Leader identity development

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Leader Identity Development:
The Role of Schemas, Meaning-Making, and Experiences

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LEADER IDENTITY DEVELOPMENT

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DISSERTATION

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by

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General Introduction

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"Why Your Leadership Development Programs Don't Create Lasting Change"
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Leadership development has long been a strategic priority for many organizations (DeRue, Nahrgang, Hollenbeck, & Workman, 2012). Viewing effective leadership as a main driver for organizational success, organizations worldwide are yearly spending billions on leadership development initiatives to build better leaders and enhance collective capacity for leadership (Vogel, Reichard, Batistič, & Černe, 2021). However, while organizations are heavily investing in leadership development, they still struggle to adequately enhance leadership capacity and fill the leadership pipeline. There seems to be a lack of leaders that are able to effectively navigate complex leadership challenges in the dynamic workplace and a need of more people taking on leadership responsibility throughout all levels of the organization (Wellman, Ashford, Sanchez-Burks, & DeRue, 2022).

Higher education, and particularly universities and business schools, have responded to this growing need for effective leaders and enhanced leadership capacity in organizations. Through their leadership education, their research on leadership, and the provision of leadership development initiatives, they aim to offer valuable learning platforms for leadership development. For young adults, they provide various curricular, extracurricular, and non-curricular learning experiences for building leadership capacity prior to starting one's work career (Avolio & Vogelgesang, 2011; Sternberg, 2011). For professionals, they offer safe learning experiences away from the turbulent, uncertain, and high pressure work environment and that allow for a sole focus on learning. Indeed, developing leaders and leadership is increasingly considered to be an important objective and outcome of universities and business schools around the globe, and leadership development initiatives are increasingly an integral part of their offerings (DeRue, Sitkin, & Podolny, 2011).

However, while large numbers of students and professionals go through these undergraduate, graduate, and executive developmental offerings, during the last

decade, business schools have received a mounting wave of criticism for their approach to leadership development (Mabey, Egri, & Parry, 2015). Questions have been raised from inside and outside management academia not only about whether and how business schools truly fulfill their promise to develop leaders, but also about what kind of leaders they develop (Petriglieri & DeRue, 2018). They have been accused of not teaching the right content and not practicing evidence-based teaching, often overemphasizing functional knowledge and technical skills relative to the contextual nature of leadership and human side of business (Klimoski & Amos, 2012). They have also been accused of contributing to the dehumanization of leadership and the consequences thereof for individuals, organizations, and society (e.g., ethical lapses, corporate scandals, financial meltdowns) (Petriglieri & Petriglieri, 2015). This due to a heavy focus on teaching rather traditional theories of leadership that associate leadership with hierarchical and formal positions of power in organizations and long lists of traits, skills, and behaviors of extraordinary, heroic individuals. For these reasons, it is argued that they are not adequately preparing their students for the ambiguity and complexity of leadership challenges in the contemporary workplace and are producing graduates that are ill-prepared to lead (Benjamin & O'Reilly, 2011; Bennis & O'Toole, 2005).

These issues in organizations and higher education raise two key questions: (1) What can be done to support organizations in improving leader effectiveness and enhancing leadership emergence? and (2) What can be done to aid business schools in better preparing their students to take the lead in the complex leadership challenges that lie ahead in the workplace? This dissertation argues that the answer to these questions and the solution to these issues may lie in taking a different approach to leadership development.

LEADERSHIP DEVELOPMENT

The field of leadership development has evolved substantially over the past few decades, providing an increasingly sound scientific and evidence-based foundation for shaping and developing leaders and leadership (Day, Fleenor, Atwater, Sturm, & McKee, 2014; Vogel et al., 2021). Traditionally, the field emphasized examining traits, skills, and behaviors of highly effective leaders, and focused at providing training interventions to convey this trait-based knowledge and build and practice these skills and behaviors (Day, Harrison, & Halpin, 2009). Research demonstrated that these predominantly skills and

behaviorally-based approaches served a valuable purpose in building leadership capacity and leadership effectiveness (Murphy & Johnson, 2011). Yet at the same time, research also showed that effect sizes for these activities often remained relatively small (Avolio, Walumbwa, & Weber, 2009). This spurred the field to consider alternative approaches, to move beyond the sole focus on the surface structures or observable level of leadership skills and behaviors, and to dive into the deeper-level and less observable cognitive components of leadership development (Lord & Hall, 2005; Wallace, Torres, & Zaccaro, 2021).

Cognitive components of leadership development refer to the notion of schemas that people rely on to participate in and carry out leadership processes (DeRue & Myers, 2014). A schema (plural schemata or schemas) is defined as a cognitive framework or mental structure of organized knowledge about a given stimulus that guides information processing and directs behavior (Lord & Foti, 1986). It can be considered as a representation of an experience, such as a situation, event, interaction, or relationship that is encoded in the mind of the individual and functions as a lens for how we think and a template for how we act. Schemas are also referred to as knowledge structures, cognitive schemas, cognitive maps, mental models, frames of reference, implicit theories, or heuristics (Hodgkinson, 2003). All these labels convey the general idea of a cognitive framework or mental structure that resides in people's heads and that assists individuals in understanding and making meaning of a given experience, so that action can follow.

One particular schema that has received considerable scholarly attention in the leadership development literature in recent years is leader identity (Epitropaki, Kark, Mainemelis, & Lord, 2017). Leader identity is a schema of the self as a leader that organizes relevant knowledge and values associated with being a leader (Lord & Hall, 2005). Theory suggest that leader identity plays an important role in leadership processes by serving as organizing force and motivating mechanism for thinking and acting as a leader, and as a developmental driver for seeking out and pursuing opportunities to practice and learn leadership (Day et al., 2009; Lord & Hall, 2005). In line with this theorizing, empirical research has demonstrated its important role in facilitating leadership skills development (Miscenko, Guenter, & Day, 2017), leadership emergence (Kwok, Hanig, Brown, & Shen, 2018), leadership behavior (Johnson, Venus, Lanaj, Mao, & Chang, 2012), and leadership effectiveness (Hannah, Woolfolk, & Lord, 2009; Kark & Van Dijk, 2007). Indeed, leadership development is now increasingly conceptualized as a process of change and growth in knowledge,

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skills, and identity by which individuals and collectives enhance their ability to engage and perform in leadership roles and processes (Day & Dragoni, 2015).

With this growing evidence of the important role of leader identity in leadership processes, so does the need to gain a better understanding of *what* leader identity entails and *how* leader identity can be shaped and developed. This is the focus of the studies presented in this dissertation. In other words, across this dissertation as a whole, the purpose is to gain a better understanding of the content of leader identity (the "what" of leader identity) and the process of leader identity development (the "how" of leader identity). In the following, we describe recent research that has investigated leader identity and leader identity development and elaborate on the studies that we have undertaken to contribute to the field. Through these studies, this dissertation aims to contribute to theory-building and provide practical insights that can help provide solutions for the big issues that organizations and business schools are struggling with.

Leader Identity Intrapersonal Process: The "What" of Leader Identity

"The mind is everything. What you think, you become."
[Buddhist teachings]

In the first part of this dissertation, we focus on the intrapersonal level of analysis and take a leader-centric and within-person approach to unraveling the content of leader identity. Only few studies to date have adopted this approach to examining leader identity, as the majority of studies has focused on the interpersonal (between person) level and on how leaders elicit, prime, or effect follower identities (Epitropaki et al., 2017). Research on an intrapersonal level of analysis on leader identity can offer insights into the basis for leadership development, leadership emergence, and leadership behavior and effectiveness (Lord & Maher, 1993; Wofford, Goodwin, & Whittington, 1998). It provides a framework for and understanding into *why* people engage into certain leadership behaviors, decide to stand up as a leader, or are driven to actively participate in leadership development opportunities that they encounter.

As mentioned, a leader identity is a schema of the self as a leader that organizes relevant knowledge and information associated with being a leader (Lord & Hall, 2005). It is a subcomponent of one's overall identity that encompasses the internalized meaning of what to do, what to value, and how to behave as a leader,

therewith affecting individuals' responses to the environment (Markus, 1977). It includes thoughts, beliefs, and expectations associated with the present self as being a leader (e.g., "I am a leader") as well as possible or alternative view of the self in the future (e.g., "I am a future leader") (Cross & Markus, 1994). Leader identity is therewith not necessarily related to a formal role or position as a leader within an organizational hierarchy (DeRue & Ashford, 2010). Rather, it is the self-perception as a leader that relates to understanding and seeing oneself as a leader (Day & Harrison, 2007).

A leader identity is therewith also an ambiguous personal identity (DeRue, Ashford, & Cotton, 2009). Not all people necessarily come to internalize a leader identity, nor does leader identity contain the same content for all people. Recent research summarizing different theories of leader identity development suggests that leader identity can vary along four dimensions: strength, integration, level, and meaning (Hammond, Clapp-Smith, & Palanski, 2017). The *strength* of a leader identity refers to the extent or degree to which individuals view themselves as leaders, which can vary from strong, to moderate, to weak (Hammond et al., 2017). With a strong leader identity, individuals identify as a leader to a great extent. With a moderate leader identity, individuals only identify as a leader to a certain extent. And with a weak leader identity, individuals might not view themselves as leaders at all. Furthermore, individuals can also possess a provisional leader identity (Ibarra, 1999). Individuals with a provisional leader identity do not yet consider themselves a leader but do envisage being one in the future. Theory suggests and empirical research is starting to show that individuals with a stronger leader identity are more likely to emerge as a leader and enact leadership, and are more inclined to pursue ongoing leadership development (Chan & Drasgow, 2001; Kwok et al., 2018; Lord & Hall, 2005). As they feel certain about this self-view, see it as important, and prefer being seen by others in this light, they will direct attention and effort towards developing as a leader (Cross & Markus, 1994).

The *integration* of leader identity refers to the extent to which a person has internalized being a leader. Individuals hold a fully integrated leader identity when they see themselves as a leader in all aspects of life (e.g., I am always a leader), a partially integrated leader identity when they see themselves in some domains (e.g., I am a leader in my sports club and in my debate team, but I am not a leader at my internship organization), or a limitedly integrated or splintered leader identity when they see themselves as a leader in only a certain domain (e.g., Only in the family situation with my younger siblings, I am

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a leader). Research suggests that the integration of leader identity is related to leadership development, with domain-specific integration potentially opening up less avenues for leadership development than integration across multiple domains (Day & Lance, 2004; Hammond et al., 2017). Empirical work also indicates as such, showing that integrated leader identities can enrich leadership development by noting similarities and differences and by noting opportunities for trying out and experimenting with provisional selves (Ibarra, 1999).

Level relates to how individuals view the source of their leader identity, which is suggested to be personal, relational, or collective. A personal level of leader identity draws upon individual characteristics, such as personality traits or leadership behavioral repertoires, on individual factors that set the individual apart from others (e.g., I am a leader, because I am really charismatic). A relational level identity is derived from interpersonal relationships, such as the leader-follower relationship (e.g., I am a leader, because I have followers). A collective level relates to group memberships (e.g., I am a leader, because I am an employee of this organization and I must take my leadership responsibility in that group). Research suggests that the level of leader identity impacts leadership behavior and effectiveness (Day & Harrison, 2007). Initial empirical work confirms this notion, and shows that leaders' collective and individual identities are uniquely related to transformational and abusive behaviors, respectively (Johnson et al., 2012).

Last, *meaning* refers to how people think about and understand leadership. It relates to the perspectives and understandings that individuals hold about leadership, that is their leadership schemas, and how these leadership views are included in an individual's leader identity (Epitropaki et al., 2017). Most importantly, it is suggested that these leadership schemas form the foundation of the leader identity (Hammond et al., 2017). To be more precise, research suggest that an individual's leader identity is grounded in the general understanding of leadership an individual holds, referred to as leadership-structure schema (DeRue & Ashford, 2010; Epitropaki et al., 2017; Hammond et al., 2017). In addition, research indicates that an individual's leader identity is guided by an individual's person schema of others as leaders, that is their implicit leadership theory (DeRue & Ashford, 2010; Lord & Hall, 2005). In other words, research suggests that leader identity is grounded in meaning-making and that individuals claim a leader or follower identity based on their perceptions of what leadership is *and* who they consider a leader.

Building on this research, the first study in this dissertation set out to explore the content of leader identity and in particular how leader identity interacts with schemas on leaders and leadership. In line with the overall aim to contribute to leadership teaching and education, the study undertaken, looked into the schemas of students at business school. We analyzed qualitative reports from 510 undergraduate students at an intrapersonal level with a theoretical approach originating from research in the learning and organizational sciences. The guiding research question in this study is "How do cognitive schemas of leadership manifest in students?" Supporting questions are: 1) What are the self-schemas as a leader that students hold? and 2) How are students' leader identities related to their leadership-structure schema and person schema of others as leaders?

A better understanding of whether or not students see themselves as leaders and how students' leader identity is related to their leadership-structure schema and implicit leadership theory could provide business schools and management educators with insights into the cognitive basis for individual differences in leadership skills, behavior, emergence and effectiveness (Epitropaki et al., 2017). As existing research indicates that cognitive schemas of leadership are malleable and can change during training interventions, these insights could in turn add significant value to increasing the effectiveness of leadership development interventions (Miscenko et al., 2017; Schyns, Kiefer, Kerschreiter, & Tymon, 2011). This could then move the leadership field forward towards a more customized and integrative approach that incorporates the deeper-level cognitive structures to complement the observable, behavioral level. The findings from this study (Zaar, Van den Bossche, & Gijselaers, 2020) are shared in chapter two of this dissertation.

Leader Identity Developmental Process: The "How" of Leader Identity

In the second part of this dissertation, the focus is on the process of leader identity development, and more specifically, on the *how* of shaping and developing leader identity. The majority of extant research on how leader identity develops, has focused on the interpersonal level of analysis and on how leader identity work unfolds through social interaction (Ibarra, Wittman, Petriglieri, & Day, 2014). In this dissertation, the focus is different. Here, the studies take an experiences-grounded, intrapersonal developmental psychology perspective and explore how leader identity is shaped and developed via experiences and meaning-making of experiences. To date, there are only a handful of studies that

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have taken this perspective (Epitropaki et al., 2017). These studies have mostly focused on investigating whether leader identity strengthens over time as a function of formal leader development programs (Kwok, Shen, & Brown, 2021; Middleton, Walker, & Reichard, 2019; Miscenko et al., 2017; Zheng & Muir, 2015) or on how leader identity develops in college students through life experiences (Komives, Owen, Longerbeam, Mainella, & Osteen, 2005).

Our research adds on to these initial empirical studies by (1) investigating the features of the setting in which leader identity is cultivated, and (2) unraveling the process of leader identity development via meaning-making of experiences and unveiling the meaning-making system. This focus allows for an understanding of how events-driven triggers and transformations and leader-driven actions and reflections either help or hinder leader identity development. We thereby build on the notion that it is not so much the experience per se, yet the features embedded in the experience and how people interpret the experience that matters for leader identity development.

Leader Identity Development via Experiences

"While experience is at the heart of leadership development,
not all experiences are created equal."
[McCall Jr, 2004, p.127]

Building on cognitive science and information processing theories of leader development (Lord & Hall, 2005; Lord & Maher, 1993), we conceptualize leader identity development as the process of schema change and growth through which individuals come to define who they are as a leader (Epitropaki et al., 2017). Now, while leader identity formation involves an internal process of meaning-making (Hammond et al., 2017; Zaar et al., 2020), leader identity development as schema change and growth requires an external experience to trigger this process (DeRue et al., 2009; Kwok et al., 2021). This is in line with the broader leadership development literature, where there is also strong agreement of the crucial role of experiences in triggering change and growth (Day & Dragoni, 2015; McCall, 2004). At the same time, both the general leadership development literature and the identity-based literature also emphasize that mere exposure to or participation in any experience by itself does not necessarily result in learning and development (Liu, Venkatesh, Murphy, & Riggio, 2021; McCall, 2010).

