based on our review, we noticed strong similarities between the Leadership for Learning theory and the characteristics of effective school principals (see figure 2.2). Outstanding similarities are the agreements in the field of curriculum and instruction, vision, communication and organisational culture. However, LfL should focus more explicitly on collaboration and recognition of staff's accomplishments in order to fully align with the characteristics of effective school principals. Moreover, the dimension 'resource acquisition and use' does not align with the characteristics of effective school principals emerging from the present review. Still, it is important to keep track of the finances in order to use the resources effectively for the purpose of quality school outcomes and education.

Figure 2.2 clarifies the relation between Leadership for Learning and the characteristics of effective school principals.

Figure 2.2

Relation between Leadership for Learning and the characteristics of effective school principals
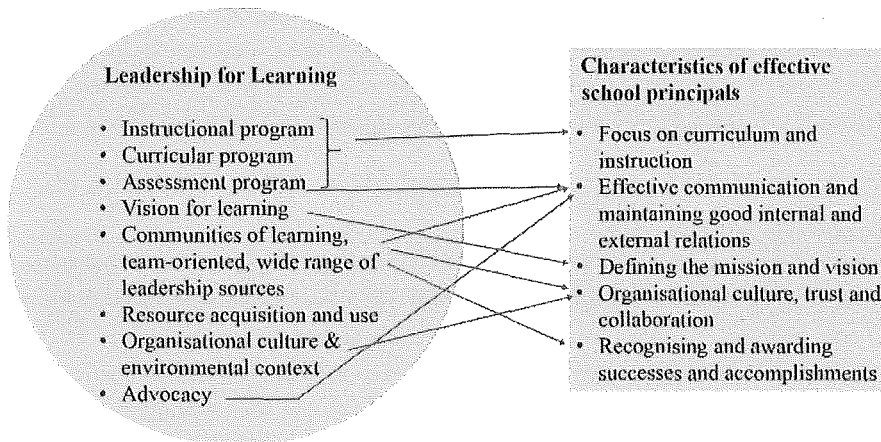
The description of LfL is taken from Murphy et al. (2007)

2.6.3 School principals' leadership development

School leaders' professional development is still limited researched. However, some similarities between school leaders' PD and LfL were noticed. LfL approaches leadership as a process in which the whole community participates (Marsh, 2012). School leaders' PD is like LfL seen as a process as it is suggested to spread school leaders' PD over time. Further, LfL recognises that learning goes beyond an individual and emphasises the importance of a learning

community. This does not appear explicitly in the features of school leaders' PD, however the features of school leaders' PD recognise the importance of networking and collegial consulting. The latter aligns with both communities of learning and social advocacy of LfL, wherein the growth of communities, stakeholders' engagement and the employment of the environmental context are named.

2.7 Conclusion

A lot of contemporary research builds on instructional leadership and transformational leadership. In the presented overview of leadership theories, it is noticeable that instructional leadership strongly focuses on the core process of education i.e. teaching and learning. Meanwhile, transformational leadership focuses on how to motivate staff in the direction of the school goals. The emergence of distributed leadership emphasises that leadership is no longer only the responsibility of one formal leader. The importance of the context for leadership is often illuminated. Scholars therefore recommend to integrate several theories such as instructional leadership, transformational leadership and distributed leadership or propose a theory that integrates multiple theories such as LfL.

Effective leadership in education is often approached from the perspective of pupils' achievement. Though, principals have often an indirect effect on pupils' achievement through for example their influence on teachers. The characteristics of effective school leadership arising from the present study point among others to focus on curricula and instruction, communication and relations, the ability to shape the school climate and culture, and hiring and retaining qualified teachers. Research considering school leaders' personality traits and school leaders' resource management in terms of finance and infrastructure are limited.

The concept of school leaders' professional development remains fairly vague. Existing research has predominantly focused on learning through formal trainings. Research on school leaders' informal learning appears only in a small number of studies. Moreover, studies about school leadership are mainly self-reported, and so mostly rely on the principals' perceptions. Scholars barely integrate or compare various PD techniques. Substantial research considering transfer of professional development activities and research measuring the effectiveness is lacking as well. Hence, we suggest that future research maps school leaders' current professional development and investigates school leaders' professional development needs, their preferences of PD techniques and motivation to participate in professional development. We also suggest that future research includes the perception of several stakeholders such as the board, staff members and parents. School context appears as a common theme throughout the different parts of the present study and is of influence on leaders' performance. Therefore, school context has to be integrated in research designs about the effectiveness of school principals and their PD.

It was attempted to carry out the study in a respectable way, though every study has its limitations. During the coding, school leadership was approached from a general point of view and hence the study addresses general characteristics. Given the fact that effectiveness criteria can slightly differ for the various theories of leadership, it is possible that more nuanced answers on RQ 2 (What are the key characteristics of effective leadership in an educational setting?) can be found, when the levels of the different theories are taken into account.

In summary, we can conclude that there is room to further investigate school leadership, much to discover about school leadership skills and the approach to effectively develop and conduct school leadership development.

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2.9 Appendices

2.9.1 Appendix A. Codes to tackle RQ2

Table 2.5
Code clarifications to tackle RQ 2 presented according to their ranking

	Code	Clarification of the code
1.	Focus on curriculum	Managing the curriculum, supervising and evaluating instruction (adapted from Hallinger, 2003)
2.	Safe (learning) climate	Providing incentives for learning and promoting professional development (adapted from Hallinger, 2003)
3.	Good relations and communication	Maintaining good relations and communication with the direct stakeholders e.i. teachers, the board, parents and pupils (authors' definition)
4.	Vision and goals	Clarifying and stimulating to put the vision and goals into practice Communicating the vision and goals (adapted from Leithwood & Jantzi, 1999)
5.	Acknowledges teachers and other motivation	Encouraging teachers Recognising achievements and contributions of teachers (adapted from Yukl, 2012)
6.	High expectations for staff and pupils	Empowering staff members and pupils to go for excellence (authors' definition)
7.	School context	Surrounding neighbourhood of the school The school size (e.i. number of pupils, teachers) (authors' definition)
8.	Leadership, policy, budgetting	Leadership: influence people to structure activities and relationships Policy: the whole of setting goals and allocating resources to achieve the school results Budgetting: finance and budget planning (authors' definition)
9.	Supportive for teachers – fair treatment	Providing support and equal treatment to teachers (adapted from Yukl, 2012)
10.	Continuous professional development	All techniques that contribute to the professional development of school leaders (authors' definition)
11.	Decision-making	The proces of decision-making and people involved in decision-making (autors' definition)
12.	Evaluation	Developing and monitoring evaluation procedures (authors' defintion)
13.	Participation	Empowering teachers to be involved in policy (adapted from Yukl, 2012)
14.	Monitoring the results of the students	Monitoring the results of the students (authors' definition)
15.	Overarching care policy	Actions taken by all school members to create an optimal development opportunities for pupils and staff. This relates to learning and psychological, social and physical well-being of the pupils and staff. (authors' definition)
16.	Infrastructure	Buildings and materials that foster the process of schooling (authors' definition)
17.	Respresent others	Representing and defending the reputation of colleagues and the organisation (adapted from Yukl, 2012)
18.	Self-evaluation	Evaluations by the school leader of teachers (authors' definition)
19.	Preparing to reach the aims	Planning actions aiming to reach the school outcomes (authors' definition)
20.	Role model credibility	Leading by example and clarifying assignments and responsibilities (authors' definition)

21.	Classroom observation	Observing and evaluating teachers' and pupils' performances during teaching activities (authors' definition)
22.	Teacher performance	Hiring and retaining teachers, performance appraisals (authors' definition)

2.9.2 Appendix B. Codes to tackle RQ 3

Table 2.6
Code clarifications to tackle RQ 3 presented according to their ranking

	Code	Clarification of the code
1.	Action research	Educational processes where people work and learn together by tackling real issues and through reflection. (adapted from Walia & Marks-Maran, 2014)
2.	Connection to prior learning	Making connection to prior learning and experiences in order to facilitate integration (authors' defintion)
3.	Considering school context and own practice	Surrounding neighbourhood of the school The school size (e.i. number of pupils, teachers) Own experiences during daily practice (authors' definition)
4.	Experiential learning Coaching, mentoring Supervision, Intervision	Experiential learning can occur through the interrelated listed techniques.The listed techniques are often used interchangeably or differently in different settings. Therefore this code includes cooperative human relationships in which actions, activities and thoughts are discussed to elicit professional development. One definition is highlighted to guide the coding. Coaching: 'an intensive and systematic facilitation of individuals or groups by using a wide variety of behavioural techniques and methods to help them attain self-congruent goals or conscious self-change and self-development in order to improve their professional performance' (adapted from Segers, Vloeberghs, Henderickx & Inceoglu, 2011)
5.	International Study Visits or International courses	A visit to a school or institution abroad for knowledge exchange A course in a country abroad (authors' definition)
6.	Lectures, courses, trainings	Formal, planned trainings focusing on knowledge transfer
7.	Mutual learning, networking, collegial consulting	Learning in relations with peers, colleagues, stakeholders, externals (authors' definition)
8.	Reflective learning	Reflective learning is a process of thinking and doing in order to acquire new skills (Schön, 1987)
9.	Spread over time	PD trajectories, several sessions spread over time (authors' definition)
10.	Theory	PD initiatives including theory (authors' definition)
11.	Transfer of learning	The extent in which the knowledge, skills and attitudes are effectively applied at the workplace (Newstrom, 1986)
12.	Variety of techniques	The use of multiple learning and development techniques in the context of a PD trajectory (authors' definition)
13.	Collegial and collective learning	Learning activities in which participants construct knowledge, skills and/or attitudes in collaboration with fellows and/or colleagues (authors' definition)
14.	Networking	Learning activities/oucomes related to networking (authors' definition)

Chapter 3
Mapping school leaders' professional development

Exploratory Phase	Experimental Phase	
A review on leadership and leadership development in educational settings 2	Developing school leaders: Responses to group reflective learning 4	Do school leaders learn from a group reflective learning programme? 5
Mapping school leaders' professional development 3	Does leadership training improve organizational learning climates? 6	School leaders' and teachers' leadership perceptions: Differences and similarities 7

This chapter is based on the relevant parts of the following conference papers:

- Daniëls, E., Hondeghem, A. & Dochy, F. (2017, September). School leaders' tasks and professional development. [Paper Presentation]. World Education Leadership Symposium, Zug, Switzerland.

- Daniëls, E., Hondeghem, A. & Dochy, F. (2017, November). Primary school leaders' professional development. [Paper Presentation]. European Association for Practitioner Research on Improving Learning, Hämeenlinna, Finland.

Abstract

In 2016, 40% of the Flemish primary and secondary schools started with a newly appointed school leader. School leaders increasingly resign after holding the position for only two or three years. This implies among other things a loss of expertise. Studies considering school leaders' professional development are rare. Hence, research on school leaders' professional development needs is of interest. The present chapter reports on a qualitative study (n=16) and a quantitative study (n=592) regarding Flemish primary school leaders' professional development.

Findings from the qualitative study demonstrate that school leaders participate in a variety of professional development activities. On the one hand, they mentioned formal learning techniques: workshops, seminars, coaching trajectories and prolonged trainings, on the other hand, they also explained informal learning techniques such as learning in interaction with others and learning by consulting theory.

The findings from the qualitative study are reinforced by the findings from the quantitative study. The quantitative study shows that school leaders participate in various professional development activities and that school leaders value various techniques as meaningful. With regard to the topic of professional development, school leaders indicate in the quantitative study to favour the following topics: coaching teachers, staying informed about new educational trends, motivating teachers, implementing the schools' mission and vision, and promoting teachers' well-being. Furthermore, school leaders indicate to learn the most from conversations with fellows, in multi-day trainings and through reflecting.

3.1 Introduction

Organizations care about leadership and are interested in the effective and efficient development of their leaders (Day, Fleenor, Atwater, Sturm & McKee, 2014). The importance of school leaders for school effectiveness and pupils' achievement is widely acknowledged (Hitt & Tucker, 2016). Contrasting the latter, research on leadership development and school leaders' professional development have a rather short tradition and still a myriad of unanswered questions (Day et al., 2014). The existing body of research on school leaders' professional development (PD) remains vague and contrasts the numerous studies considering school leadership (Daniëls, Hondeghem & Dochy, 2019; Hallinger in Leithwood, 2019). Existing studies focus rather on school leaders' professional development in formal training settings and barely integrate or compare various PD techniques. Research considering transfer of professional development activities and research measuring the effectiveness is scarce as well (Nicolaidou & Petridou, 2011; Helsing, Howell, Kegan & Lahey, 2008). The existing studies about school leaders' PD are often conducted from a narrow perspective on particular local training programmes. As a consequence of the latter, studies investigating school leaders' informal learning are lacking (Hulsbos, Evers & Kessel, 2016).

In Flanders, as in many other regions of the world, a teaching qualification is sufficient to apply for the position of school leader. Hence, mainly experienced teachers become school leader but do not always feel fully prepared for the job (Daresh & Male, 2000). In 2016-2017, approximately 40% of the Flemish primary and secondary schools started with a newly appointed school leader and it has been noted that more school leaders resign after a period of two or three years due to administrative load and psychological issues (Vancaeneghem, 2017). This implies among other things a loss of expertise and hence research on school leadership and in-service professional development is of interest. The Flemish primary school leader is responsible for the day-to-day management. Sometimes, a special needs coordinator supports the primary school leader in the daily school management. The role of the special needs coordinator varies across schools, because primary schools have autonomy in making use of the position of special needs coordinator (Flemish Education Council, 2003). The core assignment of a special needs coordinator is taking the lead in developing and implementing a tailor-made policy on special needs.

At the time the study was conducted (in 2016-2017), 15% of the primary school leaders still had teaching assignments (Vandenberghe, 2017). Thereafter measures were taken. Nowadays primary school leaders having teaching assignments are rare. A primary school with a minimum of 100 pupils enrolled has a full-time school leader funded by the Flemish government (Crevits, 2018a; Crevits, 2018b). In case schools have a smaller number of pupils, it may be the case that school leaders still have teaching assignments, depending on how they assign the allocated funds. According to Crevits (2018a; 2018b), in 2018-2019 88 school leaders (0.04%) were leading a school with fewer than 100 pupils.

To better understand the way school leaders (prefer to) develop their (leadership) skills, the present study investigates school leaders professional development and combines insights from a qualitative and a quantitative study. Providing school leaders with appropriate professional development is of interest in order to successfully guide and support teachers which eventually can result in an increase of pupils' performance (Pont, Nusche & Moorman, 2008).

3.2 Theoretical perspectives

The section 'theoretical perspectives' provides background on leadership and leadership development. The construct of leadership is only briefly explained. The construct leadership is approached as a supporting construct for leadership development and school leaders' professional development. For a more detailed overview of leadership in education, for example, the review study of Daniëls et al. (2019) can be consulted (see Chapter 2).

3.2.1 Leadership

The literature does not provide a single agreed definition of leadership. A widely accepted assumption about leadership is the assumption of social influence over others. Yukl (2002) defines this as follows 'leadership is a social influence process in which an individual exerts intentional influence over others to structure activities and relationships in organizations'. This widely accepted assumption is constructed across various research fields. The field of research on leadership in education stands out because of its focus on the instructional aspect of leadership. The available models on school leadership mainly focus on leadership linked to teaching and learning, and pay limited attention to other processes of school leadership. In addition, Grissom and Loeb (2011) define effective school leadership as 'combining and understanding the instructional needs of the school with an ability to target resources where they are needed, hiring the best available teachers and keep the school running smoothly'. Gurr (2015) describes school leadership as 'engaging within the school context to influence student and school outcomes through interventions in teaching and learning, school capacity building, and the wider context.' Additionally, Gurr (2015) denominates the following elements: the qualities a leader brings to the role, a portfolio approach to using leadership ideas, constructing networks, collaboration and partnerships, and utilizing accountability and evaluation for evidence-informed improvement. Hallinger (2011) assumes that instructional leadership relies on expertise and influence, more than on formal authority and power to achieve.

For the sake of the current research, leadership is considered as the responsibility of the school leader. In Flemish primary education, the school leader is the formal leader who takes up most of the leadership roles and assignments due to an absence of a middle management. Leadership roles and processes comprise those roles and processes that facilitate setting direction, creating alignment and maintaining the commitment of people working together (Van Velsor, Mc Cauley & Ruderman, 2010).

As stated, the school leader is the one who takes up most of the leadership roles and assignments but is often assisted by a special needs coordinator, a policy coordinator and/or policy team for particular roles and assignments. The presence of shared leadership is ubiquitous, though out of the scope of the current research, which is centred around the school leader.

3.2.2 Professional development

Professional development (PD) is a broader concept comprising leadership development. According to Day (1999), professional development consists of all natural learning experiences and conscious planned activities intended to benefit the participant. Professional development occurs planned and unplanned, individually and collectively and aims to enhance an individual's capacity (Day, 1999) and subsequently, the school performance.

Professional development is often divided into formal learning and informal learning. Formal learning occurs within a context that is structured, planned and specifically designed for learning f.i. workshops, seminars and conferences (Day et al., 2014; Goldring, Preston & Huff, 2012; Kyndt & Baert, 2013). Moreover, formal learning is more structured and deliberated than informal learning (Ainsworth & Eaton, 2010). Therefore, professional development activities such as coaching, a PD technique where people are guided to improve their performances and expand their capabilities (Ellinger, Watkins & Bostrom, 1999), and group reflected learning[1], a PD technique wherein colleagues and/ or peers participate and help to reflect on personal and job-related issues, are considered in the present study as formal learning.

Informal learning on the other hand results from engagement and reflection in daily work-related activities in which learning is not the primary goal such as asking for feedback, reading literature, consulting and/or observing colleagues (Kyndt & Baert, 2013). Informal learning is less structured, less consciously and less intentional than formal learning (Ainsworth & Eaton, 2010; de Feijter, de Grave, Koopmans & Scherpbier, 2013). Nonetheless, informal learning and formal learning do not have to be approached as a strict dichotomy because they can elicit or strengthen one another.

3.2.3 Leadership development

Leadership development is approached as the expansion of the capacity to be effective in leadership roles and processes (Van Velsor et al., 2010). Leadership development involves a dynamic and ongoing process of multiple actions to develop and apply a variety of skills in every stage of a leader's career (Brungardt, 1997; Day et al., 2014). It is an ongoing and integrated process, linking a variety of developmental practices with work performances. Gurr

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[1] In Flanders, the constructs 'intervisie' and 'supervisie' are more in use. 'Intervisie' comprises group reflected learning among peers in absence of trainer or coach, whereas 'supervisie' refers to group reflected learning among peers guided and structured by and in the presence of a trainer or coach.

(2015) states that successful school leadership is crafted through a blend of on-the-job learning, formal and informal learning, mentoring by significant others and some serendipity in pathways to leadership.

Hence, school leaders' in-service (leadership) development takes place in many formats and can consist of many different professional development activities at the workplace or beyond.

3.2.4 School leaders' professional development

In the literature, a particular classification of informal learning activities of school leaders is hardly available. Hulsbos, Evers and Kessels (2016) explored secondary school leaders' informal learning and proposed a first classification, comprising three main categories: working on improvements or innovation, reflecting and 'other learning activities'. Hulsbos et al. (2016) concluded that working on improvement and innovations, and learning by reflecting were the most occurring informal learning activities in their study. As the literature on school leaders' informal learning is scarce, teachers' informal learning was explored. The results of the review study of Kyndt, Gijbels, Grosemans and Donche (2016) revealed different types of learning activities in teachers' everyday learning. Kyndt et al. (2016) determined e.g. reading professional literature, observation, collaboration with colleagues, reflection, learning by doing/experience and talking with unspecified others. In other fields, for instance in medicine, research on informal learning is more mature and provides a more demarcated classification of learning activities (Berings, Poell,& Simons, 2005; Cuyvers, Donche & Van den Bossche, 2015). Based on the studies of Berings et al. (2005), Cuyvers et al. (2015), Huber (2011), Hulsbos et al. (2016) & Kyndt et al. (2015), a framework for school leaders' learning activities at the workplace is proposed in table 3.1.

Table 3.1
Learning activities at the workplace – compiled based on Berings et al. (2005), Cuyvers et al. (2015), Huber (2011), Hulsbos et al. (2016), Kyndt et al. (2016)

Learning activity	Description
Learning by doing	Work experience, learning from successes and failure, observation, exercising, helping others to learn (mentoring), performing tasks of colleagues, practising under supervision
Learning in interaction	Colleagues asking for help, support and feedback, sharing knowledge and experiences, collaboration with colleagues, conversations with pupils, parents and unspecified others, networking
Learning by consulting literature (theory)	Reading professional literature, browsing the internet and social media, self-study of professional literature
Learning by reflecting	Self-reflection and reflection with fellow school leaders considering planning and looking back on particular experiences

Learning from non-workplace related experiences	Experiences outside the exercise of the profession such as dealing with emotions and communication

Some scholars argued that a clear and useful framework about effective professional development for school leaders is lacking (Goldring et al., 2012; Wright & da Costa, 2016). Huber (2011) proposes a model of multiple approaches to learning in PD (see figure 3.1). A few of the five learning opportunities are briefly described. In his model, Huber does not clearly distinguish between formal and informal learning, though he states that professional development of a formal and informal kind, both play an important role in the professional development of school leaders.

Figure 3.1
Approaches to learning in professional development (Huber, 2011)
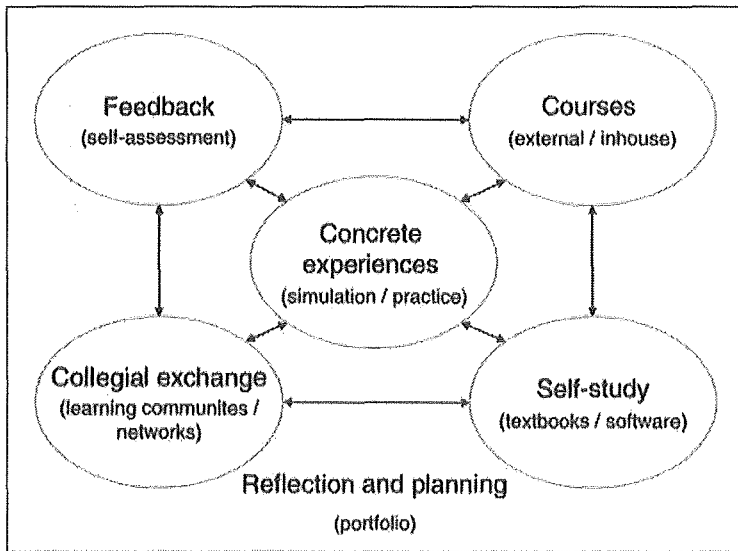
Course formats take into account that learning has to be comprehended as inspiration and information, reflection and exchange, experiment and realization.
Self-study can be used to prepare and explore topics of seminars, and as a learning technique to explore and acquire particular knowledge.
Concrete experiences as in working on individual projects, classroom observations, shadowing and mentoring, provide the opportunity to work on complex authentic problems. Experience and practice plays an important role in moving from knowledge to action and subsequently contributes to the sustainability and impact of professional development. Earl & Katz (2002)

& Robertson (2009) suggest similarly that experiences and reflection on experiences are vital elements in a fruitful learning process.

Collegial exchange refers to learning opportunities situated in professional learning communities and networks. Participating in networks provides chances for intensive reflection on one's own action and behaviour and if school leaders are integrated in networks outside their own schools, there is a higher possibility of widening their views. Reflection is crucial to use all opportunities explicitly and to turn learning into practice.

Feedback based on self-assessment provides a needs-assessment and creates a start for the planning of PD. Earl & Katz (2002) & Robertson (2009) recognize formative feedback as an essential part of effective professional development.

In addition, Pont et al. (2008) state that professional development for school leaders requires sequential provision to respond to the different stages of leadership careers. Pont et al. (2008) suggest therefore that the best suited methods/content to this end are methods and content that include coaching or mentoring, work based and experiential learning, learning through peer support and networking, and formal learning programmes.

Apart from the framework comprising approaches for professional development, Huber (2011) draws attention to the nature of adult learning. Huber (2011) states that adult learners are selective, consciously and/or unconsciously, in their learning (PD). They want the gained competencies to be relevant for practice. In addition, he states that adults approach learning more problem-oriented than theme-oriented, and that adults benefit more from learning if they can apply the gained knowledge in practice. Practice of the gained competencies, followed by feedback and reflection (Huber, 2011) allows the best opportunities for effective learning. With regard to the framework, Huber stated that theories should be included as well so that a deep reflection can take place. He also states that it is harder to link previously existing cognitive systems and hence states that it is preferable to link the newly acquired competencies to experiences and to anchor it in the experiences. A last remark of Huber is that adult learners' practices, needs and problems should be the starting point for the development of the content and methods of PD.

The literature offers also common prescriptive elements to consider while developing effective professional development activities for school leaders. Daniëls et al. (2019) summarized the prescriptions in their systematic review about school leadership. Leadership development programmes should be developed: (1) with attention to prior learning, (2) based on the development needs of principals in the particular phase of their career, (3) taking into account the context and experiences, (4) considering transfer into practice, (5) spread over time, (6) starting from relational learning such as networking and collegial consulting.

3.3 Research questions

The present chapter aims to map primary school leaders' professional development integrating a qualitative and a quantitative study. To get a holistic insight in the way school leaders (prefer to) develop their leadership skills, the present study searches for answers on the following research questions:

(1) How do primary school leaders develop their leadership skills through PD activities?

(2) To which extent, participate school leaders in professional development activities? To which extent, perceive school leaders the activities they participate in as useful?

(3) What are primary school leaders' professional development preferences with regard to techniques and topics?

The subsequent sections report on two different studies. The qualitative study, referred to as study 1, searches for an answer on research question 1, whereas the quantitative study searches for an answer on research question 2 and 3.

Study 1 and study 2 focus on primary schools and were conducted in Flanders. In Flanders, primary education comprises education for pupils from 2,5 - 12 years old and includes nursery school (2,5 – 6 years old) and elementary school (6 – 12 years old). The absence of a vice school leader, middle management and in some schools, employees who perform administrative tasks are common in Flemish primary education. Hence, and as stated before, in the present study school leadership is approached as a responsibility of the school leader.

3.4 Study 1: Qualitative study

3.4.1 Methodology

Qualitative research allows to collect rich data and to obtain a deeper insight in how and why phenomena occur (Mortelmans, 2013; Sandelowski, 2000). Additionally, the present study searches for answers on 'how'-questions. Therefore, a qualitative approach is eligible. The data in the present study are collected via 16 semi-structured interviews.

3.4.1.1 Sample

The sample was assembled via purposive snowball sampling to assure richness of the data. Reference persons from umbrella organizations and staff members from an advanced training in school development were consulted to assemble the sample. Eventually, 16 school leaders, working in different public and private primary schools spread throughout Flanders, participated.

Mean of age in the sample is 47,38 years (SD 7,29) and mean of seniority in the position of school leader is 10,53 (SD 5,12). Moreover, five participants have previously worked as a special needs education coordinator. All participants hold a bachelor's degree in education and are employed in different schools. Prior to the interview, participants were given an informed consent explaining the interview procedure and ensuring anonymity. Participants had the

opportunity to ask questions before signing the informed consent. All participants participated voluntarily and signed for informed consent. For clarity purposes, none of the participants from the current study, study 1, participated in studies, which are part from Part II of the book (i.e. Chapter 4, 5, 6 and 7).

3.4.1.2 Data collection

The data were collected using semi-structured interviews. Semi-structured interviews allow exploring phenomena (Cohen, Manion & Morrison, 2011). By means of semi-structured interviews, answers on research question 1 were sought (Yin, 2009).

An interview guide was used to conduct the interviews. Theoretical insights, conversations with pedagogical counsellors and the research aims guided the development of the interview questions resulting in the interview guide. An interview guide allows to pursue methodological consistency and contributes to the similarity of the different interviews (Cohen et al., 2011). However, semi-structured interviews still leave room to zoom or further explore answers (Mortelmans, 2013). The interview guide was based on open questions to encourage informants to describe situations and experiences extensively. At the beginning of the interview, the confidentiality and anonymity of the interview were emphasized again forasmuch collecting valuable data (Cohen et al., 2011). The interview guidance was carefully designed and tested in various phases with doctoral students, teachers and primary school leaders. Their suggestions and the occurred misunderstandings were used to adjust the interview guide. For a translation of the main questions from the interview guidance, see 3.8.1 Appendix 1.

A flexible attitude was adopted in terms of location, date and time for the interviews. This eased the participants and involved them from the beginning. The interviews were conducted at the participants' workplace and lasted between 35 and 70 minutes.

3.4.1.3 Data analysis

All interviews were audio-recorded and transcribed verbatim. Subsequently, the transcriptions were analysed using NVivo11. To thoroughly explore the data and give room to empiricism, the transcriptions were first inductively coded. In a second coding phase, the transcriptions were coded using concepts from the literature as sensitizing concepts (see table 3.1 and figure 3.1) (Bowen, 2006). See 3.8.2 Appendix 2 for an overview of the main codes.

3.4.1.4 Trustworthiness of the study

Various characteristics of qualitative research were taken into account to ensure the trustworthiness of the current study. Trustworthiness refers to providing a plausible representation of the participants' explanations and exemplifications. The transcriptions were

presented to the participants for member validation (Torrance, 2012) and support a correct understanding of the provided information.

Criticality and thoroughness were pursued by repeated readings of the transcripts, the detailed description of the data analysis and peer feedback leading to a thorough understanding of school leaders' development (of leadership skills) through professional development. Confirmability refers to the fact that the findings emerge from the participants and are predominantly shaped by the participants rather than by the researchers. Confirmability aligns with credibility, which refers to the 'truth' of the data or the participant views and representation of them by the researcher (Polit & Beck, 2012). Confirmability was addressed using rich and vivid quotes from the transcriptions. To ensure accuracy of interpretations, the coding process was carried out through the use of the coding table (see 3.8.1 Appendix 1). The dependability of the research, i.e. the findings are consistent and can be repeated, is ensured because the sample, experiment and data analysis are described in detail. Furthermore, data saturation occurred after 11 interviews, which refers to the fact that there is little chance that other codes would have emerged from a larger sample.

3.4.2 Findings
The findings of study 1 are discussed based and ordered on the research questions of the present study. The results are clarified using quotes from the transcriptions.

3.4.2.1 School leaders' professional development
The participating primary school leaders report to develop their competences in various ways. Formal learning activities such as trainings or seminars complement informal learning activities, for instance learning in interaction, learning by doing, learning by consulting theory.

3.4.2.1.1 Formal learning
Over half of the participants (n=9) name to participate in formal trainings such as workshops, seminars or conferences. The participants perceive formal trainings as meaningful when frameworks are presented, when inspiring lecturers facilitate the trainings, and when there is room to actively engage in the training to support the development of self-constructed knowledge. Room for discussions and conversations about concrete and authentic cases is appreciated as well. The participating school leaders indicated to learn from these discussions, and valued the option to air and discuss their personal issues. Further, they also emphasized the benefits of informal discussions during lunch or coffee breaks when participating in formal trainings.

> "The multi-day sessions were meaningful, the multi-day ... about conflict management, and it was really tailored to your own practice, you could explain your own conflict situations. You could tell, I'm stuck here and then ask the others ... how would you handle that?" [School leader 10]

> "It is all about the educational style of the lecturer. Lecturers who talk very enthusiastically and inspirationally, and who make you really listening, people who tell their story interactively, making sure you stay involved. Of course the subject, the content is important as well, but the educational style and the lecturer certainly too." [School leader 4]

Five participants indicated that they have learned or are learning via a coaching trajectory.