Recent research suggests that experiences only become meaningful for leader identity development when they function as an identity workspace (Clapp-Smith, Hammond, Lester, & Palanski, 2019; Zaar, Van den Bossche, & Gijselaers, 2021). An identity workspace is a social setting (e.g., team, learning group, institution, organization) that serves as a holding environment for identity work (Petriglieri & Petriglieri, 2010). Identity work refers to engaging in activities to form, repair, maintain, strengthen, or revise one's leader identity (i.e., identity work) (Epitropaki et al., 2017; Ibarra et al., 2014). A holding environment refers to a setting that challenges individuals' current ways of meaning-making as well as supports people in new ways of meaning-making (Kegan & Lahey, 2009).

Our understanding of how educational experiences can function as holding environments for identity work and facilitate leader identity development is however still quite limited. Existing research lines on experiences-based leadership development and identity-based leader development are quite disconnected. Therefore, the first step taken, was to write a conceptual paper to outline a coherent framework that brings together these two lines of research and that assists in organizing and synthesizing the existing research. More particularly, this paper sought to offer a better understanding of the connections between leadership development, leader identity and learning from experiences in order to show possibilities for integrating leader identity work into leadership education and leadership development offerings at business schools. This conceptual paper (Zaar et al., 2021), outlining an organizing framework for leader identity development through formal classroom experiences can be found in chapter 3 of this dissertation.

Next, and following up on the conceptual paper, we engaged in an empirical study to explore how formal classroom experiences in higher education become moments that matter for students' leader identity development. In this study, we first draw on theories of experiential learning and integrate research from the fields of cognitive science, psychology, learning and education, and leadership development to unravel the complex process of leadership development via learning from experiences. We highlight that learning from experiences is a context-sensitive process that is conditional to developmental features embedded in the experience and contingent on a meaning-making mechanism that mediates between experiences and learning outcomes. We also emphasize the multidimensional and interrelated nature of learning outcomes generated through this process.

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This brings us to the following research question: "What are the conditions under which (*when*) and the mechanism by which (*how*) formal classroom experiences in higher education translate into outcomes of leadership development (*what*)? We organized our exploration around the following research questions: (1) What are the features of developmental classroom experiences?, (2) What are the processes of meaning-making involved with learning from experiences?, and (3) What are learning outcomes of developmental classroom experiences? In addition, to explore potential connections, we ask (4) What are the relationships within and between categories of developmental classroom experiences, meaning-making, and learning outcomes in the process of leadership development through learning from formal experiences? To answer these questions, we drew on the in-depth analysis of 487 narrative reports of undergraduate students at business school.

By doing so, the aim was to build theory that can enable future research to engage in more specific deductive studies as well as offer practical insights that can assist higher education in purposefully designing and delivering formal experiences to become moments that matter for students' leadership development. The study therewith addresses explicit calls for research to incorporate context into the research design (Day et al., 2014) and go beyond investigating the main effects of experiences on outcomes (DeRue & Ashford, 2010; DeRue & Myers, 2014). It also addresses repeated calls for research that investigates an under-researched area on what is actually developed through experiences (Day, Riggio, Tan, & Conger, 2021; DeRue & Myers, 2014; Murphy & Johnson, 2011). The findings of this empirical study can be found in chapter 4 of this dissertation.

Leader Identity Development via Meaning-Making of Experiences

> *"We had the experience, but missed the meaning."*
> *[T.S. Eliot, Four Quartets 'The Dry Salvages', 1941]*

Experience is a funny thing (Ashford & DeRue, 2012). An experience can have all the developmental features needed to create an environment for leader identity development, yet that same experience can still impact people's leader identity development in different ways. This is because how individuals make meaning of the experience impacts leader identity development (Epitropaki et al., 2017; Zaar et al., 2020). Meaning-making refers to the intrapersonal processes of information processing and interpretation by which people craft meaning of experiences encountered in light of previous knowledge, skills, and perspectives (Faller, Lundgren, & Marsick, 2020; Lord & Maher, 1993). It can be thought of

as an experience-processing system through which individuals determine the value, usefulness, and relevance of an experience, and distill lessons learned from experiences that guide subsequent thinking and action (Ashford & DeRue, 2012; Cross & Markus, 1994). Meaning-making is therefore considered to play an important mediating role between experiences and learning outcomes, such as the development of a leader identity (Liu et al., 2021).

Recent research suggests that leader identity development through meaning-making of experiences involves a gradual process of schema change and growth that unfolds as people engage in varied experiences over time and in particular ways of meaning-making of those experiences. However, studies that have looked into the intrapersonal level of the leader identity developmental process and how leader identity unfolds across time and situations and through meaning-making of experiences are however still sparse (Epitropaki et al., 2017). Moreover, studies that have taken a leader-centric view and have investigated how people in a formal leader role go through this developmental process seem to be almost non-existent (Epitropaki et al., 2017; Kragt & Guenter, 2018). The few available empirical studies on the intrapersonal developmental process have mostly focused on investigating student samples and/or on whether leader identity develops in individuals as a function of formal leader development experiences (Komives et al., 2005; Kwok et al., 2021; Middleton et al., 2019; Miscenko et al., 2017). Thus, how individuals in a formal leader role shape and develop a leader identity throughout their leadership career and through a process of meaning-making of experiences across time and situations remains underexplored.

This gap in research is surprising for two reasons. First, leader development is inherently longitudinal (Day, 2011). It involves an ongoing journey of learning from a large variety of experiences (e.g., events, episodes, situations, interactions, and relationships) that range across contexts (e.g., family, education, work) and traverse the entire lifespan (Hammond et al., 2017; Murphy & Johnson, 2011). It is therefore unlikely that anyone would be able to fully embrace a leader identity by merely participating in a series of formal training or workshops or by life experiences only up until young adulthood (Day et al., 2014). To contribute to a greater understanding of how people develop and internalize an identity as a leader therefore involves mapping within-person changes over time and across experiences (Day et al., 2014). Gaining an understanding of how leader identity is shaped through meaning-making across experiences and how schema change and growth unfolds over time could offer

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unique insights into the intrapersonal leader identity developmental process that has so far remained a black box (Epitropaki et al., 2017).

Second, having a formal leader position and holding a leader identity do not necessarily go hand in hand. A leader identity is a self-perception as a leader that relates to how and what degree people consider themselves a leader (Day & Harrison, 2007). It is thus an ambiguous personal identity that not all people necessarily come to internalize, nor contains the same content for all people (DeRue et al., 2009). For this reason, the fact that people might hold a formal leader position and others might view them as a leader, does not necessarily mean that the person also sees and defines oneself as a leader. People need to consciously and deliberately engage in ways of meaning-making to form, repair, maintain, strengthen or revise a sense of self as a leader in order for leader identity to become a salient component of the overall self-concept (Epitropaki et al., 2017). This active and agentic engagement is generally referred to as identity work (Ashforth & Schinoff, 2016; Petriglieri & Stein, 2012). However, we still lack a clear idea of the ongoing ways in which people in a formal leader role engage in meaning-making of experiences to craft a leader identity. Given the prominent role of leader identity development for leadership behavior and effectiveness (Day & Dragoni, 2015) and of effective leaders for organizational functioning (Vogel et al., 2021), gaining these insights would offer valuable insights for theory and practice.

This body of work makes a compelling case for researching leader identity development of people in a formal leader role via meaning-making and through assessing schema change and growth. In the study as presented in chapter 5 of this dissertation, we aim to do just that and explore how organizational leaders engage in this intrapersonal developmental process. We ask: how do organizational leaders shape and develop a leader identity through meaning-making of experiences across time and situations? In this study, we draw on detailed narratives of the leadership development trajectories of 14 organizational leaders. Through uncovering the in-depth thoughts, experiences, and constructed meaning about their developmental trajectory as a leader, we seek to better understand the ways in which leader identity develops. By doing so, our study answers calls for more narrative approaches to leadership research (Shamir & Eilam, 2005) as well as for research that focuses on charting longitudinal trajectories of development (Day et al., 2014). It also answers call for more research on the intrapersonal leader identity developmental process (Epitropaki et al., 2017) and on how schemas are shaped and developed over time (DeRue & Myers, 2014).

To interpret our findings, we draw on and integrate cognitive science perspectives and information processing theories of leader development (Lord & Hall, 2005; Lord & Maher, 1993) as well as theories of experiences-grounded and identity-based leader development (DeRue et al., 2009; Hammond et al., 2017; Liu et al., 2021). This enables our research to add novel perspectives to the literature on leader identity development and to provide a detailed understanding of the leader identity developmental process of individuals in a formal leader role. It also allows our research to extend discussions around how leader identity development for this specific group can be stimulated and facilitated.

THIS DISSERTATION

To summarize what has been discussed so far, this dissertation reports on four studies that examined the concept of leader identity and the process of leader identity development. This with the aim to broaden and deepen the field's understanding of the whats, hows, and whys underlying the leader identity developmental process. A visual of the organizing framework that guided the research studies of this dissertation is presented in Figure 1.1. The light grey boxes of this framework corresponds to current gaps in research and the empirical studies reported in this dissertation to fill these gaps. The dark grey boxes represent what we already know from existing empirical research.
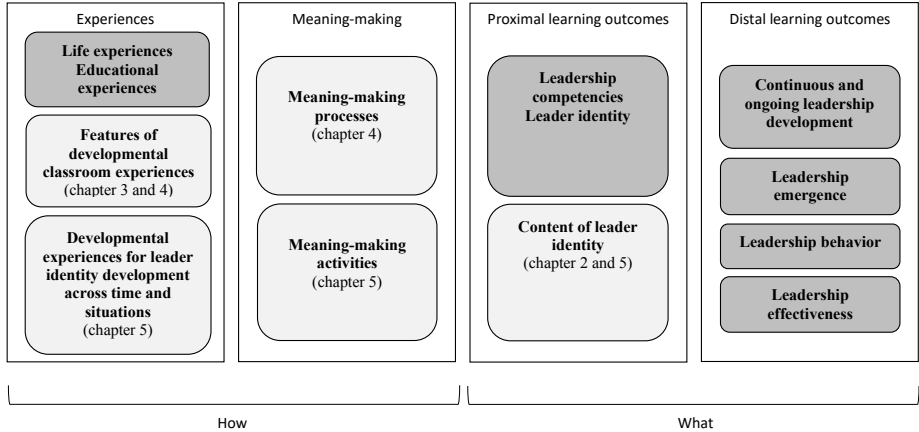
Figure 1.1 Organizing Framework for this Dissertation

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All four studies presented in this dissertation adopted a qualitative research design. The different studies, however, took distinct approaches to collecting and analyzing the data. Together, the four studies represent a rich variety of qualitative research designs. In the studies as presented in chapter 2 and chapter 4, we took a phenomenological study approach, collected voluminous data sets – written reports of respectively 510 and 487 respondents – via structured open-ended questions posted on an online platform. We analyzed data using thematic content analysis with a hybrid of theory-driven analytical deduction and data-driven induction. This approach allowed us to describe, in depth, the common characteristics of the phenomena involved and support these through showing frequency distributions and basic statistical tests.

In the study as presented in chapter 3, we undertook a review of literature and used integration and synthesis to combine insights from different fields of research. This allowed us to offer an integrated, theoretically founded organizing framework. In the study as presented in chapter 5, we took a narrative theory approach, collected data via life narrative interviews with 14 organizational leaders and enriched these interviews with photo, object, and timelining elicitation tools. We analyzed data using interpretative content analysis with a hybrid of theory-driven analytical deduction and data-driven induction. With this approach, we could examine rich, in-depth stories to gain an understanding of how participants interpreted and created meaning of experiences over time. An overview of the research objective and research design of the four studies is presented in Table 1.1.

In the following chapters, we share with you the details of the four studies that we just outlined in this introduction chapter. We conclude this dissertation with a final chapter providing a general discussion and conclusion. In this final chapter, we synthesize the key findings of our four studies, reflect on limitations of the current studies and explicate recommendations for future research. We also elaborate on practical implications for universities, business schools, and organizations that aim to introduce or extent the use of identity-based leadership development interventions.

On a final note, we wish to point out that this dissertation contains a collection of closely-related book chapters and articles that have been published (parts of this chapter, and chapter 2 and 3) or have been submitted to peer-reviewed journals (chapter 4 and 5). As each book chapter and article was written to be read on its own, there is inevitably some repetition and overlap across the chapters in this dissertation.

Table 1.1 Overview of Research Aims and Designs of the Four Studies in this Dissertation

Study	Aim	Method	Data and analysis
How Business Students Think About Leadership: A Qualitative Study on Leader Identity and Meaning-Making (Chapter 2)	To explore how cognitive schemas in leadership manifest in students by examining the content of their leader identity and the relatedness to their view on leadership and leaders	Qualitative research Phenomenological study approach Online platform with structured open-ended questions	Written reports from 510 undergraduate students Thematic content analysis Hybrid of theory-driven analytical deduction and data-driven induction
New Avenues for Leadership Education and Development: Shaping Leader Identity through Meaning-Making from Experiences (Chapter 3)	To synthesize existing research on leadership development, leader identity and learning from experiences to offer an integrated, theoretically grounded framework for students' leader identity development through classroom experiences	Conceptual paper Review of literature	Research from fields of experiences-grounded leadership development and identity-based leader development Integration and synthesis
Meaningful Experiences for Leadership Development: Moments that Matter for Shaping Knowledge, Skills, and Identity (Chapter 4)	To investigate the conditions under which and the mechanism by which formal classroom experiences in higher education translate into moments that matter for students' leadership development	Qualitative research Phenomenological study approach Online platform with structured open-ended questions	Written reports from 487 undergraduate students Thematic content analysis Hybrid of theory-driven analytical deduction and data-driven induction
From Imposter to Original: How Organizational Leaders Shape and Develop a Leader Identity through Meaning-Making of Experiences (Chapter 5)	To explore how organizational leaders shape and develop a leader identity through meaning-making of experiences across time and situations	Qualitative research Narrative theory approach Semi-structured interviews and photo, object, and timelining elicitation tools	Life narrative interviews with 14 organizational leaders Interpretative content analysis Hybrid of theory-driven analytical deduction and data-driven induction

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How Business Students Think about Leadership: a Qualitative Study on Leader Identity and Meaning-Making

ABSTRACT

Business schools face increasing criticism for their one-size-fits-all approach to leadership development. Too much emphasis is placed on knowledge and skills building and the developmental needs of managers while insufficient attention is paid to purposeful student leadership development and to the underlying cognitive components that drive leadership development. The present study takes a cognitive approach to leadership development and explores how cognitive schemas of leadership manifest in students. We collected qualitative data from 510 undergraduate business students to analyze students' leader identity and its relatedness to their leadership-structure schema and implicit leadership theory. Results show that students' leader identity is related to their leadership-structure schema *and* their implicit leadership theory. More specifically, alignment between these cognitive schemas of leadership strengthens leader identity. In addition, results show that the content of the leadership-structure schema serves as a constraint or a catalyst for possible future alignment between the cognitive schemas of leadership. Implications for leadership development are discussed.

Keywords: leadership education, leadership development, leader identity, cognitive schemas

INTRODUCTION

Leadership development is considered to be an important objective and outcome of business schools (Benjamin & O'Reilly, 2011; DeRue, Sitkin, & Podolny, 2011; Eich, 2008; Sternberg, 2011). Through their leadership education, their research on leadership, and provision of leadership development initiatives, business schools aim to offer valuable learning platforms that contribute to developing leaders. In particular for young adults, business school and universities can provide suitable learning environments for building leadership capacity prior to starting one's work career (Avolio & Vogelgesang, 2011; Day, 2014; Petriglieri & Petriglieri, 2010; Sternberg, 2011). Research shows that purposeful development in adolescence, educational activities at college and university, and the learning environment in business schools positively impact ongoing leadership development and the leadership behavior individuals later on exhibit in the workplace (Avolio & Vogelgesang, 2011; Day & Dragoni, 2015; Komives & Dugan, 2014; Murphy & Johnson, 2011; Sternberg, 2011; Zacharatos, Barling, & Kelloway, 2000). These activities contribute to enabling students to get a better understanding of leadership, what it means to be a leader, and at the same time shape their general ideas of leadership (Petriglieri & Petriglieri, 2010). In addition, these learning environments enhance students' needs to craft, revise, or affirm who they are, experiment with different roles and identities, decide what to incorporate in their persona, and draw meaningful lessons from their experiences (Avolio & Vogelgesang, 2011; Komives & Dugan, 2014; Murphy, 2011; Petriglieri & Petriglieri, 2015). In this way, business schools prepare students for the leadership challenges ahead in the workplace.

However, during the last decade business schools have received increasing criticism for their approach to leadership development (Bartunek, 2012; Dyllick, 2015; Ghoshal, 2005; Klimoski & Amos, 2012; Mabey, Egri, & Parry, 2015). Critics argue that business schools are not adequately preparing their students for the ambiguity and complexity of leadership challenges in the contemporary workplace and are producing graduates that are ill-prepared to lead (Benjamin & O'Reilly, 2011; Bennis & O'Toole, 2005). Chief among the concerns is the one-size-fits-all approach that puts too much emphasis on knowledge and skills building and on the developmental needs of managers (Benjamin & O'Reilly, 2011; Collinson & Tourish, 2015; Hibbert, Beech, & Siedlok, 2017; Murphy, 2011; Petriglieri & Petriglieri, 2015). Transferability to the student context is often assumed and how people think about themselves as leaders and give meaning to leadership is rarely part of leadership development (Komives & Dugan, 2014;

Petriglieri & Petriglieri, 2015; Sessa et al., 2016). This assumption continues despite research showing that leadership development needs vary across levels and circumstances, and that how people think about leadership and leaders influences their continuous and ongoing leadership development, leadership emergence, leadership behavior and effectiveness (Day & Harrison, 2007; DeRue & Ashford, 2010; Drath & Palus, 1994; Engle & Lord, 2011; Epitropaki & Martin, 2004; Lord & Emrich, 2001; Lord & Hall, 2005; Lord, Hall, & Halpin, 2011; Schyns, Kiefer, Kerschreiter, & Tymon, 2011; Shondrick, Dinh, & Lord, 2010; van Knippenberg, van Knippenberg, De Cremer, & Hogg, 2004). As a case in point, empirical research points out that young graduates early in their career struggle with interpreting and making meaning of the leadership experiences they encounter in the workplace (Benjamin & O'Reilly, 2011). In particular, they seem to have difficulty with rethinking, letting go of old assumptions, and changing how they see themselves in order to deal with leadership challenges presented in the workplace (Benjamin & O'Reilly, 2011). Taken together, as business schools we may thus be pursuing a wrong course of action in how we develop leaders if we do not first start with understanding how our students think about leadership and give meaning to being a leader.

Leadership development is a context-sensitive process that evolves across the lifespan (Avolio & Vogelgesang, 2011; Day & Dragoni, 2015). Becoming a leader and developing leadership requires more than acquiring a body of knowledge on the traditional theories of leadership (e.g., trait theories, skills models, behavioral approaches) and practicing a prerequisite set of skills. It requires leadership development initiatives that acknowledge that students studying at business school have different leadership developmental needs than managers working in organizations (Benjamin & O'Reilly, 2011; Murphy, 2011). Furthermore, it requires that business schools pay attention to the underlying cognitive components of leadership such as values, beliefs, and meanings (Petriglieri & Petriglieri, 2015). How people think about themselves as leaders and give meaning to leadership are however rarely part of leadership research and development and even more rare in the context of student leadership development (Petriglieri & Petriglieri, 2015; Sessa et al., 2016). At the same time, ample research indicates that how people interpret leadership, view their own role, and the roles of others as leaders, impact how they engage in leadership processes (Day, Harrison, & Halpin, 2009; Epitropaki, Kark, Mainemelis, & Lord, 2017; Shondrick et al., 2010). The present study addresses these concerns by taking a cognitive approach to student leadership development. Our research explores how students think about leadership and give meaning to being a leader.

MEANING-MAKING AND LEADERSHIP DEVELOPMENT

Making sense of the world and the meaning of leadership refers to the central role of cognitive schema. *Cognitive schemas* are defined as broad organizing mental frameworks that help one understand and make sense of a given situation or experience (Avolio, Walumbwa, & Weber, 2009). Understanding the cognitive basis of leadership requires that cognitive schemas are considered as one of the essential building blocks in theoretical frameworks on cognitive leadership (Avolio et al., 2009). Different terminologies are in use for cognitive schemas: *schemata*, *scripts*, *categories*, *implicit theories*, *frames*, *mental models*, or *heuristics* (Hodgkinson, 2003; Lord & Maher, 1993). These terms are used interchangeably to convey the general idea that individuals develop internal representations of their world (Hodgkinson, 2003). Here refer to cognitive schema whenever it is about how they help people to simplify and effectively manage information present in the complex task and social environments (Lord & Foti, 1986), and how they help people in understanding events or experiences (Day et al., 2009).

Current literature mentions at least three different cognitive schemas of leadership that are particularly important for leadership development (Avolio et al., 2009; Day et al., 2009; DeRue & Myers, 2014; Schyns et al., 2011). First, how people give meaning to leadership requires examination of their general understanding of leadership (Drath, 2001; Drath & Palus, 1994). This general understanding of leadership is referred to by DeRue and Ashford (2010) as the *leadership-structure schema*. It refers to individuals' beliefs about how leadership is structured in groups; whether individuals conceptualize leadership as zero-sum and reserved for a single individual within a group (often the designated leader), or whether leadership can be shared among multiple group members (DeRue & Myers, 2014). Second, how people make sense of leadership requires examination of the schemas people hold about others as leaders. This has been defined by Lord and Foti (1986) as *person schema*. It refers to the conceptualization of leaders held by an individual; the individual's implicit theory about who is a leader and who is not, as in the case of implicit leadership theory (ILT) (Shondrick et al., 2010). Third, individuals may hold schemas on how they see themselves as leaders, referred to as *self-schema* (Lord & Foti, 1986). The self-schema as a leader relates to being a leader and how one thinks of oneself as a leader - rather than a follower; also referred to as leader identity (Day & Harrison, 2007; Ibarra, Wittman, Petriglieri, & Day, 2014).

Recently, scholars have begun to position leader identity as a critical component of the leadership development process that links individual capabilities such as personality, skills, and knowledge with more distal outcomes such as increasingly dynamic skills and more complex meaning-making structures (Day & Dragoni, 2015; Day & Harrison, 2007; DeRue & Ashford, 2010; Lord & Hall, 2005). This growing body of research suggests that individuals that hold a self-schema as a leader are more inclined to engage in leadership roles, seek out developmental opportunities to practice leadership, and find opportunities to practice leadership skills (Chan & Drasgow, 2001; Day et al., 2009; Lord & Hall, 2005). This in turn will strengthen their continuous and ongoing leadership development and influence their leadership behavior and effectiveness (Day & Harrison, 2007; DeRue & Ashford, 2010; DeRue & Myers, 2014; Epitropaki et al., 2017; Lord & Hall, 2005). Emerging empirical work confirms the key role played by leader identity in leadership development, leadership emergence, leadership behavior and effectiveness (Day & Sin, 2011; Johnson, Venus, Lanaj, Mao, & Chang, 2012; Kragt & Guenter, 2018). For example, a recent study by Miscenko, Guenter, and Day (2017) amongst 98 postgraduate students shows that leader identity plays an integral role in facilitating the development of leadership skills. A recent study by Kwok, Hanig, Brown, and Shen (2018) amongst 88 young cadets shows that individuals who possess a stronger leader identity are more likely to emerge as leaders. These findings show the importance of exploring early stage leadership schemas of students. Students who view themselves as leaders are more likely to emerge as leaders. They are more likely to enact leadership, look for experiences to further develop as a leader, and develop leadership skills and capabilities. In this way, students' leader identity serves as a catalyst for ongoing leadership development and leadership emergence.

Self-schema as a leader: leader identity

Two dimensions of leader identity – strength and integration - have been shown to shape an individual's choice to seek out opportunities and experiences to develop leadership competences and enhance individuals' motivation to lead (Chan & Drasgow, 2001; Day et al., 2009; Kark & Van Dijk, 2007). The degree or the extent to which a person identifies as a leader is referred to as the strength of a leader identity (Hammond, Clapp-Smith, & Palanski, 2017). It can vary from a strong leader identity when individuals identify as a leader to a great extent, to a moderate leader identity when individuals identify as a leader to a certain degree, to a weak leader identity when individuals might not view themselves as a leader at all (Hammond et al., 2017). In addition, individuals can also hold a provisional leader identity when they do not consider themselves

a leader yet, but do envisage themselves being a leader in the future (Ibarra, 1999). Research suggests that individuals can claim a leader identity based on individual possession of leadership abilities, on being recognized as a leader in relationships with others (i.e., relational recognition), and/or through being seen within a broader social context as leaders (i.e., collective endorsement) (DeRue & Ashford, 2010; Lord & Hall, 2005). Leader identity is expected to be stronger to the extent that it is relationally recognized (DeRue & Ashford, 2010). The degree or the extent to which a person has internalized a leader identity into one's overall identity is referred to as the integration of a leader identity (Ibarra et al., 2014). It can vary from a fully integrated leader identity when individuals see themselves as a leader in all aspects of life, to a partially integrated leader identity when individuals see themselves as a leader in some domains, to a splintered leader identity when individuals see themselves as a leader in only a certain domain (Hammond et al., 2017).

How a person comes to see oneself as a leader does not occur *ex nihilo* (Ely, Ibarra, & Kolb, 2011). An individual's leader identity is thought to be grounded in meaning-making, and in particular to be related to the leadership-structure schema and the person schema of others as leaders that a person holds (Epitropaki et al., 2017; Hammond et al., 2017; Lord & Hall, 2005; Marchiondo, Myers, & Kopelman, 2015), suggesting an interplay between these cognitive schemas of leadership. Two separate streams of research have addressed relationships between cognitive schemas of leadership, respectively leader identity research and implicit leadership theory (ILT) research. The leader identity research is grounded in identity theory (Day et al., 2009) and its rich conceptual work indicates that an individual's leader identity is influence by or grounded in the general understanding of leadership an individual holds, i.e., the leadership-structure schema (DeRue & Ashford, 2010; Epitropaki et al., 2017; Hammond et al., 2017). The ILT research is grounded in categorization theory (Lord, Foti, & De Vader, 1984) and suggests that an individual's leader identity is guided by an individual's person schema of others as leaders, i.e., their implicit leadership theory (DeRue & Ashford, 2010; Lord & Hall, 2005). In the following sections, we describe the concepts of leadership-structure schema and implicit leadership theory further, and elaborate on the suggested relationships between the three cognitive schemas of leadership.

Leadership-structure schema: understanding of leadership
Research indicates that people can hold different leadership-structure schemas (DeRue & Myers, 2014; Wofford, Goodwin, & Whittington, 1998). When people

move through distinct stages of growth, they develop progressively more complex and integrated leadership-structure schemas when experiencing conflict with the situations they encounter (McCauley, Drath, Palus, O'Connor, & Baker, 2006; Wofford et al., 1998). Each successive stage of cognitive complexity is formally higher than the preceding one because it can perform the functions of the prior level as well as additional functions (Kegan & Lahey, 2009). Grounded in constructive developmental theory (Kegan, 1982), the work of Drath (2001) proposes three different leadership-structure schemas that can be arranged along a continuum of complexity. It ranges from a relatively simple way of understanding leadership as the personal characteristic of a certain kind of person called a leader (personal dominance), to a way of understanding leadership as an interaction between people (interpersonal influence), to an understanding of leadership that constructs all persons as leaders (relational dialogue). In other words, the leadership-structure schema expands from belonging to the individual, to incorporating others in the relationship, to being based in group membership. It has been argued that individuals at higher levels of development are able to use a greater number of cognitive schemas to attach meaning to their experiences and to make more interconnections among these principles, resulting in a broader perspective on how things are interrelated (Day & Lance, 2004). More advanced developmental levels are associated with a broader repertoire of cognitive schemas; a 'big picture' orientation toward the world (Day & Lance, 2004).

Recent research suggests that an individual may evaluate whether or not she is a leader based on her interpretation of what leadership is and thus that the meaning of being a leader is influenced by or grounded in an individual's leadership-structure schema (DeRue & Ashford, 2010; Hammond et al., 2017). While limited, there is nascent empirical evidence of a relationship between leader identity and leadership-structure schema (Sessa et al., 2016). For example, a recent study by Zheng and Muir (2015) amongst fifteen adult community members of a diocese and their ten mentors showed indeed that an individual's leadership-structure schema to be related to the salience of their leader identity. A broadening understanding of leadership led to a stronger leader identity. In addition, in the context of student leadership development, a grounded theory study by Komives, Owen, Longerbeam, Mainella, and Osteen (2005) indicates that students' leader identity is related to their understanding of leadership. Based on life narrative interviews with 13 college students from a mid-Atlantic university in the USA, their study showed that students generally view leadership as a hierarchical position and as a behavior of the positional

leader. When students have the leadership position, they identify as a leader, otherwise they do not (Wagner, 2011).

Person schema of a leader: implicit leadership theory

Typical empirical implicit leadership theory (ILT) research has focused on the classification and identification of leaders by sets of relevant attributes. In a study amongst undergraduate students and working adults by Offermann, Kennedy, and Wirtz (1994), prototypic leaders were described by both male and female subjects with traits such as sensitive, dedicated, charismatic, attractive, intelligent, and strong. Following up on this study, Epitropaki and Martin (2004) found sensitivity, intelligence, dedication, dynamism, tyranny, and masculinity to most accurately represent ILTs in organizational settings. The prototypic leader was described as sensitive, intelligent, dedicated, and dynamic. Furthermore, ILT research has investigated whether the content of ILTs is universal and similar across different cultures. Looking at the cross-cultural aspects of ILTs in large samples of middle managers and working adults, researchers identified specific leader attributes and behaviors that are universally viewed as contributing to leadership effectiveness, such as charismatic, team-oriented, participative, and humane (House et al., 1999). To summarize, existing research has found support for the generalizability of ILTs across different groups in terms of gender, work setting, and culture.

Recent research proposes that the ILTs that people hold are not only used to judge others as leaders, but also to judge oneself (Guillén, Mayo, & Korotov, 2015). Individuals may judge their own ability to lead by comparing their attributes to the mental representation of a leader prototype, therewith influencing whether they claim a leader or follower identity for themselves (DeRue & Ashford, 2010). This would suggest that a person's ILT constitutes one's leader identity. In fact, a recent empirical study by Guillén, Mayo, and Korotov (2015) taking a leader identity approach to understanding motivation to lead, indeed revealed a relationship between individuals' leader identity and their ILT. They found that self-to-leader comparison with respect to affiliation was positively related to motivation to lead when individuals perceived alignment between their self-schema as a leader and their person schema of others as leaders.