> "I went to a coach, someone who empowered me. And it was so fruitful. So someone who has prepared difficult conversations. We did things such as roleplays to practice and to prepare myself for difficult conversations. I learn much more from a personal conversation than during a whole day of training." [School leader 2]

Group reflective learning (in Dutch known as 'supervisie') on the other hand is a professional development technique wherein colleagues and/or peers participate and help to reflect on personal and job-related issues. Some participants (n=4) named group reflective learning activities in absence of a facilitator or coach (in Dutch known as 'intervisie'). These meetings often arise from likeminded school leaders who have met each other during in-service management trainings for school leaders and indicate that they discuss issues, difficulties and rare or extreme cases.

Some participants (n=4) indicated that they prefer to participate in prolonged trainings with sessions spread over one year or even over multiple years with the aim to obtain whether or not an advanced bachelor's or a master's degree. While explaining the importance of trainings with several sessions, three other participants emphasized the importance of follow-ups, in order to transfer what they had learned to the workplace in the best possible way. Moreover, the follow-up is perceived as meaningful to discuss the alignment with the school contexts and to develop and implement a change process.

> "In one day trainings, you get in a very short time, too much information. During long-term trainings, you can take time to get fully involved in it and personalize it. What helps, is that you have to study it to do the exam. Therefore, a lot happens unconsciously, you use a lot of those things unconsciously." [School leader 12]

Two school leaders cited to have learned from an international study visit. They clarified that they have learned from good practices abroad, which were afterwards used to improve some processes at their school.

One school leader mentioned a 'collegial visitation' project. This type of project creates the opportunity for school leaders and staff members to participate in structured school visits to provide advice to the visited school. While conducting a 'collegial visitation', the members of a visitation team, mainly school leaders and teachers, have the opportunity to interview and shadow teachers and school leaders. After collecting information, mostly separated from the other members of the visitation team, they have meetings to discuss their findings in order to

come up with an advice report about the visited school. During a 'collegial visitation' there are many opportunities to learn in interaction, but also learning by observation because visitation members can conduct a job shadowing and/or observe lessons.

At the start of the interviews, open questions were asked to gauge the perception of formal trainings. Answering these open questions, a large half (n=11) of the participants expressed different negative comments about formal trainings in their responses. The school leaders mentioned that they often heard 'more of the same'; trainers were not fully passionated or informed about their topic. In addition, they experienced formal trainings sometimes as a single shot activity with low efficiency, indicated to miss links to their own context, stated that the used techniques did not meet their learning styles or emphasized that the opportunity to learn from other participants was lacking. Nevertheless, about one-third (n=6) expressed positive comments about formal trainings. The positive comments included enthusiasm about inspiring lecturers, workshops in which the participants were able to develop something useful for their schools and the explanation of theoretical frameworks linked to their contexts.

3.4.2.1.2 Informal learning
In the following paragraphs, the findings considering informal learning are discussed. The discussion is based on the constructs of informal learning activities displayed in table 3.1.

Learning in interaction is mentioned by a majority of participants (n=11) and is approached from several angles. The most cited activities of learning in interaction, often named together, are asking questions, asking for help in dealing with rare or difficult situations, or sharing knowledge and experiences. The participants indicated to call or make an appointment with a fellow primary school leader to discuss issues. These kind of meetings are rather informal and often take place outside the school context. In addition, also learning in interaction occurs as a side effect of formal professional development activities such as informal discussions or asking for feedback during coffee or lunch breaks.

> "It is beneficial to have a drink with a fellow school leader and ask: 'How do you do those things?'. Those moments of exchange, especially our pursuits at the school community, they are fascinating and interesting. Or just asking how they handle particular situations. Or sharing what we have encountered. And that is fruitful, sometimes even more than formal professional development courses." [School leader 12]

The previous learning activities are learning activities in interaction with people not directly linked to the school itself, yet the participating school leaders identify situations in which they learn from staff members as well. Some school leaders assigned a staff member to help them grow in certain behaviour and ask their staff members to report about their behaviour. One of the rather novice school leaders named that she has gained substantive knowledge from the accountant, who was already an experienced accountant at the moment she started as a school leader. She reported that she has learned from the school board as well. The school board

supported and guided the renovation project in terms of dealing with renovation issues and the corresponding administration and approaches. Another school leader explained to learn while carrying out tasks with a staff member, who was perceived as having more expertise about the particular task. Lastly, some school leaders indicated to learn from parents who have particular skills or opinions about education.

A certain group (n=7) of the participating school leaders cited to learn from theory. They explained to consult the literature to stay up to date with new trends or to widen their knowledge about topics related to the challenges of their school. One of the participants explicitly named a situation in which the consulted literature was discussed along the team members involved in the particular topic.

> "You can also read and investigate and ... hm. I definitely read and investigate to follow the new trends and so on." [School leader 13]

> "I mean ... I read a lot, I look things up, I look for ..., I pass it on to teachers. You learn a lot from reading." [School leader 14]

A few participants (n=3) named learning by doing in terms of learning from experiences at the workplace. One participant explicitly named to have learned from ticklish situations.

> "It is normal, you grow and evolve, and you grow stronger and you do better in a number of assignments and it would have been useful if you knew that before, at the moment you started, but that's not possible. Some things, you just have to experience, you have to learn from your experiences." [School leader 8]

Learning by observing, a part of learning by doing, was not often discussed in the interviews. One participant suggested 'job shadowing' as a valuable method for novice school leaders.

A small group (n=3) pinpointed learning by reflecting. The three participants named three different subdivisions of learning by reflecting: self-reflection, reflection while having a one-on-one (dyadic) chat and group reflection. The following quote exemplifies reflection during a one-on-one chat and self-reflection.

> "And then, we [referring to a colleague, coordinator] go out for a walk. Then we can talk about it, I can think about it and then I take counsel of my pillow, sometimes even for a few days. Just leave me alone for a while. And then, it will be okay. Usually it is ok, or I find a way to handle it?" [School leader 10]

A single school leader explained that she has learned from non-workplace related experiences, in addition to her job as school leader, she is a part-time lecturer at a university of applied sciences as well. She explained to learn because she was enforced to consult the literature in order to keep her lessons up to standard and as a result of the interaction with the students who regularly challenged her critical thinking.

3.5 Study 2: Quantitative study

A survey research was conducted to get a broader overview and more structured insight in school leaders' professional development complementing the data from the qualitative study. Quantitative research allows to collect answers on multiple focused questions. The data gathered from a survey research allow summarizing the findings in numbers, which are helpful in creating insights and providing an overview. The data are collected using a tailor-made questionnaire (paper and online) and resulted in 592 valid responses. The following sections report on the methodology used and the findings emerging from the questionnaire.

3.5.1 Methodology

3.5.1.1 Sample

The entire population of Flemish primary school leaders (n= 2 143) was invited to participate in the survey. In order to avoid bias, the questionnaire was designed to gauge the position of the respondent. Gauging the position of the respondent, resulted in the removal of two responses. Two responses were deleted as a special needs teacher and a policy advisor completed them. Four respondents indicated to combine the position of school leader with a position as teacher or special needs teacher. These four respondents were included in the sample. Hence, eventually 592 responses were used in the present study. This amounts to a response rate of 27.62%, which may be considered as rather high in the Flemish educational context.

The participants were asked to indicate their education level. The vast majority (95%) holds a bachelor's degree, 1% holds a master's degree, 3% holds both a bachelor's and a master's degree. 98% of the participants had been teaching before they were hired for the position. Most participants with teaching experience, had been teaching for a period of over ten years (83%). The experience as school leader ranged from less than three years to 36 years of experience, though 62% has 10 years of experience or less. 20,61% of the participants had three years or less experience as school leader. School sizes varied from schools with less than 50 pupils until schools with over 600 pupils. The sample consisted of school leaders spread throughout the five Flemish provinces, private and public schools and schools in metropolitan (30%) and 'rural' (70%) environments. The majority of the participants (69,76%) successfully completed a training for school leaders organized by their umbrella organization. Moreover, 16,55% of the participants hold an additional 'diploma of higher educational studies' (DHOS: Diploma Hogere Opvoedkundige Studiën) and 10,98% of the participants obtained an advanced bachelor in education, predominantly the advanced bachelor 'care and remedial teaching'.

We suppose that the non-responses were random. This is supported by the distribution of the gender and type of schools in the sample compared to this distribution within the population of Flemish school leaders and school types. The detailed information is shown in table 3.2 below.

Table 3.2

Sample in the present study versus population in terms of gender and school type (Vlaams Ministerie van Onderwijs en Vorming, 2016)

Gender	Sample	Population
Male	40%	40%
Female	60%	60%

School type	Sample	Population
Primary school (nursery school and elementary school)	83%	84%
Autonomous nursery school	7%	6%
Autonomous elementary school	8%	10%

3.5.1.2 Instrument and data collection

The questionnaire was developed to map school leaders' PD activities and preferences with regard to professional development techniques and topics. The items measuring leaders' PD activities and preferences were constructed based on semi-structured exploratory interviews (n=16), the literature, and suggestions from pedagogical supervisors from umbrella organizations (n=2). One of the pedagogical supervisors reported on an internal questionnaire about school leaders' professional development. The questionnaire was extensively piloted in face-to-face meetings (n=5) with primary school leaders and via e-mail (n=4).

The data were collected using a paper form and an electronic questionnaire. Information about the study and an invitation to participate were first distributed by mail and one week later a reminder and a link to the survey was sent by e-mail. Two more reminders were sent during the following four weeks.

3.5.1.3 Data analysis

Before the data were analysed, invalid observations of variables were omitted. The psychometric characteristics of the scales are presented in table 3.3.5. First, an explorative factor analysis was conducted to check whether the scale was measuring an unidimensional construct or not. It is important to check the unidimensionality of a scale as alpha's are affected by it and should follow the tau-equivalence: i.e. every item should measure the same latent construct (Tavakol & Dennick, 2011). The items on the scale of professional development activities and professional development themes are according to the factor analysis unidimensional. Only items having a component loading of ≥ 0.4 were included. Cronbach's alpha's and inter-item correlations were calculated to check the reliability of the scale. The alpha coefficients all exceeded the lower limit of 0.7 (Cronbach, 1951; Hair, Black, Babin & Anderson, 2010). Thus, each scale shows a significant level of consistency. Clark and Watson (1995) recommend a mean inter item correlation ranging between 0.15 and 0.20 for scales that measure broad characteristics, and between 0.40 and 0.50 for those mapping narrow characteristics.

Table 3.3
Psychometric characteristics of the included scales

Scales	Items	Raw Alpha	Average inter-item correlations	Mean	Sd
PD activities	20	0.79	0.16	3.8	0.37
PD themes	14	0.89	0.35	3.8	0.59
n= 592					

3.5.2 Findings

The findings report on school leaders' professional development activities and preferences for particular topics. First, the professional development activities are explained and second the preferences for the topics.

3.5.2.1 Primary school leaders' professional development activities: methods

Primary school leaders indicate to participate in a variety of professional development activities. The participants were asked to answer items considering their current and overall perception of professional development activities.

94% of the participants participated in a workshop, training or seminar in the last nine months before they completed the survey. 75 participants (12,5%) were participating in a school leadership training organized by an umbrella organization, three were enrolled in an advanced bachelors' degree and four in a masters' degree.

Table 3.4 provides an overview of the participation in particular professional development activities, the perception of usefulness and the percentage of participants applying something they have learned during the particular professional development activity. The extent in which participants perceive professional development as useful and to which extent they apply what they have learned, were added.

Table 3.4
Self-reported participation in professional development activities, perceived usefulness and application

	Participated	Useful	Applied
One-day training	89%	85%	87%
Training spread over multiple days	71%	86%	82%
Training spread over multiple years	68%	81%	90%
Informal consultation	87%	89%	86%
Network event	83%	81%	84%
Observation visits	58%	90%	71%
Coaching/Mentoring	33%	85%	84%
Guided reflection	30%	80%	76%

The survey did not only question whether school leaders participated during the school year 2016-2017, but also asked to which extent school leaders learn in general. A scale of 20 items was constructed to measure to which extent school leaders learn from professional development activities.

The school leaders indicate to learn the most in interaction with colleagues and from trainings spread over several sessions. Reflecting also appears in the school leaders' top five. Online learning is the least popular among the participants. An overview of the extent to which school leaders learn from a certain learning activity is provided in table 3.5. Items were scored on a five-point Likert scale (1 = not at all, 2 = very little, 3 = neutral, 4 = somewhat, 5 = to a great extent).

Table 3.5
The perceived extent of learning while participating in PD

Professional learning activity	Score Likert scale
Conversations fellow school leaders	4.30
Multi-day trainings	4.21
Asking colleagues for advice, help, feedback	4.17
Reflecting	4.15
Multi-year training	4.11
Conversations with teachers	4.08
Action research	4.08
Conversations with experts	4.02
Coaching	3.99
Networking	3.91
One-day training	3.89
Informal chats during trainings	3.76
Searching the internet	3.68
Collegial visitation	3.65
Conversations with parents	3.64
Conversations with pupils	3.55
Literature	3.51
Observing a colleague	3.50
Facebook/ KlasCement	2.37
Online Webinar	2.32

In order to get an insight in PD preferences, it is also of interest to investigate the school leaders' preferences for professional development activities. The participants were asked to pick three methods out of seven and rank them. The table is constructed in such a way that the items that were ranked first, are displayed in the first row, the items that were ranked second appear in the second row, and finally the items that were ranked third are displayed in the third

row. So the row referring to ranking 1, provides an overview of the constructs who were ranked first and the corresponding percentages and numbers. PD based on experiences in the school leaders' own context, have the ability to discus with others to find solutions for concrete problems and sharing experiences with peers appear to be the most meaningful for the participants. In addition, support after the PD activity is valued. Table 3.6 provides an overview of preferences for PD activities.

Table 3.6
Preferences for PD activities

	%	N
Ranking: 1		
Considering experiences in the own context	19%	n=104
Discuss situations to find solutions for concrete problems	18%	n=96
Sharing experiences with peers	17%	n=78
Ranking: 2		
Considering experiences in the own context	21%	n=112
Discuss situations to find solutions for concrete problems	16%	n=88
Sharing experiences with peers	15%	n=83
Support after the PD	15%	n=82
Ranking: 3		
Discuss situations to find solutions for concrete problems	17%	n=97
Support after the PD	15%	n=83
Considering experiences in the own context	14%	n=79
Sharing experiences with peers	14%	n=79
Developing tools and methods	14%	n=79

3.5.2.1 Primary school leaders' professional development activities: topics
The survey comprised items measuring the participants' preferences for particular topics. The results show that topics considering coaching, motivating, promoting of teachers' and other employees well-being, and providing feedback are highly ranked. Staying informed about new educational trends and implementing the schools' vision and mission are indicated as interesting topics for professional development activities as well. The mean scores for all measured PD topics can be consulted in table 7. The items considering the topics were scored on a five-point Likert scale (1 = not at all, 2 = very little, 3 = neutral, 4 = somewhat, 5 = to a great extent).

Table 3.7
Professional development topics

Professional development topics	Score Likert scale
Coaching teachers and other employees	4.05
Stay informed about new educational trends	4.02
Motivating teachers and other employees	3.99
Implementing the schools' vision and mission	3.98
Promoting teachers and other employees well-being	3.83
Providing feedback on teachers' performance and class visits	3.79
Developing mission and vision	3.77
Dealing with resistance	3.74
Time Management	3.74
Delegate tasks and responsibilities	3.72
Developing a policy for school wide professional development	3.68
Internal communication	3.55
External communication	3.43
Educational regulations	3.40
Mean	*3.76*

3.6 Discussion and conclusion

Primary school leaders show to participate in various professional development activities. In study 1, an answer on research question 1 'How do primary school leaders develop their leadership skills?' was sought. The majority indicates formal learning activities such as workshops, seminars and conferences. A smaller group values prolonged trainings e.g. advanced bachelors or master degrees. Some participants name to grow their leadership skills via coaching trajectories. Besides, they name informal learning activities. Learning in interaction is mentioned the most and is explained as asking for help, questions or feedback. Fellow school leaders and staff members are asked for help and feedback. Another frequently occurring activity is learning from theory. School leaders consult the literature to stay up to date with new trends and to widen their knowledge. The findings are not fully in correspondence with Hulsbos et al. (2016) who concluded that working on improvement and innovations and learning by reflecting were the most occurring informal learning activities in their study. Working on improvement and innovations was not mentioned in the current study as a part of PD. However, these findings show some similarities with Hubers' approach on adult learning and PD. He states that theory should not be neglected and that professional development should focus on practice. The focus on practice comes to the front in examples of discussing with others in an attempt to ask for help and feedback. The learning activity 'learning in interaction' aligns with the focus on practice and the importance of experiences as starting point for PD, and anchor point for imprinting knowledge.

In study 2, research question 2 'To which extent, participate school leaders in professional development activities?' and research question 3 'What are primary school leaders' professional development preferences with regard to the techniques and the topics?' were tackled. The extent to which school leaders participate in professional development activities is high, 94% ticked to have participated in a workshop, training or seminar in the nine months before the survey was conducted. The professional development activities they participate in, are greatly perceived as useful (all above >80%). These activities are not only perceived as useful, but the results also show that school leaders largely apply things they have learned (>70%). Furthermore, the results show that conversations with fellow school leaders, multi-day/year trainings, asking colleagues for advice and feedback, and reflecting are perceived as PD that provokes learning. The favoured topics for PD according to the school leaders are coaching teachers, educational trends, motivating teachers, implementing the schools' vision and mission, and promoting teachers' well-being. The results concerning the preferences for professional development demonstrate that school leaders value the opportunity to consider experiences, to discuss situations in order to find solutions for concrete problems, and like to share ideas with peers. In addition, attention for ongoing support after the PD is valued. This aligns with Hubers' (2011) approach of adult learning: the centrality of experiences and the importance of a problem-based method.

Summarizing the results of the two studies, school leaders value the informal aspect of professional development. They favour learning in interaction with colleagues and peers, value attention for their own context and situation, prefer reflective learning and indicate to like PD spread over time. This aligns with the findings in the review study of Daniëls et al. (2019), who concluded among others that professional development for school leaders should be spread over time, include learning with peers, e.g. in terms of networking or collegial consulting, and should take into account school leaders' daily context and prior experiences. In study 1, a majority of the participating school leaders noted less positive feelings about formal trainings and emphasized the importance of theory, inspiring lecturers, and room for active engagement and discussions about authentic cases in order to benefit from formal trainings. Hence, the current paper contributes to prescriptions to take into account when developing professional development for school leaders. The results contribute to practice in terms of developing effective professional development for school leaders, which among others can support the sustainability of the profession (e.g. prevent early drop outs). The results pave the way forward and provide grip for research considering the effects of professional development for school leaders and school leaders' leadership development. Furthermore, research on school leaders' professional development and considering school leaders' informal learning is necessary because the existing literature on school leaders' professional development is still in its infancy, especially research considering school leaders' informal learning. In follow-up research investigating the impact of school leaders professional development, it is recommended to include various levels of analysis i.e. the school leader and the teacher, to ensure a holistic understanding of the effect of professional development. The central question to PD is the

question of its effect, and therefore the effect component of PD should receive the necessary attention in order to contribute to the field.

The present study is an exploratory survey and relies on self-reported data. Self-reported data might be biased as people sometimes report certain behaviour they do not demonstrate in real life. Hence, studies combining multiple perspectives such as the perspective of the board, teachers and all other stakeholders are a necessary to get a general and valid overview. The participants were informed in advance about the subject of the interviews and purposive sampling was used. Therefore, it is possible that people with a particular interest in PD have participated. The self-selecting effect may also have occurred in the quantitative study. Another suggestion is to include the perception of leadership behaviour by people surrounding the school leader, f.i. superiors, subordinates, peers and/or the board. This is needed in order to guide school leaders' professional development as well as the organizations conducting school leaders' professional development.

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3.8 Appendices

3.8.1 Appendix 1

Main interview questions

Which tasks do you carry out during your daily performance? Can you describe a day in the life of a school leader?

How would you define leadership?

How would you describe your way of leadership?

Which knowledge and skills does one need to be an excellent school leader?

Do you ever participate in professional development activities contributing to your role as school leader? About which topics? Why?

Do you prefer a particular approach of professional development activities? Why?

Which approach is the most effective in your opinion? Can you explain why you find it the smost effective?

3.8.2 Appendix 2

Main codes used to answer the RQ's

RQ 1

- Formal learning
  - Coaching
  - Collegial visitation project
  - Formal trainings
  - Intervision
  - Prolonged trainings
  - Study visit

- Informal learning
  - Learning by doing, experiences
  - Learning by observing
  - Learning by reflection
  - Learning from experiences out of the workplace
  - Learning from the literature
  - Learning in interaction

Chapter 4

Developing school leaders: Responses on group reflective learning
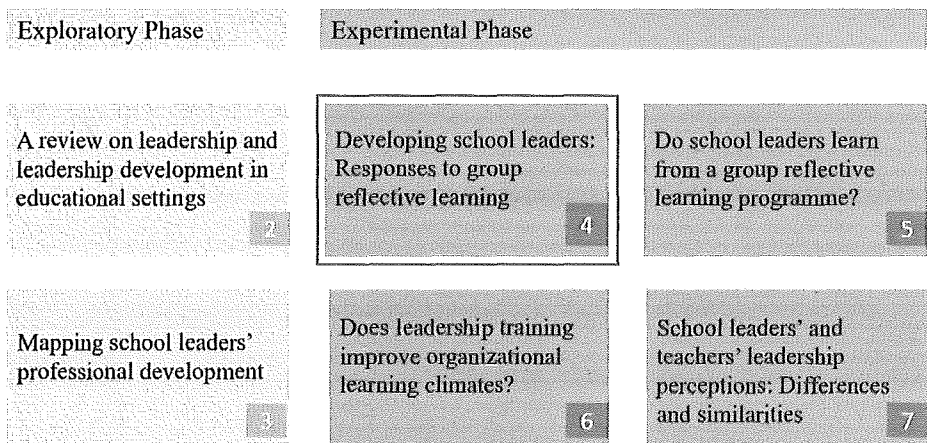
Exploratory Phase	Experimental Phase	
A review on leadership and leadership development in educational settings	Developing school leaders: Responses to group reflective learning	Do school leaders learn from a group reflective learning programme?
Mapping school leaders' professional development	Does leadership training improve organizational learning climates?	School leaders' and teachers' leadership perceptions: Differences and similarities

Original Article:

Abstract

Throughout the past decades, the profession of school leader has become more complex. To deal with these increasing complexities and the challenges school leaders encounter, it is important that school leaders are provided with effective professional development. However, research on school leaders' learning and professional development, and especially on school leaders' group reflective learning, is still rather limited. Based on findings of a few previous studies considering school leaders' professional development, a group reflective learning programme was developed. The current qualitative study unravels school leaders' reactions with regard to group reflective learning programmes through interviewing the 19 participants of the programme.

The study of the school leaders' reactions shows that school leaders set particular preconditions for group reflective learning, that they value recognition and support of fellow school leaders, and that they appreciate the programme because they were able to learn from their own, and their fellow school leaders' daily-life experiences. Group reflective programmes have the potential to develop knowledge, skills and/or attitudes, and seem to satisfy the statement that school leaders need to be provided with appropriate professional development programmes to prevent job related psychological issues.

Keywords

School leaders' learning
Professional development
Reflective learning
Collaborative learning

4.1 Introduction

Several scholars stated that school leadership is a complex and challenging job. School leaders have the challenging task of leading in times of socio-economic changes and high accountability, which makes the job even more complex and stressful. Classes become increasingly diverse, resulting in school leaders who provide more support to teachers and to teachers' professional development to ensure appropriate education. Moreover, school leaders have to deal with teacher turnovers and teacher shortages. Research shows that the complexity of school leaders' work can lead to inordinate amounts of stress and eventually burnout (Battle, 2010; Devos, Vanblaere & Bellemans, 2018; Fullan, 2009; Normore, 2007). This implies that school leaders need to be supported and provided with appropriate continuous professional development opportunities to keep their skills up-to-date, to prevent drop out and job related psychosocial issues, and to support teachers and teachers' professional development (Devos et al., 2018; Elmore, 2000; La Pointe & Davis, 2006). Drago-Severson (2012) point to prioritising and securing time and resources for 'all adults' at school, including school leaders, to engage in reflective learning practices with colleagues, in order to ensure continuous learning across all levels of the school organization.

To be able to deal with these complexities and challenges, it is important that school leaders are trained properly and that they among others participate in continuing professional development. So far, little research has been conducted on reflective learning programmes for school leaders. However, Drago-Severson (2012) reported that school leaders stressed the importance of renewal through reflecting on thinking and practice in company of colleagues. Peer school leaders can support each other through reflection as they work their way through and support each other to manage changes more effectively. School leaders' engagement in reflective learning can positively influence the school climate and teacher growth (Donaldson, 2008; Youngs & King, 2002). The emphasized collaborative aspect of reflective learning aligns with an important aspect of work motivation: connectedness to others (Hawkins, 2014). The importance of connectedness to others and the power of the group is a main reason for establishing collaborative continuous professional development (Aas & Vavik, 2015; Flückiger, Aas, Nicolaidou, Johnson & Lovett, 2017).

In a qualitative study of Daniëls, Hondeghem & Dochy (2017a) considering Flemish school leaders' professional development, school leaders indicated that they favour conversations with fellow school leaders, asking colleagues and teachers for feedback, and that they favour reflective learning. This aligns with the recommendations of the study of Devos et al. (2018). They refer among others to reflective learning in peer groups, and emphasize the importance of the specific needs of the particular school leader and context.

The current chapter researches the perceptions of school leaders about a group reflective learning programme in which reflective learning in company of peers is central. Reflection is understood as an activity in which 'an individual steps back from particular experiences in order to analyse the meaning to the self' (Hulsbos, Evers & Kessels, 2016, p.24 & p.32;

127

Daudelin, 1996). Aas (2016) defines reflective learning as 'the critical investigation of an individual's own practice in order to provide professional learning and development'.

The aim of the study is to gain a deeper insight in school leaders' perceptions about this type of professional development and to contribute to the empirical base for a broader approach on group reflective learning among school leaders. The study questions how school leaders respond to the group reflective learning programme. A positive response to professional development activities is a relevant step in achieving deep learning (Kirkpatrick, 1994; Phillips, Stone & Phillips, 2001). Contributing to the insight in school leaders' responses to this particular type of professional development is of interest because it is under researched and a first step to eventually research the possible learning results and organizational change. Moreover, an increased insight in school leaders' professional development can contribute to effective programmes for school leaders' professional development. Furthermore, an insight in experiences with reflective learning is important, because it is known that positive experiences with professional development activities and more in particular, learning activities in company of peers, have the potential to facilitate the development of school leaders' and moderate their stress levels (Devos et al., 2018; Drago-Severson, 2012).

4.1.1 Context of the study

The current study was conducted in primary schools in Flanders, the northern part of Belgium. A single school leader taking the formal daily lead over the teachers and the administrative employee(s) characterizes the organizational structure of Flemish primary schools. The average school leader-teacher ratio is 1:20 – 1:35. Apart from the teachers and the administrative employee, primary schools employ a special needs coordinator who takes the lead in developing and implementing a tailor-made policy on special needs. Primary schools have autonomy in making use of the position of the special needs coordinator (Flemish Education Council, 2003).

Professional development for school leaders is not compulsory in Flanders. However, the majority of the Flemish primary school leaders (94%) participates annually in professional development activities (Daniëls, Hondeghem & Dochy, 2017b). Professional development for school leaders is provided by the educational umbrella organizations[2], universities, universities of applied sciences but also by other organizations. Reflective group programmes exist, but are often carried out in the absence of a trainer. A trainer is understood as someone who keeps track of the reflective learning in the programme and ensures that the group stays focused and

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[2] Umbrella organization: In Flanders, there are four main umbrella organizations: the Catholic Umbrella Organization, the Umbrella Organization of Education of the Flemish Community, the Umbrella Organization of Education of Cities and Municipalities, and the Umbrella Organization of Provincial Education. These umbrella organizations (UO) support schools, represent schools, and prepare curricula and class schedules. The UO develop among others initiatives to improve the quality of education and to strengthen the professional skills of staff members (Flemish Ministry of Education, 2019).

prevents the process resulting in superficial and meaningless conversations. The groups mostly consist of acquaintances. In the study of Daniëls et al. (2017b), 30% indicated that in the previous school year they had participated in group reflective learning programmes. Moreover, the school leaders also indicated that these particular trainings were useful (80%) and 76% stated that they made use of the knowledge they had gained during this training (Daniëls et al., 2017b).

4.2 Theoretical Perspectives

4.2.1 Continuous professional development of school leaders

In contemporary times, there is ample attention to participate in continuous professional development (CDP) to keep professional knowledge, skills and attitudes up to standard. The literature on CPD emphasizes the continuity beyond the pre-service training and focuses on the participation in professional development activities. Mitchell (2013) describes continuous professional development as a 'process whereby an individual acquires or enhances the skills, knowledge and/or attitudes for improved practice' (p.390). CPD can be structured and organized in a number of different ways including many different forms of professional development in face-to-face and online contexts (Peterson, 2002; Stevenson, Hedberg, O'Sullivan & Howe, 2016). Huber (2011) distinguishes three main categories of school leaders' CPD: (1) cognitive theoretical ways of learning, (2) cooperative and communicative process-oriented procedures, and (3) reflexive methods. Cognitive theoretical learning includes among others lectures and self-study. Cooperative and communicative process-oriented procedures include for example group and project work. Reflexive methods contain methods such as feedback and reflective learning supervised by a trainer. The group reflective learning programme, which is subject of the current study, belongs to the last category of reflexive methods. Daniëls, Hondeghem & Dochy (2019) conducted an extensive review on school principals' leadership development and found five categories to take into account in the development of school leaders' professional development: (1) prior learning and the professional development needs of the school leader; (2) the contextual and experiential aspect of school leaders' CPD, including reflective learning and action research; (3) transfer of knowledge skills and attitudes to practice, to obtain an effect; (4) networking and collegial consulting in terms of sharing ideas, reactivating knowledge and easing the feeling of loneliness, and (5) the spread over time and ongoing support of CPD to extend and redefine school leaders' daily experiences. Similarities with the constructivist approach to learning and the latter findings of Daniëls et al. (2019) are noticeable. The constructivist approaches to learning consists of four generally accepted principles: (1) learners construct their own meaning, (2) learning builds on prior knowledge, (3) learning is enhanced by social interaction, and (4) meaningful learning develops through authentic learning tasks (Good & Brophy, 1994). This aligns with the suggestions of Daniëls et al. (2019) to consider prior learning, the

129

suggestion that school leaders' professional development should be contextual and experiential, and hence include reflective learning and the importance of networking and collegial consulting. Constructivist approaches to learning assume that understanding comes from a process of inquiry and reflection (Meisel, 2012). Problem-based learning is one of the methods that helps to create learning environments based on the constructivist approach (Inel & Balim, 2010).