Taken together, conceptual research and emerging empirical work suggest that leader identity develops though meaning-making (Hammond et al., 2017; Lord & Hall, 2005; Miscenko et al., 2017), that a student's leadership-structure schema influences whether or not this student claims a leader identity (Komives, Longerbeam, Owen, Mainella, & Osteen, 2006; Komives et al., 2005; Sessa et

al., 2016), that broadness of the leadership-structure schema is related to leader identity salience (Zheng & Muir, 2015), and that there is a relationship between an individual's person schema of others as leaders and their leader identity (DeRue & Ashford, 2010; Guillén et al., 2015). In other words, research suggests that individuals claim a leader or follower identity based on their perceptions of what leadership is *and* who they consider a leader. Therefore, empirical research exploring these three schemas together in one study, that examines how they relate to each other and complement each other, may close the research gap that remains and seems imperative to advance the field of leadership research and development.

To the best of our knowledge, previous research has not examined how these three cognitive schemas of leadership together manifest in students, and in particular how their leader identity is related to their leadership-structure schema *and* their implicit leadership theory. There are only a handful of studies that have sought to empirically cast light on leader identity at the intrapersonal level (Epitropaki et al., 2017). A better understanding of whether or not students see themselves as leaders and how students' leader identity is related to their leadership-structure schema and implicit leadership theory could provide business schools and management educators with insights into the cognitive basis for individual differences in leadership skills, behavior, emergence and effectiveness (Epitropaki et al., 2017). As existing research indicates that cognitive schemas of leadership are malleable and can change during training interventions, these insights could in turn add significant value to increasing the effectiveness of leadership development interventions (Miscenko et al., 2017; Schyns et al., 2011). In turn, this could then move the leadership field forward towards a more customized and integrative approach that incorporates the deeper-level cognitive structures to complement the observable, behavioral level.

We therefore set out to explore how cognitive schemas of leadership manifest in students. For this purpose, we examined the content of students' leader identity and its relatedness to their leadership structure-schema and implicit leadership theory. We analyzed qualitative reports from 510 undergraduate business students at an intrapersonal level. Our theoretical approach originates from research in the learning and organizational sciences. The guiding research question in this study is "*How do cognitive schemas of leadership manifest in students?*" Supporting questions are: 1) *What are the self-schemas as a leader that students hold?* and 2) *How are students' leader identities related to their leadership-structure schema and person schema of others as leaders?*

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METHODOLOGY

The assessment of schema content requires the presentation of a salient cue that elicits the cognitive content, the recording of the elicited content, and content analysis of this data (Wofford et al., 1998). We employed qualitative research methods based on recommendations of previous cognitive leadership research (Hammond et al., 2017; Schyns, Tymon, Kiefer, & Kerschreiter, 2012; Shondrick et al., 2010). By asking structured open-ended questions, responses may more accurately reflect students' actual thoughts and experiences and may be less subjected to biases (Shondrick et al., 2010).

Context
Our sample consisted of first-year bachelor students enrolled in the Strategy course of an international business program at a Northern-European university. This program demands from students to engage actively in small group tutorials, to lead sessions and class discussions, to work in diverse teams, and to take on several group roles to facilitate the learning of peer students. Data were collected in the second semester of this program when students are getting more and more accustomed to taking initiatives, and serving as a leader or facilitator of group discussion and interaction.

Participants and procedure
The initial sample consisted of 813 first-year bachelor students. Students were invited by email to voluntary participate in a wide research study on leadership development including qualitative and quantitative measures. This invitation included information on the background and purpose of the study and the commitment required. Students received bonus points for participating in the study. The primary data for this qualitative study was drawn from this wider investigation on leadership development. Data was collected at a single point in time. A total of 617 individuals volunteered to take part in the research study by completing the online registration form. Informed consent for data collection and publication of anonymized data was obtained from all registered individuals. Subsequently, an email containing the link to online open questions was sent to the registered participants, who were asked to complete the questions within three days. Responses to the open-ended questions were collected and stored digitally with the use of the online platform Qualtrics. Of the 617 participants who registered for voluntary participation in the research, 591 students completed the questions, yielding a 96 percent response rate. After removing invalid (i.e., incomplete answers) and duplicate entries (i.e.,

respondents who completed the questions twice), 510 answer sets provided usable data to be included in the study. The average age of the participants was 20 years; 272 participants were female and 238 participants were male. In total, 38 nationalities were represented in the sample of which 55% was German, 12% Dutch, 9% Belgian, 4% had dual nationalities, 3% was American and 17% had other nationalities. This is a good reflection of the student population at this university. The study was conducted in English in line with the *lingua franca* of the university.

Measures

Data were collected through qualitative, structured open questions using the online platform Qualtrics. Participants were asked to answer a set of three open-ended questions to elicit schemas related to leadership. These questions can be found in Table 2.1. Using qualitative, structured open questions to capture the schemas of leadership, we sought to minimize the participants' awareness of what is being measured and/or their ability to control their responses (Epitropaki, Sy, Martin, Tram-Quon, & Topakas, 2013). The questions were phrased in a broad way avoiding the use of the words "traits", "skills" and "behavior" as well as the words "position" and "process" to minimize priming the participants' responses in a certain direction. There were no restrictions on the amount of words respondents could use in their answers. After piloting the questions on a small set of five students and two academics in the field, minor adjustments were made in the phrasing and sequence of the questions.

Table 2.1 Structured Open Questions

Leadership-structure schema
• Describe your view on leadership. What is leadership to you?
Person schema of others as leaders
• How would you describe a leader? Who is a leader to you and why? What features and what aspects make someone a leader?
Self-schema as a leader
• Do you consider yourself a leader? Why or why not? Explain your answer in detail.

Analysis

The data analysis was conducted in two phases. The first phase consisted of the coding of the collected data. A hybrid of theory-driven analytical deduction and data-driven induction (Hsieh & Shannon, 2005) was used to prepare the coding scheme. The second phase involved the content analysis of the data (Miles & Huberman, 1994) after the coding was completed.

Phase 1. A team of six coders including the primary researcher started with the sample coding of random sets of reports using the qualitative data analysis computer software, ATLAS.ti (Friese, 2014). The primary researcher set up the initial coding scheme based on existing theory. The five other coders were trained to code the content of the responses using this preliminary coding scheme and a coding protocol. This initial coding scheme was used to systematically review the data and document the codes represented in each answer set. An iterative process followed in which the team of coders moved back and forth between emerging thematic understanding of the data and existing literature (Miles & Huberman, 1994) through four rounds of coding a small sample set of reports. For the first three rounds, the coders received the same set of ten randomly selected reports. For the fourth round of sample coding, a smaller set of five randomly selected reports was used. To properly manage the issues of inter-coder reliability, after each round of coding, the six coders met in a face-to-face meeting to compare the coding work, address inconsistencies and atypical data, and discuss themes and data patterns that emerged from this analytical activity. Based on these discussions, the coders read or returned to literature, and adjusted the coding scheme. Where necessary and appropriate, codes were deleted, added or merged and code descriptions were better defined. All the while, the coders were careful not to stray from participant meaning, by in the face-to-face meetings cross-checking each other's coding work with the original respondent's text. This iterative and systematic review of the samples resulted in a final coding scheme after the fourth round of sample coding that was fully agreed upon by the six coders. The final coding scheme can be found in appendix A. The coders then proceeded coding the full set of data, each coder coding a set of 90 data sets. The primary researcher coded the remaining set of 94 data sets.

Phase 2. During the second phase, the primary researcher continued with the content analysis of the coded reports to consolidate codes and categories into higher levels of abstraction and search for relationships between and variations within categories. First, we set out to answer the supporting research question: "*What are the self-schemas as a leader that students hold?*" To assess students' self-schema as a leader, we used the work of Hammond et al. (2017) on leader identity strength and integration as an interpretive frame. First, we clustered and counted the data by strength and integration of the leader identity. Then, we looked for systematic differences between these groups of students in terms of age, gender, and nationality. For age, we performed a one-way analysis of variance (ANOVA) and a post hoc test using Hochberg's GT2 and Games-Howell

procedures due to variety in group sizes (Field, 2013). For the categorical data of gender and nationality, we used chi-square tests (Field, 2013). Next, we moved on to answer the second supporting research question: "*How are students' leader identities related to their leadership-structure schema and person schema of others as leaders?*" For this purpose, we used the work of Hammond et al. (2017) on the meaning of leader identity as an interpretive lens. To assess students' leadership-structure schema, we used the work of Drath (2001) as an interpretive frame. To assess students' person schema of others as leaders, we used the framework of implicit leadership theory (ILT) (Shondrick et al., 2010) as an interpretive lens. Per category of leader identity strength and integration, we then proceeded with an in-depth qualitative content analysis to find patterns in students' leadership-structure schemas and person schemas of others as leaders. Contradictory evidence was sought out, examined, and accounted for in the analysis to ensure that potential researcher bias did not interfere with interpretation of the data and insights offered. A pattern was established when deviant cases accounted for less than ten percent for each category of leader identity.

FINDINGS

We start with presenting our findings to our first supporting research question: "*What are the self-schemas as a leader that students hold?*" For this, we examined the strength of students' leader identity and the integration of the leader identity in their global self-concept.

Self-schemas as a leader: strength and integration

Our findings show that 69 out of 510 students report that they do not see themselves as a leader. These students were coded as having a *weak leader identity*. Students with a weak leader identity (N = 69) mention that they are not a leader (N = 67) or that they are not a leader except for in one specific situation in a family setting in which they have seniority (N = 2). In fact, they refer to themselves as followers or team members. The integration of a leader identity in their global self-concept is absent.

> "*I do not consider myself a leader (...). I like to be a follower.*"
> *(report 537)*

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Sixty-four out of 510 students report that they do not see themselves as a leader yet, but do consider themselves a leader in the future. These students were coded as having a *provisional leader identity*. Students with a provisional leader identity (N = 64) mention that they are not a leader yet, but can be a leader in the future. They consider being a leader a possible future identity. The integration of a leader identity in their global self-concept is possible.

> *"I see myself as a future leader." (report 289)*

A total of 238 out of 510 students mentioned that they see themselves as a leader to some degree and in certain situations. These students were coded as having a *moderate leader identity*. Students with a moderate leader identity (N = 238) mention that they are a leader, but only to some degree and only in certain situations. The situation that they are in determines whether they are a leader. They refer to themselves as being a leader and a follower.

> *"I would consider myself a leader in certain situations. (...) But in other situations I am much of a team player and also a follower." (report 186)*

More specifically, students with a moderate leader identity mention that they are only a leader in small group settings that are structured, where they are assigned a task, know the people they have to work with, feel comfortable, and are familiar with what needs to be done. Their leader identity is partially integrated in their global self-concept.

> *"I consider myself a leader in certain aspects of life while I do not do so in other aspects. When it is about working as a team on a task, I tend to take control over the situation, trying to optimize the way in which we work together. I distribute tasks, set deadlines, bring information together et cetera. This I do once I am comfortable within the group that I am working with. (...) In a situation that is not structured or new I like being led rather than leading myself." (report 465)*

Finally, findings show that 139 out of 510 students mentioned that they see themselves as a leader. These students were coded as having a *strong leader identity*. Students with a strong leader identity (N = 139) mention that they are a leader. These students do not specify any domains or settings in which they do

not see themselves a leader. They firmly refer to themselves as being a leader. Their leader identity is fully integrated in their global self-concept.

"Yes, I definitely consider myself as a leader." (report 129)

We could categorize all students' responses in one of the afore-mentioned degrees of leader identity. After grouping students' leader identities by strength and integration, we looked for systematic differences between the four leader identity groups in terms of age, gender, and nationality. ANOVA showed a significant main effect of age on students' leader identity (F (3,506) = 6.319, p = .000). Post hoc comparisons between the four leader identities revealed three relevant sub effects. First, students with a provisional leader identity were found to be significantly younger than those with a weak leader identity (μ_{weak}-$\mu_{provisional}$ = .703, p = .021), and also younger than those with a strong leader identity (μ_{strong}-$\mu_{provisional}$ = .791, p = .001). Second, students with a moderate leader identity were found to be younger than those with a strong leader identity (μ_{strong}-$\mu_{moderate}$ = .452, p = .014). Third, no statistically significant difference was found between students with a weak and strong leader identity. Next, chi-square test showed that gender was not equally distributed (χ^2(3) = 12.30, p = .006). There were more women (73%) than men (27%) in the weak leader identity group. Last, chi-square test showed no statistically significant differences in nationality compositions between groups (χ^2(96) = 106.93, p = .209).

Self-schemas as a leader: meaning

To answer our second supporting research question: *"How are students' self-schemas as a leader related to their leadership-structure schema and person schema of others as leaders?"* we examined the meaning of students' leader identity per category of leader identity strength and integration.

Weak leader identity. Examining the leadership-structure schema of students with a weak leader identity (N = 69), findings show that the meaning of these students' leader identity is related to their understanding of leadership. Our data show that in general these students understand leadership as a hierarchical position or formal role in an organization and a synonym for the personal characteristics or innate traits of the leader. They mention that they do not consider themselves a leader, because they do not occupy a hierarchical position or formal role in an organization.

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"I wouldn't consider myself a leader. Leadership exists wherever there exists superiority (...). As I am not in a professional environment, I am not currently experiencing myself being superior to the people that surround me." (report 379) Furthermore, they report that they do not consider themselves a leader, because they are not a born leader and believe that leadership cannot be learned and developed.

"No, I don't consider myself as a leader. (...) some people have more capabilities to become a leader. I don't think that leadership can be learnt (...)." (report 375)

In addition, they mention that they do not consider themselves a leader, because they are afraid of the responsibility that comes with being a leader and fear being the one responsible for a group's failure. They understand leadership as carrying sole responsibility and do not believe that they have to ability to carry that responsibility. They show low leadership self-efficacy (Hannah, Avolio, Luthans, & Harms, 2008).

"I would not consider myself a leader because I'm afraid to make decisions for people. I am afraid that the decision I make is wrong and that the group will fail because of me." (report 357)

Last, these students mention that they do not view themselves a leader, because even though they have some experience with being in a leader role, they feel that they were not effective in this role and/or failed to receive validation for their attempts.

"I do not consider myself a leader as I am hesitant in making tough decisions. Although I have leadership experience in my co-curricular activities, I feel that I was not an effective leader. I could execute and organize the roles of my members, but (...) it was hard to command respect, because the tough decisions I made sometimes did not sit well with my members. A leader would be able to reconcile both of these traits." (report 467)

These findings show that students with a weak leader identity claim the absence of a leader identity, i.e. claim their follower identity, based on the absence of alignment between their self-schema as a leader and their leadership-structure schema.

Examination of the findings of the person schema of others as leaders of students with a weak leader identity shows that these students compare their abilities with the abilities they attribute to a prototypical leader. They do not view themselves a leader, because they do not possess the abilities that they attribute to prototypical leaders. For example, a student who attributes decisiveness as an ability of a prototypical leader, will not perceive herself a leader when she believes that she is not decisive.

> *"I would describe a leader as being a decisive individual whom is fair and cohesive with other team members. (...) I don't consider myself a leader because I am not very decisive." (report 493)*

Furthermore, they do not perceive themselves as a leader, because even though they possess some of the abilities that they attribute to leaders, they do not possess them all.

> *"No, I don't see myself as a leader because I try to avoid direct conflicts and I can't tell people when they are doing something wrong. But I am social and open minded and very organized." (report 477)*

These findings indicate that students with weak leader identities view leadership abilities as something that you either possess or not possess. They do not mention that they believe that they can learn and develop the abilities that they attribute to prototypical leaders. These findings show that students with weak leader identities claim their follower identity based on the absence of alignment between their self-schema as a leader and their person schema of others as leaders.

In summary, students with weak leader identities mention that based on their understanding of leadership (i.e., leadership-structure schema) and compared to their image of a prototypical leader (i.e., their person schema of others as leaders), they do not consider themselves a leader. They believe that they are not a leader, because they do not occupy a hierarchical position or formal role in an organization, are not a born leader, are afraid of carrying the sole responsibility that comes with leadership, feel that they were not effective in the role of the leader, and do not possess the abilities that they attribute to a prototypical leader. In addition, they believe that leadership cannot be learned and developed. Our findings show that their leadership-structure schema - the

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lack of a developmental perspective on leadership - prevents them to envisage a possible future alignment between their self-schema as a leader and their person schema of others as a leader.

Provisional leader identity. In the leadership-structure schema of students with a provisional leader identity (N = 64), findings also show that the meaning of these students' leader identities are related to their understanding of leadership. Our data show that in general, these students understand leadership as a hierarchical position or formal role in an organization and a synonym for experience that is gained over time and through learning and development. They mention that they do not consider themselves a leader yet, because they do not occupy a hierarchical position or formal role in an organization and have not acquired enough experience that would legitimize viewing themselves as a leader.

> *"Even though we already had the experience of being a discussion leader in different courses, we are not at the point where we can consider ourselves as a leader yet. An effective leader needs time to gain experience in different situations and through having different positions e.g. within a company and I think I do not have enough experience yet." (report 474)*

Furthermore, they mention that they believe that they can be a leader in the future, because they think that leadership can be learned and developed.

> *"I would not consider myself as a leader at the moment, but I would say that I am on my way of becoming a leader throughout my training at university, internships and life." (report 474)*

In addition, they report that they believe that they can be a leader in the future, because they have already gained some positive experiences with being in positional leadership roles in student associations, with leading group work at university, and leading sports teams.

> *"I believe that I can be a leader. I already gained some experience as a student representative in high school or in my football team, where I really enjoyed to perform the corresponding tasks." (report 328)*

These findings show that students with a provisional leader identity claim their possible future leader identity based on initial nascent alignment between their self-schema as a leader and their leadership-structure schema and on envisaged future alignment between their self-schema as a leader and their leadership-structure schema.

In examining the person schema of others as leaders of students with a provisional leader identity, we found that these students compare their abilities with the abilities they attribute to a prototypical leader. These students mention that they do not consider themselves a leader yet, because they believe that they do not yet possess all the abilities that they attribute to prototypical leaders. They mention that they believe that they can be a leader in the future, because they already possess some of the abilities that they attribute to prototypical leaders.

> *"I would describe a leader as a person who is organized, structured in the way he/she works and approaches problems and someone who can motivate others to achieve set goals. (...) Further features include good time management, social skills, and to be open minded. I think I am not a leader because some of the features I mentioned. I think I have the potential to be a leader because I have well time management and good social skills, but I do not think that I am at the point to consider myself a leader." (report 398)*

Furthermore, they mention that they do not consider themselves a leader yet, but believe that they can be a leader in the future, because they think that they can learn and improve the other abilities that they attribute to prototypical leaders.

> *"I myself do not consider myself a leader as of yet. There are a lot of characteristics a leader should have in my opinion that I have obtained myself, like honesty, commitment. (...) But some key aspects that would make me a leader are missing or not established well enough, for example confidence and motivation. (...) Those two main features a leader should have, have to improve for me in order to become one." (report 094)*

These findings indicate that students with provisional leader identities claim their possible future leader identity based on a current initial alignment between their self-schema as a leader and their person schema of others as leaders and

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on an envisaged future full alignment between their self-schema as a leader and their person schema of others as leaders that is facilitated by their leadership-structure schema (i.e., leadership can be learned and developed).

To summarize, students with a provisional leader identity mention that based on their understanding of leadership (i.e., leadership-structure schema) and compared to who they consider to be a leader (i.e., their person schema of others as leaders), they do not consider themselves a leader yet, but do believe that they can be a leader in the future. They do not view themselves a leader yet, because they do not occupy a hierarchical position or formal role in an organization and have not acquired the necessary leadership experience and leadership abilities that legitimize viewing themselves as a leader. However, they do believe that they can be a leader in the future, because they have some positive leadership experience, believe that leadership can be learned and developed, and that they can acquire the necessary leadership experience and leadership abilities over time. Our findings show that their leadership-structure schema enables them to perceive a future alignment between their self-schema as a leader and their person schema of others as a leader. This implies that developing a provisional leader identity requires students to understand leadership as malleable. This is something which can be achieved through purposefully designed leadership development activities.

Moderate leader identity. Here too the findings on the leadership-structure schema of students with a moderate leader identity (N = 238) show that the meaning of these students' leader identity is related to their understanding of leadership. Our data display that in general these students understand leadership as a hierarchical position or formal role in an organization and a synonym for experience that is gained over time and through learning and development. They mention that they consider themselves a leader to a certain degree and in certain situations only, because they do not yet occupy a hierarchical position or formal role in an organization on a daily basis.

> *"As I haven't started working and I therefore don't have subordinates, in this aspect I can't speak of myself as a leader in a way of working and practicing business. But being a leader can also be possible during a football match when I´m the captain of the team. So in this aspect I consider myself a leader." (report 246)*

Furthermore, they mention that they consider themselves a leader to some degree and in certain situations, because they have acquired some leadership experience through for example positional leadership roles in student associations, leading group work at university, and leading sports teams, that legitimizes viewing themselves as leaders. They mention that they are a leader in situations where they have a lot or the most experience. In situations where they lack experience or where there is a person present with more experience, they do not consider themselves a leader. They believe that leadership comes with experience and that the leader is the most experienced person in the group.

> *"As I was captain for my hockey team for four years I would consider myself as a leader of my team during that period of time. Since I was the oldest and most experienced player on the roster, it was my aim to get the best out of the players around me by motivating them and to pass my knowledge of the game and my experiences on. On the other hand there are a lot of situations where I am not a leader. For instance, during my apprenticeship it was me, who still had to learn from the older, more experienced colleagues. Therefore, it depends on the situations I am in, if I would consider myself a leader or not."*
> *(report 403)*

In addition, they mention that they consider themselves a leader to some degree and in certain situations, because they still have a lot to learn. They believe that leadership can be learned and developed.

> *"In specific areas I see myself as a leader, for example in playing football. I can lead a team because I have learned how to play through several years of training. (...) In other fields I seek to learn from others. I'm not an expert yet in my study."* *(report 416)*

These findings exhibit that students with a moderate leader identity claim their leader identity based on a current partial alignment between their self-schema as a leader and their leadership-structure schema and an envisaged future full alignment between their self-schema as a leader and their leadership-structure schema.

An examination of the person schema of others as leader of students with a moderate leader identity also shows that these students compare their abilities with the abilities they attribute to a prototypical leader. They mention that they

consider themselves a leader to some degree and in certain situations, because they already possess some of the abilities that they attribute to prototypical leaders. They mention that because they still lack some of the other abilities that they attribute to prototypical leaders, they do not fully consider themselves a leader yet. In addition, they mention that they believe that they can learn and improve the other abilities that they attribute to prototypical leaders.

> *"I think everybody of us in some occasions is a leader. I see myself as a leader when I take the leading role during a groupwork at the university or when I am the one who plans and coordinates a trip which I want to do with friends. In other occasions I am the one who is following a leader, for example the tutor at university who is leading the tutorial group by motivating and inspiring us. There are many situations in which I just don't have the knowledge which is needed to be the leader and that's why I have to be led by other people to acquire knowledge." (report 120)*

These findings indicate that students with a moderate leader identity claim their leader identity based on a current partial alignment between their self-schema as a leader and their person schema of others as leaders and an envisaged future full alignment between their self-schema and their person schema of others as leaders that is facilitated through their leadership-structure schema (i.e., leadership can be learned and developed).

To summarize, students with a moderate leader identity mention that based on their understanding of leadership (i.e., leadership-structure schema) and compared to who they consider to be a leader (i.e., their person schema of others as leaders), they consider themselves a leader to some degree and in certain situations. We found that they have some leadership experience and some leadership abilities that legitimize viewing themselves as a leader. Typically, these students demonstrated a somewhat higher level of leadership experience in a certain domain or situation which seem to help them in developing a more robust leader identity than the students showing a provisional leader identity. In situations where they occupy a formal leadership position and have a lot or the most experience, they view themselves as a leader. In other situations they do not consider themselves a leader. They believe that leadership can be learned and developed, and that they can acquire the necessary leadership experience and leadership abilities over time. Our findings indicate that these students perceive a current partial alignment between their self-schema as a leader, their leadership-

structure schema, and their person schema of others as leaders. Their leadership-structure schema enables them to perceive a future full alignment between their self-schema as a leader and their person schema of others as a leader.

Strong leader identity. Our examination of the leadership-structure schema of students with a strong leader identity (N = 139), once again show findings that the meaning of these students' leader identity is related to their understanding of leadership. Our data exhibit that in general these students understand leadership as a hierarchical position or formal role in an organization and a synonym for experience which is gained over time and through learning and development. They mention that they consider themselves a leader, because they have considerable experience with occupying formal leadership positions, for example in student associations and in sports teams.

> *"Yes, I do consider myself as a leader, since I have a lot of leadership experiences. I was a captain in my high school of the tennis club and also I am now a vice captain of my football team." (report 018)*

Furthermore, they report that they consider themselves a leader, because they have extensive leadership experience from an early age onwards and have some work experience (e.g., internship, part-time jobs, full-time jobs).

> *"I consider myself a leader because I learned to motivate other people while playing handball in a team for more than 15 years and got to learn more about the leading role in an internship before I started university." (report 142)*

In addition, they mention that they consider themselves a leader, because they enjoy the responsibility that comes with leading and that they enjoy being responsible for a group's outcome. They understand leadership as a positive challenge.

> *"I like to see myself as a leader as I greatly enjoy taking that role in diverse team works, which had to be done in high school, or now university. Dividing tasks, finding the people who are best at each and construct an overall plan until the work needs to be finished. Of course I still have to learn a lot, therefore I would like to take part in bigger groups where this task becomes a bigger responsibility." (report 324)*

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Also, these students mention that they consider themselves a leader and that they believe that they can learn and develop to become a better leader. They understand leadership as something that requires ongoing learning and development.

> *"I consider myself a leader because I like to motivate people to do their work and try to help where ever I can, when it seems to be difficult. (...) But I also know that I still can improve myself a lot and have to learn more things, to become a better leader in the future."*
> *(report 195)*

These findings show that students with strong leader identities claim their leader identity based on full alignment between their self-schema as a leader and their leadership-structure schema.

In examining the person schema of others as leader of students with a strong leader identity, our findings show that these students compare their abilities with the abilities they attribute to a prototypical leader. These students mention that they consider themselves a leader, because they possess the abilities that they attribute to prototypical leaders.

> *"A leader is someone that has other people's respect but also has respect for other people's opinion. Someone that is able to maintain control in any type of situation and can find solutions. They know when to implement their own ideas and when to ask for others opinions. I believe that I have the qualities to be a leader. I am able to take charge in a situation but am also able to take suggestions from anyone that may have other ideas. I can find solutions using my ideas as well as others ideas." (report 499)*

These findings indicate that students with a strong leader identity claim their leader identity based on full alignment between their self-schema as a leader and their person schema of others as leaders.

In addition to the findings above, our data show that students with strong leader identities also mention that they consider themselves a leader, because they are self-confident about and belief in their own ability to be a leader. These students show leadership self-efficacy (Hannah et al., 2008).

> *"Yes. I have always been a person who prefers to lead instead of being led. Simply because of the strong belief in myself that I know which is the right way to deal with a situation and I can trust myself." (report 498)*

Additionally, our data also shows that these students report that they consider themselves a leader, because they have been told by others that they are a leader or have been chosen by others to be a leader.

> *"I consider myself a leader, because I have been told it many times, people instantly follow my orders if I give them at work and I possess all the features I wrote above." (report 199)*

Finally, these students report that they consider themselves a leader, because they have received good feedback on and acknowledgement for being a leader.

> *"I consider myself as a leader. Throughout my life I have been in situation where I found myself to be the leader and due to my own impressions and the feedback from others I can conclude that I am an a leader." (report 333)*

These findings indicate that they received relational recognition for being a leader (DeRue & Ashford, 2010).

In summary, students with a strong leader identity mention that based on their understanding of leadership (i.e., leadership-structure schema) and compared to who they consider to be a leader (i.e., their person schema of others as leaders), they view themselves as a leader. This is because they believe that they have considerable leadership experience (typically from an early age onwards and including work experience), enjoy the responsibility that comes with leadership, and possess the abilities that they attribute to prototypical leaders. They report that they are learning and developing to become a better leader. Our findings show that students with strong leader identities perceive full alignment between their self-schema as a leader, their leadership-structure schema, and their person schema as a leader. Finally, our findings show that these students are confident in their ability to enact leadership and have received relational recognition for acting as a leader, reinforcing their leader identities.

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DISCUSSION

Our study explored how cognitive schemas of leadership manifest in students. Consistent with existing leadership development research that positions leader identity as a pivotal component of leadership development processes (Day & Harrison, 2007; DeRue & Myers, 2014; Epitropaki et al., 2017; Hammond et al., 2017; Lord & Hall, 2005), we placed students' leader identity at the core of our data analysis. Building on initial empirical leader identity work (Guillén et al., 2015; Komives et al., 2005; Zheng & Muir, 2015), we examined students' leader identity and how students' leader identity relates to their leadership-structure schema and their person schema of others as leaders. Our findings provide empirical evidence that students' leader identity is related to their leadership-structure schema *and* their person schema of others as leaders. In other words, how students think about leadership and view others as leaders is related to whether or not they view themselves as a leader. Table 2.2 provides an overview of the main findings.

Our first supporting question *"What are the self-schemas as a leader that students hold?"* provided the following insights. We learned that the majority of our student sample consider themselves a leader, either fully (139 out of 510 students) or to some degree and in certain situations (238 out of 510 students), or envisage being a leader as a possible future identity (64 out of 510 students). These findings are promising as research suggests that possessing a leader identity is an important precursor for taking leadership roles, seeking out purposefully relevant developmental experiences and opportunities to practice leadership behaviors, and enacting leadership (Ashford & DeRue, 2012; Day et al., 2009; Johnson et al., 2012; Kwok et al., 2018) as well as it being a predictor for enhanced motivation to lead and leadership effectiveness (Chan & Drasgow, 2001; Day & Sin, 2011; Guillén et al., 2015). These findings are also promising as research indicates that possible selves facilitate a person to focus attention to thoughts and actions that can build a bridge between current state and future state (Cross & Markus, 1994). This bodes well for business schools that aim to develop the next generation of leaders (Sternberg, 2011).

A small part of our student sample (69 out of 510 students) does not consider themselves a leader. These students with a weak leader identity are mostly female. This finding could be an indication that the predominant theories of leadership that are emphasized in leadership education and that equate leadership with a heroic male at the top of an organization and behaviors believed

to be more common or appropriate in men, interfere with female students' ability to see themselves as leaders (Ely et al., 2011). We furthermore found age to be related to students' leader identity. Students with a weak leader identity and students with a strong leader identity were the relatively older students in the sample. As prior research shows that relatively older students in cohorts have accumulated more leadership experiences compared to their younger peers (Dhuey & Lipscomb, 2008), albeit speculative, the manifestation of a weak or strong leader identity in older students could be related to having accumulated respectively more negative or more positive leadership experiences. Last, we could not find support that nationality is related to differences in leader identity. Nationalities were nearly evenly represented across all leader identities. It could be that not nationality per se but rather cultural and ethnical factors play a role (Ely et al., 2011).

The second supporting question: "How are students' leader identities related to their leadership-structure schema and person schema of others as leaders?" showed the following results. First, we observed that across the degrees of leader identity, students mostly share a similar leadership-structure schema in viewing leadership as a hierarchical position in an organization. There is no group with a dominant leadership-structure schema as shared, i.e., who view leadership as relational or as a collective process. The 'broadness' of their leadership-structure schema seems to lie in their view of how an individual can acquire such a hierarchical position in an organization, i.e., by having innate traits and characteristics or through accumulating experience and learning and development. This suggests that the differences in students' leader identities might be more quantitatively related to issues of leadership-structure schema (i.e., with each group feeling more or less aligned with the same leadership-structure schema) and more qualitatively related to the person schema of others as leaders (i.e., with each group identifying distinctly different characteristics or qualities of leaders).