Additionally, several scholars have suggested that continuous professional development should take place in the context of teams because of the complex nature of contemporary jobs (e.g. Paulus & Nijstad, 2010; Van den Bossche, Gijselaers, Segers & Kirschner, 2006). Teams consist of people with different experiences, values and knowledge sets, and hence are expected to be more effective in adequately solving problems than individuals (Van den Bossche et al., 2006). According to Aas & Vavik (2015), groups create social learning environments with opportunities for contextual feedback from peers. This feedback broadens the participants' thinking about their performance. Sanner & Bunderson (2015) add that groups vary in composition and number, and they emphasize the importance of psychological safety in groups in the context of professional development (Sanner & Bunderson, 2015). Team (group) psychological safety is a tacit belief and is not given direct attention by individual participants nor by the team (group) as a whole, though it is a precaution to open up and allow deep reflective learning. Edmondson (1999) defines team (group) psychological safety as 'a shared belief that the team (group) is safe for interpersonal risk taking'. Psychological safety refers to confidence that is based on mutual respect and trust among the team (group) members (Edmondson, 1999). In safe groups, group members can ask for help, are admitted to make mistakes, are prepared to present new ideas and can express their concerns. The latter prevents possible feelings of embarrassment or threat, which can hamper learning (Edmondson 1999, 2008).

For clarity, the constructs 'team' and 'group' are often used interchangeably. However, there is a difference between the two constructs and the current book is about groups. Teams are groups, however not all groups are teams. A group consists of a number of people who are connected by some shared activity, interest or feature whereas teams consist of people who are connected, share a common goal and responsibility, and work towards the shared goal(s) (Armstead, Bierman, Bradshaw, Martin & Wright, 2016). Group members have separate goals and are responsible for their own work.

4.2.2 Evaluation of training

Evaluating professional development programmes and evaluating learning outcomes of professional development programmes is important. Without learning, no change in behaviour will occur (Kirkpatrick & Kirkpatrick, 2006). A commonly accepted model to evaluate training effectiveness is Kirkpatrick's Hierarchical Model of Training Outcomes (1959, 1994). The model consists of four levels: reaction, learning, behaviour and results and is displayed in

Figure 4.1 below. In the discussion of the model, more attention is paid to the first level (reaction) because the first level is the central focus of the current chapter. Reaction is the level that includes the extent to which participants are satisfied with the training programme and is considered as an important level. If participants perceive the training as irrelevant or inappropriate, then the training is not meaningful to the participants and has only little chance to be successful (Phillips et al., 2001). Kirkpatrick & Kirkpatrick (2006) state that participants will not be motivated to learn if they do not react to the programme in a favourable way. Therefore, questions measuring the reaction level ideally gauge participants' overall satisfaction, the satisfaction with the quality of the provided activities and the trainer (DeSilets, 2018).

The level 'learning' refers to the extent of development of knowledge, skills and attitudes induced by the training. The level behaviour comprises the extent to which participants apply the gained knowledge, skills and attitudes (at the school) and eventually, the level of results refers to the extent to which the training contributes to the achievement of the goals of the school. The four levels represent a sequence of ways to evaluate training programmes. While moving from one level to the next level, the process becomes more difficult and time-consuming, but it provides more and valuable information (Kirkpatrick, 1994).

Figure 4.1
Kirkpatrick's four level model of training evaluation (model adapted from Kirkpatrick, 1994)
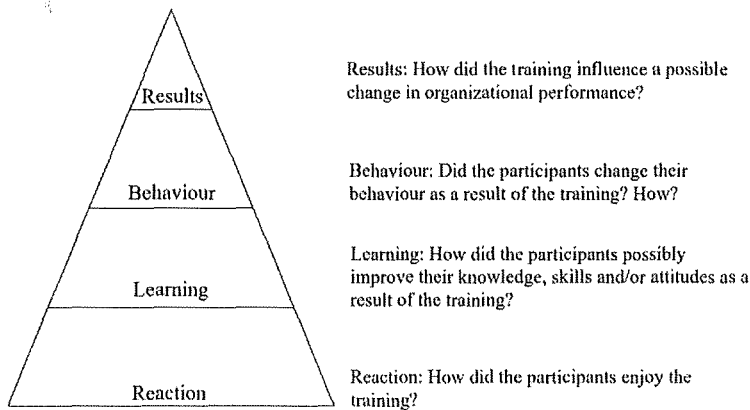
4.2.3 The group reflective learning programme

The following paragraph explains the design of the group reflective learning programme. The programme was developed based on the insights from exploratory studies (Daniëls et al., 2017a; Daniëls et al., 2019) and for the sake of the research project. The design fits within a constructivist approach on learning and was developed bearing in mind the principles of effective school leaders' development (Daniëls et al., 2019; Huber, 2011).

The groups consisted of six to seven participants supervised by an experienced trainer. A group size of six to seven members is suitable to develop context-based competences and to build an atmosphere for sharing personal experiences and feelings (Aas & Vavik, 2015). Moreover, the school leaders were sampled and assigned to a group ensuring that they did not know each other prior to the training. The latter was important with regard to establishing a safe climate in the groups. A safe climate fosters school leaders' willingness to share (personal) cases and allows reflective learning to move beyond surficial reflections (see infra). The groups were compiled using the strategy of maximum variation considering seniority, gender and umbrella organization. The geographical location was taken into account in terms of spread but the feasibility to travel to the training location as well. The role of the trainer is important for group reflective learning in order to keep the group focused and to prevent the group from engaging in superficial and informal reflective chats (Aas & Vavik, 2015; Dyke, 2014; Korthagen & Wubbels, 2001). The trainer was experienced on guiding group reflective learning and was hired from a University of Applied Sciences (UAS) for the sake of the programme. The relevant UAS, has a tradition on group reflective learning in among others bachelor degrees in education and advanced bachelor degrees in education. The advanced bachelor degrees are predominantly followed by working students (in case teachers and school leaders) and hence, the experience and skills of the trainer were relevant for guiding school leaders' group reflective learning. Figure 4.2 provides a graphical overview of the group reflective learning programme. The figure is explained in the following paragraphs.

Figure 4.2
Schematic overview of the group reflective learning programme
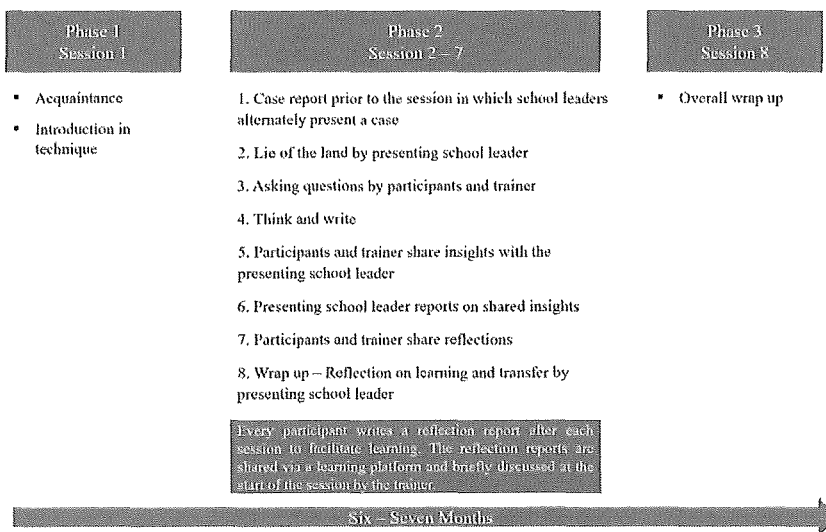
The programme consisted of eight sessions. The outline of the sessions will be explained based on Step, Depuydt, Mertens, Delathouwer & Daniëls (2018). The first session was an

introductory session in order to become familiar with the technique and make room to build trust to ensure psychological safety. Psychological safety is a necessity to ensure that the group members feel safe to share their personal issues. Psychological safety is understood as a shared belief that the team is safe for interpersonal risk taking (Edmondson, 1999).

From the second session onwards, one school leader reported alternately on a self-selected case, related to the topic of the programme: coaching, supporting and motivating teachers. Prior to the session, the reporting participant had to share a written report with the group members and the trainer. This preparatory task had two advantages: (1) the reporting school leader could structure the case clearly and (2) the trainer and peers could prepare themselves for the upcoming session. The written preparatory report included a paragraph on the context, the facts, the experience of the school leader and the learning effects thus far. The sessions were divided in several phases. First, the session started with an update on the case focusing on facts. Second, after providing the group with the lie of the land, the trainer and the peers assisted the school leader in the reflection process through asking clarifying questions and adding, predominantly by the trainer, relevant theoretical frameworks until the particular issue was clear. Third, the reporting school leaders and other members were given a moment to write down their perceptions about the central issue. Fourth, every participant shared his/her opinion with the reporting school leader who carefully listened to the various opinions. Fifth, the reporting school leader reflected on the opinions of the peers and determined the scope of the further process. Sixth, peers got room to share relevant experiences. This phase focused on recognition and personal learning experiences with regard to the specific case. The session concluded with a wrap up. Every participant reflected on their personal learning during the session and specified what they were planning to do with the gained insights in practice. Finally, the reporting school leader concluded the session and reported on how the school leader experienced the session, reported on the learning gains and the planned actions to get started with the case.

In the subsequent session, the reporting school leader was questioned on what he/she had put into practice in order to facilitate transfer of training. To ensure the learning and transfer of learning of all participants, every participant had to write a review report on the session that was shared with the group members and was discussed briefly in terms of (learning) experience in the following session (Step et al., 2018). Summarized, the design takes into account school leaders' personal needs and their context by letting them select their own case (Daniëls et al., 2019).

Reflecting on cases from school leaders daily practice, allows school leaders to get a deeper insight resulting in problem solving. Hence, the programme shows similarities with action learning. Action learning is a process in which diverse teams/groups, consisting of peers or colleagues, search for solutions for real life problems (Marquardt et al., 2009; Pedler, 1997). By means of action learning, the participants learn with and from each other by working and reflecting on real life problems and experiences (Mc Gill & Beaty, 2001). Action learning assumes self-development and organizational development (Pedler, 1997). Marquardt (2011)

suggests the following features of action learning to attain powerful action learning for leaders: action learning (1) starts from a problem, challenge or task; (2) takes place in groups of 4-8 people; (3) comprises a questioning and reflective process; (4) aims to develop strategies and actions; (5) is supervised by a trainer or coach; and (6) considers individual learning, team learning and organizational learning. The features of action learning are present in the current programme as well. However, a difference can be noticed because the group reflective learning programme focuses on school leaders' individual learning, rather than organizational learning. It is assumed that school leaders' individual learning can influence organizational learning or organizational development.

To achieve an effective learning process, the technique of 'core reflection' is used (Korthagen & Vasalos, 2005). Core reflection is a deep reflection technique and moves beyond superficial and predominant rational approaches. Core reflection includes one's thoughts and feelings in the process, and focuses on nurturing the relation between a person's core qualities and experiences in his/her professional life. Furthermore, core reflection is inspired by positive psychology and aims at building on people's strengths and positive feelings. It leaves room for an analysis of a particular case, but focuses on creating room for new possibilities and considering the ideal situation including the resources that people need to achieve the ideal situation (Korthagen & Vasalos, 2005). The technique of core reflection focuses on people's internal obstacles who limit the enactment of one's inner potential. Instead of fighting these obstacles, core reflection teaches a person to be mindful about their effects and connecting with the will to change (Korthagen Professional Development, n.d.).

The group reflective learning programme takes into account the recommendations of learning with peers and learning outside the own school (Daniëls et al., 2019; Hulsbos et al., 2016). Moreover, the quality of the trainer is important (Dyke, 2014). Hence, we carefully considered the appointment of a quality and experienced trainer (see above). 'The quality trainer' is a multiple construct. A quality trainer (1) is someone who manages to keep the group focused on the reflection process; (2) is able to add relevant theories during the process, (3) ensures that everyone participates in an equal way; (4) is experienced in training people and has been successful in training people. Carrying out training in a successful way is understood as succeeding the training and improving practices related to the training. Lastly, the training was spread over several months and in this way, the group reflective learning programme meets the advice for training to be spread over time (Daniëls et al., 2019).

4.3 Research Question
The first level of Kirkpatrick's model of training evaluation is considered as an important level. Indeed, if participants perceive the programme as irrelevant or inappropriate, the programme has little chance to influence the participants. Hence, the current study thoroughly researches school leaders' responses to the programme and addresses the following research question:

What were the school leaders' reactions with regard to the group reflective learning programme?

The research question is of a qualitative nature and fits the aim of the current study: thoroughly researching the responses of the programme. Researching the responses to the programme in depth, will allow one to carry out follow up studies on the other levels, but also provides one with valuable feedback that helps to evaluate and improve group reflective programmes, to advocate or not about group reflective learning programmes, and can provide one with information to establish standards of performance for future programmes (Kirkpatrick & Kirkpatrick, 2006).

4.4 Methodology

4.4.1 Participants
The sample was assembled via 'purposive sampling'. Purposive sampling was used to ensure homogeneity of the sample with regard to the school leader – teacher ratio in the participating primary schools varying from 1:20 – 1:35 ($\bar{X}$= 27,15). Apart from sampling for homogeneity, aligning with the average school leader – teacher ratio in primary schools in Flanders, a variety of school leaders with regard to seniority, geographical location (highly urbanized versus less urbanized) and umbrella organization was taken into account to elicit rich reflective discussions.

The average seniority of the school leaders in the position of school leader was 7.10 years ranging from 2 years up to 19 years. The ages of the school leaders ranged from 37 to 54 years with an average age of 45.15 years. The sample consisted of 6 male and 13 female school leaders. The sample was developed by inviting all 2143 primary school leaders whose details were available via the Flemish ministry of education to participate in the study. The primary school leaders were asked to participate in an interview. Initially, 70 school leaders replied and based on the school leader – teacher ratio and geographical spread, 24 primary schools were selected. After detailed explanation of expectations of participating in the training and study, eventually 22 school leaders participated in the group reflective learning programme. One school leader dropped out after the first session due to job turnover and two school leaders dropped out halfway through the process due to prolonged sick leave. All participants signed for informed consent. The informed consent clearly described the interview procedure and the researchers invited the participants to ask questions before the interview started. The participants voluntarily took part and confidentially was assured.

4.4.2 Data collection

The data were collected using semi-structured interviews. An interview guide was used to allow the pursuit of methodological consistency and the contribution to the similarity of the interviews (Cohen et al., 2011). The interview guide consisted of open questions to encourage informants to describe situations and experiences extensively and independently. The interview guide was carefully designed and tested in various phases with doctoral students and primary school leaders. Their suggestions were used to adjust the interview guide. For a translation of the main questions from the interview guidance, see appendix A. The questions were of an open nature. The interviewees responded predominantly in a positive way, but were incited to think about the less positive or negative experiences as well.

A flexible attitude was adopted in terms of location, date and time for the interviews. This eased the participants and involved them from the beginning. Almost all interviews were conducted at the participants' workplace and lasted 20 to 60 minutes. One participant preferred to hold the interview at the researchers' workplace. According to Mc Evoy (1997), trainees often tend to complete professional development programmes in a state of euphoria, and as such, their prompt reaction is much higher than feedback reactions measured later. Hence, the interviews were taken three – six weeks after the programme ended.

4.4.3 Data analysis

The interviews were audio-recorded and transcribed verbatim. The transcriptions were presented to the participants for member validation (Torrance, 2012). During the literature review, some sensitizing concepts came to our attention and were included in the field notes. The sensitizing concepts are indicated in the final coding tree by means of an asterisk.

First, all transcripts were thoroughly read keeping the research question in mind in order to get a clear insight, and derive codes for the coding tree (see table 4.1 in appendix B). Based on this focused reading, relevant codes were selected per research question. These relevant codes were finally checked for suitability and eventually the coding tree was drafted. The initial coding tree was compared with the sensitizing concepts of the field notes, however no concept needed to be added based on this comparison. During the initial development phase of the coding tree, the explanations of the codes were drafted as well and discussed with two peers in order to ensure clarity of code clarifications. Subsequently, the transcriptions were analysed using NVivo11. To thoroughly explore the data and let additional codes emerge, the transcriptions were coded inductively. The coding relied on the interpretation of the researcher and was supplemented by a search based on the nouns and verbs appearing in the coding tree in order to assure a structured coding and to prevent researcher bias. The coding results were discussed after the first coding round. To ensure that the coding was meticulously carried out, a second coding was done, though it barely resulted in extra codes or extra coded citations.

4.4.4 Trustworthiness of the study

Various characteristics of qualitative research were taken into account to ensure the trustworthiness of the current study. Trustworthiness refers to the fact that the data analysis and the forth-coming results represent a plausible representation of the participants' explanations and exemplifications. Lincoln and Guba (1985) summarize it in an overarching question: 'How can an inquirer persuade the audience, that the findings of an inquiry are worth paying attention to?' (p. 290).

Triangulation was ensured through the inclusion of data from interviews, the interviewer's field notes and the scientific literature. The field notes acted as an aid to develop a broader insight in the collected material and determined codes. Criticality and thoroughness were pursued by repeated readings of the transcripts, the detailed description of the data analysis, explanations of the codes to ensure an unambiguous coding process, and peer feedback leading to a thorough understanding of school leaders' responses on the group reflective learning programme. Confirmability refers to the fact that the findings emerge from the participants and are predominantly shaped by the participants rather than by the researchers. Confirmability aligns with credibility which refers to the 'truth' of the data or the participant views and representation of them by the researcher (Polit & Beck, 2012). Confirmability was addressed using rich and vivid quotes from the transcriptions. To ensure accuracy of interpretations, the coding process was carried out through the use of the coding table (see table 4.1 in appendix B). The dependability of the research, i.e. the findings are consistent and can be repeated, is ensured because the sample, experiment and data analysis are described in detail. Furthermore, data saturation occurred after 10-11 interviews, which refers to the fact that there is little chance that other codes would have emerged from a larger sample.

4.5 Findings

School leaders' findings about the group reflective learning programme are clustered into three groups: (1) preconditions that are considered as important by the participants; (2) recognition and support; (3) and the learning-oriented perceptions. To meet the criterion of credibility and to exemplify the subcategories of the three groups, quotes derived from the transcripts are included in the following paragraphs.

The overall reaction of all school leaders (n=19) about the group reflective learning programme was positive. They all expressed positive feelings about the programme and stated that they were satisfied that they had participated.

> "I would sign up for a follow-up trajectory immediately. This was very meaningful to me." [School leader 17, male, 7 years of experience]

> "Yes, very positive. It affected me in a positive way. I loved to go to the sessions." [School leader 2, female, 19 years of experience]

While asking the school leaders how they perceived the group reflective learning programme, they spontaneously named some preconditions. For a clear understanding, the school leaders did not name this as a precondition but explained that they experienced this as a valuable feature of the programme. Ten participants indicated the importance of psychological safety as an important aspect of the positive experience with the programme. Some participants explicitly added that they needed to feel safe in order to open up and share uncomfortable real life situations.

> "From the start we were a 'safe group'. I genuinely felt ... whether I say or do here, it stays between us. You will not show your vulnerability that easy with a school leader from the same village." [School leader 3, female, 2 years of experience]

> "A positive thing to me was the safe atmosphere. Nobody knew each other. That is important. If you have school leaders from the same area ... if you have a good relationship, you talk, but that is different. So, it was definitely an added value that no one knew each other." [School leader 16, male, 16 years of experience]

> "We had a good group. I experienced an atmosphere of trust; we could tell each other everything." [School leader 19, male, 15 years of experience]

Furthermore, the importance of the quality of the trainer was named by nine participants in order to structure the process, to prevent 'complaining chats', which may result in dead ends and to add relevant theories to get a deeper insight in the studied case. The participants valued the trainer frequently.

> "To continue to organize that, a programme with a trainer is a necessity, not without. Without a trainer, the programme will end up in a meaningless chat. The added theory and the professional approach from someone 'outside' is important. Professionals must be appointed for that. We should not be coached by our school board or a colleague." [School leader 2, female, 19 years of experience]

> "Our trainer advised us to think twice, to go the extra mile and she enforced deep thinking. It usually remains rather superficial when you share a problem with colleagues. They nod, recognize it and that's it. But due to the presence of the trainer, solutions were sought." [School leader 7, male, 4 years of experience]

> "Gosh, the trainers must be of an extreme high-quality, like our trainer. According to me, that is very important." [School leader 8, female, 13 years of experience]

The group diversity was perceived as an important factor of the positive experiences with the group reflective learning programme. The diversity of the group widens school leaders' perspectives on issues and widens their views. School leaders also seem to feel eased by the experiences of peers and no longer blame their context and lack of experience. They start to realize that every school has its issues. Eight participants named the easing effect as something

they appreciated in the training and linked it to the diversity of the group. More experienced school leaders referred that they felt eased because similar cases happened in other contexts too, whereas less experienced school leaders referred to the seniority of other school leaders and explained that they felt eased because they noted that senior school leaders experience similar cases as well and it is not due to their lack of experience. Furthermore, some school leaders operating in a highly urbanised environment, which is usually perceived as a more demanding context, also referred to the fact that they felt eased by stories of colleagues who experienced similar cases in more rural areas.

> "I feel more confident now. And the easing effect of the insight that we do not always know the answer and that even senior school leaders still encounter those problems ... and yes, that comforted and eased me. And with regard to content and material, I got so much tools to tackle a number of problems." [School leader 14, female, 2 years of experience]

> "I find it nice to hear, that it is not only in my city that the children react in this particular way, or that teachers behave like this or that. Because sometimes you blame your context. And then I think ... it is everywhere." [School leader 1, female, 2 years of experience]

The second cluster, consists of 'recognition' and 'support' from fellow school leaders. The codes are interconnected and sometimes mentioned together. Recognition was named by eleven school leaders and is mentioned the most frequently in answering the question on how they perceived and experienced the group reflective learning programme. Some school leaders described recognition related to its easing effect and the soothing of feelings of loneliness.

> "The reassurance of recognition of cases of other school leaders. It comforts ... that it happens at their schools as well, in a total different context, that they have sometimes some clashes too." [School leader 9, female, 9 years of experience]

> "It is about recognition; you notice that you are not the only one in the world who experiences those difficulties. Others are struggling too." [School leader 18, female, 2 years of experience]

Another emerging perception is supporting peers and the support received from peers (n=6). School leaders explain examples of deep listening, properly analysing the exemplified case, concrete advice in solving problems and comforting peers when unravelling the causes.

> "The strengths of the group reflective learning programme, once again ... the exchange and support of each other, deep listening, and the analysis of each phase of every case in a proper way." [School leader 10, female, 14 years of experience]

The participants also expressed their enjoyment of the learning-oriented experiences. The school leaders (n=7) valued learning from experiences. They named that it was interesting to

learn from own and others' experiences. They valued the group reflective learning programme because it built on own daily-life experiences.

> "It is important, that trainings are more concrete. They should start from existing, real life situations, from situations of school leaders like us. That is very fruitful, yes!" [School leader 18, female, 2 years of experience]

School leaders (n=6) also indicated enjoyable learning experiences in terms of possibilities to learn thanks to their participation in the group reflective learning programme. Some explained that they were grateful to learn from the supporting theoretical frameworks introduced by the trainers, whereas some others preferred to learn from the experiences of their colleagues. The link with the theoretical frameworks was also valued by school leaders (n=5) in more general explanations when valuing the programme. The school leaders named it as a general positive feature of the programme or as a feature that helped them to get more insight into a particular case.

> "The positive aspect is the theoretical approach and the valuable input." [School leader 12, male, 6 years of experience]

> "The input during the training, the literature, that is interesting, that is something I can learn." [School leader 10, female, 14 years of experience]

School leaders (n=6) also indicated that they found it meaningful to learn to approach cases from different viewpoints. Additionally, some school leaders exemplified that it eased them and removed tension from the situation resulting in a case that was easier to tackle.

> "It is good to talk substantively with like-minded people. Sometimes they have a different opinion, that broadens your own vision and eventually you look at it differently. I support that, I learn the most from that." [School leader 17, male, 7 years of experience]

Lastly, the participants valued the possibility of reflecting about their position and role as school leader (n=6). It helped them to get an increased understanding of their position and to eventually feel more confident and act more effectively at the workplace.

> "And that is a mirror that comes very close and that stimulates you … am I doing it in the right way? Do I have to change it? Do I have to act faster? Do I have to involve others or not? It is a very good exercise. A good mirror for myself as school leader, to see … is this okay?" [School leader 14, female, 2 years of experience]

> "So, we could reflect about ourselves. We are … I got a better insight in myself. I became more self-confident in some ways." [School leader 2, female, 19 years of experience]

Gauging the school leaders' experiences with the group reflective learning programme was based on open-ended questions supplemented by questions inciting positive and negative

experiences. The answers were predominantly of a positive nature; however, some school leaders added critiques. Three school leaders indicated that they would have liked to have time to exercise conversation techniques related to coaching, one school leader explicitly referred to the use of role-plays. Another comment expressed by three school leaders was that they felt pressure to leave their schools and found eight sessions of 2.5 hours spread over seven months rather excessive. One school leader indicated explicitly that the additional tasks caused time management issues and were demanding.

4.6 Discussion

One main research question guided this study: 'What were the school leaders' reactions with regard to the group reflective learning programme?' The findings show that the participants experience this type of programme as meaningful. A positive response to professional development activities is relevant to achieve deep learning (Kirkpatrick, 1994; Phillips, Stone & Phillips, 2001) eventually resulting in possible learning results and organizational change (Kirkpatrick, 1994). The school leaders agree on the importance of recognition, which refers to easing school leaders and soothing their feelings of loneliness. This aligns with the recommendations for the development of effective professional development for school leaders of Daniëls et al. (2019) who state that networking and collegial consulting reactivates knowledge and eases feelings of loneliness. Additionally, this corresponds with the statement of Aas & Vavik (2015) and Flückiger et al. (2017) who point to the importance of connectedness to others and the power of the group of establishing school leaders' continuous professional development. The participants also expressed their enjoyment of learning. Apart from that, the school leaders expressed some preconditions for the success of a group reflective learning programme and mentioned the importance of psychological safety, the role and quality of the trainer to steer the programme, and the diversity of the group to widen their views resulting in an easing effect. Other authors also described the preconditions expressed by the participants. For instance, Sanner & Bunderson (2015) referred to the importance of psychological safety in team learning. Aas & Vavik (2015), Dyke (2014) and Korthagen & Wubbels (2001) emphasized the role of the trainer in order to induce reflective learning and prevent for superficial informal chats. These results are meaningful in three ways. First, the predominantly positive responses of the participating school leaders show that the programme has the potential to effectively improve the participants' knowledge, skills, attitudes and behaviour which will possibly result in a change of the overall school performance (Kirkpatrick, 1994). Second, the results provide us with a deeper insight in school leaders' perceptions of preconditions of these particular kinds of programmes and it will allow shaping future group reflective learning programmes. Third, the results show that these participants enjoy the programme and the included learning activities. The school leaders show eagerness to learn and explained that they especially enjoyed reflecting about their own position and valued the link with the theoretical frameworks. In addition, the different viewpoints from the

peers were appreciated. Fourth, group reflective learning seems to satisfy the statement that school leaders need to be supported and provided with appropriate professional development programmes to prevent job related psychosocial issues (Devos et al., 2018; Elmore, 2000; La Pointe & Davis, 2006). The findings in the study indicate that group reflective learning can contribute to lower feelings of stress among school leaders, but to state this convincingly follow up research including a larger sample and a more focused questionnaire is needed.

4.7 Conclusion
Little is known about school leaders' group reflective learning, hence a qualitative approach was used to generate an insight in school leaders' responses to group reflective learning. Given the predominantly positive responses on the group reflective learning programme, further research considering the higher sequenced levels of Kirkpatrick's model is worth being carried out. Indeed, based on the outcomes of the current study, it can be stated that group reflective learning programmes have the potential to be successful. The participants enjoyed the programme and indicated the programme as relevant and appropriate. According to Kirkpatrick & Kirkpatrick (2006) this positively affects the participants learning motivation which was also reflected in the inquisitiveness the participants showed in their answers. Further studies, taking into account the higher sequenced levels of Kirkpatrick's model, will determine whether the participants transfer gained knowledge, skills and/ or attitudes into practice. The findings of the current study also give cause to invest in the development of (assessment tools for) group reflective learning programmes for school leaders.

While reasonable efforts have been made to conduct a trustworthy study, the study has some limitations. The limitations are relevant to take into account, when one would like to generalize the findings or would like to transfer it into practice. While compiling the sample, a self-selection effect may have occurred. Every Flemish school leader was allowed to participate in the study, but the participants have committed themselves to participate in the programme. While applying for the programme, school leaders had to indicate their motivation to participate in the programme. Subsequently, their motivation was gauged in a detailed explanation. Hence, the sample might consist of the most inquisitive primary school leaders. All participants were granted free participation in the programme because the programme had research purposes. The interviewer incited the participants to provide the interviewer with honest and critical feedback in order to carry out valuable scientific research, some school leaders, who are genuinely perceived as critical people, might have responded slightly more positive than usual. The positive reactions may also be linked to the feelings of elation because they found a platform to share their doubts and found a solution for their problem(s). The study relies on school leaders' self-reporting data. Self-reporting data recall sensitivity to bias such as social desirability, recall period and selective recall. The transcripts of the interviews were presented to the participants with the request to provide feedback. This request allowed to level out some bias caused due to issues of recalling during the interview. A few school leaders

provided some additional information. However, self-reporting data are valuable data when gauging perspectives and opinions likewise in the current study.

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4.9 Appendices

Appendix A

Main interview questions with regard to the reaction level

How did you experience the group reflective learning programme?
What is your most important experience in relation to the programme?
What could be improved about the group reflective learning programme?
Which advice would you give about the programme if you could report to school boards and/or umbrella organizations about the programme?

Appendix B

Table 4.1
Code clarifications to tackle school leaders' reactions on the group reflective learning programme

1. Qualitative trainer*	A trainer who manages to keep the group focused on the reflection process and who is able to add relevant theories during the process. (Authors' definition)
2. Team/group psychological safety*	"Team (group) psychological safety is defined as a shared belief that the team is safe for interpersonal risk taking." (Edmondson, 1999, p.5)
3. Diversity of the group members	The groups were composed taking into account a variety of umbrella organizations, seniority and geographical spread. (Authors' definition)
4. Recognition	Recognition refers to the fact that school leaders recognize situations that peers encounter as well. (Authors' definition)
5. Support from fellow school leaders	Support from fellow school leaders refers to gaining new perspectives, increasing efficiency, becoming more innovative through the presence and support from fellow school leaders. (Authors' definition)
6. Learning from own experiences and peers*	The particular learning experiences based on cases, examples, advices or questions from own experiences and/or group members. (Authors' clarification.)
7. Possibility to learn	School leaders value the different learning activities, options to learn or express their inquisitiveness. (Authors' clarification.)
8. Approach the situation from another point of view*	Exposure to the experiences of school leaders from various schools develops 'cultural competence'. Cultural competence includes the

	ability to respond in an open-minded way to other people's ideas and be willing to question one's own assumptions and the assumptions of other group members (Passmore, 2013).
9. Reflecting about their own position*	Reflection is an activity in which 'an individual steps back from experiences in order to analyse the meaning to the self' (Hulsbos, Evers & Kessels, 2016; Daudelin, 1996). Aas (2016) defines reflective learning as 'the critical investigation of an individual's own practice in order to provide professional learning and development'.
10. Link with theory	Referring to the trainer who introduces links to theoretical frameworks and theories to clarify or better understand the presented cases. (Authors' definition)
11. Human approach of the fellow school leaders	A positive, respectful and empathic approach of the fellow school leaders in the group. (Authors' definition)
12. Not at their own school	The school leaders, who indicated this, valued the fact that the trajectory took place out of their own school environment and emphasized that this facilitated their learning process. (Authors' clarification.)
13. Based on own experiences*	This node compiles quotes referring to the starting point of the trajectory: school leaders' own experiences and difficulties to find eventually options to proceed or in the best-case solutions. (Authors' clarification.)
14. Accompanying tasks (preparatory and wrap up writing tasks) helped to structure and facilitate the reflective process.	For the sake of the professional development trajectory, the participating school leaders were asked to write a summary of the case they wanted to discuss. After every training session, the school leaders had to write a report in which they addressed their learning experiences and reported on how to turn into practice what they had learned. (Authors' clarification.)

The sensitizing concepts are indicated in the table above by means of an asterisk.

CHAPTER 4

Chapter 5

Do school leaders learn from a group reflective learning programme?

Exploratory Phase	Experimental Phase	
A review on leadership and leadership development in educational settings　2	Developing school leaders: Responses to group reflective learning　4	Do school leaders learn from a group reflective learning programme?　5
Mapping school leaders' professional development　3	Does leadership training improve organizational learning climates?　6	School leaders' and teachers' leadership perceptions: Differences and similarities　7

This chapter is derived from the following article published in Reflective Practice (tandfonline):

Abstract

Research on school leaders' professional development is scarce. Knowledge about school leaders' professional development is important with regard to keeping school leadership attractive and pupils' achievement. Based on previous scholarly work, the current article explores the impact of a group reflective learning programme for school leaders. The programme focused on one of the school leaders' prioritised professional development needs: coaching teachers. Nineteen school leaders participated in the eight-part programme and were interviewed after the programme. The interviews gauged school leaders' perceptions of learning outcomes and impact on their professional behaviour. The school leaders indicated that they gained theoretical knowledge and that they developed their coaching skills and the way they provide feedback. The school leaders stated that they valued group reflective learning because they learned to approach situations from various angles. Moreover, the school leaders reported increased levels of self-confidence and no longer feeling responsible for solving all problems by themselves.

5.1 Introduction

The importance of school leadership to pupils' achievement and moreover the overall school effectiveness and improvement is widely accepted (Leithwood & Jantzi, 2006) and results in an increasing interest in school leaders' professional development. Despite this increasing interest, the literature on school leaders' professional development (PD) and especially the impact of professional development programmes for school leaders is according to Hallinger, still an embarrassment in the field (Leithwood, 2019, Foreword, p. x). The existing literature is dominated by descriptions, opinions, and prescriptions of professional development programmes for school leaders and lacks studies investigating short- and long-term effects of school leaders' PD.

The current study researches the learning effects of a group reflective learning programme for primary school leaders in Flanders, Belgium. It takes into account a number of important characteristics of professional development for school leaders suggested in a review of Daniëls, Hondeghem & Dochy (2019): the programme focuses on experiential learning, pays attention to the transfer of learning, considers networking, and was spread over time. Apart from these insights, the programme builds on recent studies indicating that school leaders prefer to ask colleagues for feedback and that they favour reflective learning and trainings spread over multiple sessions (Daniëls, Hondeghem & Dochy, 2017; Devos, Vanblaere & Bellemans, 2018). Flemish school leaders stated in previous studies that they feel a need for professional development programmes with regard to people management and more in particular programmes considering coaching skills.

The current study contributes to the literature on school leaders' reflective learning and more particular on the effects of group reflective learning for school leaders. The contribution can foster the improvement of school leaders' professional development, especially professional development focusing on reflective learning.

For a clear understanding, first some information about the context is provided. The current study was conducted in primary schools in Flanders (Belgium). A single school leader taking the daily lead over the teachers characterizes the organizational structure of Flemish primary schools. Professional development for school leaders is not compulsory in Flanders. However, the majority of the Flemish primary school leaders (94%) participates annually in professional development activities (Daniëls et al., 2017). In the study of Daniëls et al. (2017), 30% indicated that they participated in the previous year in a group reflective learning programme. Existing group reflective learning programmes are characterized as programmes among acquaintances, in the absence of a trainer and hence contrast with the programme subject to the current study (cf. infra). Moreover, the group reflective learning programmes are perceived as useful (80%) and 76% stated that they made use of the gained knowledge (Daniëls et al., 2017). In-depth information about learning gains and behavioural changes of group reflective learning programmes is so far scarce.

5.2 Theoretical Perspectives

The current section provides background on reflective learning, coaching leadership and evaluation of training programmes.

5.2.1 Reflective Learning

Researchers define reflection as 'a process in which one takes a step back from the experience to analyse the meaning to the self through the development of inferences' (Daudelin, 1996; Hulsbos, Evers & Kessels, 2016). Peltier, Hay & Drago (2005) designate three features of the reflection process in terms of awareness, critical analysis, and change. Through awareness, critical thinking and analysis, reflection aims to elicit learning and change resulting in acquiring or refining knowledge, skills, and/or attitudes (KSAs). Reflection involves theory, practice, thought and action, to elicit the development of KSAs (Osterman & Kottkamp 1993). Daudelin (1996) states, whether conducted alone or with others, effective reflection occurs if it is approached in a structured way.

Reflection is also associated with deep learning. Ryan & Ryan (2013) for instance state that deep learning is more likely to occur in association with reflection. Nevertheless, these positive associations, there are also some pitfalls. Clydesdale (2016) states that discussions in small groups are not always appropriate for personal issues. Participants may feel uncomfortable when airing personal reflections in front of others.

A specific feature of reflection taking place in small groups is that ideas are generated by sharing different perspectives. Reflection in small groups allows viewing practice through different lenses resulting in a more holistic picture (Karm, 2010). Additionally, peers in small groups facing similar challenges assist others in discovering important information about themselves and their ways of thinking. The total reflection time for peers seems less in small groups, though while one person is sharing his or her experience, others can relate the information to their own challenges, practice, or experiences as well (Daudelin, 1996).

Korthagen & Vasalos (2005) propose core reflection to achieve an effective learning process. Core reflection focuses on deep reflection and moves beyond a rather superficial and rational approach. The process assumes including one's thoughts and feelings, and focuses on nurturing the relation between a person's core qualities and experiences in his/her daily (professional) life. Moreover, core reflection is inspired by positive psychology and aims at building on people's strengths and positive feelings. It is centred on seeing oneself positively and elaborates on people's core qualities and creating alternative methods of action (Korthagen et al., 2001). Core reflection leaves room for an analysis of the situation but focuses on creating new possibilities and taking actions towards the ideal situation (Korthagen & Vasalos, 2005). Core reflection promotes the awareness of people's qualities and levels of change displayed in the 'onion model' (see Figure 5.1).

The levels of change are explained based on Korthagen (2004). The outer levels environment (school, teachers, and pupils) and behaviour focus on problems and cases in the school. The level of competencies (i.e. an integrated body of knowledge, skills and attitudes) is influential for the behaviour level and represents the potential for behaviour. Whether behaviour occurs in practice or not, depends on the circumstances. Subsequently, one's competencies are determined by one's beliefs. If a school leader, for instance beliefs that he or she cannot change anything, the school leader will probably not develop the competencies nor show them in practice. The fifth level, identity, considers people's beliefs about themselves. Identity focuses on a person's perception of his or her professional identity. Professional identity is concerned with what one professionally inspires, and gives meaning and significance to one's professional life. The sixth and last level mission reflects on what moves one to do what he or she does. The mission level is about becoming aware of the meaning of one's own existence and the relationship with others. It refers to one's personal inspiration and the calling for practising the profession. An alignment between the levels of changes is the key to effective performance.

Figure 5.1
Onion-model: A model of levels of change (Korthagen Professional Development 2018)
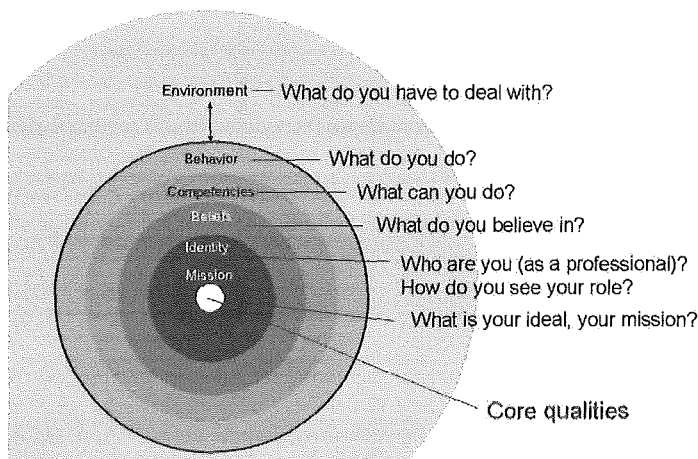
5.2.2 Coaching Leadership
Coaching at the workplace arose as an attempt to foster individual professional development and enhance performance (Greer, 2010). Various definitions of coaching leadership have been developed over the past years. Tanskanen, Mäkelä & Viitala (2019) define coaching leadership as leadership behaviour that supports individuals to set and attain their goals, to improve performance and to develop competencies, to strengthen self-directed behaviour, and to understand the broader goals of the organization (Bond & Seneque, 2013; Ellinger, Hamlin &

Beattie, 2008). A trusting and supportive relationship between a leader and an employee is a crucial element in coaching leadership (Bond & Seneque, 2013). Based on a review study, Heslin, Vandewalle & Latham (2006) derived three components of coaching leadership: (1) guidance, i.e. the communication of clear performance expectations and constructive feedback regarding performance outcomes and improvement, (2) facilitation: providing support in enhancing performance and exploring ways to solve problems, (3) inspiration: encouraging employees to use their full potential and to focus on PD.

Coaching leadership requires coaching skills and behaviours. Empirical research has described a series of coaching behaviours: giving feedback, encouraging employees to solve work-related problems, setting expectations, supporting employees in developing new skills, offering resources for the accomplishment of tasks, etc. (e.g. Choi, 2013). The previous mentioned coaching skills are largely consistent with managerial effectiveness (Ellinger et al., 2008). John Heron (1975) (in de Haan & Nilsson, 2017) proposed a model that focuses on coaching skills and behaviours and names six types of interventions classified in two groups: leading skills (1-3) and facilitating skills (4-6). The table below (5.1) provides insights in the coaching skills using explanations of de Haan & Nilsson (2017).

Table 5.1
Coaching skills and behaviours (Heron, 1975) adapted from de Haan & Nilsson (2017)

Leading Skills	Prescribing	giving directions, advice and recommendations. The coach directs the learning experience in some way, taking a degree of responsibility for coaching goals, learning methods, the design and possible solutions within the coaching process.
	Informing	giving information and transferring knowledge. The coach gives information to the coachee; this could be technical, professional or organizational knowledge. It could also be "feedback" about the content of coaching or about the potential consequences of different courses of action.
	Confronting	challenging the coachees assumptions; stimulating awareness of the coachees behaviour, attitudes or beliefs. The coach uses confrontation to help the coachee to gain a deeper awareness.
Facilitating Skills	Releasing	helping the coachee to release tension and to discharge or come to terms with emotions that are blocking progress. The coach helps the coachee to express and to deal with emotions that are holding him or her back in the learning activity.
	Exploring	helping the coachee to self-discovery, to self-directed learning, and to owning and solving his or her own problems without becoming involved in the learning or changing oneself as a coach. Examples of skills are active listening, summarizing, paraphrasing, echoing and inquiring more deeply through open client-led questioning.
	Supporting	Building the coachee's self-esteem, self-confidence and self-respect. Self-esteem is strengthened by welcoming and offering specific support, appreciation and praise, expressing confidence or agreement; or appropriate self-disclosure and sharing.

5.2.3 Evaluation of Training Programmes

A commonly accepted model to measure training effectiveness is Kirkpatrick's Hierarchical Model of Training Outcomes (1994). The model consists of four levels: reaction, learning, behaviour, and results. The four levels are explained in table 5.2 and represent a sequence of ways to evaluate training programmes. Evaluating training including higher levels implies that the evaluating process becomes more difficult and time-consuming (Kirkpatrick, 1994). However, it provides more and valuable information (Kirkpatrick, 1994).

Table 5.2

The four levels of Kirkpatrick (Kirkpatrick, 1994)

Level	Definition
Level 1 Reaction	The degree to which participants find the training favourable, engaging and relevant to their jobs.
Level 2 Learning	The degree to which participants acquire the intended knowledge, skills, attitude, confidence and commitment based on their participation in the training.
Level 3 Behaviour	The degree to which participants apply what they have learned during training when they are back on the job.
Level 4 Results	The degree to which targeted outcomes occur because of the training and the support and accountability package.

Some scholars criticized Kirkpatrick's model or proposed additions to the model (Tamkin, Yarnall & Kerrin, 2002). Several scholars argue that Kirkpatrick's model does not capture all possible factors. The model does not take into consideration all contextual, individual nor external factors (Mc Evoy, 1997). Giangreco, Carugati & Sebastiano (2008) state that research should focus on assessing the use of training and how it contributes to performances, rather than assessing the training itself. The criticism of Kirkpatrick's model are considered as additions and nuances, rather than fundamental criticism. Hence, the model is considered as a valuable model to research school leaders' experiences with group reflective learning.

5.3 Research Questions

The current study researches the effectiveness of a professional development programme, i.e. a group reflective learning programme (GRLP) (see 5.4.1). Professional development effectiveness is a measure that examines the degree to which a professional development programme results in the improvement of the goals of the programme. In the current study, the development of school leaders' coaching behaviours was the focus. However, room to trace unintended effects was left as well. This central focus was determined based on previous research (Daniëls et al., 2017; Devos et al., 2018) in which Flemish school leaders among others stated that they favour reflective learning and that they prefer PD focusing on coaching skills. Hence, the current study designed a group reflective learning programme to investigate the outcomes of a GRLP for school leaders.

The study digs into the perception of the effects on the learning level and the changes on the behavioural level and addresses the following research questions:

1. What did school leaders learn because of the GRLP?
2. Do school leaders perceive the GRLP to influence their behaviour at the workplace?

5.4 Method

5.4.1 Group Reflective Learning Programme

The group reflective learning programme consists of three phases, i.e. session 1, sessions 2-7, and session 8 (see Figure 5.2). Each session lasted for 2.5 hours. The programme enabled groups of six or seven participants supervised by an experienced trainer to reflect on cases about coaching teachers. A group size of six to seven members was determined because a number of 6-7 is suitable to develop context-based competences and to build an atmosphere of psychological safety for sharing personal experiences and feelings (Aas & Vavik, 2015). The role of the trainer is important for group reflective learning to keep the group focused and to prevent the group from engaging in superficial chats (Aas & Vavik, 2015; Korthagen & Wubbels 2001). The trainer structures the reflective process, carries out the role of expert by adding relevant theories and connects ideas and information raised by participants. The programme applies a structured approach because using a structured approach of reflection deepens the quality of reflection (Daudelin 1996) (see phase 2 in Figure 5.2). The outline of the sessions is displayed in Figure 5.2 and is explained based on Step, Depuydt, Mertens, Delathouwer & Daniëls (2018). The first session was an introductory session to become familiar with the technique and to give room for acquaintance and the development of psychological safety. Psychological safety is understood as a shared belief that the group is safe for interpersonal risk taking (Edmondson, 1999). Psychological safety is a necessity to ensure that the participants feel safe to share their personal case, feelings and issues.

In the second phase, the school leaders alternately reported on a self-selected case, related to the topic of the programme: coaching teachers. Throughout the sessions, the non-presenting school leaders were actively involved by asking questions, thinking about the presented case and by sharing relevant experiences. Sharing relevant experiences is important for recognition and eliciting learning experiences.

In the sessions of the second phase, the participants first had to prepare and share a written report with the group members and the trainer. Second, the reporting school leader provided a lie of the land. Third, the other participants and the trainer assisted the school leader in the reflection process through asking clarifying questions and adding, predominantly by the trainer, relevant theoretical frameworks (among others coaching skills) until the particular issue became completely clear. Fourth, everyone was given a moment to write down their perceptions about the central issue, called 'think and write'. Fifth, every participant shared his/her opinion with the reporting school leader who listened to the opinions. Sixth, the

reporting school leader reflected on the opinions of the peers and determined the scope of the further process. Seventh, the other participants got room to share relevant experiences. Sharing relevant experiences is important for recognition and eliciting learning experiences. The session concluded with a wrap up. Every participant reflected on their learning experiences and specified how and what they were planning to transfer into practice. Finally, the reporting school leader concluded the session and reported on how the school leader experienced the session, reported on the learning gains and the planned actions to get started with the case. In the subsequent session, the reporting school leader was questioned what he/she had put into practice in order to facilitate transfer of training. To ensure the learning and transfer of learning of all participants, every participant had to write a review report on the session that was shared with the group members and was discussed briefly in terms of (learning) experience in the following session (Step et al., 2018).

The last phase, consisting of session 8, was a wrap-up session in which all school leaders could look back and reflect on their overall learning process in order to facilitate further transfer.

Figure 5.2
Schematic overview of the GRLP (Step et al. 2018)

Phase 1 Session 1	Phase 2 Session 2 – 7	Phase 3 Session 8
▪ Acquaintance ▪ Introduction in technique	1. Case report prior to the session in which school leaders alternately present a case 2. Lie of the land by presenting school leader 3. Asking questions by participants and trainer 4. Think and write 5. Participants and trainer share insights with the presenting school leader 6. Presenting school leader reports on shared insights 7. Participants and trainer share reflections 8. Wrap up – Reflection on learning and transfer by presenting school leader	▪ Overall wrap up

Every participant writes a reflection report after each session to facilitate learning. The reflection reports are shared via a learning platform and briefly discussed at the start of the session by the trainer.

Six – Seven Months

5.4.2 Participants

The sample was compiled by inviting all primary school leaders whose details were available via the Flemish ministry of education (n=2143). The school leaders were invited via e-mail. Seventy school leaders replied and based on a large variation of the following parameters:

seniority, umbrella organization, urbanized and less-urbanized surroundings, and homogeneity for the school leader – teacher ratio (1:20 – 1:35, $\bar{X}$= 27.15), 22 primary schools were selected. The range for the school leader – teacher ratio in the sample aligns with the average school leader – teacher ratio in primary schools in Flanders. Apart from the homogeneity for the school leader – teacher ratio, a variety for the other parameters (such as seniority, umbrella organisation, urbanised or less-urbanised) was taken into account in order to elicit rich reflective discussions. Three school leaders dropped out, one due to job turnover and two due to prolonged sick leave. The final sample (n=19) consisted of 6 male and 13 female school leaders. The school leaders were divided into three groups of 6-7 participants. The groups were compiled for variation on the previously mentioned parameters to elicit rich discussions. Table 5.3 provides an overview of the seniority and age of the sampled school leaders. Prior to the study, the participants were given an informed consent explaining the group reflective learning programme and the research procedure. Anonymity was ensured throughout the study. All participants participated voluntarily and signed for informed consent.

Table 5.3
Overview of seniority and age of the school leaders in the sample

	Average	Range
Seniority	7.10 years	2-19 years
Age	45.15 years	37-54 years

5.4.3 Data Collection
Semi-structured interviews were used to collect the data. An interview guide allowed the pursuit of methodological consistency and contribution to the similarity of the interviews (Cohen, Manion & Morrison, 2011). The interview guide consisted of open questions to encourage the participants describing their experiences extensively and independently. The interview guide was designed and tested in various phases with doctoral students and primary school leaders.

Almost all interviews (n=18) were conducted at the participants' workplace and lasted between 20 and 60 minutes. One participant preferred to hold the interview at the researchers' workplace. According to Mc Evoy (1997), trainees often tend to complete PD programmes in a state of euphoria, and as such, their prompt reaction is much higher than feedback reactions measured later. Hence, the interviews were carried out 3-6 weeks after the programme ended.

5.4.4 Data Analysis
The interviews (n=19) were audio-recorded and transcribed verbatim. The transcriptions were presented to the participants for member validation (Torrance, 2012). During the literature review, some sensitising concepts emerged and were included in the field notes.

First, all transcripts were read to get an insight, and derive codes for the coding tree. Based on this reading, relevant codes were selected and checked for suitability, resulting in an initial coding tree. The initial coding tree was compared with the sensitizing concepts of the field notes; however, no concept needed to be added based on this comparison. During the development of the coding tree, the explanations of the codes were drafted and discussed with two peers to ensure clarity of code clarifications. Subsequently, the transcriptions (n=19) were analysed using NVivo11. To explore the data and let additional codes emerge, the transcriptions were coded inductively. The coding relied on the interpretation of one of the researchers and was supplemented by a search based on the nouns and verbs appearing in the coding tree in order to assure a structured coding and to prevent researcher bias. The coding results were discussed after the first coding round. To ensure that the coding was meticulously carried out, a second coding was done, though it barely resulted in extra codes or extra coded citations.

5.4.5 Trustworthiness
Trustworthiness refers to the fact that the data analysis and the forth-coming results represent a plausible representation of the participants' explanations and exemplifications (Suter, 2012). Hence, while carrying out the current study; various characteristics of qualitative research were taken into account to ensure trustworthiness.

Triangulation was ensured through the inclusion of data from interviews, the interviewer's field notes and the scientific literature. The field notes acted as an aid to develop a broader insight in the data and codes. Criticality and thoroughness were pursued by repeated readings of the transcripts, rich descriptions including quotes, explanations of codes to ensure an unambiguous coding process, and peer feedback leading to a thorough understanding of school leaders' responses. Confirmability refers to the fact that the findings emerge from the participants and are predominantly shaped by the participants. Confirmability aligns with credibility which refers to the 'truth' of the data, the participant views and the representation of these views by the researchers (Polit & Beck, 2012). Confirmability was addressed using rich quotes from the transcriptions. To ensure accuracy of interpretations, the coding process was carried out using a coding tree. The dependability of the research, i.e. the findings are consistent and repeatable, is ensured because the methods and design of the study are described in detail. Furthermore, data saturation occurred after 10 interviews, which means that there is little chance that other codes would emerge from another or larger sample.

5.5 Findings
The following paragraphs report on the frequently cited perceptions of learning experiences (level 2) and percetions of behavioural changes on the job (level 3) resulting from the GRLP.

5.5.1 Level 2 – Learning

5.5.1.1 Knowledge

During the interviews, 15 participants responded that they gained knowledge as a result of the GRLP. The acquired knowledge was mostly explained as a result of the feedback on the presented case by the trainer, and consisted of theoretical frameworks to support the participants' understanding of the particular case.

> "The models and methods, I will remember that. Especially that model of the iceberg, and the model as a guidance for performance appraisals. I have put them together in a map. If necessary, I can look it up quickly, apply, and adjust it to a particular case at my school." [School leader 14]

> "Every now and then, those frameworks were introduced. That framework of authority and autonomy that was a revelation for me. That framework, that is a return on the sessions and I am grateful. Certainly that framework. And so is the drama triangle." [School leader 8]

Additionally, the participants exemplified that they learned from theoretical clarifications and additions from other participants. The theoretical frameworks facilitated insight in the cases and one's behaviour and role as school leader. Two participants explained that they got an insight in their behaviour and the particular case, but did not link it to the acquisition of theoretical knowledge during the GRLP. They emphasized, like four others, the importance of the group reflective technique and thus analysing the cases with their peers to get an insight in one's behaviour and role.

5.5.1.2 Skills

Many school leaders (n=11) explained that the group reflective learning programme influenced their way of providing teachers with feedback. The school leaders explained that they name things more explicitly and clearly. This is in correspondence with the leading coaching skills, prescribing, informing and confronting, and with the facilitating coaching skill supporting (Heron, 1975 in de Haan & Nilsson, 2017). Previously, they avoided to provide feedback because they were afraid of hurting their teachers or causing major conflicts. However, the participants indicated that teachers appreciate immediate feedback and that providing immediate feedback does not lead to more or worse conflicts, something they previously feared. The participants also emphasized that they are more aware of providing both positive and negative feedback.

> "Awareness. If I see something, I will not just pass by and think: 'I will talk about it later.' I will provide them with immediate feedback. I try to do that much more. I state things concretely and do not give one huge compliment at the end of the conversation. *[Participant refers to acknowledging teachers frequently for achievements.]* When I

have been with someone, I immediately mention what I have seen: 'Wow that is cool.' but also vice versa, when I have seen something that makes me frown, I do not wait but state things like: 'I have seen that ... or ... why are you doing that?' I question and ask more." [School leader, 20]

Seven school leaders named that they developed their coaching skills and six school leaders added that their overall leadership developed more towards a coaching leadership style. They referred to coaching skills in general, but when asked to clarify this, one usually (n=5) referred to 'asking coaching questions' in order to get a clearer picture of what was going on, i.e. exploring questions, or to stimulate the teachers to encourage them to find solutions themselves, i.e. questions to challenge the teachers. Moreover, five school leaders exemplified that their attention was drawn to the importance of appreciating teachers' contributions and achievements more frequently and explicitly.

Some school leaders valued the insights they gained through approaching the case from various angles. They learned to approach the case from various viewpoints and got deeper insights. One school leader for instance expressed that he/she realizes that other ideas are meaningful as well, and that his/her idea was not always correct. According to the participants, approaching a particular case from the point of view from other people and various angles stimulates to think outside the box and come up with renewed solutions. The latter aligns with the approach of core reflection, i.e. creating alternative methods of action.

5.5.1.3 Self-confidence

Almost all school leaders (n=16) cited examples explaining that the group reflective learning programme contributed to the development of their professional self-confidence. For a more nuanced understanding, the coding of self-confidence was divided into two main categories. First, 10 school leaders indicated that the participation in the programme resulted in higher levels of self-confidence in their leadership competencies. The participants for instance clarified that if previously something went wrong, they thought it only happened at their school, they blamed themselves for these things or thought it was due to their lack of experience. They stated that the programme brought peace because they learned that they were not the only one who had to deal with these situations. Moreover, they got an insight in how to handle similar situations in different ways using the feedback of other participants, and they received compliments and recognition for their work by the participants, resulting in higher levels of self-confidence. Second, seven school leaders explained that they feel more confident in coaching and carrying out coaching conversations with teachers.

"There are clashes and fights everywhere. It is very interesting to listen how someone else approaches that. One approaches it very deeply, puts so much effort in it that it almost causes a nervous breakdown, whereas someone else approaches it much more relaxed. And yes, so I yes, I liked that. I now feel more confident. I really want to do it

now; I dare to say that I want to be a school leader until I retire. I did not have that feeling a few years ago." [School leader 7]

5.5.2 Level 3 - Behaviour

The participants (n=12) reported to apply coaching skills in their daily practice as a result of the group reflective learning. One school leader exemplified for instance that she wanted to develop her people by involving them in daily management and self-leadership, and asking teacher-led questions:

> "To develop my people, ... I ask them for instance: 'How do you look at it?', 'What are your options?', 'How can you develop?', 'What do you need? and 'How can I support you?'. It is about involving the colleagues and asking questions." [School leader, 10]

Some others stated that they used the coaching technique of 'confronting in a concerned way' (cf. leading coaching skills). Confronting someone in a concerned way is multiple and considers gaining deeper awareness, supporting the relationship, adjusting behaviour or processes, challenging teachers' assumptions, and challenging them to undertake action. One school leader exemplified it as follows:

> "Involvement, I want to be respectful. Sometimes, I thought ... damn, I am going to hurt those people, I am going to say something wrong, or that may jeopardize our relationship. However, it has become clear that through confronting them in a concerned way, which is a very correct way ... it is linked to who I want to be as a school leader. I mention in a very respectful way, honest and open, transparent, the way I see them, with concrete examples, expressing my feelings to a certain extent. That made me realize that it is possible to discuss difficult situations. It made me realize, that this is no longer the worst, and the connection with the teachers will stay, of course, it is not only stars and rainbows, but teachers do not expect that either. It is much appreciated, that you name things as they are and how you experience them." [School leader 15]

Seven school leaders reported that they no longer avoid or postpone providing teachers with feedback. Due to the programme, the school leaders name things more explicitly, even uncomfortable situations.

Apart from applying coaching skills, about half of the participating school leaders (n=8) indicated that they no longer solve all problems by themselves. Some explicitly indicated to invest in teachers' empowerment and the development of teachers' solution-oriented behaviour, whereas other participants refer rather to 'setting limits' related 'to self-care'. To no longer solve all problems by themselves, some school leaders clearly made use of coaching techniques. For instance, the citation of school leader 21 shows how school leaders ask

questions to sort out the current situation and challenge the teacher to take action to solve the problem. This aligns with the leading coaching skills prescribing and confronting.

> "I am clearer about the limits. It is easier for me to say 'stop'. What do I actually state? Uhm, I think that school leaders feel responsible and let every responsibility and every assignment jump on their back. Like monkeys on their back. However, in the end, that is impossible. I became more direct. I say 'That is your responsibility; you need to make sure that it is sorted out.' In the past, when teachers came to complain about another colleague … I immediately would have put time and effort in it. Now, I will say 'First, have you discussed this with your colleague?'" [School leader 21]

One school leader explained that he/she did not apply anything yet, because the teachers experienced high levels of stress during the education review. Hence, the school leader decided to leave the teachers as much as possible in peace during the remaining months of the school year in which the GRLP and interview with the school leader took place.

5.6 Discussion

The study investigated school leaders' perceptions about learning and change in professional behaviour because of group reflective learning. The study aimed to contribute to the rather unexplored field of school leaders' professional development and more in particular school leaders' perceived group reflective learning. The group reflective learning programme aimed to facilitate the participants' development with regard to coaching skills. The GRLP was based on the premise that addressing structured group reflective learning can elicit (deep) learning with regard to coaching teachers. Deep learning is understood as a powerful way of learning that reflects intrinsic interest, orientation to deeply understand what is being learned (Dolmans, Loyens, Marcq and Gijbels, 2016), and developing as a person.

Empirical evidence from our study suggests that group reflective learning can contribute to the development of coaching skills, i.e. development of leading coaching skills (Heron, 1975) and more in particular to the skills informing and confronting, but also to facilitating coaching skills, namely exploring and supporting. In addition, the participants exemplified that they gained theoretical knowledge and that the programme contributed to the development of their professional self-confidence. Therefore, it can be summarized that the combined core reflective and case-based approaches adopted by the GRLP resulted according to the participating school leaders in learning experiences. Furthermore, the programme appears to provoke changes in professional behaviour. The participants reported to apply coaching skills, especially involving teachers in the coaching process, asking teacher-led questions and confronting teachers in a concerned way. In addition, school leaders indicated to support teachers towards solution-oriented behaviour and hence, provoking behavioural change among teachers.

Implications of the current study may be that pre-service and in-service training for school leaders with group reflective learning components (see 4.1) can elicit learning. A group

reflective learning programme can contribute to the development of coaching skills and can contribute to an increase in school leaders' self-confidence. A GRLP has potential for contributing to keeping the job attractive and sustainable. For example, school leaders tend to involve teachers more in problem solving and feel no longer responsible for each problem resulting in a decrease in school leaders' workload.

The current study is a qualitative study, exploring the impacts of a programme for primary school leaders in Flanders. To make reliable generalizations, the authors state that future work is a necessity. Future research including comparative research between Flanders and other regions, and quantitative research can reinforce generalisations. Another relevant research approach is to investigate how group reflective learning for school leaders relates to other professional development techniques for school leaders. Moreover, future work should consider the longitudinal effects of group reflective learning and should include teacher perceptions as well, because they are the ones who benefit or not from school leaders' (coaching) skills. Using deep case studies, future work can explore the effects of group reflective learning on the level of the organisation.