Second, we learned that experiences play a role in leader identity. Our findings show that students with a weak leader identity mention that they believe that they lack experience with formal leadership roles, perceived their leadership experiences as negative, and did not feel acknowledged in their attempts to enact leadership. Students with a strong leader identity on the other hand mention that they believe that they have considerable experience with formal leadership roles, perceived these experiences as positive and enjoyable, and received validation and recognition for their attempts to enact leadership.

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These results indicate that not experiences per se, but being able to make meaning of the experiences that one encounters (McCall, 2004), receiving support in the meaning-making of experiences (McCauley, Van Velsor, & Ruderman, 2010), and receiving relational recognition for enacting leadership (DeRue & Ashford, 2010), is related to establishing a leader identity.

Third, our findings revealed a two-fold cognitive mechanism. The first mechanism consists of an alignment process between the self-schema as a leader and the leadership-structure schema and the self-schema of a leader and the person schema of others as a leader. In other words, the extent to which students' leadership-structure schema and person schemas of others as leaders align with their self-schema as a leader relates positively to their leader identity strength. For example, students who believe that leadership is a hierarchical position in an organization and a personal characteristic of a born leader that cannot be learned and developed, and who believe that they do not occupy such a position and do not possess the abilities that they attribute to a prototypical leader, do not consider themselves a leader. This mechanism was found in similar ways for other leader identities. In the case of strong leader identity for example, we found that students who believe that leadership is a hierarchical position in an organization and a synonym for experience that is gained over time and through learning and development, and believe that they occupy such a position and possess the abilities that they attribute to a prototypical leader, do consider themselves a leader. This suggests that the degree of alignment between cognitive schemas of leadership creates a favorable or unfavorable condition to make the next step: developing as a leader.

Table 2.2 Overview of Main Findings

Self-schema as a leader	Weak leader identity (N = 69)	Provisional leader identity (N = 64)	Moderate leader identity (N = 238)	Strong leader identity (N = 139)
	I am not a leader	*I am not a leader yet, but I can be a leader in the future*	*I am a leader, but only to some degree and in certain situations*	*I am a leader*
Leadership–structure schema	Leadership … • is a hierarchical position in an organization • is synonym for the innate traits and abilities of the leader • cannot be learned and developed	Leadership … • is a hierarchical position in an organization • is synonym for experience • can be learned and developed	Leadership … • is a hierarchical position in an organization • is synonym for experience • can be learned and developed	Leadership … • is a hierarchical position in an organization • is synonym for experience • is a continuous journey of learning and development
Person schema of others as leaders	The leader … • is the person in the hierarchical leadership position • is born	The leader … • occupies a formal leadership position • is a person with experience • is made	The leader … • occupies a formal leadership position • is the most experienced person in the group • is made	The leader … • occupies a formal leadership position • is a person with a vast amount of experience • is made
Alignment between cognitive schemas of leadership	Alignment is absent	Current initial alignment and envisaged future full alignment	Current partial alignment and envisaged future full alignment	Full alignment

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The second mechanism is related to the content or "broadness" of the leadership-structure schema and determines whether the potential outcome of the first mechanism is achieved: being a leader. That is, the content or "broadness" of students' leadership-structure schema serves as an enabler or disabler for possible future alignment between the cognitive schemas of leadership. We found that in the case of a weak leader identity, students did not consider being a leader as a possible future identity, even though they mentioned having some leadership experience and possessing certain leadership abilities. This while in the case of a provisional leader identity, where students also mentioned having some leadership experience and possessing certain leadership abilities, students did consider being a leader as a possible future identity. This means that in addition to alignment, something else was needed to achieve the potential of the first mechanism: a broader, developmental perspective on leadership, i.e., the belief that leadership can be learned and developed. Our results show that students who believe that leadership can be learned and developed, do consider being a leader as a possible future identity. Students who do not believe that leadership can be learned and developed, do not consider being a leader as a possible future identity. In this way, a broader developmental leadership-structure schema, i.e., leadership is made, facilitates envisaged future alignment between the cognitive schemas of leadership. A narrower, non-developmental leadership-structure schema, i.e., leadership is born, inhibits envisaged future alignment between the cognitive schemas of leadership. Combined, this indicates that leader identity is the consequence of a two-fold cognitive mechanism of degree of alignment and broadness of perspective.

Implications for theory

Our study contributes to leadership research in general and research on leader identity in specific in various ways. First, our empirical findings confirm and provide critical support for theoretical claims previously made which emphasize that leader identity is grounded in meaning-making and that leader identity is influenced by an individuals' understanding of leadership and who they consider a leader (Day et al., 2009; DeRue & Ashford, 2010; DeRue & Myers, 2014; Epitropaki et al., 2017; Ibarra, 1999; Komives et al., 2005; Lord & Hall, 2005). Second, our results contribute to and reinforce the nascent empirical evidence on the relationship between leader identity and leadership-structure schema (Komives et al., 2005; Sessa et al., 2016; Zheng & Muir, 2015) and the relationship between leader identity and person schemas of others as a leader (Guillén et al., 2015). Third, our findings advance existing research by providing new empirical evidence that an individual's self-schema as a leader is related

to their leadership-structure schema *and* their person schema of others as leaders. More specifically, alignment between cognitive schemas of leadership strengthens leader identity. In addition, we showed that the content of the leadership-structure schema serves as a constraint or a catalyst for possible future alignment between the cognitive schemas of leadership, therewith creating a favorable or unfavorable condition for leadership development, leadership emergence, leadership behavior and effectiveness. Last, our work shows that this two-fold cognitive mechanism of degree of alignment and broadness of perspective exist in undergraduate business students. This establishes the need to tailor student leadership development by starting with an understanding of how students think about leadership and give meaning to being a leader.

Implications for leadership development

In our introduction, we highlighted how business schools face increasing criticism for their one-size-fits-all approach to leadership development. Critics argue that business schools put too much emphasis on knowledge and skills building and on the developmental needs of managers while insufficient attention is paid to purposeful student leadership development and to the underlying cognitive components that drive leadership development. Our findings may help business schools and management educators to address these concerns and customize their leadership development to better fit the developmental needs of their students in undergraduate leadership education. We believe that leadership development initiatives that provide students with a framework for understanding the cognitive basis of leadership development and with an understanding of how cognitive schemas of leadership can promote or block leadership development, could help students (and in particular female students) to be better prepared to take a lead in the challenges ahead in the workplace. Based on our findings, we offer three concrete recommendations for incorporating a cognitive approach in the design and delivery of leadership development programs. These are: (1) teach leadership development, not leadership (2) develop leaders by asking open questions instead of providing fixed answers, and (3) support students' leader identity development through meaningful experiences.

First, we recommend teaching leadership development, not leadership. As mentioned before, we observed from our findings that across the levels of leader identity students mostly share a similar leadership-structure schema in viewing leadership as a hierarchical position in an organization. There is no

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group with a dominant leadership-structure schema as shared, i.e., who view leadership as a relationship between people or as an emergent and collective process. While organizations are embracing collective and shared forms of leadership (DeRue & Myers, 2014) and leadership scholars are conceptualizing leadership as a broader, mutual influence process independent of any formal role or hierarchical structure (Day et al., 2009; DeRue & Ashford, 2010), our students still seem to hold a relatively narrow and traditional view on leadership. Furthermore, our results show that students with weak leader identities do not only hold this relatively narrow and traditional view on leadership, they also understand leadership as something that cannot be learned and developed. The dominant approach for teaching leadership is based on theories of leadership that associate leadership with formal positions in organizations and on long lists of traits, skills, and behaviors of extraordinary individuals (Petrieglieri & Petrieglieri, 2015). Our findings indicate that this is not helpful for broadening students' view on leadership and in promoting students' ability to see themselves as leaders. We posit that leadership can mean different things in different contexts, is exhibited by and among people at all stages of the lifespan, and can be learned and developed. By shifting the focus in our leadership education from teaching leadership as a static superior-subordinate exchange in organizations to teaching leadership development, thereby emphasizing that leadership is malleable and a context-sensitive and emergent process, we conceptualize leadership in a way that is broader and more helpful to shaping students' leader identity. This could create a better fit between students' cognitive schemas of leadership and thereby engender a greater propensity for students to step up and take on leadership. As research shows that broadening an individual's understanding of leadership can lead to a stronger leader identity (Zheng & Muir, 2015), and that individuals with a stronger leader identity are more likely to emerge as leaders (Kwok et al., 2018), this could be a fruitful avenue to pursue. We then support our students in being able to see themselves as leaders and prepare them for the complexity and ambiguity of leadership as found in organizational settings.

Second, develop leaders by asking open questions instead of providing fixed answers. Our findings show a wide range of cognitive schemas that students hold regarding leadership and leaders. It ranges from students with weak leader identities who believe that leadership cannot be learned and that being a leader is about carrying the weight of sole responsibility on your shoulders to students with strong leader identities who believe that leadership a continuous journey of learning and development and that being a leader is a positive

challenge. In our experience, leadership courses generally do not take this variety of cognitive schemas of leadership into account and do not ask their students questions on how they think about leadership and leaders. Instead, they mostly focus on providing fixed answers about which leadership skills and behaviors characterize effective leaders and are needed to be able to acquire a positional leadership role in an organization. By starting leadership development initiatives with asking open questions about the meaning of leadership and leaders, we can assess students' current cognitive schemas of leadership, show the variety existing in perspectives on leadership, and set the scene for revisiting the meaning of leadership. As an illustration, we build our leadership development activities around the three fundamental questions we used for this research study: "*What is leadership?*", "*Who is a leader?*", and "*Are you a leader?*". We use these questions at the start of our leadership development initiatives as instruments for eliciting and assessing the variety of cognitive schemas of leadership that our students hold and as tools for an open discussion and dialogue in the classroom about - often taken-for-granted and deep-rooted - assumptions and beliefs about leadership. Subsequently, using research on leader identity, leadership-structure schema, and implicit leadership theory, we offer students a research grounded and empirically based framework to create awareness of how cognitive schemas of leadership influence leadership development, leadership emergence, leadership behavior and effectiveness. This encourages students to engage in reflection about their own assumptions and beliefs regarding leadership and leaders, to realize that purposeful leadership development encompasses more than knowledge and skill building, and to identify personal areas for learning and development. In this way, we aim to teach leadership more critically (Collinson & Tourish, 2015) and humanize the field of leadership (Petriglieri & Petriglieri, 2015).

Third, support students' leader identity development through meaningful experiences. Our results indicate that students' leader identity is related to experiences and meaning-making of those experiences. Our data shows that not experiences per se, but being able to make meaning of the experiences that one encounters (McCall, 2004), receiving support in the meaning-making of experiences (McCauley et al., 2010), and receiving relational recognition for enacting leadership (DeRue & Ashford, 2010), is related to establishing a leader identity. We observed that students with a weak leader identity believed that they had little experience with leadership and felt that they did not receive validation or acknowledgment for their attempts at enacting leadership. Students with a strong leader identity believed that they had a lot of experience with leadership

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and indicated that they had received recognition for and feedback on their attempts at enacting leadership. These findings indicate that being offered experiences is not the same as being able to learn from experiences. Particularly so when keeping in mind that the students with a weak or strong leader identity were the relatively oldest students in our sample, and prior research shows that older students in cohorts generally have accumulated more leadership experiences than their younger peers (Dhuey & Lipscomb, 2008). Being able to make meaning of and learn from experiences requires assessment, challenge, and support (McCauley et al., 2010). By providing students with meaningful experiences that allow for experimenting with different roles and provisional identities and assist in evaluating experiments and experiences against internal standards and external feedback (Ibarra, 1999; Petriglieri & Petriglieri, 2010), we support students in adopting and shaping a leader identity. Role play, games, and simulations are examples of concrete activities that can offer students room for experimentation with different roles and provisional identities (Wagner, 2011). In addition, faculty could provide students with support in meaning-making of experiences through feedback and faculty mentoring for example, as this has been show to positively relate to students' overall leadership capacity (Dugan, 2011).

Limitations and future research

This study described students' cognitive schemas of leadership measured at one moment in time. This implies that we could not provide time-dependent differences in cognitive schemas. Given that our work demonstrates how cognitive schemas can be analyzed and used for understanding different cognitive views about leadership, future research could collect data on how students develop cognitive schemas of leadership over time. Longitudinal research could provide such important insights.

Second, the study looked at first-year bachelor students at one university only and the findings may not be generalizable to other groups of students at different program levels or at different levels of individuals in their professional career. Because theory shows that cognitive schemas of leadership develop over time through encountering experiences and events, and when people move through distinct stages of growth, theoretically one can expect differences in cognitive schemas of leadership of undergraduate students versus graduate students and of graduates early in their career versus working adults with several years of experience. Future research should therefore include different target groups in different educational and career stages.

Third, our findings indicate that experiences and meaning-making of experiences impacts students' leader identities. Existing literature shows that in general, experiences that contain elements of assessment, challenge, and support have more impact and are more powerful for leadership development (McCauley et al., 2010). As literature leaves us to determine what kind of experiences can best promote and enhance leader identity development, this would be an area for future research (Day et al., 2009).

Fourth, results show that variation between students' leader identities are also related to age and gender. Result show that differences are not related to differences in nationality. These results could offer interesting avenues for further research. Apart from these variables, in this study we did not examine systematic differences for different types of students. Future research should aim to collect data showing which individual differences can further explain differences in cognitive schemas of leadership.

CONCLUSION

In sum, our research offers important insights for business schools that aim to develop the next generation of leaders. It provides business students' perspectives into what they understand as leadership, who they view as leaders, and how they give meaning to being a leader. Results show that students' self-schema as a leader is related to their leadership-structure schema *and* their person schema of others as leaders. More specifically, our study indicates that leader identity is the consequence of a two-fold cognitive mechanism of degree of alignment between cognitive schemas of leadership and broadness of perspective.

Business schools hold many opportunities to align students' cognitive schemas of leadership and broaden students' understanding of leadership. We believe that leadership development initiatives that teach students leadership development, not leadership, that develop leaders by asking open questions instead of providing fixed answers, and that support students' leader identity development through meaningful experiences, could help students - in particular female students - to be better prepared to take a lead in the complex leadership challenges ahead in the workplace. In that respect, business schools can pave new pathways for a more integrative and customized approach to leadership development that starts in meaning-making.

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New Avenues for Leadership Education and Development: Shaping Leader Identity through Meaning-Making from Experiences

ABSTRACT

This chapter offers a guiding framework that helps organize and synthesize key insights from the literature on leadership development, leader identity, and learning from experience. With the aim to call attention to the deeper-level cognitive components of leadership development, we discuss how meaning-making from experiences can promote students' leadership development by shaping leader identity. We emphasize how leadership education can purposefully leverage classroom experiences as holding environments for developing students' identity as a leader, therewith creating a foundation for continuous and ongoing leadership development and future workplace leadership effectiveness.

Keywords: leadership education, leadership development, leader identity, meaning-making, experiences

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INTRODUCTION

Teaching and learning leadership at business schools is a recent trend in higher education (Eich, 2008; Sternberg, 2011). Leadership education is highly in demand, on-campus leadership development initiatives are proliferating, and business schools are increasingly emphasizing the development of leaders and leadership in their mission statements, curricula, and programs (DeRue, Sitkin, & Podolny, 2011). To develop leaders and leadership, business schools offer a variety of experiences predominantly aimed at sharing knowledge about the traditional trait and behavioral theories of leadership and at providing opportunities for students to practice a requisite set of leadership skills (Petriglieri & Petriglieri, 2015). Research has demonstrated that these knowledge-driven and skills-based activities serve a valuable purpose in building students' leadership capacity and effectiveness (Dugan, 2011). At the same time however, research also shows that the effect sizes for these activities actually often remain relatively small (Murphy & Johnson, 2011). This would suggest that the existing knowledge-based and skills-based approach to leadership education at business school by itself is not enough and that something else is needed to develop leaders and leadership more effectively.