Reasonable efforts have been made to conduct a reliable and valid study. However, every study has some limitations likewise our study. The sample was assembled based on volunteers. Although all Flemish school leaders had the chance to participate, a self-selecting effect may have occurred. Probably, school leaders having high levels of motivation for professional development have participated. A high learning motivation can result in higher learning outcomes. The study relies on self-reported data. It is relevant to start from self-reported data, but including perceptions from teachers or observations can strengthen the findings.

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Chapter 6

Does leadership training improve organizational learning climates?

Exploratory Phase	Experimental Phase	
A review on leadership and leadership development in educational settings 2	Developing school leaders: Responses to group reflective learning 4	Do school leaders learn from a group reflective learning programme? 5
Mapping school leaders' professional development 3	Does leadership training improve organizational learning climates? 6	School leaders' and teachers' leadership perceptions: Differences and similarities 7

Abstract

Research considering the effects of leadership training and development is still underexposed. In this study, we examine the effect of a leadership training in an educational setting as a subfield of public administration. The study questions whether leadership development using a group reflective learning program that focuses on coaching skills can influence teacher perceptions of the organizational learning climate and school leaders' coaching behaviour. Using a sample of 289 teachers, we found that school leaders' participation in the group reflective learning program results in a significant increase of teachers' perceptions of the organizational learning climate. Furthermore, we found a non-significant increase of teachers' perceptions of school leaders' coaching behaviour. The results are promising and show that leadership training using a group reflective learning program can result in influencing teacher perceptions of organizational learning climate. The results are inspiring for policy makers, practitioners and researchers when making policy choices and shaping professional development.

6.1 Introduction

Despite the numerous studies on leadership, research considering the effects of leadership training and development remains underexposed. This is rather peculiar. Indeed, leadership training and development get ample attention because of the increasing complexity of the workplace and the continuous need for innovation and improvement (Seidle, Fernandez & Perry, 2016). Besides, a thorough understanding of how leadership development can increase organizational performance in the public sector, and supporting empirical evidence are scarce (Fernandez, Cho & Perry, 2010; Van Wart, 2003; Oberfield, 2012). The current study examines the effect of a leadership training in an educational setting as a subfield of public administration (Meier & O'Toole, 2006). The subfield of education is of vital importance to public administration as on average in OECD-countries 11% of total public expenditures (ranging 7% - 17%) is spent on education (OECD, 2019).

Organizational learning climate has become more popular within organizational research (Eldor & Harpaz, 2016). Organizational learning climate is associated with positive influences on staffs motivation and job satisfaction (Egan, Yang & Bartlett, 2004; Govaerts, Kyndt, Dochy & Baert, 2011; Mikkelsen, Saksvik & Ursin, 1999). Moreover, an effective organizational learning climate can counteract negative employee outcomes, such as turnover intentions and work stress, and can increase positive outcomes such as job satisfaction and positive working conditions (Ellström, 2001; Egan et al., 2004; Govaerts et al., 2011; Mikkelsen, Saksvik, Eriksen & Ursin, 1998; Shoshani & Eldor, 2016). However, teachers' perceptions of organizational learning climate have been given scarce attention. This gap is surprising given that learning is the core process of schools, and given that, schools embed numerous learning opportunities for teachers (Shoshani & Eldor, 2016). Due to rising levels of teacher shortages and some studies who disclose that teachers tend to perceive formal learning as irrelevant or ineffective (Lieberman & Pointer Mace, 2008; Opfer & Pedder, 2011), it is crucial that researchers pay attention to organizational learning climate and fostering learning at the workplace. Additionally, organizational learning climate is crucial for optimizing training outcomes, and furthermore professional development has positive influences on pupils' achievement and the delivery of quality education (OECD, 2009; Weiss, Wagner & Nasca, 2012; Weiss, Bagian & Nasca, 2013).

School leaders play an important role in leading (teachers') learning and shaping the schools' learning climate, which have to respond to the challenges of the contemporary society. According to Kessels, an effective learning climate can help school leaders and teachers to tackle the challenges and complexities of the society and their jobs in a successful way (van Wessum & Verheggen, 2019, Foreword, p. 7). Adapting to the rapidly evolving society in which more knowledge becomes available, is pivotal for schools in order to be able to deliver quality education (OECD, 2009; Hetland, Skogstad, Hetland & Mikkelsen, 2011).

This chapter considers the impact of school leaders' training and questions whether leadership training can improve teachers' perceptions. More specific, we examine the impact of a group reflective learning program for school leaders focusing on coaching techniques, and question whether it influences teacher perceptions of organizational learning climate and school leaders' coaching behaviour. This focus was determined based on previous research in which school leaders indicated to prefer professional development activities focusing on coaching and in which they indicated favoring reflective learning, learning in interaction with others and learning starting from personal experiences (Daniëls, Hondeghem & Dochy, 2017). Furthermore, coaching skills, which among others include skills focusing on asking questions and providing feedback, have the potential to provoke and foster organizational learning climates. Coaching leaders provoke employees' knowledge acquirement and skills development (Whitmore, 2017).

The group reflective learning program integrates reflective learning techniques focusing on the development of managerial coaching skills. The program starts from school leaders' daily practices and cases (Huber, 2011). The program is explained in the section 'research setting and sample' (see 3.2). We study this particular leadership program for the following reasons. First, the study contributes to the insight in the outcomes of professional development for school leaders. The findings of Daniëls et al. (2017) were taken into account when developing the group reflective learning program. School leaders' preference for professional development activities focusing on coaching teachers, reflective learning, focusing on their daily experiences and in presence of peer school leaders supplemented with a theoretical background formed the starting points for the development of the group reflective learning program. Second, the study aims to contribute to the literature, because organizational learning climate and teacher perceptions of school leaders' coaching behaviour are barely researched in schools nor as a component of teachers' daily activities (Kwakman, 2003; Shoshani & Eldor, 2016). Third, managerial coaching can result in improved performance, more time for the leader, the development of the organizational learning climate, the employee and improved job satisfaction and retention (Withmore, 2017).

In summary, our study is among the studies exploring the effects of leadership development in the public sector and more particular in the subfield of education. Leadership research barely explores whether leadership development programs are effective, nor takes into account the effects on the organizational learning climate or coaching skills.
Our study contributes to insights in the development of organizational learning climate, leading teachers' learning, the impact of development programs on leaders' coaching skills and to insights, which are relevant in advancing to more sustainable jobs for school leaders and teachers, and insights, which are relevant for educational policy makers, practitioners and researchers.

6.2 Theory

In the following subsections, we explain the relevant theoretical concepts founding the study. First, we discuss organizational learning climate, second coaching behaviour following reflective learning to finally end with the connection between leadership and learning in organizations.

6.2.1 Organizational learning climate

Organizational learning climate is defined as the entire set of perceptions of work settings that helps or hinders work-related learning (Nixon, 1991; Mikkelsen et al., 1998). Nikolova et al. (2014) define organizational learning climate more detailed based on three sub constructs as employees' perceptions of organizational policies and practices aiming to facilitate, reward and support employees' learning behavior. The first sub construct, facilitating learning climate, describes the level to which the workplace supports, provides and facilitates learning opportunities for their employees. The second sub construct, appreciation-learning climate, refers to the degree in which the work environment rewards learning behavior. The last sub construct, error-avoidance learning climate, describes the extent to which a workplace focuses on avoiding mistakes.

In an educational context, organizational learning climate can be defined as the school's effort to turn learning into an integral part of work performance and providing opportunities for ongoing learning and growth (Marsick, Watkins, Callahan & Volpe, 2009). More specific organizational learning climate is expressed as the school's effort to create a climate which encourages inquiry and listening, feedback, collaboration, out-of-the-box thinking, involving staff in the collective vision, and in leaders who act as role models (Dam & Blom, 2006; Osborn, 2006). The latter aligns with the aims of the group reflective learning progam, i.e. developing coaching skills (see 3.2), which have the potential to increase the organizational learning climate. Hallinger (2003) points to providing incentives for learning, promoting professional development and maintaining high visibility in describing organizational learning climate.

6.2.2 Coaching behaviour

Coaching at the workplace arose as an attempt to enhance performance and foster personal development. Various definitions of managerial coaching have been developed over the past years. Tanskanen, Mäkelä & Viitala (2019) define managerial coaching as 'leadership behaviour that supports individuals to set and attain their goals, to improve performance and to develop competencies, to strengthen self-directed behaviour, and to understand the broader goals of the organization' (Bond & Seneque, 2013; Ellinger, Ellinger & Keller, 2003). Coaching leaders allow their employees' to acquire knowledge and to develop new skills and behaviors, not by being told or taught, but by discovering from within (Whitmore, 2017).

Managerial coaching is seen as an effective leadership practice creating conditions for high performance, through prompting employees to improve performance and facilitating their learning process (Tanskanen et al., 2019; Withmore, 2017). Managerial coaching increases goal awareness (Kim et al., 2013; Withmore, 2017), which can contribute to the employees' awareness of the gap between the current level of performance and the ideal level of performance. Coaching leaders take more responsibility for practices on supporting and helping their employees to achieve excellent performance (Hamlin, Ellinger & Beattie, 2008; Heslin, Vandewalle & Latham, 2006). Tanskanen et al. (2019) warn that managerial coaching can cause negative feelings. Employees can get the impression that their performance is never good enough, which can lead to an underestimation of their performance.

In addition to defining coaching, coaching skills and behavior are elucidated. Indeed, coaching leaders must have appropriate coaching skills and behavior in order to achieve results. Empirical research has described a series of managerial coaching skills and behavior: giving feedback, asking powerful questions, active listening, encouraging employees to solve work-related problems, communication, clearly setting goals, creating and fostering environments that sustain learning, supporting employees in developing skills, and offering resources (Babcock-Roberson & Strickland, 2010; Beattie, 2006; Choi, 2013; Withmore, 2017). The former are largely consistent with managerial effectiveness (Hamlin, Ellinger & Beattie, 2008; Withmore, 2017) because appropriate coaching skills and behavior allow a leader to provide an employee with unfiltered feedback and provide reinforcement of knowledge and self-awareness (Seidle et al., 2016).

6.2.3 Reflective learning

Reflective learning has ancient origins and is associated with experiential, deep and intuitive learning (Mann, Gordon & MacLeod, 2007; Mezirow, 1991; Ryan & Ryan, 2013). Reflection is an activity in which people engage experiences and discover insights in order to reach other levels of understanding and applications (Boud, Keogh & Walker, 1985; Ryan & Ryan, 2013). Reflection can be defined as 'a process in which one takes a step back from experiences to analyze the meaning to the self through the development of inferences' (Daudelin, 1996; Hulsbos, Evers & Kessels, 2016). Through awareness, critical thinking and analysis, reflection aims to elicit learning and change resulting in acquiring or refining knowledge, skills and/or attitudes (KSA's) (Hay, Peltier & Drago, 2004). Reflection involves theory, practice, thought and action, to elicit the development of KSA's (Osterman & Kottkamp, 1993).

Reflection in small groups allows generating ideas by sharing different perspectives. For example, peers in small groups facing similar challenges assist each other in discovering important information about themselves and their ways of thinking (Daudelin, 1996). Reflective learning is referred to high-potential learning and higher-level learning, however, there are also some pitfalls. Clydesdale (2016) states that discussions in small groups are not

always appropriate for highly personal issues. Participants may feel uncomfortable when airing their personal reflections in front of others.

6.2.4 Leadership and learning in organizations

Leadership is related to learning in organizations and organizational learning climate. Indeed, leaders occupy a unique position to affect learning climates through their status inherent in the leadership role, and because of holding the position of a role model (Bass, 1985). Leadership training programs have shown to be capable to have influences on organizational effectiveness through improved employee attitudes (Luthans & Peterson, 2003). Effective leaders can positively influence employees' motivation and job satisfaction, which influences their behavior and job performance (Seidle et al., 2016) eventually contributing to organizational performance. Although leadership was perceived as a driver for organizational learning in some studies, researchers could not clearly pinpoint which leadership actions affect organizational learning nor to which extent (Lähteenmäki, Toivonen & Mattila, 2001; Vera & Crossan, 2004). In summary, school leadership is an ongoing invitation to develop an inquisitive mind (Kessels in van Wessum & Verheggen, 2019). School leaders should foster the development of sustainable organizational learning climates (Boal, 2007; Davies, 2004) and the conditions for learning and innovation (Vera & Crossan, 2004) to ensure long-term effectiveness of the organization.

6.3 Hypothesis, Data & Methods
6.3.1 Hypotheses

Previous research has shown that leadership can be developed and that leadership' training programs have the potential to affect organizational effectiveness through improved employee behaviour (Luthans & Peterson, 2003; Day, 2012). Effective leaders can influence subordinates' behaviour, among others through coaching behaviour resulting in professional development and higher levels of performance, ultimately resulting in increased effectiveness of the organization (Seidle et al., 2016; Tanskanen et al., 2019; Withmore, 2017). Coaching leaders provoke employees' learning through developing new KSA's e.g. through providing clear feedback, and prompting and helping the employee to reflect and find solutions from within (Whitmore, 2017). Hence, we estimate that effective managerial coaching can result in an increased organizational learning climate. As such, our hypotheses are:

Hypothesis 1: A group reflective learning program for leaders focusing on coaching skills will result in an improvement of the teacher perceptions of organizational learning climate.

Hypothesis 2: A group reflective learning program for leaders focusing on coaching skills will result in an improvement of the subordinates' (teachers) perceptions of the leaders' coaching behaviours.

6.3.2 Research setting and sample

The study investigates teachers' perceptions of the organizational learning climate. We derived data from the Flemish community (Belgium) because in Belgium education is a jurisdiction of the communities. The Flemish government spends annually about 30% of its budget on education (Flemish Government, 2018).

The sample was developed through inviting all primary school leaders whose e-mail addresses were available via the Flemish ministry of education (n=2143). Initially, 70 school leaders replied and 29 were selected to participate in the study. While selecting the sample schools, the average school leader – teacher ratio for primary education in Flanders was used as a criterion (1:20- 1:35). Apart from the school leader – teacher ratio, variation in age and seniority were used to provoke a rich reflective learning process. The selected schools (n=29) were divided in an experimental group (n=22) and a control group (n=7). In the experimental group, three schools dropped out during the intervention (group reflective learning program). Two schools dropped out due to prolonged sick leave of the school leader and one due to a job turnover of the school leader. In the control group, one school dropped out during the measurement phase, because none of the teachers completed the questionnaire.

For this research, the unit of analysis is the teacher level. Hence, we gathered data from teachers in the experimental group (n=190), i.e. teachers of whom the school leader participated in the group reflective learning program, and teachers from the control group (n=99), i.e. teachers whose school leader did not participate in the program. To measure a possible impact, two measurements are necessary: a pretest and a posttest. Hence, the final sample used to conduct the analysis consisted of 380 observations in the experimental group derived from 190 individuals, and 198 observations derived from 99 individuals in the control group.

The teachers were identified using a unique anonymous individual code constructed from their year of birth, school code and initials. The codes allowed matching the teachers who participated in both measurements.

All data were collected during the same school year, ensuring generating data of unchanged teams. In a separate interview, the school leaders were asked whether their teams stayed stable throughout the year. None of the participating school leaders indicated high levels of dropout or job turnovers among teachers. Hence, the teacher teams are considered as stable and suitable for analysis. The teachers were asked to complete a survey.

The methods for the group reflective learning program i.e. reflective learning with peers, focusing on coaching and room for additional theoretical knowledge, were chosen based on the results of available scholarly work considering the potential benefits and shortcomings. The program consisted of eight sessions, spread over 7 months. The first session was an 'acquaintance session' in which the participants met, and were introduced in the technique and assignments of the group reflective learning program. The sessions lasted 2,5 hours. During the sessions, school leaders alternately presented a self-selected case, related to coaching

teachers. Guided by an experienced trainer, the participants reflected on the case and were offered relevant theoretical frameworks. To facilitate a smooth running of the sessions and transfer of learning, the participants had to write reflective reports considering their self-selected case, their learning goals and the actions they had planned and carried out. Reflecting on cases in presence of peers, facilitates the analysis and can increase the effectiveness of the process, because the case is examined from a variety of insights (van Wessum & Verheggen, 2019). The group can add value because of the amount of experience a group presents. The peers in the group have more or other experiences considering the presented case, which can increase the problem solving capacity and experiential learning, culminating in the development of knowledge and relevant solutions (Fullan & Hargreaves, 2012).

6.3.3 Independent and dependent variable
The group reflective learning program (intervention) is the independent variable in the study. A dummy treatment is created to indicate if the school leader participated in the intervention, in this case the group reflective learning program (GRLP). 'Organizational learning climate' and the school leaders' 'coaching skills' are the dependent variables. The dependent variable coaching skills refers to teachers' perceptions of their school leaders' coaching behaviour.
The items we have used to measure 'organizational learning climate' can be consulted in the appendices (table 6.1), likewise the items we have used to measure 'Coaching Skills' (table 6.2). The items to measure 'Organizational Learning Climate' were adapted from Marsick & Watkins (2003), Park (2008) and Nikolova et al. (2014). The factor scores were used as the dependent variable. The items to measure 'Coaching Skills' are adapted from de Haan & Burger (2017) and are supplemented with items derived from Clement (2008).

6.3.4 Control Variables
Five control variables were included in the current study: 'Need for support', 'Importance' of the relation with the school leader, 'Contact Frequency', 'Job Satisfaction' and 'Self-efficacy'. The authors developed the items measuring the 'Need for support' by the school leader, 'Contact Frequency' and the 'Importance of the relation with the school leader'. These variables are included because the literature suggests that leaders who influence subordinates' learning, and create an environment of expectations that shapes and supports desired results (Marsick & Watkins, 2003) build an organizational learning climate (OLC). The relationship with the school leaders is therefore included as a control variable and measured using the previous mentioned control variables. If school leaders have an intense contact with their teachers, they are more likely to build and influence the OLC. The same applies to 'Importance of the relation with the school leader', if teachers do not estimate the relation with the school leader as important or when they do not feel a need for support, the school leader will be less likely to influence the OLC. Likewise, 'Need for support', 'Contact frequency' and the 'Importance of the relationship with the school leader' can influence teachers' perceptions of

school leaders' coaching skills. If one does not long for support, barely meets the schools leader or does not estimate the relationship with the school leader as relevant, an increase of coaching skills will probably be noticed to a smaller extent. The authors developed the items 'Need for support', 'Contact intensity', and 'Importance of the relationship with the school leader' (see appendices table 6.5 for an overview of the items).

Job satisfaction is a personal attitude developed by an individual towards his or her job (Luthans, 1994). Skaalvik & Skaalvik (2013) refer to job satisfaction as the general feelings one has about his/her job. Job satisfaction is a conglomerate of several facets because someone can be (dis)satisfied about various job aspects such as atmosphere, nature of work, wage, colleagues and career opportunities (Al-Swidi, Nawawi & Al-Hosam, 2012; Berings, Grieten, Lambrechts & De Witte, 2008). Contrasting the literature, but in contemplation to the research aim, the questionnaires' length, and given that job satisfaction is included as a control variable, we opted for a concise and summative appraisal of job satisfaction by Caprara, Barbaranelli, Borgogni & Steca (2003). See appendices (table 6.3) for an overview of the items. Job satisfaction was included as a control variable, because one's job satisfaction can influence his/her perception of organizational learning climate. Teachers having high levels of job satisfaction are likely to score high on organizational learning climate as well.

Teachers' self-efficacy is also included as a control variable. Self-efficacy reflects the extent to which an employee is confident and trusts upon his/her abilities and trade to effectively plan, organize, and achieve predetermined objectives, and is capable to meet job-related expectations (Bandura, 1997; Gist & Mitchell, 1992). Skaalvik & Skaalvik (2008) define teacher self-efficacy as teachers' individual beliefs in their ability to plan, organize and carry out activities required to attain educational goals. Research has shown that self-efficacy is positively related to multiple professional aspects. Teachers with a stronger sense of self-efficacy tend to be more engaged, are more open to new ideas, and are more willing to experiment with new methods to better meet the needs of their pupils (Tschannen-Moran & Woolfolk Hoy, 2001; Simbula, Gugliemi & Schaufeli, 2011).

Self-efficacy was included as a control variable because a high level of self-efficacy is among others related to experimenting with new methods and being open to new ideas, which is consistent with items measuring organizational learning climate. Skaalvik & Skaalvik (2007) developed a self-efficacy scale for teachers: the Norwegian Teacher Self-Efficacy Scale (NTSES). We used sixteen items of the scale to estimate teacher efficacy (see appendix, table 6.4). The items were selected based on the relevance for the Flemish educational context.

6.3.5 Methods
We used a fixed-effects model to test our hypotheses. Fixed effect models allow comparing the situation before and after the intervention. A fixed effect model offers more accurate results compared to cross-sectional analyses.

A test of our hypothesis concerning the effect of the group reflective learning program on learning climate is executed using the following model:

> Organizational learning climate = $[a+u_i]$ + β_1 intervention + β_2 frequency + β_3 need for support + β_4 importance + β_5 job satisfaction + β_6 self-efficacy

Likewise, the model estimating the effect of the group reflective learning program on coaching skills is executed:

> Coaching skills = $[a+u_i]$ + β_1 intervention + β_2 frequency + β_3 need for support + β_4 importance + β_5 job satisfaction + β_6 self-efficacy

Using these data, we calculate a first difference estimator for each teacher:

$$\Delta y_{it} = y_{it} - y_{it-1}$$

Whereby -1 refers to the first measuring point. We also calculate this for the explanatory variables:

$$\Delta y_{it} = \beta_0 + \beta_1(x)_{it} + (a_i + u_{it}) - [\beta_0 + \beta_1(x)_{it-1} + (a_i + u_{it-1})]$$

a_i is called the fixed effect, or the unobserved effect, while u_{it} is the idiosyncratic error or time-varying error and represents unobserved factors that change over time and effect y_{it}. From the above formula, it becomes clear that the fixed effect a_i is eliminated. Accordingly, factors that are not in the model and do not vary over time but affect both explanatory variables and organizational climate are removed. We estimate this model using Ordinary Least Squares (OLS).

6.4 Results
6.4.1 Descriptive statistics
Women are overrepresented in the sample. This is consistent with the overrepresentation of female teachers in Flemish primary education; 86% of the teachers in Flemish primary education are female (Flemish Government, 2019). The average age of a teacher in our sample is 41 years. The descriptive statistics are included in Table 6.6.

Table 6.6
Descriptive statistics

Gender	Male	Female	
	12.82%	87.18%	
	Mean	**Lowest**	**Highest**
Age	41.40	20.00	64.00

We measured the variables organizational learning climate, job satisfaction, self-efficacy and coaching skills using various items. Therefore, we calculated factor scores. The minimums and maximums of the factor scores are displayed in table 6.7. The items founding the factors were measured using a Likert scale with a minimum of 1 and a maximum of 7.

Table 6.7
Factor scores

	Factor Organizational Learning Climate	Factor Job Satisfaction	Factor Self-Efficacy	Factor Coaching Skills
Min.	-4,10002	-3,69064	-3,1134	-3,84932
Max.	2,216835	1,156043	2,159585	1,957689

The items 'Contact intensity', 'Need for support' and 'Importance of the relation with the school leader' are not recalculated as factor scores, because we measured them using one item. These items were also measured using a 1-7 Likert scale, likewise the items founding the factors.

Lastly, in table 8 we provide the Cronbach's Alpha's for the scales founding the factors organizational learning climate, job satisfaction, self-efficacy and coaching skills.

Table 6.8
Cronbach's alpha's for the scales founding the factors

	Cronbach's Alpha's
Scale Organizational Learning Climate	0.86
Scale Job Satisfaction	0.78
Scale Self-Efficacy	0.93
Scale Coaching Skills	0.95

The alpha coefficients all exceeded the lower limit of 0.7 (Cronbach, 1951; Hair, Black, Babin & Anderson, 2010; Field, Miles & Field, 2012). Thus, each scale shows a sufficient level of consistency.

6.4.2 Analysis and results

6.4.2.1 Hypothesis 1 Effect of the intervention (GRLP) on organizational learning climate

The results of the fixed-effects models used to test hypothesis 1 (organizational learning climate) are displayed in table 6.9. We find support for our hypothesis concerning organizational learning climate. As far as the interpretation is concerned, we will focus on model 3 (i.e. the full model).

Table 6.9

Panel linear model Organizational Learning Climate

Dependent variable = Organizational Learning Climate (clustered on individuals and time)

	Model 1		Model 2		Model 3	
	B	SE	B	SE	B	SE
Intervention (GRLP)	0.173**	0.055	0.177**	0.055	0.174***	0.052
Frequency			0.116***	0.033	0.08*	0.031
Need for support			-0.066*	0.033	-0.058.	0.031
Importance			0.104*	0.049	0.068	0.046
Job Satisfaction					0.127**	0.048
Self-efficacy					0.282***	0.053
R-squared	0.033		0.09		0.205	
N	578		578		578	

Note 1: Significance level codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1.

Note 2: Testing for residual cross-sectional dependence by introducing time fixed effects results in similar tendencies with one key difference: treatment effects are no longer significantly different from zero (albeit still positive).

Note 3: VIFs, Variance Inflation Factors, are all clearly below 5, indicating there should be no fundamental concern about multicollinearity (Field et al., 2012).

We see that a shift from 0 to 1 for intervention (GRLP), significantly and positively affects organizational learning climate. The results indicate that the group reflective learning program leads to an increase of 0.174 scale points of teachers' perceptions of Organizational Learning Climate. A factor score expresses the relative position of each teacher on the latent concept we created for Organizational Learning Climate. An increase of one unit on this relative scale is associated with an effect of 0.174.

Similar findings can be observed for job satisfaction and self-efficacy (table 6.9). When the relative position of teachers on these latent constructs increases, we notice a positive effect on the perception of organizational learning climate. 'Need for support' appeared to have no effect. Frequency however, is mildly positive and significant at the 5%-level.

Notice that 'Gender' and 'Age' are not included in the regression. This is because these features are fixed. Admittedly, age could have jumped with one year for some teachers. However, the explanatory element in this jump is expected to be limited. Another relevant observation is the R^2 of 0.205 indicating that our regression succeeds in explaining 20.5% of the variance in organizational climate.

6.4.2.2 Hypothesis 2 Effect of the intervention (GRLP) on coaching skills

The results of the fixed-effects models used to test hypothesis 2 (coaching skills) are displayed in table 6.10. We will focus on model 3 (i.e. the full model) for the interpretation. A shift from 0 to 1 for intervention, slightly positively though non-significantly, affects coaching skills.

Table 6.10
Panel linear model Coaching Skills
Dependent variable = coaching skills (clustered on individuals and time).

	Model 1		Model 2		Model 3	
	B	SE	B	SE	B	SE
Intervention (GRLP)	0.029	0.051	0.038	0.05	0.043	0.048
Frequency			0.152***	0.03	0.124***	0.029
Need for support			-0.036	0.03	-0.026	0.029
Importance			0.111*	0.044	0.085*	0.042
Job Satisfaction					0.178***	0.044
Self-efficacy					0.144**	0.049
R-squared	0.001		0.111		0.195	
N	578		578		578	

Note 1: Significance level codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1.
Note 2: Testing for residual cross-sectional dependence by introducing time fixed effects results in similar tendencies.

The results indicate that the group reflective learning program leads to an increase of 0.043 scale points of teachers' perceptions of coaching skills. 'Job satisfaction' and 'Self-efficacy' are significant. When the relative position of teachers on these latent constructs increases, we notice a small increase on the perception of the school leaders' coaching skills. 'Need for support' appeared to have no effect. Likewise, the model to test the influence of the intervention (GRLP) on organizational learning climate, 'Gender' and 'Age' are not included in the regression because they are fixed. Furthermore, the R^2 of 0.195 indicates that our regression succeeds in explaining 19.5% of the variance in coaching skills.

6.5 Discussion

School leaders and teacher shortages are ubiquitous and increasing. Hence, it is important to search ways to keep the professions sustainable. Research considering school leaders' professional development measuring the consequences on teachers' perception of organizational learning climate can contribute to insights in keeping the professions more sustainable. Moreover, insights in the effects of professional development can support the shaping and focus of trainings resulting in a higher return on investment.

Understanding the impact of the group reflective learning program (intervention) with regard to teachers' perceptions or organizational learning climate and teachers' perceptions of their school leaders' coaching skills was the main aim of our study. We hypothesized that the intervention (GRLP) would lead to increased perceptions of organizational learning climate and perceptions of school leaders' coaching skills.

First, the analysis shows that teachers, whose school leaders participated in the intervention, indicate higher levels of organizational learning climate. The perceptions of organizational learning climate are estimated 0.174 higher after the intervention. The impact was highly significant (***$p < 0.01$). Hence, we conclude that hypothesis 1 is supported. Job satisfaction and self-efficacy are included in the model as control variables. The results show that their influences are highly significant (***$p < 0.01$) on organizational learning climate. Teachers having high levels of job satisfaction and self-efficacy perceive the organizational climate more positive. Hence, it is also important to consider teachers' job satisfaction and self-efficacy as an independent variable while developing and facilitating the schools' organizational learning climate.

Second, the analysis shows that teachers, whose school leaders participated in the intervention, indicated a small, non-significant, increase in the perception of their school leaders' coaching skills. The perceptions of organizational learning climate are estimated 0.043 higher after the intervention. Hence, we cannot conclude that hypothesis 2 is supported.

Job satisfaction and self-efficacy are included in the model as control variables. The results show that their influences are highly significant (***$p < 0.01$). Teachers having high levels of job satisfaction and self-efficacy perceive the coaching skills of their school leaders more positive. Hence, it is also important to consider teachers' job satisfaction and self-efficacy as an independent variable while investigating school leaders' coaching.

6.6 Conclusion

This study contributes to the interchange between theoretical and applied research. We dwell on the theoretical relevance of the study first and discuss the relevance for practice in the final paragraph of this conclusion section. The findings in the current study support hypothesis 1: school leaders' participation in the group reflective learning program positively influences teacher perceptions of organizational learning climate. This is an interesting finding given that

185

organizational learning climate can counteract negative employee outcomes, e.g. turnover intentions and work stress, and increase positive outcomes such as positive working conditions and job satisfaction.

We have chosen to carry out two measurements during the same school year ensuring data from stable teams. Carrying out two measurements during the same school year was important to obtain sufficient data and preventing teacher dropout due to job turnovers. Nevertheless, we suggest that future research focuses on the measurement of training effects for school leaders and teachers in the long end as well. Including the long end effects allows getting more insight in the effects of leadership development and relevance of leadership trainings such as group reflective learning programs for school leaders.

The literature indicates that it is difficult to indicate which leadership behaviour influences organizational learning climate (Lähteenmäki et al., 2001; Vera & Crossan, 2004). Our results point towards the same finding. Our results point to a small non-significant increase of teachers' perceptions of coaching skills. Given the non-significant increase, hypothesis 2 cannot be considered as supported or generalizable. This small non-significant increase can be partly explained by the nature of the measurement and the nature of the respondents (teachers). The measurements were taken short after the training ended; hence, the school leaders were probably not able to fully implement and practice their gained knowledge and skills. So probably not all teachers were coached. However, the small number of teachers that were coached and some overall behavioural changes in the school leaders' behavior (see Chapter 5), may have influenced the increase in organizational learning climate. Moreover, it is not unlikely that some coached teachers, may have influenced colleagues contributing to an increase in the perceptions of organizational learning climate. Additionally, people tend to focus on behaviour and information that confirms their initial expectations rather than on neutral or disconfirming information (Snyder & Cantor, 1979). Furthermore, people tend to focus on negative information when evaluating (DeNisi, Cafferty & Meglino, 1984).

However, the findings in Chapter 5 considering school leaders' perceptions of learning and change in behavior reinforce the small non-significant increase of teachers' perceptions of increase in school leaders' coaching behaviour.

Follow up studies including larger samples can provide more clarity. A study including a long-term measurement (e.g. six months after the intervention has taken place) can add clarity as well. In addition, a study based on qualitative data such as interviews with coached employees or observations can provide more clarity.

When making generalizations based on the current study, one should consider that the study relies on a single case intervention study and a rather small dataset. Moreover, school leaders who are highly motivated to participate in professional development and to grow in their position of school leader, might have participated in the study.

This chapter concludes with discussing the relevance of the study. First, the study is relevant for the advancement of the field of leadership development in education in terms of unravelling the effects of school leaders' development. Second, the results are relevant for practice. The

results point towards the usefulness of group reflective learning programs. Hence, public government and school boards can consider the results when taking decisions and pursuing policies considering school leaders' development. Group reflective learning programs are promising in contributing to the development of organizational learning climates and subsequently promising in contributing towards more sustainability in the teacher profession. Third, the findings can inspire providers of leadership development programs. The findings support the use of group reflective learning programs and can inspire providers in shaping leadership development programs.

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6.8 Appendices

Table 6.1
Items Organizational Learning Climate

L1	In my organization, employees who continuously develop themselves professionally, are being rewarded.	Learning Climate Scale (Nikolova et al., 2014)
L2	In my organization, employees dare to discuss mistakes.	Learning Climate Scale (Nikolova et al., 2014)
L3	In my organization, people help each other to learn.	Learning Organization Questionnaire (Marsick & Watkins, 2003)
L4	In my school prevails an atmosphere of mutual trust. *Original item: In my organization, people spend time building trust with each other.*	Learning Organization Questionnaire (Marsick & Watkins, 2003)
L5	In my organization, people give open and honest feedback to each other.	Learning Organization Questionnaire (Marsick & Watkins, 2003)
L6	In my organization, people identify skills they need for future work tasks.	Learning Organization Questionnaire (Marsick & Watkins, 2003)
L7	In my school, teachers are given the opportunity to make choices in their development process. *Original item: My organization gives people choices in their work assignments.*	Learning Organization Questionnaire (Marsick & Watkins, 2003)
L8	Teachers strive to supplement the lack of skills and knowledge in teaching and subject area.	(Park, 2008)

Table 6.2
Items Coaching Skills (de Haan & Burger, 2017; Clement, 2008)

CO1	The school leader asks how I feel about a particular issue.
CO2	The school leader listens very carefully when I discuss problems or experiences with him/her.
CO3	The school leader appreciates my ideas, opinions and beliefs.
CO4	The school leader discusses my emotions, for instance when I am upset or angry.
CO5	The school leader comes up with counter-arguments for my opinions.
CO6	The school leader asks how I feel about a problematic issue.
CO7	During a conversation with my school leader, there is room for laughs.
CO8	The school leader focuses on 'that what works'. The school leader focuses as little as possible on 'that what does not work'.
CO9	The school leader allows me to really be myself.
CO10	The school leader really takes time for a coaching conversation.
CO11	The school leader asks 'open' questions.
CO12	The school leader goes into more detail about the things I tell and asks for examples and clarifications.
CO13	The school leader creates a relaxed atmosphere.
CO14	The school leader pays attention to what I get excited about.
CO15	The school leader allows me to show my emotions.

Items CO1- CO6 were taken from the questionnaire of de Haan & Burger (2017).
The authors developed items CO7-CO15 based on Clement (2008).

Table 6.3
Items Job Satisfaction (Caprara et al., 2003)

JS1	I am fully satisfied with my job.
JS2	I am satisfied with what I achieve at work.
JS3	I feel good at work.

Table 6.4
Items Self-Efficacy (NTSES, Skaalvik & Skaalvik, 2007)

SE1	Explain central themes in your subjects so that even the low-achieving students understand.
SE 2	Get all students in class to work hard on their assignments.
SE 3	Successfully use any instructional method that the school decides to use.
SE 4	Maintain discipline in your class.
SE 5	Provide good guidance and instruction to all students regardless of their level of ability.
SE 6	Provide realistic challenge for all students even in mixed ability classes.
SE 7	Answer students' questions so that they understand difficult problems.
SE 8	Cooperate well with most parents.
SE 9	Get students with behavioral problems to follow classroom rules.
SE 10	Manage instruction regardless of how it is organized (group composition, mixed age groups, etc.).
SE 11	Adapt instruction to the needs of low-ability students while you also attend to the needs of other students in class.
SE 12	Get all students to behave politely and respect the teachers.
SE 13	Motivate students who show low interest in schoolwork.
SE 14	Cooperate effectively and constructively with other teachers, for example, in teaching teams.
SE 15	Organize classroom work so that both low- and high-ability students work with tasks that are adapted to their abilities.
SE 16	Get students to do their best even when working with difficult problems.

Table 6.5
Items Additional Variables (Authors)

Need for support	To what extent do you need support from your school leader to perform your job?
Contact Intensity	On average, how often do you have a one-on-one meeting with your current director?
Importance relation with school leader	To what extent do you think it is important to have a good relationship with your director?

Chapter 7

School leaders' and teachers' leadership perceptions: Differences and similarities

Exploratory Phase	Experimental Phase	
A review on leadership and leadership development in educational settings	Developing school leaders: Responses to group reflective learning	Do school leaders learn from a group reflective learning programme?
Mapping school leaders' professional development	Does leadership training improve organizational learning climates?	School leaders' and teachers' leadership perceptions: Differences and similarities

Abstract

Purpose - The purpose of this paper is to offer insight into school leaders' and teachers' perspectives on leadership behaviour and its impact on their mutual relationships. Research papers that include perspectives from both school leaders and teachers are relatively scarce in the field of education. However, it is important to take account of both perspectives because if they align, school leaders can be expected to be more successful. Moreover, positive teacher perceptions about school leaders result in lower levels of teacher burnout and enhanced teacher collaboration.

Design/Methodology/Approach – The current study employed qualitative data drawn from 24 primary schools in Belgium. The data set was assembled from 24 interviews with school leaders and 22 focus groups with teachers. The research analyses the interviews and focus groups from an inductive approach in order to let theory emerge, to refine existing theories in the field of education, and to get an in-depth understanding of agreements and disagreements in the perspectives of school leaders and teachers.

Findings - The results show that school leaders and teachers perceive school leadership principally as relation- and task-oriented. However, there are differences in the perceptions about the subcategories of relation-oriented behaviour between school leaders and teachers. School leaders refer to consulting with members when making decisions and providing feedback. On the other hand, teachers indicate the importance of support and encouragement, and recognition. The perceptions of the relationships between school leaders and teachers seem to match, with both valuing trust, openness and contribution.

Originality – This study addresses the relative scarcity of research relating to school leaders and teachers perspectives regarding school leadership. The study clarifies concepts in order to facilitate further research on school leaders' effectiveness.

Paper type – Research paper

Keywords:

Leadership in education, leadership behaviour, perceived leadership, self-perceived leadership, leader-member exchange, leader-member relationship, primary education

7.1 Introduction

The importance of school leaders for school effectiveness is widely acknowledged (Hitt and Tucker, 2016), and is often related to student achievement. Traditionally, school leadership is researched from the perspective of teachers, by asking them how they perceive leadership. Studies exploring school leadership from the perspectives of the school leaders occur as well. Indeed, leadership and consequential school leadership is not only a matter of the intended behaviour of the school leader, but it is also a matter of how followers, i.e. teachers, perceive school leaders' behaviour (Atwater and Yammarino, 1997). Moreover, the self-perceptions of school leaders and the perceptions of teachers do not necessarily match. Research papers considering school leaders' and teachers' perceptions with regard to leadership behaviour are rather limited in the field of education, especially in compulsory education (Devos et al., 2013). Nevertheless, research demonstrates that school leaders tend to overrate themselves on important leadership practices compared to teachers (Hallinger et al., 2013; Tosh and Doss, 2019). This divergence can result in negative consequences. Indeed, numerous studies in human resources and organization studies confirm that the alignment of leaders' and subordinates' perceptions relates to leadership effectiveness (Atwater and Yammarino, 1997; Tiuraniemi, 2008). Moreover, when leaders' perceptions align with observers' perceptions, leaders tend to respond in a more appropriate way to development feedback (Atwater and Yammarino, 1997). Especially, other-perceptions of leadership can be associated with organizational performance whereas self-perceptions of leadership relate rather to an indirect effect on organizational performance (Jacobsen and Bogh Andersen, 2015). If leaders are aware of how their leadership practices are perceived, it can be easier to change employee behaviour and ultimately the organizational performance (Jacobsen and Bogh Andersen, 2015).

The self-other perceptions of leader-member exchange (LMX) between school leaders and teachers are investigated in the current study. The relationship between leaders and followers is perceived as something that involves both perceptions (Dansereau et al., 1995). Several scholars have pointed to the fact that self-other perceptions of LMX are not convergent and need to be investigated (Schriesheim et al., 1999; Sin et al., 2009). The quality of the leader-member exchange have among others influences on psychological support, job satisfaction and motivation, performance, organizational commitment and innovation (Liden et al., 1997; Schriesheim et al., 2011; Wilson et al., 2010, Zhao et al., 2014). More insight in the quality of school leader-teacher relations is needed, because school leaders and teachers in Flanders as well as in other regions, report high levels of job stress, burn out, job rotation and absenteeism. High-quality LMX relationships might have the potential to mediate subordinates' turnover intentions (Chen et al., 2016). Insight in perceptions of the leader-member exchange relation and school leader-teacher relationships can contribute to the literature and the development of more effective schools.

The current research contributes to the clarification of self-other perceptions of leadership in education. Insights in the latter contributes to the insight in the effectiveness of school

leadership, the overall school performance and serves school leaders' and teachers' professional development. To provide a deeper insight, in the self-other perceptions of leadership, Yukls' behavioural taxonomy as well as the LMX theory are included. Yukl's taxonomy was chosen, because it allows investigating observable behaviour, but also to approach leadership in a balanced manner as Yukl does. Leadership research in education is criticized for focusing too much on the instructional aspect of leadership. The LMX theory was added to get a deeper insight in the relational aspect of leadership behaviour, because prior exploratory research showed that the category of relation-oriented leadership came to the front as most relevant. This is not surprising; teachers perform their assignments on a daily basis rather autonomously. However, the school leader can intervene on teachers' assignments and show task-oriented behaviour as well.

7.2 Review of the literature
In the following paragraphs, leadership is briefly introduced followed by the relevant theories for the current study: Yukl's taxonomy on leadership behaviour and LMX theory, focusing on the relationship between leaders and followers.

7.2.1 Leadership
Leadership is a well-researched and complex topic, though no agreed definition of leadership exists. Most definitions share the assumption that leadership is 'a process of influencing in which an individual exerts intentional influence over others to structure activities and relationships in a group or organization' (Yukl, 2010). The ability to influence is strongly related to the relational aspect of leadership, which is the focus of the LMX theory.

For the sake of the present study, leadership will be approached from a broad perspective. Therefore, the definition of Daniëls et al. (2019) is adapted:

> Leadership in education is a process of influencing teachers and other stakeholders. The process of influence ideally leads to an effective learning climate which all stakeholders (such as pupils, teachers, parents, society) experience as an added value and keeps all the organizational processes running smoothly.

7.2.2 Leadership behaviour
The available models about school leadership focus predominantly on leadership assignments linked to teaching and learning, and pay rather limited attention to other processes of leadership or leadership behaviour. Yukl's (2012) hierarchical taxonomy of leadership is integrated to study the perceptions about school leaders' leadership behaviour because the taxonomy considers leadership behaviour that influences team performance. This taxonomy allows to approach leadership from a general approach and consists of four meta-categories: (1) task-

oriented behaviour involving behaviour that focuses on accomplishing work in an efficient and reliable way; (2) relation-oriented behaviour that intends to increase the quality of human resources and relations; (3) change-oriented behaviour comprising working towards increasing innovation, collective learning and adaptation to the external environment and (4) external leadership behaviour that considers acquiring necessary information and resources to promote and defend the interests of the team (Yukl, 2012). Leaders typically engage in all four meta-categories. Yukl (2010) states that the context of the organization plays an important role in determining effective leadership behaviour. For instance, when curricula change, a school leader has to apply more change-oriented behaviour in order to be effective.

The different meta-categories have different primary objectives, but all involve determinants of performance. The taxonomy can be consulted in the section on analysis (see table 7.1).
The two most elaborated meta-categories: task-oriented and relation-oriented behaviour align with a long existing approach of leadership that divides leadership into two dimensions: task-oriented and relation-oriented leadership. In this approach, task-oriented leadership behaviour is seen as leadership behaviour that contributes to the completion of tasks by organizing and directing the work of others whereas relation-oriented leadership behaviour is seen as leadership behaviour that strives to maintain positive interpersonal interactions among group members (Lee and Carpenter, 2018).

7.2.3 Leader-Member Exchange Theory
The relationship between the leader and the follower is the central focus of the Leader-Member Exchange theory (LMX theory) and correlates more with relation-oriented behaviour (Yukl et al., 2009) (see table 7.1). The LMX framework assumes that leaders develop different dyadic relationships with their followers (Bernerth et al., 2007; Omilion-Hodges and Baker, 2017; Schriesheim et al., 2011) and assumes that both leaders and followers can influence the relationship through their behaviour (Dulebohn et al., 2012; Scandura et al., 1986; Yukl et al., 2009). Leader-member exchange is the essence of the LMX theory. Leader-member exchange is a kind of social exchange between a leader and a follower (Peng et al., 2017). High-quality relations are according to LMX theory based on high levels of leader-member exchange. A high level of LMX refers to high levels of mutual trust, loyalty, affect, respect and contribution (Liden and Maslyn, 1998; Yukl et al., 2009). In contrast, low levels of the latter refer to a low level of LMX. Relationships can be placed on a continuum ranging from low quality relationships, which are solely based on the assignments in the contract, to high-quality relationships, which are based on high levels of affect, loyalty, trust, professional respect and contribution (Bernerth et al., 2007; Liden and Maslyn, 1998; Yukl et al., 2009). A high level of leader-member exchange predicts important outcomes such as organizational commitment (Galletta et al., 2013), trust in the organization and management (Dulac et al., 2008; van Dam et al., 2008), and lower turnover intentions (Harris et al., 2014). Followers in relationships that are characterized by high levels of LMX, can perceive more organizational support, obtain

more rewards from leaders, and hence feel more connected to the workplace (Bauer et al., 2006). Furthermore, LMX theory assumes that leaders and followers benefit from high-quality relationships (Schriesheim et al., 2001). The relationships between leaders and followers influence job satisfaction, career development, performance, organizational commitment, role clarity, innovation, job stress, workplace safety and willingness to share information (Erdogan and Liden, 2002; Joo et al., 2014; Liden et al., 1997, Schriesheim et al., 2011; Wilson et al., 2010). Most LMX research so far solely relies on the perceptions of the followers and is of quantitative nature. Therefore, this project focuses on the perceptions of leaders and followers who emphasized the importance of the exchange. The research is of a qualitative nature, which adds the dipped dynamic to understand the relationship more in detail.

Harris and Kacmar (2006) point to the drawback of high degrees of LMX. Followers experiencing high levels of LMX between them and their leaders report more stress reactions compared to those experiencing moderate LMX quality relationships due to additional pressure and deep senses of obligation (Harris and Kacmar, 2006). Besides, other followers can perceive high quality of interchanges between leaders and certain followers as inequity at the workplace (Jha and Jha, 2013). Consequently, followers who perceive lower levels of LMX and inequity, may develop negative reactions to the situation, withhold efforts or even undermine the group performance (Othman et al., 2010). It is therefore important not only to emphasize the relationship and the exchange but approach leadership in a balanced manner as Yukl does in his theory by emphasizing the relation-oriented, task-oriented, change-oriented and external oriented aspect of leadership.

7.3 Methodology

This study was conducted to identify the perceptions of leadership behaviour and the school leader-teacher relationship including school leaders' and teachers' perspectives. Literature on leadership behaviour and leader-member exchange (LMX) is available, but is often developed in research fields other than education and out of the geographical-cultural reach of the current study. Since this study investigates how leadership behaviour and leader-member exchange in the school leader-teacher relation are perceived in a rather unexplored field, a qualitative approach is the best-suited way to gain insight. The study questions:

(1) How do school leaders/teachers perceive leadership behaviour?

(2) How do school leaders/teachers perceive leader-member exchange?

This study contributes to the insight in leadership behaviour and leader-member exchange in the field of education starting from the Flemish context. Insight in leadership behaviour and leader-member exchange can serve school leaders' performance and their professional development.

7.3.1 Participants and context

The present study was conducted in primary schools in Flanders, the Dutch-speaking part of Belgium. A single school leader taking the daily lead over the teachers and an absence or lack of middle management characterizes the organizational structure of Flemish primary schools. Flemish primary schools employ a special needs coordinator who takes the lead in developing and implementing a tailor-made policy on special needs.

The sample was assembled via 'purposive sampling'. Purposive sampling was used to ensure homogeneity of the sample with regard to the school leader – teacher ratio varying from 1:20 – 1:35. This range aligns with the average school leader – teacher ratio in primary schools in Flanders. The sample was developed by inviting all 2143 primary school leaders whose e-mail addresses were available via the Flemish ministry of education. The primary school leaders were asked to participate in an interview and to pass along the request to participate in the study to the teachers, because teacher details are not available via the ministry of education. The teachers were asked to participate in a focus group. Initially, 70 school leaders replied, and based on the school leader – teacher ratio and geographical spread, 24 primary schools were selected. 24 school leaders participated, 16 female and 8 male, with an average age of 45,5 years (SD 5,83). We conducted 22 focus group discussions in 22 schools of the 24 participating school leaders. The focus groups consisted of 4-8 teachers ($\bar{X}$= 5,91) and were composed assuming maximum variation concerning experience and job content. In total 130 teachers participated in the study. All participants signed for informed consent. The informed consent clearly described the interview/ focus group procedure and the researchers invited them to ask questions before the interview/focus group started. At the start of the focus group, the participants were explicitly asked if the group composition felt safe for the discussion and the opportunity to ask further questions was created. The participants voluntarily took part and confidentially was assured.

7.3.2 Instruments and procedure

The data were collected on the basis of semi-structured interviews to capture the perceptions of the school leaders and on the basis of semi-structured focus groups to capture the perceptions of the teachers. To contribute to the reliability of the study, an interview guideline was developed. The interview guideline was tested several times before the actual data were collected. Peer-debriefings were held to ensure the quality of the data. The focus groups allowed discussing and eliciting topics, and questioning and challenging one another. However, participants may have slightly influenced some other participants. Considering this, efforts have been made to ease the participants and to ensure confidentiality. Moreover, school leaders and teachers, received a summary and could provide individual feedback on the summary of the interview/focus group. This assumes to level out the possible peer influences. Some participants (n=5) of the focus groups made use of the possibility to make additions to the summary. 84 participants of the focus groups agreed with the summary, one person disagreed

and 40 participants did not reply. The possibility to give feedback on the interpretations of the researchers contributes to the reliability of the study (Cohen et al., 2011; Corbin and Strauss, 2015). The additional comments of the participants yielded very little extra information.

7.3.3 Analysis

The verbatim transcripts of the interviews and focus groups were accurately read to get a general overview of the data. Based on the exploratory (inductive) reading, a preliminary list of codes was constructed. During the development process of the coding tree, all included constructs were clarified. The authors determined some construct clarifications by themselves, whereas some other clarifications were built on existing theories or definitions. Clarifications are helpful to structure the coding process and minimize bias. The development of the final coding tree and the clarifications of the constructs were refined and adapted during the coding process. The final coding table is displayed in table 1. For the sake of the word limit, the table comprises solely the codes of Yukls' taxonomy including a few additions, and the clarified codes of the LMX theory.

To explore the data and give room to empiricism, the data were first inductively coded bearing in mind general questions such as 'Which behaviour is explained?' and 'How is the school leader – teacher relationship explained.' This phase consisted of two coding rounds to make sure that the inductive coding was meticulously executed. During the first inductive coding round, some extra codes emerged. The inductive coding consisted of coding using the preliminary list, but involved generating an unlimited additional number of codes (Charmaz, 2014). After the inductive coding rounds, the emerged codes were checked for relevance (i.e. the coding frequency) and compared to the descriptions of the hierarchical taxonomy of leadership behaviour (Yukl, 2002) and the LMX theory. The emerged codes showed clear similarities with the theories. Hence, the data were finally deductively coded to check whether the theories were sufficient to grasp the practice. The used codes for the final coding process can be consulted in table 7.1. The results of the deductive coding are used to report on. The coding and analysis were done using NVivo11.

Table 7.1
Final coding table

Leadership behaviour (based on Yukl's hierarchical taxonomy of leadership behaviour (2012))
Task-oriented behaviour

- Clarifying task assignments and responsibilities, setting specific goals for important work aspects
- Planning short-term activities
- Monitoring operations and quality of performance
- Problem solving: searching for and implementing solutions for a variety of problems in the organization
- Decision-making*: taking (ultimate) decisions and communicate about it

Note: The categories 'problem solving' and 'decision-making' should not be confused with the category 'empowering members to be involved in decision-making and problem solving'.

Relation-oriented behaviour

- Team coaching: helping the team to function effectively, fostering team effectiveness and performance by coaching the team to enhance their effort, review or generate strategies & consider how knowledgeable and skilled members are utilised to carry out their tasks (Hackman and Wageman, 2005)*
- Providing support and encouragement, giving advice, recommendations and suggestions
- Providing feedback and evaluation such as formal performance reviews*
- Developing member skills and confidence
- Recognizing achievements and contributions
- Empowering members to be involved in decision-making and problem solving
- Consulting with members when making decisions

Change-oriented behaviour

- Advocating change, explaining why policy or procedures should be changed
- Envisioning change: linking the vison to member values and ideals, describing the initiative with enthusiasm
- Encouraging innovation and innovate thinking
- Facilitating collective learning to improve performance and knowledge dissemination
- Engaging in professional learning and development*

External leadership behaviour

- Networking
- Monitoring information about trends and changes in the external environment
- Representing, promoting and defending the reputation of the organization

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Leader-member exchange relation (based on Bernerth et al., 2007; Liden and Maslyn, 1998; Yukl et al., 2009)

- Affect: having positive emotions, positive feelings to one another
- Loyalty: having feelings of long-term support towards someone, even if the particular person makes some minor mistakes
- Trust: relying on one another under conditions of risk
- Respect: showing positive feelings about someone's character and/or ideas
- Contribution: showing positive contributions to the job and job-related issues
- Openness in communication, name things honestly and being open to perceptions of others about the situation*
- Authenticity: being genuine and real, being able to be yourself*
- Accessibility: extent to which a school leader is accessible and concerns accessibility as important*
- Reciprocity: responding to another in a balanced and positive way*
- Caring, concerned: expressing feelings of care or being concerned about the other person in the relationship*

* Asterisks refer to codes emerging from the inductive coding; other codes were derived from the theory.

7.4 Findings
The findings of the present study are discussed in the same order as the research questions. The results arose with help from the coding tree (see table 7.1). The coding tree was composed on the basis of codes emerging from the data and codes derived from the theory. The results are clarified using quotes from the transcriptions. The *n* of the focus groups refers to the number of focus groups in which the finding was named. For a clear understanding, we repeat that 24 school leaders were interviewed and 22 focus groups were conducted.

7.4.1 Leadership
This paragraph reports on the results of an introductory topic considering which people are in charge of leading the school. In primary education in Flanders, the ministry of education funds one school leader per registered school. However, almost every school leader (n=23) in the sample indicated that leadership is no longer a matter of the single school leader. Only one school leader indicated that the team wanted the school leader to be the one and only person to take all the decisions. All school leaders (n=22) exemplified the special needs coordinator (SNC) as someone who takes up leadership. In some cases the special needs coordinator was explicitly described as someone who particularly focuses on leadership tasks considering special needs, whereas in other cases the special needs coordinator has leadership responsibilities going beyond this scope. Some schools (n=4) have 'policy coordinators' who support the school leader in policy. The school leaders (n=4) perceive the policy coordinators as people taking up leadership responsibilities. In addition to the individuals who take up leadership in schools, school leaders (n=7) name the importance of policy teams, involving teachers in policy-making.

In the focus groups (n=13), teachers predominantly refer to the SNC as someone who takes up leadership, second to the school leader. Apart from the SNC, they perceive policy coordinators, if they are employed, as leading and influencing (n=4). In addition, working groups were named as influential with regard to leadership (n=9) and the importance of policy teams was mentioned as well when describing leadership (n=5).

7.4.2 Leadership behaviour
When describing leadership behaviour, school leaders and especially teachers exemplified relation-oriented and task-oriented behaviour. One participant named it as following:

> "But I think that you can make the division quite roughly, it is about actions, it is about doing things, and situations, and then about people. Those relationships, those people, it is always interrelated. The relationships between the school leader and the people in the field. (...) I think that the relationship is, for me, the base of everything." [School leader 3]

In the following paragraphs, the results from the coding with regard to leadership behaviour are presented. The codes are presented in order of occurrence. The most named topics are presented first. Change-oriented behaviour is not discussed because it was barely mentioned in the interviews and focus groups.

7.4.2.1 Relation-oriented behaviour

Team coaching is understood as leadership behaviour that helps the team to function efficiently (Hackman and Wageman, 2005) and is named by 20 school leaders. Also in the focus groups (n=11) team coaching came to the front as a part of leadership behaviour.

> "Leadership for me is … mainly, I think to give people responsibilities and especially, the drive to give them the possibility to feel good in a working group. You can create working groups that are finally not efficient so it is searching for which working groups to expand. Hum, it is important for me anyway, and I have told the teachers that we must go through the PDCA cycle, always, so things happen efficiently."
> [School leader 2]

> "The school leader has a clear vision, where we aim for, to get the team moving to get there. [...] Making the team believe in it. To get everyone on the same page and adopt the same line." [Focus group – School 23]

School leaders (n=16) indicated in the interviews that they consult teachers and sometimes parents and other stakeholders when making decisions or redesigning the schools' mission and vision. However, it is remarkable that only in one focus group teachers named this as part of the current leadership behaviour. Though, in a few focus groups (n=5) teachers indicated to desire to be consulted when decisions are made.

> "We are working on a new vision, we are writing the vision with the children and the teachers and the parents. Step-by-step." [School leader 20]

> "Hum, teachers get a survey anyway, so they get a how can I say, a questioning of … what do they want as professional development activity, as an individual? What do they want as a group? What does the entire team need? We also do an annual evaluation, with the whole team. So from that evaluation, I will start to look for the emphasis of next year." [School leader 5]

In Flanders, providing evaluation is a decree authority of the school leader. 13 participating school leaders perceive 'providing feedback and evaluation' as a part of leadership behaviour in contrast to teachers who currently hardly perceive feedback and evaluation as a part of leadership behaviour, it was only named in two focus groups, though in a few focus groups (n=4) a need was indicated.

In many focus groups (n=15), perceptions of school leaders' support and encouragement were expressed in various ways. This can be related to pedagogical support, support in dealing with stress and coping with ticklish situations with parents. Moreover, one in three participating school leaders (n=8) named explicitly supporting and encouraging leadership behaviour. Elaborating on support and encouragement, the skill 'listening' came to the front in the focus groups (n=10).

> "A leading person in the first place, is someone who is able to listen carefully. […] I also expect someone with insight, knowledge, pedagogical skills, that if you do not know something ... that you get support, tips and advice, and advice from them. Someone with a certain intellect. Someone who can take care of you when you need it." [Focus group – School 24]

Lastly, in ten focus groups 'recognition of achievements and contribution' were indicated as leadership behaviour of interest. It was striking that none of the school leaders named it in the interviews as part of leadership or leadership behaviour. However, two school leaders described it in additional questions gauging leadership development objectives or when they were given room to add something.

7.4.2.2 Task-oriented behaviour

Decision-making is the most frequently named subcategory of task-oriented behaviour. School leaders (n=16) and teachers (n=14) often named it in descriptions of leadership behaviour. School leaders indicated to be the ones who take the final decisions about varying processes in the organization i.e. administration, finance and the core process of teaching.

> "I find it important to make choices. These choices can be on budgeting, on accounting, how much we spend on which budget line. At the same time, I make a decision about, x and y and z. That is shaping the organization. This is about occasional matters, that's decision-making." [School leader 20]

Teachers indicated that they expect their school leaders to make decisions, but also emphasized that it is important to consult with teachers when making decisions. When decisions are made, it is important that the school leader is convinced of the decision and carries out the decision or clearly communicates with the entire team why modifications are necessary and how they will be executed.

> "I think that it is someone who has to take the lead and who has to make decisions, not only make decisions, not only, but in consultation with the team, that is the healthiest form of leadership, leadership with consultation. It is someone who makes the final decision, someone who goes for it, who stands for the decision. […] It is the captain of the ship." [Focus group – School 20]

About half of the school leaders (n=13) indicated that monitoring teachers' actions and quality performance is an important aspect of leadership resulting in effective performance. School leaders mainly monitor outcomes of meetings and the quality of education. Teachers named monitoring less frequently (n=7) though name it for the same reasons: to make sure that outcomes of meetings are followed up and to make sure that every teacher participates in offering qualitative education.

> "I feel that monitoring is very important, if you do not monitor it … it doesn't make sense. Teachers have already so much to do. Therefore, they think … okay, we don't do that. That's how it goes." [School leader 10]

When describing clarifying assignments, it seems that school leaders (n=9) and teachers (n=9) are on the same page. In the descriptions, clarifying assignments was often linked to keeping assignments and actions/initiatives aligned with the schools' mission and vision. The importance to explain assignments and responsibilities was also emphasized especially assignments and responsibilities, which go beyond the scope of teachers' daily tasks.

7.4.2.3 External oriented behaviour

School leaders see themselves (n=10) and are perceived in the focus groups (n=10) as people who take the role to represent their school also outside the boundaries of the school. School leaders network with other organizations such as municipalities and umbrella organizations, participate in the school board, the parent-teacher association or negotiate in conflicts with parents.

> "I think … the link between the school board and teachers, that connection, what does the school board expect from us, not that that happens a lot, but it is an intermediary role. It is that connection. I think also about the municipality. Things about culture, sports, day care and so on." [Focus group - School 2]

In the focus groups, teachers exemplified that they expected their school leaders to stand up for them when parents interfere too much or over-criticize their efforts and functioning. This kind of behaviour is linked to providing support and encouragement, which is part of relation-oriented behaviour.

> "Sometimes, I have to protect the teachers; I have to stand up for them, against our open door mentality. It is not because we are a community that we serve as a service institution for demanding parents. It all has to stay feasible." [School leader 9]

7.4.3 Leader-member exchange

While explaining the relationships between the school leader and the teachers, both school leaders and teachers provided elaborated descriptions using various aspects of exchange in the

relationships. The most named aspect of exchange was trust. Trust was described by 14 school leaders and in 18 focus groups as an important aspect of the school leader-teacher relationship and as a condition of efficient collaboration. Besides, trust is named as important in terms of feeling eased, safe and at home at the workplace.