One thing that contemporary research is starting to show is that acquiring a sense of being a leader, a leader identity, is an essential ingredient for leadership development to occur (Day & Dragoni, 2015; Day, Harrison, & Halpin, 2009). Leader identity is a deeper-level cognitive component of leadership that refers to the extent to which a person thinks of herself as a leader rather than a follower (Day & Harrison, 2007). It serves as an organizing force and motivating mechanism for thinking and acting as a leader (Lord & Hall, 2005). Furthermore, it functions as a developmental driver for seeking out and pursuing opportunities to practice and learn leadership (Day et al., 2009). People who identify as a leader are more likely to feel confident and motivated to engage in leadership experiences to practice leadership and develop leadership knowledge, skills, and abilities. This provides the foundation for continuous and ongoing leadership development and future leadership effectiveness. The centrality or importance of the leader identity plays a key role in this (Kwok, Hanig, Brown, & Shen, 2018). A leader identity that is central to a person, is more stable and relevant across a wide range of life domains (such as work, community, family, and friendship), functions as a cue for activating prior knowledge and skills relevant to leadership, and therewith influences information processing, self-efficacy, motivation, and behavior more powerfully (Cross & Markus, 1994;

Markus, 1977). Conversely, a leader identity that is not central to a person, is less stable and relevant across domains, has a low activation potential, and is therewith less powerful in impacting information processing, self-efficacy, motivation, and behavior (Cross & Markus, 1994; Markus, 1977).

In this way, leader identity explains the potential outcomes of leadership education and leadership development activities (Kragt & Guenter, 2018). It explains why students who see themselves as a leader, or at least see being a leader as a possible self, are more likely to seek out opportunities to exhibit leadership (i.e., enact leadership and emerge as leaders) as well as foster their leadership capabilities (i.e., engage in ongoing leadership development) (Kwok et al., 2018; Miscenko, Guenter, & Day, 2017). Their existing knowledge and skills are activated and more readily available for processing new information (Lord & Maher, 1993). This makes them feel more confident about and belief in their ability to practice leadership. It motivates them to engage in activities to further develop leadership (e.g., leadership experiences, taking up leadership roles) (Chan & Drasgow, 2001). Over time, this creates the foundation for continuous and ongoing leadership development and future workplace leadership effectiveness (Day & Sin, 2011; Komives & Dugan, 2014). In contrast, this explains also why students with a leader identity that is not important to them and who do not view themselves as a leader, are most likely not inclined to demonstrate leadership and will probably shy away from opportunities to further develop leadership capabilities. The prior knowledge and skills activation potential is low, making them feel less confident about their ability to enact leadership. It negatively impacts self-efficacy and provides little incentive or motivation to act or behave as a leader. Over time, this creates the foundation for diminishing engagement in leadership development and limited workplace leadership effectiveness. Taken together, this research shows that developing leaders and leadership is not only a matter of building knowledge and skills. It is a matter of change in knowledge, skills, *and* identity. Given these research insights, it seems imperative for business schools to include leader identity as part of their leadership education.

What seems to be missing is that we lack substantial understanding of *how* to pay attention to leader identity development in leadership education (Komives, Longerbeam, Owen, Mainella, & Osteen, 2006). A rich body of conceptual and empirical work on leadership development shows that experiences are considered as the main driver for learning leadership (McCall, 2004; Van Velsor, McCauley, & Ruderman, 2010). Research is however unclear about

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how classroom experiences at business schools contribute to leader identity development and how classroom experiences can be designed to promote and enhance leader identity (Day et al., 2009; Komives, 2011; Petriglieri & Petriglieri, 2010). Existing research lines on how leadership development is influenced by experiences and on leadership development as identity work are quite disconnected. Therefore it is useful to have a coherent framework that bring together these two lines of research and helps in organizing and synthesizing the existing literature (DeRue & Myers, 2014). This allows leadership educators to acquire a better understanding of the connections between leadership development, leader identity, and learning from experiences, thereby showing possibilities for integrating leader identity work into leadership development offerings. Moreover, this would help business schools in strengthening the development of leadership in their programs and increase the developmental impact of their initiatives.

The present chapter brings together existing research on leadership development, leader identity, and learning from experiences. It offers an integrated and theoretically grounded framework, exhibited in Figure 3.1, that can assist business schools in integrating leader identity development into leadership education. In the following sections, we start with introducing our framework and explain its components. We continue with elaborating on the process of leader identity development and highlight how leadership education can purposefully leverage classroom experiences as so-called holding environments for shaping and developing students' identity as a leader. Last, we describe the developmental features of classroom experiences and the contextual features of the immediate learning environment that promote and enhance students' leader identity development. Here we also provide examples of how these features can be designed into leadership education.

AN ORGANIZING FRAMEWORK
Starting at the right side of the model, the box portrays the distal outcome of ongoing leadership development and future workplace leadership effectiveness through engaging in classroom experiences. Leadership development is a process of change that occurs in context and spans an entire lifetime (Day et al., 2009). Experiences are considered the main driver for learning and developing leadership (McCall, 2004; Van Velsor et al., 2010). Development occurs when individuals develop increasingly dynamic and complex ways of conceptualizing and practicing leadership (Day & Dragoni, 2015; DeRue & Myers, 2014). Ongoing leadership development then refers to continuous engagement in a wide variety

of developmental experiences, that can range across settings and domains, and can occur at all ages and stages of the lifespan. (DeRue & Myers, 2014; Hammond, Clapp-Smith, & Palanski, 2017; McCauley, Van Velsor, & Ruderman, 2010).
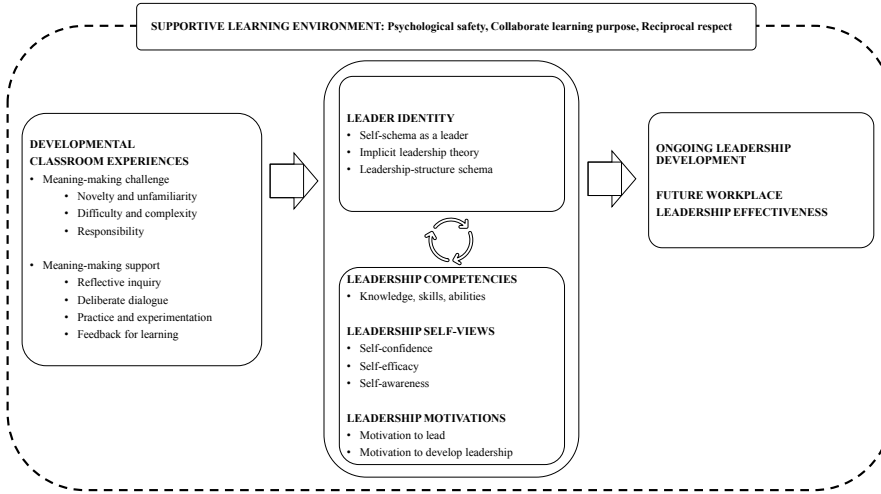
Figure 3.1 A Framework for Students' Leader Identity Development through Classroom Experiences

Examples of ongoing leadership development experiences could therewith involve formal leadership programs, mentoring and coaching relationships, self-development initiatives, or on-the-job assignments (Day et al., 2009; Murphy & Johnson, 2011).

Leadership effectiveness refers to observable, behavioral levels of leadership competencies and the degree to which an individual is considered by others to be successful in enacting leadership within and across specific settings or contexts (Johnson, Venus, Lanaj, Mao, & Chang, 2012; Kragt & Guenter, 2018). Overall, research has demonstrated that leadership experiences positively influence leadership effectiveness (Avolio, Walumbwa, & Weber, 2009; Day & Sin, 2011). More specifically, research shows that leadership experiences at college, university, and business school positively impact later workplace leadership effectiveness (Dugan, 2011; Komives & Dugan, 2014). As leadership effectiveness is in the eye of the beholder and therewith contingent on individual differences and context (Engle & Lord, 2011; Hall & Lord, 1995; Martin & Epitropaki, 2001), this could entail various types of leadership (e.g., transformational leadership, servant leadership, leader-member exchange) that could be considered effective.

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Continuing to the core of the model, the center box includes leader identity as a proximal outcome of classroom experiences and as a mediating factor between classroom experiences and ongoing leadership development and leadership effectiveness. Leader identity is the subcomponent of an individual's overall identity that relates to the degree to which a person considers herself to be a leader rather than a follower (Day et al., 2009; Lord & Hall, 2005). Theory suggests and recent initial empirical evidence confirms that it includes one's self-schema as a leader ("Who am I as a leader?"), one's perspective on leadership or leadership-structure schema ("What is leadership to me?"), and one's perspective about others as leader or implicit leadership theory ("Who do I consider to be a leader?") (DeRue & Ashford, 2010; Guillén, Mayo, & Korotov, 2015; Hammond et al., 2017; Zheng & Muir, 2015). Or in other words, how students view leadership and see others as leaders relates to how they see themselves as a leader. Together these views impact the degree to which they see themselves as a leader, i.e., their leader identity.

The center box also depicts leadership competencies (i.e., knowledge, skills, and abilities), leadership self-views (i.e., self-awareness, self-confidence, self-efficacy), and leadership motivations (i.e., motivation to lead, motivation to develop leadership) as proximal outcomes of classroom experiences (Murphy & Johnson, 2011). Both theory and empirical evidence indicate that classroom experiences contribute to leadership development of students by building leadership capacity (knowledge, skills and abilities), and leadership self-efficacy (the internalized belief system about one's capacity) (Dugan, 2011). Furthermore, research evidence shows that quantity and quality of leadership experiences impact the level of students' motivation to lead (Chan & Drasgow, 2001). Accumulated experiences over time that enhanced self-awareness and self-efficacy, positively impacted motivation to lead. Recent theorizing suggests that leader identity interacts with these other proximal outcomes of classroom experiences in a reciprocal fashion, as leader identity functions as a cue for activating and accessing prior knowledge and skills related to leadership, therewith impacting information processing, motivation, and self-efficacy (Ashford & DeRue, 2012; Cross & Markus, 1994; Hannah, Woolfolk, & Lord, 2009; Ibarra, 1999). In turn, enhanced leadership capacity, motivation, and self-efficacy strengthens leader identity (Miscenko et al., 2017; Zaar, Van den Bossche, & Gijselaers, 2020).

Moving to the left side of the model, the first box shows the classroom experiences that shape leadership development by contributing to leader identity development of students. Classroom experiences refer to the formal leadership interventions that occur in the curriculum, such as in leadership

courses, workshops, and trainings (Komives & Dugan, 2014). Given that not all experiences are equally developmental (Dewey, 1938; McCall, 2004), the extent to which classroom experiences result in leader identity is dependent on specific developmental features of the experience. It goes without saying that classroom experiences are not the only experiences contributing to students' leadership development during their time at business school. In this chapter however, we focus on classroom experiences as these are experiences that leadership educators can most directly influence to purposefully design for leadership development. As a side note, although we are cognizant of and fully underwrite the important role that also individual factors (e.g., learning orientation, feedback-seeking behavior, self-regulation) play in the process of learning from experience, our emphasis here is on the developmental features of classroom experiences and their immediate learning environment.

Last, the model includes the contextual factors of the micro learning environment that moderate the extent to which classroom experiences result in leader identity development and the extent to which leader identity results in ongoing leadership development and future leadership effectiveness. Research is clear that context matters in leadership development and that particular contextual features of the environment in which learning occurs can be beneficial (or detrimental) for developing leaders and leadership (Van Velsor et al., 2010). The micro learning environment refers to the immediate setting of the learner in which learning is socially constructed (Kolb & Kolb, 2005).

Taken together, the framework depicts (1) that classroom experiences shape ongoing leadership development and future workplace leadership effectiveness through the mediating factor of leader identity, (2) that leader identity interacts with other proximal outcomes of classroom experiences in a reciprocal fashion, and (3) that these relationships are moderated by the contextual features of the micro learning environment. The extent to which classroom experiences result in leader identity development is contingent on the developmental features of the classroom experience. In the next section, we elaborate on the process of leader identity development and the important role that leadership education can play in this process.

Leader identity development

Leader identity is a multifaceted construct that is grounded in meaning-making and shaped through a dynamic process of learning from experiences (DeRue & Ashford, 2010; Hammond et al., 2017). It is a multifaceted construct as it

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includes various cognitive schemas related to leadership and being a leader (Zaar et al., 2020). More precisely, theory suggests, and recent empirical evidence, demonstrates that leader identity is related to one's perspective on how leadership is organized in groups (leadership-structure schema), one's perspective about others as leaders (implicit leadership theory), and one's understanding of oneself as a leader (self-schema as a leader) (DeRue & Ashford, 2010; Guillén et al., 2015; Hammond et al., 2017; Zheng & Muir, 2015). People claim a leader identity based on their understanding of leadership and compared to who they view as leaders. The more alignment there is between these various views and the broader and more complex an individual's view on leadership and being a leader, the stronger the leader identity (Zaar et al., 2020). These findings indicate that shaping and developing leader identity involves aligning views on leadership and being a leader as well as broadening and increasing complexity in understandings of leadership.

Leader identity development is a dynamic process in the sense that it involves gains and losses (Freund & Baltes, 1998) and does not develop in a solely linear fashion towards a more positive self-perception as a leader (Kegan, 1982). In fact, longitudinal studies show that leader identity develops in a curvilinear mode, that is in a J-shaped curve (Day & Sin, 2011; Miscenko et al., 2017). Initially leader identity changes follow a negative development trend with an upturn towards the end of the developmental experience. This indicates that leader identity development involves leader identity construction *and* deconstruction (Miscenko et al., 2017). Leader identity deconstruction, that is temporary destabilization of the current identity by eliciting and questioning current views on leadership and being a leader, facilitates identity change. It makes room for broadening and increasing complexity in thinking about leadership and leaders and for a new identity to be constructed. This dynamic process of leader identity construction and deconstruction is prompted by experiences.

Drawing on experiential learning theory (Dewey, 1938; Kolb, 1984), leadership development begins with individuals engaging in concrete experiences that challenge their existing ways of thinking and doing, and elicit the need to learn and develop. The challenge is needed to get people out of their comfort zone and review their habitual ways of thinking and acting (McCauley et al., 2010). Without this challenge, people usually do not feel the need to develop new ways of thinking and acting. Experiences that challenge current ways of meaning-making of leadership and being a leader provide the prompt or trigger for leader identity destabilization by creating uncertainty, confusion, or frustration. The

challenging experience then creates a disequilibrium, providing the incentive or motivation to stabilize a leader identity rendered fragile, or to transition toward a new one (Petriglieri & Petriglieri, 2010). This involves attempts to reinterpret the experience in ways that allows individuals to maintain their current way of meaning-making of leadership and being a leader or change to a new way of meaning-making of leadership and being a leader.

Too much challenge however can hinder learning from experiences. Experiences that present individuals with demands that far exceed their current capabilities and overly challenge individuals, have been shown to hinder their leadership development (DeRue & Wellman, 2009). Participants found these experiences overwhelming, causing stress and anxiety. This diverts focus, attention and interest away from the experience and blocks learning from the experience (Boud & Walker, 1998; Fiedler & Garcia, 1987). People then come away from an experience having learned little to contribute to their leader identity development, having learned nothing at all, or even having learned the wrong lessons. Especially the latter is particularly detrimental for leadership development when people, for example, come away from an experience thinking that being a leader is something that they can never acquire.