> "Trust, I personally find trust my number 1. I think, if you cannot trust your school leader or your colleagues, then it stops. Yes. There it stops for me. If you have to work in a suspicious atmosphere ... that just does not work." [School leader 6]

> "I can state that if you say something to her (i.e. school leader), if you want it to be confidential, that it stays confidential, it will happen that way. It feels very safe, she grants haven, can I say it that way? You have no fear to talk here; you don't have any fear that afterwards you will face any trouble, whether you have said something positive or negative." [Focus group – School 3]

Linked to trust, openness was often described. The participants explained that a clear and open communication in which expectations and interpretations are shared, are perceived as meaningful for a high-quality relationship. 15 school leaders named it, whereas in 13 focus groups it was mentioned.

> "So I try to deal with my team in a positive way, but if something goes wrong, it should also be mentioned. So I mean, I am really open and I name things as they are, but with mutual respect, and I think that is very important." [School leader 13]

> "We focus on openness, on 'open communication', that is something ... almost every school year we start with it. What do we expect from each other? We know that it is difficult. But it is fruitful. And the creation of a safe climate." [Focus group – School 9]

Contribution to the profession and to the school emerged as prominent for school leaders (n=14). Likewise, it was named in 11 focus groups. School leaders and teachers assign relationships higher levels of quality if they notice that the other shows higher levels of contributions to the job and job-related issues, for instance in putting extra efforts in working groups, developing teaching materials, and supporting colleagues and pupils. School leaders indicated that it is harder to work with people with low levels of contribution because people with low levels of contribution usually stick to strict minimum requirements. One of the school leaders clarified that he did not like to start discussions each time to participate in an extra activity and therefore levels of collaboration with that teacher were perceived as rather low.

> "Hum, yes, I think ... commitment is also very important, not purely professional, but going the extra mile for the school. [...] Involvement, certainly to their pupils, that they really get the most out of their pupils and that they do everything they can, to help their pupils, to move them forward." [School leader 17]

Respect was mainly named in the focus groups (n=17) and less by school leaders (n=8). It was exemplified that school leaders and teachers sometimes have different opinions and can have discussions; but that everyone has to be respected.

> "Respect, for your own character, everyone ... yes ... everyone's individual. Being yourself. Yes, that's it. You are, who you are. You do not have to play a role, nor to wear a mask ... to be able to function. Appreciating and being appreciated, that's what it is all about." [Focus group – School 2]

In addition to respect, authenticity was described in the focus groups (n=11) and by school leaders (n=7). They explained that they find it important to be themselves and do not want to change their own character nor personality through peer pressure and value authentic people in relationships.

> "Our school leader doesn't want to be popular and I think that's important. Everyone can be himself or herself." [Focus group – School 7]

School leaders (n=8) recognize the importance of reciprocity in relationships. This came out in the focus groups as well (=11). They named that they both experience situations from their own perspectives, can have different information and opinions about the same issues and need to recognize each other as equal partners in the relationship in order to work efficiently.

Teachers indicated in the focus groups (n=10) that school leaders are involved in taking care of them. They recognize it as nice and pleasant, but on the other hand, some warn school leaders to take care and protect themselves for stress-related diseases. In addition, only a few school leaders (n=5) indicated care as an aspect of the relationship between the school leader and the teacher in the interviews. School leaders described it in taking care of teachers suffering from stress-related symptoms, facing serious conflicts with parents or more in general by ensuring that they like to teach at their school.

Lastly, accessibility was often named in the descriptions. Accessibility was perceived as a condition but also a feature of the school leader-teacher relationship. In the focus groups (n=13), teachers name it as a condition to work towards a high-quality relationship. Indeed, if you cannot access the school leader because he or she is barely at school, it is hard to develop a relationship. Some school leaders named to pay consciously attention to an open-door attitude so teachers easily can walk in if they feel a need to discuss things. Besides, accessibility in terms of having no feelings of fear to approach the school leader were expressed.

7.5 Conclusion and discussion
School leadership research has a tradition of researching the construct of leadership predominantly from the perspective of teachers. This study researches the concept of leadership in primary education integrating school leaders' and teachers' perspectives. The study has an

explorative nature and aims to clarify and refine the theoretical perspectives of leadership and leader-follower relations, which were mostly developed out of the educational field. The study compiles the perceptions of 24 school leaders and 22 teacher groups employed in 22 schools.

The results reveal that leadership is no longer the responsibility of a single person. School leaders and teachers indicate that different people can take up leadership roles such as special education needs coordinators or policy coordinators. It was striking that teachers perceived working groups as leading, whereas school leaders left them underexposed.

When describing leadership behaviour, school leaders and teachers paid attention to relation-oriented leadership behaviour and task-oriented behaviour. Relation-oriented behaviour is largely different perceived among school leaders and teachers (see table 7.2). School leaders indicated that 'coaching and guiding people' is the core of their job in order to ensure organizational performance. The taxonomy of Yukl provided guidance to structure the data, though through giving room to empiricism we noted that categories as 'team coaching' and 'providing feedback and evaluation' are important categories to add to the taxonomy.

Team coaching, i.e. helping the team to function efficiently, is especially perceived by the school leaders but also named in about half of the focus groups. Besides, the category providing feedback and evaluation emerged. Providing feedback and evaluation is a decree authority of the school leader and something school leaders perceive as an important assignment. Teachers perceive this barely as leadership behaviour. This might be because school leaders focus more on providing feedback and evaluation, due to the decree authorities for Flemish school leaders. Further research is needed to confirm this. Teachers long for a daily confirmation of their performance, which is reflected in the category 'recognizing achievement and contribution'. Recognition was predominantly mentioned in the focus groups and rather absent at the level of the school leader. In times of teacher shortage, it is interesting to know that recognition and the support of co-workers and leaders can contribute to the desire for continued employment as a motivating factor in the senior phase of the career (van Dam et al., 2009).

Table 7.2
Main categories of perceived relation-oriented behaviour

Perception of relation-oriented behaviour	
School leaders	*Focus groups*
1. Team coaching (n=20)	1. Providing Support & Encouragement (n=14)
2. Consulting teachers and sometimes parents and other stakeholders (n=16)	2. Team coaching (n=11)
3. Providing feedback and evaluation (n=13)	3. Recognition of achievements and contribution (n=10)

The categories are presented in a ranked order.

The self and other-perceptions of relation-oriented leadership behaviour seem rather divergent. On the one hand, in the focus groups the teachers exemplified to perceive their school leaders as 'supportive and recognizing'. In contrast, the school leaders perceive themselves rather

exceptional as supportive and recognizing. Given the high levels of stress among school leaders, it could be easing for school leaders to be aware of this perception and appreciation of teachers. On the other hand, school leaders name 'consulting with members when making decisions' as a main part of their leadership behaviour. The recognition of teachers about consulting in the decision-making process is however low. Clear communication about consultation in the decision-making process can help to guide teacher perceptions and lead to better alignment of school leaders' and teachers' perceptions about consultation in the decision-making process, leading eventually to a positive influence on school leaders' effectiveness (Atwater and Yammarino, 1997).

Moreover, according to a review of Daniëls et al. (2019) communication and maintaining quality internal relations are features of effective school leadership. The same applies to providing feedback and evaluation. The divergence in the previous mentioned perceptions can be explained by the Rashomon effect. The Rashomon effect is based on the principle that people see and interpret different aspects of an event and that all perceptions of the truth are shaped by peoples' own perceptions and understandings (Roth and Metha, 2002). School leaders have other priorities than teachers. School leaders focus on keeping the overview of the school and keeping the school running, whereas the teachers focus on their particular teaching assignments and pupils.

School leaders and teachers need support from one another, but in a different way. School leaders need support in terms of consulting in decision-making whereas teachers need support in terms of receiving 'support and encouragement' and 'recognition of achievement and contribution'. Moreover, school leaders focus on 'team coaching' and 'providing feedback and evaluation' in order to keep the team functioning effectively.

Task-oriented behaviour was also extensively described in the interviews and focus groups (see table 7.3). It was mainly exemplified as decision-making, monitoring operations, clarifying assignments related to the schools' mission and vision, and accomplishing particular tasks according to the decretal obligations. The results for task-oriented behaviour are largely similar for school leaders and teachers. It is striking that the distinction between the task-oriented and relation-oriented approach with regard to decision-making, is difficult in practice. Teachers expect their school leaders to make decisions (task-oriented) though state that they value consultation (rather relation-oriented) about decision-making.

Table 7.3
Main categories of perceived task-oriented behaviour

Perception of task-oriented behaviour	
School leaders	*Focus groups*
1. Decision-making (n=16)	1. Decision-making (n=14)
2. Monitoring operations (n=13)	2. Clarifying assignments (n=9)
3. Clarifying assignments (n=9)	3. Monitoring operations (n=9)

The categories are presented in a ranked order.

External oriented behaviour comes to the front in the school leaders' role of presenting, promoting and defending the reputation of the organization and/or the teachers. Results are convergent for school leaders and teachers. Change-oriented behaviour is another subcategory of Yukl's taxonomy, but was underexposed in the interviews and the focus groups.
In conclusion, Yukl's taxonomy of leadership behaviour is directional to study leadership in primary education, though we noticed that some subcategories are more appropriate than others and that it is recommended to elaborate the taxonomy with a few subcategories.

The perception of the leader-member relationship seems to match fairly well for school leaders and teachers. In the focus groups, 'respect' is more often named than in the interviews with the school leaders. In the focus groups, school leaders are frequently described as caring and concerned whereas school leaders perceive themselves less caring and concerned. The latter seems to align with the findings in the section on leadership behaviour. School leaders do not perceive themselves as caring, supportive and recognizing as teachers do. The proposed aspects of leader-member exchange by the LMX theory: trust, contribution and respect correspond with the perceptions of the participants in our sample, whereas loyalty and affect are less present. It is suggested to elaborate the aspects of leader-member exchange with openness and authenticity. In addition, the use of care and feelings of concerning and reciprocity should be considered to include. The preceding ones are clearer at the level of the teachers. Besides, accessibility was often named by the teachers as a condition for the development of a high-quality relation but also mentioned by teachers and school leaders as a feature of a relationship. Given that the largely shared mutual perspective on leadership, it is likely that school leaders and teachers develop high-quality relationships, which benefit among others job satisfaction, performance and job stress. However, scholars warn for the drawback of high degrees of LMX, which can cause higher degrees of stress due to deep senses of obligation (Harris and Kacmar, 2006). To get a thorough understanding of the effects of high degrees of LMX related to the effects on job stress and satisfaction in education, follow-up research is designated. Lastly, establishing and maintaining trusting and high-quality relationships with each teacher individually takes time, though this time is well spent because it helps school leaders to create conditions necessary to meet their goals (Tschannen-Moran and Gareis, 2015).

Summarized, the current study shows that the hierarchical taxonomy of leadership behaviour (Yukl, 2012) and the LMX-theory are guiding theories for studying leadership in primary education including self and other perceptions, but that it is recommended to elaborate the constructs of the theories taking into account the findings of the current study. Studying the alignment of self-other perceptions about leadership in education is important because it contributes to the effectiveness of school leaders' actions such as facilitating change in teachers behaviour contributing to the overall school effectiveness and affects school leaders responses to development feedback. Moreover, insights in the quality of school leader-teacher relations are relevant concerning the issue of teacher shortages in education. The quality of school leader-teacher relations have among others influences on job satisfaction, job motivation and

organizational commitment. Therefore, the insights of the current study provide building blocks for future work focusing on unravelling the effects of school leader-teacher relations concerning turnover intentions and the reasoning behind turnover intentions. Overall, the study (1) contributes to future research on school effectiveness and the increase of organizational effectiveness, and (2) provides insights, which give direction to research and practice concerning the sustainability of the teacher profession.

7.6 Limitations and recommendations

While reasonable efforts have been made to conduct a reliable and valid study, the study has some limitations. First, the current study was conducted in Flanders, the Dutch-speaking part of Belgium. The culture in Flemish primary schools is generally known as a less hierarchical culture. This cultural context may have influenced the perceptions of leadership behaviour and the school leader – teacher relationships. In case of comparisons with more hierarchical school cultures, precautions must be taken and possibly additional research must be carried out. Second, the research was conducted in schools with a school leader – teacher ratio varying from 1:20 – 1:35. This is an average size for a Flemish primary school. However, the school leader – teacher ratio can vary among schools and is different in secondary education where the school leader – teacher ratio easily increases to 1:100 or even more. The school leader – teacher ratio can possibly influence the results. An influence on the school leader – teacher relationship can be expected as the school leader has to spread the attention over more teachers. This is recommended as a subject for follow-up research. Third, a self-selection effect may have occurred during the sampling phase. Indeed, every school leader was allowed to participate in the study, but they have chosen themselves to respond resulting in the inclusion in the sample. Fourth, the interviews and focus groups were coded using the coding tree. We did not elaborate on the particular meaning of the codes as it was out of the scope of the current research. However, it is recognized as meaningful for follow-up research. A last recommendation for follow-up research is to focus on the quality of school leader-teacher relations using mirrored interviews to explore the relationships between school leaders and teachers, and relate it among others to job-related stress and turnover intentions. The authors would like to warn against generalizations based on the current study. The current study is a qualitative study and therefore, it is advisable to carry out additional quantitative research before generalizations are made.

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7.8 Appendix

Sample questions interviews and focus groups

Similar questions were asked to school leaders and teachers. The questions are adjusted to the perspective of the school leader/teachers?

1. How do you describe leadership (behaviour)?

2. What are (un)important/favourable features of leadership (behaviour)?

3. Which features of a professional relationship are important in a professional relationship with a teacher/ school leader?

4. What would make you describe the relationship with a teacher/school leader as strong/weak?

Chapter 8
General discussion and conclusions

Exploratory Phase	Experimental Phase	
A review on leadership and leadership development in educational settings 2	Developing school leaders: Responses to group reflective learning 4	Do school leaders learn from a group reflective learning programme? 5
Mapping school leaders' professional development 3	Does leadership training improve organizational learning climates? 6	School leaders' and teachers' leadership perceptions: Differences and similarities 7

The research project founding this book contributes to a deeper insight in school leadership and school leadership development. Therefore, the book reports on various studies gauging school leaders' professional development, the impact of an intervention study i.e. group reflective learning programme (GRLP) for school leaders, and self-other perceptions of leadership in primary education. The book is divided in two parts. The first part, the exploratory part, reports on the studies exploring school leadership and school leadership development. The insights from the studies in Part I (see Chapter 2 & 3) enabled the design of the group reflective learning programme, which is the predominant focus of Part II (Chapter 4, 5, 6 & 7). The second part, predominantly considering the experimental phase, reports on the outcomes of the group reflective learning programme considering the level of the school leader (Chapter 4 & 5), the level of the teacher (Chapter 6) and includes a side study investigating self- and other perceptions of leadership in primary education (Chapter 7).

The existing body of research lacks studies considering school leaders' professional development. Studies providing an overview of school leaders' professional development and their preferences for professional development are scarce. Therefore, Part I, first reports on a review study (Chapter 2). The review study questioned how school leaders develop in an effective way. Furthermore, the review study sought for answers on the evolvement of leadership theories in education and explored the key characteristics of effective leadership in education. Additionally, a qualitative study and a quantitative study (Chapter 3) were carried out to map and get a deeper insight in school leaders' preferences for professional development to eventually provide guidance in developing the intervention study (GRLP).

Building on the insights of the review study (Chapter 2) and the qualitative and quantitative studies concerning school leaders' professional development (Chapter 3), a group reflective learning programme for school leaders was designed. The technique of reflective learning was chosen, because reflective learning is associated with deep learning (Ryan & Ryan, 2013; Mezirow, 1991) and turned out to be one of the favoured techniques among school leaders. The programme focused on a prioritised professional development need: coaching teachers. The experiences and perceived effects according to the school leaders are discussed in Chapter 4 and 5, whereas teachers' perceptions correlated to school leaders learning are discussed in Chapter 6. Chapter 7 reports on self-other perceptions of leadership and should be considered as an additional study. It is a relevant study, because school leadership is predominantly studied from an instructional or transformational approach, whereas this study focuses on the perception of the leaders' behaviour and the quality of the relationship between school leaders' and teachers. A qualitative relationship is found to be a key characteristic in improving well-being (Viitala, Mäkelä, Säntti, Uotila, Tanskanen, Kangas & Hölsö, 2015). Moreover, school leadership is often researched from a single perspective of teachers or school leaders. This single approach is limited, because leadership is a matter of leaders (school leaders) and followers (teachers) (Jacobsen & Bogh Andersen, 2015). The school leaders are the ones who lead, but the teachers are the ones who have to deal with the school leaders' leadership

behaviour. Hence, it is important to include both perspectives ensuring a holistic and nuanced understanding.

The following sections first discuss the main findings and contributions to the field of school leadership and school leadership development (8.1). Second, possible implications for practice are explained (8.2). Third, reflections on the research project are elucidated (8.3). The fourth section elaborates on suggestions for future work (8.4). Lastly, a brief overall conclusion is drawn (8.5).

8.1 Main findings and contributions
Based on the studies included in the current book, several conclusions can be drawn. The book is divided in two main parts. Therefore, the key findings and contributions to the field are discussed per part. Section 8.1.1 reports on the findings of Part I, whereas section 8.1.2 reports on the findings of Part II.

The main research questions of the book are answered in the studies founding Part II. The studies founding Part I were necessary to eventually develop and answer the main research questions.

8.1.1 Main findings considering leadership and school leaders' professional development in education (Part I)
The main findings arising from Part I are derived from a review study (Chapter 2), a qualitative study (n=16) and a quantitative study (n=592) (Chapter 3). The review study (Chapter 2) sought among others for answers on research questions considering (1) the features of effective leadership in an educational setting and (2) the effective professional development of school leaders. The research question founding Chapter 3, questioned (1) how school leaders develop their leadership skills and (2) to which extent school leaders participate in professional development activities.

8.1.1.1 A thorough understanding of leadership in education requires a broad approach (Chapter 2)
Contemporary research on leadership in education, builds predominantly on instructional leadership and transformational leadership theories (Daniëls, Hondeghem & Dochy, 2019). Instructional leadership strongly focuses on the core process of education i.e. teaching and learning. Transformational leadership focuses on how to motivate staff members in the direction of the school goals. The emergence of distributed leadership and studies investigating distributed leadership emphasize that leadership is no longer the responsibility of one formal leader.

The emergence of distributed leadership contrasts Flemish primary education, the area where the study was conducted. In Flanders, school leaders are still the ones who take up the role of the formal daily leader. The school leader gets assistance from a special needs coordinator who contributes to the special needs policy and daily operation of the school with regard to special needs pupils (Flemish Education Council, 2003). In some schools, policy advisors or policy teams are guiding or responsible for particular leadership assignments (see also Chapter 7).

Scholars recommend integrating several theories such as instructional leadership, transformational leadership and distributed leadership or propose a theory that integrates multiple theories such as Leadership for Learning, ensuring thorough research on leadership in education (Daniëls et al., 2019). The advice of scholars builds on the following arguments: (1) the theory on instructional leadership and how to bring the theory in practice is rather vague (Piot, 2015); (2) the impact of school leadership on student achievement and school performance is according to Marks & Printy (2003) meaningful when instructional, transformational and distributed leadership are integrated and (3) Robinson, Lloyd and Rowe (2008) suggest to expand instructional leadership with other theories because instruction is a specific process of leadership in education. A focus on instruction is lacking in more general theories such as transformational leadership.

8.1.1.2 Effective school leaders focus on more than just the instructional aspect of school leadership (Chapter 2)

The importance of effective school leadership to pupils' achievement and the overall school effectiveness is widely accepted (Hallinger & Heck, 1996; Leithwood & Jantzi, 2006; Robinson, Lloyd & Rowe, 2008). In order to be effective, school leaders need to focus on more than the schools' core process: curricula and instruction. Providing education founds the core of schools, yet one cannot ignore processes facilitating providing education. Effective school leaders pay attention to communication and maintain good relationships. Effective communication then contributes to two other characteristics of effective school leadership: shaping the schools' culture, and defining and sustaining the schools' mission. Lastly, human resource management in terms of recognizing and awarding successes, and investing in personnel by hiring and retaining qualified teachers are relevant features of effective school leadership (Daniëls et al., 2019).

8.1.1.3 Effective professional development for school leaders is a process that involves others and starts from school leaders' experiences in daily practice (Chapter 2 & 3)

Despite the existing body of research on leadership in education, research studies considering school leaders' professional development are still scarce. The literature on school leaders' professional development and especially the impact of professional development programmes for school leaders are according to Hallinger, still an embarrassment in the field (Leithwood, 2019, Foreword, p. x). The existing literature is dominated by descriptions, opinions and prescriptions of professional development programmes for school leaders and lacks studies investigating short and long-term effects of school leaders' professional development. The review study and particular the research question focusing on the features of effective professional development for school leaders attempts to contribute to the exploration of the field. The review study presented in Chapter 2 points to five features, which can give rise to effective professional development for school leaders and were guiding in developing the group reflective learning programme (Chapter 4, 5 and 6).

First, professional development should be designed with attention to prior learning and should consider the individual development needs of the participating school leaders (Goldring, Preston & Huff, 2012; Huber, 2013; Peterson, 2002; Simkins, 2012; Wright & Da Costa, 2016). Second, professional development for school leaders should be contextual and experiential to strengthen learning on the individual and organizational level (Aas, 2016), and to allow participants to apply what they have learned (Goldring et al., 2012; Simkins, 2012). Considering transfer of the gained knowledge, skills and attitudes into practice is a third characteristic of effective school leadership development. To arrive at transfer of learning, professional development should consider the correct method for the professional development aim, and the use of a range of learning activities in various formats should be considered (Huber 2011; 2013, Goldring et al., 2012, Forde, McMahon & Gronn, 2013; Simkins, 2012). Fourth, the relationships with others while learning are important. School leaders learn when spending time networking with fellow school leaders, by sharing ideas and reactivating knowledge (Goldring et al., 2012; Mac Beath, 2011). Lastly, effective professional development for school leaders is spread over time (Goldring et al., 2012; Peterson, 2002; Wright & Da Costa, 2016).

The findings mentioned in the previous paragraph correspond strongly with school leaders' preferences on professional development as discussed in Chapter 3. In the studies, founding Chapter 3, Flemish primary school leaders' indicated that they favour learning in interaction with peers and colleagues, that they value professional development considering the school leaders' own daily practice and experiences, that they like to reflect and favour professional development which is spread over time. Reflection can be used as a tool to find solutions for concrete problems, another focal point mentioned in the studies founding Chapter 3.

8.1.1.4 Flemish primary school leaders prefer professional development focusing on supervising teachers (Chapter 3)

In order to get an insight in Flemish primary school leaders' preferences and needs for professional development, a survey among Flemish primary school leaders was conducted (n=592). The five top favoured topics are coaching teachers, educational trends, motivating teachers, implementing the schools' vision and mission, and promoting teachers' well-being. Hence, it can be stated that school leaders feel a need to develop their skills with regard to supervising teachers.

Summarized, the studies serving as a foundation for Chapter 3 (and Chapter 2), allow us to conclude that professional development for school leaders is a process that is spread over time, occurs in the presence of peers or through networking and collegial consulting, and starts from school leaders daily practice and experiences. With regard to the topic, it can be concluded that Flemish primary school leaders prefer to develop their skills concerning supervising and coaching teachers.

The field of professional development for school leaders is still an underexplored field. In the current research project, attention was paid to formal professional development. The focus on formal professional development resulted from the project purposes who required the investigation of a formal programme. For completeness, informal professional development for school leaders is even less explored. The subfield of informal professional development deserves the necessary attention in order to compile a full picture of school leaders' professional development. Knowledge on informal professional development is certainly relevant, because school leaders indicate in the exploratory studies also features of informal learning such as asking for help in dealing with rare or ticklish situations and sharing experiences.

8.1.2 Main findings considering group reflective learning for school leaders (Part II)

The main findings arising from Part II are derived from three qualitative studies and a quantitative study:

- a qualitative study (n=19) gauging school leaders' responses to the group reflective learning programme (reaction level) (Chapter 4);
- a qualitative study (n=19) investigating contribution of the group reflective learning to school leaders' development (learning level and behaviour level) (Chapter 5);
- a quantitative study (n=289) examining teacher perceptions before and after the school leaders participated in the group reflective learning programme (Chapter 6);
- a qualitative study including interviews with school leaders (n=24) and focus groups with teachers (n=22) (Chapter 7).

The studies answer the main research questions and one of the additional research questions (research question 4) that guided the research project founding this book. For clarity purposes, the research questions are repeated. The relevant chapters are indicated between brackets.

1) How do school leaders perceive the group reflective learning programme? (Chapter 4)
2) Does the group reflective learning programme contribute to the development of leadership behaviour (coaching behaviour)? (Chapter 5)
    a. What do school leaders learn because of the group reflective learning programme?
    b. Do school leaders perceive a contribution of the group reflective learning programme to a possible change in their behaviour at the workplace?
3) Which possible other effects are achieved by the group reflective learning programme according to the school leaders? (Chapter 4 & Chapter 5)
4) Does the group reflective learning programme influence teacher perceptions of the schools' organizational learning climate?

    a) Does a group reflective learning programme for school leaders (focusing on coaching skills) result in an improvement of teacher perceptions of the organizational learning climate?

    b) Does a group reflective learning programme for school leaders (focusing on coaching skills) result in an improvement of teachers' perceptions of the school leaders' coaching skills?

8.1.2.1 School leaders perceive group reflective learning as meaningful (Chapter 4)
Two constructs underlie school leaders' expressed satisfaction about the group reflective learning programme. First, school leaders point to the importance of recognition during the programme. Recognition refers to easing school leaders and soothing their feelings of professional loneliness. These feelings of loneliness occur, due to the position of Flemish primary school leaders. Flemish primary school leaders are the ones who have the formal daily lead over their schools. Second, school leaders exemplified their enjoyment of learning during the group reflective learning programme. These positive responses point at the potential of the group reflective learning programme to effectively improve knowledge, skills, attitudes and behaviour at the workplace, possibly resulting in a change of the overall school performance (Kirkpatrick, 1994).

8.1.2.2 Preconditions need to be taken into account in designing and developing group reflective learning for school leaders (Chapter 4)
Based on the responses of the school leaders, it can be concluded that some preconditions must be taken into account ensuring a successful group reflective learning programme. The school leaders mentioned the importance of psychological safety, the role and quality of the trainer in

guiding the sessions, and the diversity of the group members to widen their views resulting in an easing effect. Other authors also described the preconditions expressed by the participants. For instance, Sanner & Bunderson (2015) referred to the importance of psychological safety in team learning. Aas & Vavik (2015), Dyke (2014) and Korthagen & Wubbels (2001) emphasized the role of the trainer in order to induce reflective learning and prevent for superficial informal chats.

8.1.2.3 The group reflective learning programme provokes school leaders' learning (Chapter 5)

Empirical evidence from the study gauging school leaders' learning shows that a group reflective learning can contribute to the development of coaching skills. The school leaders reported among others to have learned about the coaching skills informing, confronting, exploring and supporting (Heron 1975 in de Haan & Nilsson, 2017). The participants indicated that they no longer tend to avoid providing feedback, are more eager to ask coaching and teacher-led questions, confront coachees in a concerned way, and involve teachers more.

Table 8.1 provides explanation on the previous mentioned coaching skills. In addition, the participants exemplified that they gained theoretical knowledge and that the programme contributed to the development of their professional self-confidence.

Table 8.1

Explanation on coaching skills based on (Heron, 1975) adapted from de Haan & Nilsson (2017)

Informing	giving information and transferring knowledge.
	The coach provides information to the coachee; this could be technical, professional or organizational knowledge. The coach could also provide feedback about the content of coaching or about the potential consequences of different courses of action.
Confronting	challenging the coachees' assumptions; stimulating awareness of the coachees' behaviour, attitudes or beliefs.
	The coach uses confrontation to help the coachee to gain a deeper awareness.
Exploring	helping the coachee to self-discovery, to self-directed learning, and to owning and solving his or her own problems without becoming involved in the learning or changing oneself as a coach. Examples of skills are active listening, summarizing, paraphrasing, echoing and inquiring more deeply through open client-led questioning.
Supporting	Building the coachee's self-esteem, self-confidence and self-respect. Self-esteem is strengthened by welcoming and offering specific support, appreciation and praise, expressing confidence or agreement; or appropriate self-disclosure and sharing.

8.1.2.4 The group reflective learning programme contributes to school leaders' learning and behavioural changes at the workplace (Chapter 5)

The group reflective learning programme provokes changes in school leaders' reported professional behaviour. The participants reported to apply coaching skills, especially involving teachers in the coaching process, asking teacher-led questions and confronting teachers in a concerned way. Confronting someone in a concerned way is multiple and considers gaining

deep awareness, supporting the relationship between the involved partners, adjusting behaviour or processes, challenging assumptions and challenging them to undertake action. In addition, school leaders indicated to support teachers towards more problem solving and solution-oriented behaviour, resulting in behavioural change among teachers as well. The latter was perceived as easing for the school leaders in terms of no longer feeling the need to solve all problems themselves.

8.1.2.5 The group reflective learning improves teachers' perceptions of the organizational learning climate (Chapter 6)

In the study on teachers' perceptions of organizational learning climate, teachers indicate higher scores of the schools' organizational learning climate after the school leader completed the group reflective learning programme. School leaders' participation in the group reflective learning programme led to a positive and significant increase of the perceptions of the schools' organizational learning climate.

This finding is not only relevant for shaping professional development for school leaders; it is also relevant with regard to the sustainability of the teacher profession. Organizational learning climate is associated with positive influences on staffs motivation and job satisfaction (Egan, Yang & Bartlett, 2004; Govaerts, Kyndt, Dochy & Baert, 2011; Mikkelsen, Saksvik & Ursin, 1998).

The teachers also assign slightly higher scores to their school leaders' coaching behaviour after completion of the group reflective learning programme. However, the scores are not significant and therefore cannot be generalized.

8.1.3 Main findings considering self-other perceptions of leadership in education (Part II)

Chapter 7 reports on a study that explored school leaders' and teachers' perceptions of leadership making using of Yukl's taxonomy on leadership behaviour (Yukl, 2012), and the Leader-Member Exchange theory (LMX) (Bernerth, Armenakis, Field, Giles & Walker, 2007; Liden & Maslyn, 1998; Yukl, O'Donnell & Taber, 2009), a theory that focuses on leader-follower relationships. The research question that grounded the study on self-other perceptions questioned whether differences in perceptions between school leaders and teachers could be noticed. Hence, in this concluding chapter, attention is paid to the most striking differences. Understanding the differences, allows working towards more alignment between school leaders' and teachers' perceptions, aiming more divergent perceptions who have the potential to positively influence school leaders' effectiveness (Atwater & Yammarino, 1997). Chapter 7 provides a deeper and more holistic insight on self-other perceptions of leadership in primary education and deals with the similarities as well.

8.1.3.1 School leaders and teachers perceptions of relation-oriented leadership behaviour differ (Chapter 7)

Relation-oriented behaviour is one of the four meta-categories described in Yukl's taxonomy on leadership behaviour (Yukl, 2012). While questioning how school leaders and teachers perceive relation-oriented behaviour, this category appeared to be perceived largely different (see table 8.2). The study did not only rely on the taxonomy of Yukl to analyse the data. Through giving room to empiricism, it was noted that categories as 'team coaching' and 'providing feedback and evaluation' are relevant categories to expand the taxonomy for use in education.

Table 8.2
Main categories of perceived relation-oriented behaviour

Perception of relation-oriented behaviour	
School leaders	*Focus groups with teachers*
1. Team coaching (n=20)	1. Providing Support & Encouragement (n=14)
2. Consulting teachers, parents and other stakeholders (n=16)	2. Team coaching (n=11)
3. Providing feedback and evaluation (n=13)	3. Recognition of achievements and contribution (n=10)

The categories are presented in a ranked order.

The numbers between brackets refer to the number of interviews and the number of focus groups in which the particular construct was mentioned. Hence, the numbers in the column referring to the focus groups with teachers do not relate to the number of teachers but to the number of focus groups.

The emerging category 'team coaching', i.e. helping the team to function efficiently, is especially named by the school leaders (n=20). Besides, the category providing 'feedback and evaluation' emerged. Providing feedback and evaluation is a decree authority of the school leader and something school leaders perceive as an important assignment. Teachers perceive this barely as leadership behaviour. School leaders possibly focus more on providing feedback and evaluation, because they are worried about achieving the decree authorities, whereas teachers long for a daily confirmation of their performance, which is reflected in the emergent category 'recognition of achievements and contribution'. Recognition was predominantly mentioned in the focus groups and rather absent at the level of the school leader.

The teachers exemplified to perceive their school leaders as 'supportive and recognizing' contrasting school leaders perceptions, who perceive themselves rather exceptional as supportive and recognizing. Moreover, school leaders name 'consulting with members when making decisions' as an important aspect of relation-oriented leadership behaviour. The recognition by teachers about 'consulting in the decision-making process' is however low.

8.1.3.2 Consideration should be given to expand the LMX-theory when applying in research in education (Chapter 7)

The perception of the leader-member relationship seems to match fairly well for school leaders and teachers. Table 8.3 provides an overview of the most relevant constructs as discussed in the interviews/focus groups and the according frequency. The difference in perception with regard to 'respect' stands out. The teachers more often name 'respect' than the school leaders.

School leaders are frequently described as 'caring and concerned' whereas school leaders perceive themselves less caring and concerned. The feature of care is appreciated by the teachers as a feature of the relationship with the school leader. The latter seems to align with the findings in the section on leadership behaviour. School leaders do not perceive themselves as caring, supportive and recognizing as teachers do (cf. category 'providing support and encouragement' in table 8.2 above).

Table 8.3
Main constructs of LMX discussed in the interviews (school leaders) and focus groups (teachers) (Bernerth et al., 2007;
Liden & Maslyn, 1998; Yukl, O'Donnell & Taber, 2009)

Relationship (LMX)	School leaders	Teachers
Trust	14	16
Openness*	14	13
Contribution	12	11
Respect	8	16
Authenticity*	7	11
Accessibility*	8	13
Reciprocity*	7	10
Caring, concerned*	5	10

* Asterisks refer to codes emerging from the inductive coding; other codes were derived from the theory.

The proposed aspects of leader-member exchange by the LMX theory: trust, contribution and respect correspond with the perceptions of the school leaders and teachers who participated. 'Loyalty' and 'affect' were less frequent and hence not listed in table 8.3. It is suggested to expand the aspects of leader-member exchange with 'openness' and 'authenticity'. In addition, the use of 'care and feelings of concerning' and 'reciprocity' should be considered to include although they are more clearly present at the level of the teachers. Besides, accessibility was often named by the teachers as a condition for the development of a high-quality relation but also mentioned by teachers and school leaders as a feature of a relationship. Given the largely shared mutual perspective on leadership, it is likely that school leaders and teachers develop high-quality relationships, which benefit among others job satisfaction, performance and job stress (Liden, Sparrowe & Wayne, 1997; Schriesheim, Wu & Cooper, 2011; Wilson, Sin & Conlon, 2010; Zhao, Kessel & Kratzer, 2014).

8.2 Reflections on the research design: Strengths and limitations

Developing a research design resulting in clear and appropriate answers on the research questions is a major part of conducting research. The field of leadership development in education is a developing field. Hence, exploratory studies were necessary to get a deeper insight in the research field with the ultimate goal of developing an experiment, in case a group reflecting learning programme, in order to meet the project aims. The exploratory studies included a review, a qualitative (n=16) and a quantitative study (n=592) (see figure 8.1 below

and figure 1.7 Graphic overview of the book). Building on the findings and insights of the exploratory research, a mixed method approach was chosen, including interviews (n=19), focus groups (n=22) and surveys (n=289) (see figure 8.1). Furthermore, interviews with school leaders (n=24) and focus groups among teachers (n=22), both taken before the group reflective learning programme, were included for the study on school leaders' and teachers' leadership perceptions.

Figure 8.1
Schematic overview of the research design
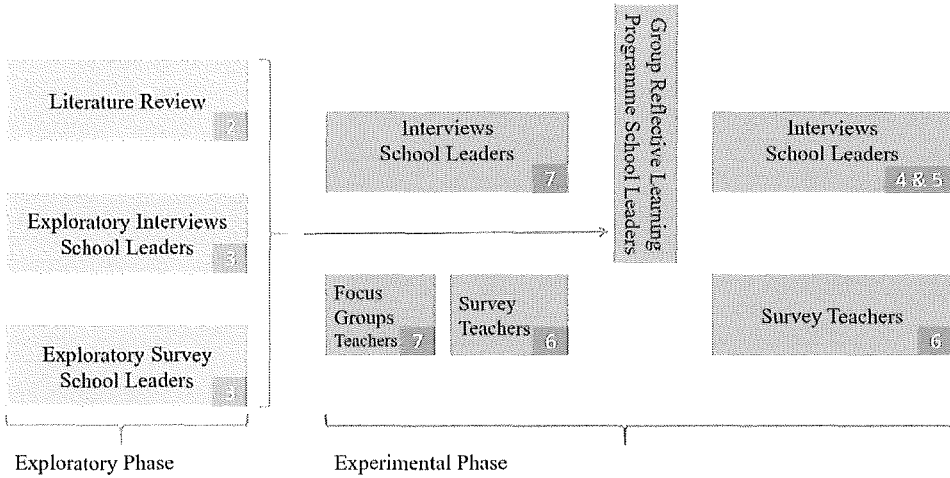
The numbers refer to the respective chapters in which the data are discussed.

The major data are the data derived from the interviews with school leaders. School leaders are the main focus and level of analysis in the current research project. It was chosen to rely on data from in depth interviews with regard to school leaders, because the aim was to get a deeper insight in school leaders' experiences, learning and possible changes in behaviour. Moreover, existing research is limited, so it is hard to rely on data from previous studies. The sample (n=19) was small enough to carry out semi-structured in depth-interviews and analysis on the level of the school leaders. To contribute to the reliability of the studies, the interview data were collected using an interview guideline. The interview guidelines were tested several times before the actual data were collected. The main advantages of using in depth-interviews are (1) collecting data considering a rather unexplored field, (2) the possibility for the participant to extensively describe and nuance their answers, (3) room to investigate unintended and unexpected effects and (4) the motivation of the participants to participate in the interview.

The participating school leaders received a transcript of the interview allowing the participants to provide feedback and make additions. The option to provide feedback is considered as member-checking and can strengthen the interpretations of the researcher contributing to the

reliability of the study (Cohen, Manion & Morrison, 2011; Corbin & Strauss, 2015). School leaders barely provided comments or extra information after they received the transcript.

Using interviews, in which school leaders provide self-reported experiences and changes in behaviour, has some pitfalls. What participants report is not necessarily what they effectively do in daily-practice. When using interviews, some selective recall bias can occur as well. To prevent for selective recall, the school leaders were provided with the transcript afterwards to allow them to add relevant information. School leaders knew in advance that the interviews were about their perceptions of leadership and their perceptions of the training programme, though had no detailed information. Hence, they could think in advance, what they considered relevant to explain. In the last training session, school leaders had to reflect on their learning trajectory. This reflection was thoroughly prepared and helped the school leaders when reporting their experiences to the interviewer.

Moreover, the available literature points out that leaders tend to overrate (some aspects of) leadership behaviour compared to their followers (f.i. Lee & Carpenter, 2018). In addition, it should be noted that measuring leadership behaviour results in less bias when ratings occur in the context of professional development (Murphy & Cleveland, 1995; Lee & Carpenter, 2018) likewise the studies included in the current book (Chapter 3, 4, 5 & 7).

Data derived from qualitative and quantitative data on the level of the teachers add strength to the findings on the level of the school leader. To add strength to the findings on the level of the school leader and to triangulate the self-reported data of school leaders, teachers were as mentioned before, included in the research project. The number of teachers included in the research design, were much higher (n=289), hence quantitative techniques were more suitable. The survey was meticulously developed, giving practitioners and scholars room to provide feedback. Furthermore, quantitative techniques were relevant because on the level of the teachers, among others the variables organizational learning climate, job satisfaction and self-efficacy were relevant variables. These variables are rather mature and valid measurement scales are available in the literature. The survey questions gauged also rather sensitive questions about leadership behaviour. In the introduction of the survey, ample attention was paid to clarify the aims and anonymity of the survey. Moreover, the participants could fill in the questionnaire online or on paper and return it to the researcher in a self-chosen way (e.g. mail, scan via e-mail). Participants could ask questions about the survey using the provided e-mail address.

In a survey, limited room for answering questions in a personal way is left, due to the predetermined fixed design of surveys. Unconscious responses can occur in surveys as well. In the introduction text, the importance of the survey was indicated and the chance to get a reward if the survey was completed was included as well. It was attempted to keep the participant attentive and motivated. Preventing for unanswered questions, a pop-up message was included in the survey design, aiming to keep the non-responses of individual items as low as possible.

Focus groups were held with teachers to estimate their perceptions of leadership (Chapter 7). The focus groups (n=22) in which 130 teachers participated, allowed discussing and eliciting perceptions of leadership. It was taken into account that discussing leadership is a sensitive matter; hence, the questions gauged general perceptions of leadership and relationships between school leaders and teachers. Sample questions: What are favourable features of leadership? Which features of a professional relationship are important in a professional relationship with a school leader?

However, it was possible that the participants influenced each other or that participants did not feel safe. Therefore, efforts were made to ease the participants and to ensure confidentiality. A clear explanation of the aims of the focus groups were provided in advance via e-mail. At the start of the focus group, the interviewer explained the aims again and asked whether the participating teachers felt safe. Teachers were told that they could leave the room at any moment and were allowed not answering questions. One teacher decided to leave the room after the instruction. Afterwards, the teachers received a summary and could provide individual feedback on the summary. Apart from easing teachers and being transparent, providing summaries had the advantage to level out the possible peer influences and check whether the researcher understood the members of the focus groups correctly. The possibility to give feedback on the interpretations of the researcher contributes to the reliability of the study (Cohen, Manion & Morrison, 2011; Corbin & Strauss, 2015). However, additional comments of the participants yielded very little extra information.

Individual interviews might have delivered richer and more personal data. While carrying out deep case studies, interviews with teachers are preferred over the focus groups. Indeed, the choice for focus groups was prompted by a certain degree of pragmatism and by feasibility purposes.

It is relevant to consider the experiment itself as well. The experiment, in case the group reflective learning programme, was designed and implemented with great care. For the design, the findings from the exploratory studies were guiding. Subsequently, a team of experienced higher education teachers was involved to design and implement the training. The team was familiar with structured core reflection and applied the technique for over five years in advanced bachelor degrees. Advanced bachelor degrees, involve a large number of working students holding practical experiences. Hence, the team was also familiar with the target group of adults and school leaders. Based on the feedback of the participants during the interviews, it was expected to get recommendations allowing improving the training. The recommendations from the participants were little. A few school leaders indicated that the reports were demanding, but they recognized the benefit of it and did not recommend excluding it. Another comment by a few school leaders was, that the trajectory is quite time consuming, though they stated that it is important that everyone has sufficient time to explain his/her case and have the opportunity to experience a session in which they stand in the spotlight. Some stated that they would love to continue, whereas a few said that they would like to participate in the future again, but that it was enough for now. In the control group, a less motivated

participant took part despite the careful screening. The less motivated school leader participated in the group reflective learning programme and used it as a platform to spit her negativity about the position of school leader. After two sessions, that person quitted the group reflective learning programme at own initiative. This confirms the importance of motivation to participate in the training programme, the importance of team psychological safety and a positive attitude. In conclusion, the group reflective learning programme was designed and implemented in a good and feasible way. Based on the current experiment and collected data, no fundamental recommendations for improvement of the programme seem to be necessary.

It is noticeable that the sample was compiled based on voluntary willingness to participate in the study. Therefore, a self-selecting effect may have occurred. School leaders who are particularly interested in professional development, reflective learning and/or coaching techniques probably responded on the request to participate in the study. A final selection of the 70 school leaders who replied on the single request for participation, was done by the researcher considering homogeneity for the school leader – teacher ratio (1:20 – 1:35) and heterogeneity for experience, geographic location and umbrella organization. The choice of homogeneity for the school leader – teacher ratio, was done because this aligns with the average school size in Flemish primary education. The sampling for heterogeneity was done to elicit rich discussions in the training.

Data saturation was achieved after 10 interviews in the studies in part II (Chapter 4, 5 & 7). However, it cannot be stated that another sample would yield the same findings, because of the possible self-selecting effect. Therefore, generalizations must be handled with the necessary caution. Yet, school leaders in OECD countries are traditionally the one individual who holds the formal leadership position (Pont, Nusche & Moorman, 2008). The roles and responsibilities of school leaders vary in different contexts and over time. Given the commonality in OECD countries that in primary education one school leader holds the formal leadership position, group reflective learning programmes can be of interest in other OECD countries. Indeed, the findings of the current study indicate that group reflective learning programmes lower school leaders' feelings of loneliness and support their professional self-confidence.

Generalizations from the current study to (Flemish) secondary education must be handled with caution as well, because Flemish secondary schools have a far larger span of control. The school leader-teacher ratio can rise up to 1:100 or even more making it harder to carry out individual coaching of teachers. Pont et al. (2008) note that in primary schools, principals envisage leadership in a more collegial and participative way compared to secondary education. Moreover, Flemish secondary schools have middle management positions, contrasting the absence of middle management positions in most primary schools in Flanders.

The issue of self-selection is recognized, yet this does not mean that the findings cannot be applied to other contexts at all. School leaders who are working in a rather lonely context, which is also the case in other areas of the world (Pont et al., 2008), and are eager to learn and develop, can benefit from group reflective learning. Chapter 4 and 5 reveal school leaders perceived effects with regard to soothing feelings of loneliness, to approaching cases from

various angles, increasing self-confidence and increasing knowledge and skills. If a similar group reflective learning programme is carried out on a smiliar sample (including the possible the issue of self-selection), it is likely that similar results are derived. This for instance consistent with the findings of a Norwegian study from Aas & Vavik (2015), who state that school leaders develop greater confidence through personal and contextual feedback from other school leaders.

8.3 Practical implications

The studies included in this book contribute to an increased understanding of school leaders' professional development and contribute to a deeper understanding of leadership in primary education. Based on the findings of the studies in this book, suggestions for practice are derived. The insights are inspiring for school leaders and providers of school leadership development. Hence, the section is divided in two subsections considering the implications for school leaders and professional development for school leaders.

Some practical implications were mentioned in the relevant chapters. However, the contributions for practice are listed and some overall suggestions are provided as well.

8.3.1 Practical implications for school leaders

The research project founding this book, focused on effective school leadership (Chapter 2) and self-other perceptions of leadership (Chapter 7) resulting in two main practical implications for school leaders.

School leadership is often approached from an instructional perspective in the literature and in practice. When one asks school leaders about their assignments, they often mention the importance of curricula and instruction and a lack of time to focus on curricula and instruction (Daniëls, Hondeghem & Dochy, 2017). However, the review study suggests an integrative approach of leadership beyond the instructional part of leadership. An integrative approach refers to including diverse theories to get a thorough understanding of leadership and its effects on school effectiveness. Moreover, the review study points to the features of effective school leadership. Effective school leaders pay attention to instruction and curricula. Apart from this common focus in research, the review study points to various other key characteristics of effective leadership that can be classified under the umbrella term 'Human Resource Management' (HRM). These 'other' key characteristics are effective communication and relations, shaping the schools' climate (and mission), recognizing and awarding successes and investing in personnel by hiring and retaining qualified teachers. Hence, focusing more on HRM and organizing ones schedule towards more time for HRM can result in higher levels of school effectiveness. Given the indicated need for professional development with regard to coaching, motivating and supporting teachers (Chapter 3), school leaders are aware of the importance of (some aspects of) HRM.

Chapter 7 provides insights in self-other perceptions of leadership. The self-other perceptions of leadership in primary education differ when it comes to the relational aspect of school leadership. This finding aligns with the findings in the meta-analysis of Lee & Carpenter (2018). Their meta-analysis agrees with the findings in Chapter 7 and contradicts the rather commonly accepted self-enhancement bias. According to Lee & Carpenter (2018) leaders do not necessarily allocate higher ratings to their leadership behaviour. Leaders do not allocate higher ratings to task-oriented behaviour, only for particular aspects of relation-oriented behaviour (Lee & Carpenter, 2018). It is noticeable that Lee & Carpenter (2018) did not approach relation-oriented leadership in terms of Yukl's hierarchical taxonomy (Yukl, 2012). Lee & Carpenter (2018) made use of leadership styles to grasp relation-oriented leadership. Four sublevels of relation-oriented leadership were studied i.e. ethical leadership, servant leadership, transformational leadership and considerate leadership. Leaders over-reported ethical, servant and transformational leadership relative to the followers, but under-reported the levels of consideration. For clarity, the meta-analysis of Lee & Carpenter (2018) considers ratings, whereas the study founding Chapter 7 refers to mentioning and valuing the relevant aspects of leadership.

Nevertheless, convergence of self-other perceptions are related to leadership effectiveness (f.i. Atwater & Yammarino, 1997; Tiuraniemi, 2008). Hence, it is suggested to make room for feedback and discuss mutual expectations of leadership. Discussing leadership is often something sensitive. Hence, it is suggested to approach conversations in an atmosphere of trust and with regard to positive aspects of leadership and asking and discussing 'good practices'. There must also be room to share difficult or troublesome aspects of leadership. It is suggested to gauge these aspects more anonymously such as making use of surveys or by calling neutral external professionals, or in working with a 'critical friend'. A 'critical friend' is someone who provides the school leader with critical but constructive feedback in order to improve leadership practices.

Communicating and feedback-seeking actions about leadership (behaviour), approaches in policy and decision-making, and why something is approached in a particular way, can contribute to converge school leaders' and teachers' perceptions as well. Moreover, feedback has the potential to increase performance by increasing one's level of self-awareness (Fletcher, 1997; London & Smither 1995). Detailed feedback enables to determine the discrepancies between self- and other perceptions, which in turn may lead to modify ones self-image and behaviour (Bailey & Fletcher, 2002). Additionally, feedback is a relevant variable that facilitates the improvement of a match between self- and other ratings (Bailey & Fletcher 2002).

8.3.2 Practical implications for school leaders' professional development
The research project allowed features of effective professional development to emerge and resulted in an experiment on group reflective learning. Hence, practice can use the features of

effective professional development (Chapter 2) when developing professional development for school leaders. To guide practices when developing group reflective learning, a blue print for group reflective learning programmes is provided (see figure 8.2).

While developing professional development activities for school leaders, attention should be paid to school leaders' individual development needs, to include school leaders' contexts and experiences, the transfer of knowledge, skills and attitudes into practice, networking and collegial consulting, and spreading the professional development over time. Focusing on the development of school leaders' HRM skills are of interest with regard to effective school leaders, and aligns with school leaders' indicated preferences for professional development (i.e. among others coaching, supporting and motivating teachers). These suggestions are relevant for continuous professional development, but should also be taken into account when preparing school leaders for the job and providing pre-service training or initial trainings for school leaders (e.g. trainings for starting school leaders organized by the umbrella organizations).

Based on the studies reporting on the exploratory phase (Chapter 2 and Chapter 3) and the positive outcomes of the studies investigating the impact of the group reflective learning programme for school leaders (Chapter 4, 5 & 6) it can be concluded that group reflective learning programmes are meaningful and valuable for school leaders. Briefly repeated, school leaders respond in a positive way to the group reflective learning programme and the programme has the potential to provoke knowledge construction, the development of coaching skills and self-confidence eventually resulting in behavioural change at the workplace. Therefore, a blue print of the training is provided allowing practitioners to design a similar group reflective learning programme. The blue print is displayed in figure 8.2 below.

Figure 8.2
Blue print of the studied group reflective learning programme
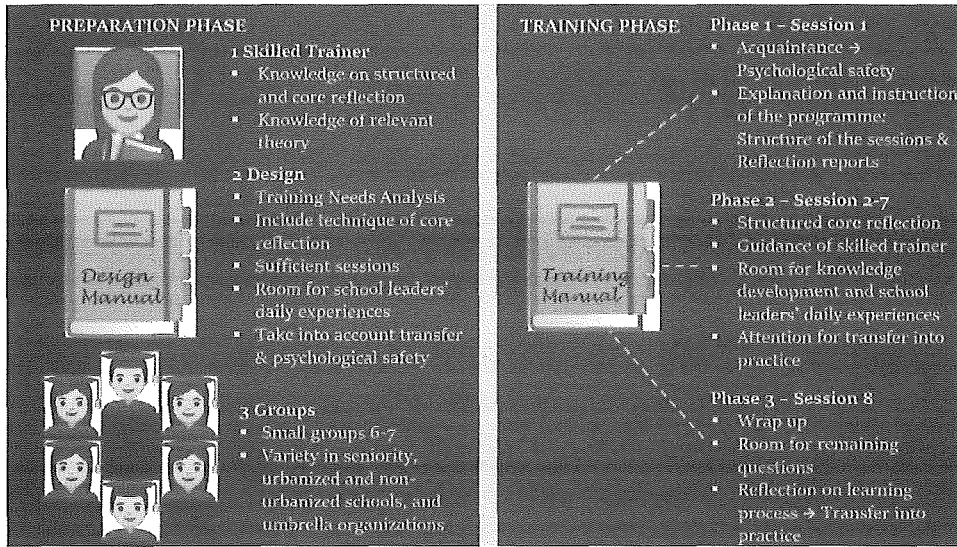
The blue print is divided in two parts, the preparation phase prior to the training and the training phase itself. The figure speaks for itself and is a graphical wrap up of the design of the training. The aspects taking into account when designing the training align with school leaders' indicated preconditions for success: a skilled trainer, a high level of team psychological safety and a varied group. The role of the training is important in directing and structuring the reflection process. The trainer is supposed to add relevant theoretical frameworks to clarify particular cases and insights in cases. The presence of a trainer, who guides the group in a structured reflection process has the advantage of preventing the reflection process from resulting in rather superficial chats among like-minded. Moreover, the trainer can prevent the sessions from becoming 'complaint sessions' who do not result in learning or are perceived as meaningless.

The participants were sampled taking into account maximum variety of seniority, context: urbanized or not, and umbrella organization. This sampling was on purpose to elicit deep reflections and turned out to be a factor of soothing school leaders. To facilitate team psychological safety, it was attempted to include school leaders who did not know each other prior to the programme. Indeed, it can be uncomfortable to share and air particular sensitive issues if colleagues know the person you are talking about.

The current group reflective learning programme made use of the core reflection technique (Korthagen, 2004; Korthagen & Vasalos, 2005; Korthagen Professional Development, 2018) and structured reflection (Daudelin, 1996) as described in Chapter 1 (see 1.5.3).

The recommended use of reflection reports must be taken seriously. A few school leaders were negative about the reflection reports, because they were perceived as time consuming, though stated that the reports were beneficial. Hence, they should not simply be omitted. The reflection reports are relevant for the presenting school leaders and the peers. The reflection reports aim to elicit further reflection on and beyond the sessions and aim to facilitate transfer into practice. Finally, the reflection reports fulfil the function of a course book, allowing the participants to reread their process later on and to reactivate certain processes or insights.

Moreover, in order of maximizing the potential effect, it is necessary to pay attention to the geographic location of the programme (travel time) and take into account the costs of the programme. In the current study, two trainings of the experimental group took place in Ghent and one experimental group in Leuven, likewise the control group.

The previous sections were created, keeping school leaders and providers of professional development in mind. However, the previous findings are inspiring for policy makers in education as well. Policy makers can make use of the findings and conclusions to adjust policies, or guide the development of future policy plans f.i. when considering providing feedback or evaluation for school leaders, or when concerning issues with regard to school leaders' professional development.

8.4 Suggestions for future work
The author aimed to include studies in this book who contribute in a meaningful way to the advancement of a developing field. Notwithstanding the contributions of the studies included in this book, the limited studied field of school leadership development needs further research in order to obtain a fuller picture and a thorough understanding of the field. The suggestions for future work consist of suggestions to further explore the field of school leaders' professional development and suggestions to further explore and strengthen group reflective learning for school leaders.

8.4.1 Suggestions for future research on school leaders' professional development
The field of school leaders' professional development is still in its infancy and the concept of professional development for school leaders is still rather vague. Existing research has predominantly focused on school leaders' formal professional development such as training programmes. Research on school leaders' informal learning is limited to a few studies (Hulsbos, Evers & Kessels, 2016). Hence, further exploration of school leaders' formal and informal learning is relevant in getting a holistic insight. Informal learning is of interest because it is imaginable that school leaders learn particular competences more effectively in an informal way. Insights in the benefits of informal learning are relevant for school leaders, pedagogical counsellors and developers of school leaders' professional development in terms of supporting school leaders in their professional growth.

Moreover, studies about school leadership are mainly self-reported, and so mostly rely on school leaders' perceptions. Including various perspectives (teachers, board and even parents and/or other stakeholders) can strengthen the findings of research on school leaders' professional development. The school context may also be decisive. Deeper case studies or research measuring and taking into account the context can result in the emergence of relevant decisive factors for school leaders' professional development.

Chapter 3 aimed to map Flemish primary school leaders' professional development. It is of interest to repeat the study soon to get an insight in the evolvement of school leaders' professional development and to estimate the findings from a broader perspective.

A last suggestion with regard to school leaders' professional development is, comparing (the effects of) various professional development techniques. This can contribute to a more clear estimation of the effectiveness of particular techniques.

8.4.2 Suggestions for future research on group reflective learning for school leaders
The studies in the current book, researched the effects of school leaders' professional development predominantly on the level of the school leader and from a qualitative approach. Deeper case studies integrating qualitative and possibly quantitative techniques, can investigate the effect of group reflective learning (and other training programmes for school leaders) on the organizational level. Additional quantitative studies, including more cases and levels of analysis, can strengthen the findings of the current study with regard to school leaders' perceptions, learning and change in behaviour.

For the sake of the research project and based on the findings of the exploratory studies, a group reflective learning programme was designed. The findings show that the programme has relevant effects. To fully understand and estimate the effectiveness of the technique of group reflective learning, it is advised to compare the outcomes of group reflective learning with other outcomes of other training programmes for school leaders.

Qualitative research dwelling on teacher perceptions, in case teachers who were coached by the school leader, can provide deeper insights in the effects of group reflective learning centred on coaching techniques. Although relevant and meaningful, researching coaching experiences through the eyes of a coachee is research of a sensitive matter.

Research considering the longitudinal effect of group reflective learning can contribute to the insights on the technique. Research considering longitudinal effects is so far limited. The longitudinal effect of group reflective learning is understood as the 'far transfer' of the gained competences (Cheng & Ho, 2001). 'Far transfer' considers competences after a certain time in practice. Cheng & Ho (2001) suggest taking a minimum time lapse of three months between a training and an impact measurement aiming to measure 'far' transfer. A minimum time lapse of three months allows participants to use newly acquired competences and subsequently

allows teachers to observe possible changes in behaviour and/or performance more, on the condition that school leaders change or implement behaviour.

It has to be noted that the previous conceptualization of 'far' and 'near' transfer should not be confused with the more common conceptualization of 'far' and 'near' transfer which is founded in the work of Thorndike (Thorndike & Woodworth, 1901; Thorndike, 1923). Near transfer refers to transfer between very similar contexts (Perkins & Salomon, 1992). It involves learning a task and practising it to a high level of automaticity. A common example is that of tying shoelaces. Once one has learned to tie a shoelace, it is highly likely that one can generalize the skill to all types of shoelaces regardless their length or thickness. Far transfer refers to transfer between contexts that seem less related to each other (Perkins & Salomon, 1992). Far transfer tasks involve skills and knowledge being applied in various and changing situations. An example of far transfer is that of someone who has learned the principles of wind flow through designing a windmill and applies it later on when directing the sail of a sailboat (or vice versa).

8.5 Overall conclusion

This research project attempted to contribute to the field of leadership and leadership development in education using several research methods: a review study, qualitative and quantitative exploratory studies, an experimental mixed-method study including two levels of analysis (i.e. school leaders and teachers) and a qualitative study on school leaders' and teachers' perceptions of leadership. The project delivered a large and various range of data that allowed getting an insight in leadership (development) and the perceptions of it by primary school leaders and teachers.

Overall, it can be concluded that group reflective learning for school leaders is relevant. The school leaders responded in a positive way to the group reflective learning programme and indicated that they learned due to the group reflective learning programme and transferred learning results into practice resulting in behavioural change at the work place and a change in teachers' perceptions of organizational learning climate. The school leaders did not only gain knowledge and skills related to the topic of the programme, namely coaching teachers, they indicated an increase in self-confidence and indicated that they no longer feel responsible for each and every problem at their school. School leaders tend to involve teachers more in solving (teachers') problems. The group reflective learning programme (GRLP) is relevant for school leaders, but based on the included studies it is not possible to claim that GRLP is the best way to develop coaching skills. It can be stated that the GRLP allows developing coaching skills, but other techniques should be investigated and compared with GRLP's to determine whether better ways exist to develop coaching skills. Comparative research should among others compare the outcomes of GRLP's with for instance 360° feedback or role playing.

Teachers seem to benefit from school leaders' participation in the GRLP as well. They indicated a significant increase in their perceptions of the schools' organizational learning

climate after the school leader completed the GRLP. Organizational learning climate is a relevant variable with regard to job satisfaction, turnover intentions and job-related work stress.

Additionally, the studies in this book can be read as a plea for more attention for HRM in education. HRM considers the human resources in an organization. While drawing conclusions from the exploratory studies, it became clear that effective school leadership is more than providing attention to the instructional aspect of schooling. Effective school leaders pay attention to communication, relationships with teachers, acknowledge and recognize teachers and take care of recruitment, selection and retention of their teachers. Second, the exploratory studies pointed to school leaders' concern of taking care of teachers' wellbeing, and motivating and coaching teachers. Third, in the experimental studies it became clear that school leaders valued the fact that they found support during the group reflective learning programme. The school leaders also stated that their level of 'self-blaming' decreased. School leaders tended to blame themselves because they were unexperienced or due to the context of the school. Noticing that others struggle with the same issues, contributes to their self-confidence and in some cases even cleared doubts about their role and future as school leader. Hence, group reflective learning and possibly other ways of professional development have the potential to contribute to making the position of school leader more sustainable. Therefore, school leaders' professional development deserves the necessary attention.

Bearing all the findings and the reflections of the current chapter in mind, our research aims to elicit further research (1) on school leadership development ensuring the development of knowledge on school leaders' professional development and (2) research on and attention for HRM in the educational field. Moreover, the research project aims to inspire providers and designers of professional development for school leaders.

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