Receiving adequate support can offset potential negative effects of challenge (DeRue & Wellman, 2009; McCauley et al., 2010). Receiving support is about assisting the learner in reflecting on experiences and engaging in constructive meaning-making of experiences (Schön, 1987). Support in learning from experiences for leader identity development involves facilitating meaning-making of leadership and being a leader and reducing disturbing emotions such as stress and anxiety that come with being challenged in current ways of meaning-making (Petriglieri & Petriglieri, 2010). It is about providing support in making meaning of new perspectives on leadership and new ways of being a leader by building on existing perceptions and frameworks and offering new ways of thinking and acting. This to provide a cognitive bridge for learning by connecting and linking what is new with what already exists (Boud & Walker, 1998). It also involves assistance in providing opportunity to elaborate on, experiment with, and consolidate meanings associated to the self as a leader (Ibarra, 1999; Ibarra, Snook, & Guillén Ramo, 2010). This can be achieved by creating collective arrangements, such as work methods or learning structures and by installing rituals or practices that signal growth and development (Petriglieri & Petriglieri, 2010). With support of seniors and peers, individuals can then shape and discover who they are as a leader and who they want to become as a leader.

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Receiving support also refers to a supportive learning environment. This is the immediate environment in which learning takes place, the micro learning environment. It provides support by promoting feelings of safety and reassurance on the learning process (Kolb & Kolb, 2005; Van Velsor et al., 2010). It offers a formal or informal social arrangement that brings belonging, affiliation, and identification to the foreground, by providing for example recognition and encouragement for attempt at leading (DeRue & Ashford, 2010; Petriglieri & Petriglieri, 2010). This sends the message that a new equilibrium can be found on the other side of change (McCauley et al., 2010). In this way, receiving support turns cognitive and emotional turmoil into meaning (Petriglieri & Petriglieri, 2010).

Taken together, this existing research indicates that shaping and developing students' leader identity requires a social setting in which experiences are offered that challenge current ways of conceptualizing leadership and being a leader, and provide support in meaning-making of new perspectives on leadership and being a leader. These experiences should be embedded in a micro learning environment that offers safety and reassurance on the learning process. Research has conceptualized such settings as 'holding environments' (Kegan & Lahey, 2009; Petriglieri & Petriglieri, 2010). The classroom, as a holding environment for students' leader identity development, assists students in consolidating an existing identity (identity stabilization) or in transitioning to a new one (identity transition) (Petriglieri & Petriglieri, 2010). Leadership education can purposefully leverage the classroom as a holding environment for shaping and developing students' identity by designing specific developmental features in and particular contextual features around classroom experiences. To these, we turn in the next section.

The classroom as a holding environment for leader identity development

We begin with discussing the developmental features of experiences that challenge existing ways of meaning-making of leadership and being a leader and the developmental features of experiences that support new ways of meaning-making of leadership and being a leader. Next, we discuss the contextual features of the micro learning environment that support the learning process. While in practice these features are closely interconnected, in this chapter we conceptually separate the developmental features of experiences and the contextual features of the learning environment in order to better discuss them.

Developmental features of experiences that challenge meaning-making

From the existing literature, we distinguish three main developmental features of experiences that challenge existing ways of meaning-making of leadership and being a leader. These are: (1) *novelty and unfamiliarity*, (2) *difficulty and complexity*, and (3) *responsibility.* These features of meaning-making challenge push the student out of the comfort zone and into the zone of proximal learning (McCauley et al., 2010).

Novelty and unfamiliarity

The developmental feature of novelty and unfamiliarity refers to the classroom experience being new or unknown to the students. It entails students encountering a situation for the first time ("I have never done that before.") or encountering a known situation with different aspects to it ("I have done that before, yet not with such a diverse group of people."). Drawing on activation theory (Scott, 1966), when an individual is unfamiliar with a task or situation, or when a person is exposed to a task or situation that is new to them, a heightened sense of arousal is created within the individual that is positively linked to behaviour and cognition. The novelty and unfamiliarity therewith spark interest and motivation to engage in meaning-making and learning. A relatively straightforward example of a classroom experience that challenges existing ways of meaning-making of leadership and being a leader through novelty and unfamiliarity is presenting students with new knowledge and information on how leadership develops. As research shows that the majority of students view leadership as an hierarchical position in an organization and define leadership as what people in positions in authority do (Komives, Owen, Longerbeam, Mainella, & Osteen, 2005; Wagner, 2011), providing them a perspective of leadership as relational or shared, can trigger meaning-making.

Difficulty and complexity

The developmental feature of difficulty and complexity refers to the experience being academically challenging for the students. It includes students encountering a task or situation that they find difficult because it requires thinking beyond their current frames of reference ("I do not understand why people would consider this person a leader.") or encountering a task or situation that is too complex to unravel alone ("I understand that I could be a leader, yet I am unable to make sense of it on my own."). It also refers to the experience being ambiguous and open to more than one interpretation, and where a range of views or perspectives should be accounted for. The experience

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then requires students to process distinct elements simultaneously, deal with multiple demands simultaneously, or manage multiple opposing or seemingly conflicting demands (DeRue & Wellman, 2009). This can be done, for example, by small group projects in which students from various cultures, gender, racial and ethnical background work together on an academic task. The academic task could involve working as a self-organized team in which no one has direct authority, or asking them to reflect on leading-following interactions occurring throughout the group work process.

Responsibility
The developmental feature of responsibility relates to the experience requiring students to take on responsibility, being allocated responsibility, or manage high levels of responsibility (DeRue & Wellman, 2009). It involves students being allocated responsibility to take on leadership, by for example allocating them roles and responsibilities to lead small group work or class discussions. It includes students being offered or allocated projects that require high levels of responsibility, such as for example working on and leading a real-life project for an organization. The feature of responsibility challenges current ways of meaning-making of leadership and being a leader by providing assessment data on their attempt at practicing leadership (McCauley et al., 2010). These data can come from teachers and peers and can be formal (e.g., examination, assignments, performance evaluations) or informal (e.g., observing other's reactions to one's ideas about leading a group, receiving unsolicited feedback) (McCauley, Ruderman, Ohlott, & Morrow, 1994).

Developmental features of experiences that support meaning-making
The previously discussed features of classroom experiences trigger and challenge students to review and rethink their current ways of meaning-making of leaders and leadership. Given that challenge alone is not sufficient for individuals to be able to find and establish new ways of meaning-making, support in meaning-making of new ways of thinking about leaders and leadership is needed the facilitate learning from experiences. From the existing literature, we distinguish four main developmental features of meaning-making support. These are: (1) *reflective inquiry*, (2) *deliberate dialogue*, (3) *practice and application*, and (4) *feedback for learning.* These features of meaning-making support assist students to craft, revise, or affirm who they are as a leader, experiment with different leader roles and leadership responsibilities, and decide what to incorporate in their persona (Avolio & Vogelgesang, 2011;

Komives & Dugan, 2014). In this way, the meaning-making support facilitates students being in the zone of proximal learning and prevents them from entering the zone of anxiety (McCauley et al., 2010).

Reflective inquiry

The developmental feature of reflective inquiry refers to the posing of critical, open questions about the meaning of leaders and leadership. This in order to elicit existing knowledge, beliefs, and ideas about leaders and leadership and show variety in existing perspectives on leadership and being a leader, which sets the scene for revisiting these meanings (Schyns, Tymon, Kiefer, & Kerschreiter, 2012). This can be done by asking students to answer three simple, yet foundational questions: "What is leadership?", "Who is a leader?", and "Are you a leader?" These questions prompt students to engage in reflection on what they believe constitutes leadership and being a leader. Sharing the answers to these questions with the entire class or in small groups allows students to gain insight in the variety of perspectives on leadership and leadership and encourage reflection on the usefulness of currently held views.

Deliberate dialogue

The developmental feature of deliberate dialogue refers to having open discussions and debate about leadership and leaders. Where the reflective inquiry serves to draw out and exchange existing knowledge, beliefs and ideas about leadership from a variety of backgrounds and perspectives, the deliberate dialogue serves to stimulate discussion and debate about varying beliefs about leadership and being a leader. Disagreement and criticism are assets rather than impediments to learning. In addition to input from a reflective inquiry exercise, deliberate dialogue can be further stimulated by, for example, a drawing exercise that asks students to draw what effective leadership looks like (Schyns, Kiefer, Kerschreiter, & Tymon, 2011). This image can be a sketch of people, symbols, diagrams, or events, and include followers, metaphors, and key words or phrases (Clapp-Smith, Hammond, Lester, & Palanski, 2019). It would then serve as a talking point for articulating meanings of leadership held and sharing interpretations.

Practice and application

The developmental feature of practice and application refers to providing students with the opportunity to transfer knowledge to know-how and apply what they conceptually learned to real-life settings. Put simply, students can shape leader identity by practicing leadership. Building on theories of human development,

research shows that practice (i.e., experimentation, repetition, and reinforcement within and across experiences) and in particular deliberate practice (i.e., dedicated practice on a particular task with appropriate feedback) extends, refines and internalizes new ways of conceptualizing and practicing leadership (Ericsson, Krampe, & Tesch-Romer, 1993; Kolb, 1984). By practicing leadership, individually and collectively, students can experiment with being a leader and taking leadership responsibility, can practice to overcome challenges and fear, and reinforce and extend lessons learned from prior experiences (DeRue & Myers, 2014).

This can be done in a variety of ways. For example, students can be engaged in practicing leadership through allocating them roles and positions of facilitating learning in the classroom and teaching fellow students, through providing opportunities to give individual and group presentations, and by assigning small group projects to experience leading-following interactions. Through small group projects students can learn to practice collaborative leadership by identifying their own ways of being effective as a leader, by taking on various team roles of being leader and follower, and by together finding ways of developing as a team. Repeating these activities within and across courses can be particularly powerful in helping students realize the development of their ways of conceptualizing and practicing leadership.

Feedback for learning
The developmental feature of practice and application can be made even more impactful when coupled with feedback for learning. Cognitive theories of learning (Kraiger, Ford, & Salas, 1993) posits that feedback availability helps with reducing evaluation uncertainties that arise when presented with challenging situations. It reduces the likelihood that cognitive resources are diverted away from the task and the learning process. Theories and models of learning and leadership development (Avolio, 2004; Ericsson et al., 1993; Kolb, 1984) in particular emphasize the importance of availability of systematic and evaluative feedback as it provides the student with essential input on the appropriateness and usefulness of thoughts, emotions, and behavior for attaining learning goals and objectives. It gives them an evaluative assessment of where they are now: their current strengths as a leader, the level of their current performance or leader effectiveness, and their primary leadership development needs (McCauley et al., 2010).

Feedback for learning can be purposefully designed in classroom experiences by systematically incorporating a feedback moment in the classroom experience

set-up. Students are expected to actively engage in feedback moments by asking for feedback as well as by providing feedback in each classroom session that they have together. These feedback moments are *timely* and given immediately after practice and application has taken place. They are also *specific*, based on direct observation or received data, and *actionable*, that is practical and progress oriented. In addition, these feedback moments are *inclusive,* involving all members of the group as feedback giver and feedback receivers, so that all group members participate in and benefit from the feedback. Finally, these feedback moments are *mindful* in the sense that feedback delivered in a respectful and empowering way.

Contextual features of the micro learning environment

The extent to which classroom experiences result in leader identity development and the extent to which leader identity results in ongoing leadership development and future leadership effectiveness is likely to differ depending on the contextual features of the micro learning environment. From the existing literature, we distinguish three contextual features of learning environments that have been shown to positively impact leadership development. These are: (1) *psychological safety*, (2) *collaborate learning purpose*, and (3) *reciprocal respect.*

Psychological safety

Research demonstrates that environments that are psychologically safe promote learning and leadership development (Garvin, Edmondson, & Gino, 2008; Kolb & Kolb, 2005). Psychological safety refers to an environment in which people feel confident and safe to express their views and opinions, speak up with ideas and thoughts, experiment and make mistakes, and can do all this without having to fear negative consequences, such as punishment or humiliation, for doing so (Edmondson & Lei, 2014). This reduces potential disturbing emotions such as stress and anxiety that come with being challenged in current ways of meaning-making (Petriglieri & Petriglieri, 2010).

Collaborative learning purpose

Collaborative learning purpose refers to an environment that emphasizes the reasons for why learning is shared, that creates a sense of belonging, and recognized or validates attempts at learning (Kolb & Kolb, 2005; Petriglieri & Petriglieri, 2010). It highlights that leadership development requires joint intellectual effort and working together so that one can capitalize on each other's resources and skills in order to search for understanding and meanings, solve problems, or complete tasks (Kolb & Kolb, 2005). In addition, it emphasizes that developing leadership and a sense of being a leader is a social endeavor

that involves interaction between people (DeRue & Ashford, 2010). It includes acts that individuals use to assert leadership (claiming) as well as acts that others use in social interaction to recognize a person's leadership (granting). These claiming and granting acts strengthen leader identity in a spiral fashion (Clapp-Smith et al., 2019).

Reciprocal respect

The contextual feature of respect is about the learning environment reducing status differences and removing barriers between teachers and students. Educators are open and accessible, acknowledge and respect learning efforts, and demonstrate integrity (Eich, 2008). This empowers students and promotes the sharing of knowledge, feelings, and thoughts (Kolb & Kolb, 2005). This enables students to learn about leadership and being a leader through observation and role modeling and enhances holistic development as a leader (Eich, 2008).

CONCLUSION

This chapter draws attention to the deeper-level cognitive components of leadership development and provides an integrative framework that organizes and synthesizes the existing research on leadership development, leader identity, and learning from experiences. The framework demonstrates how business schools and leadership educators can incorporate a cognitive approach to leadership development to complement the existing knowledge-driven and skills-based approach to leadership development. More specifically, the framework shows how classroom experiences can be purposefully leveraged as holding environments for shaping and developing students' identity as a leader through a process of meaning-making, therewith creating a foundation for ongoing leadership development and future workplace leadership effectiveness.

We began this chapter with explaining the role of leader identity in the leadership development process. We offered a framework that places leader identity at the core of the leadership development process, as it serves as an organizing and motivating force for ongoing leadership development, leadership emergence, leadership behavior and effectiveness. Through the framework, we emphasized that leader identity is malleable and develops through a process of meaning-making that is prompted by experiences. Leader identity development occurs when students engage in experiences that challenge the adequacy of their skills, frameworks, and approaches, that elicit the need to learn and develop,

prompting them to reflect and review and to explore alternatives to extend and refine these. Given that not all experiences are equally developmental, and people do not automatically engage in meaning-making of experiences, developing leader identity requires a so-called holding environment. Holding environments for leader identity work provide experiences that both challenge existing ways of conceptualizing and practicing leadership and support meaning-making of new perspectives of leadership and being a leader. These experiences are embedded in a micro learning environment that offers safety and reassurance on the learning process.

The classroom can serve as a holding environment for students' leader identity work at business school. This requires purposefully designed classroom experiences with specific developmental features and a supportive learning environment. Developmental features of these experiences that challenge existing ways of conceptualizing and practicing leadership are novelty and unfamiliarity, difficulty and complexity, and responsibility. These features of challenge can be purposefully designed into classroom experiences by, for example, small group work and real-life projects. Developmental features of experiences that support meaning-making of new perspectives of leadership and being a leader are reflective inquiry, deliberate dialogue, practice and application, and feedback for learning. These features of support can be purposefully designed into classroom experiences by, for example, class discussions, peer teaching, and systematic and evaluative feedback moments. The impact of these developmental classroom experiences can be strengthened when embedded in a supportive learning environment that offers psychological safety, promotes a collaborate learning purpose, and demonstrates reciprocal respect. The developmental features of classroom experiences and their immediate context for learning are closely connected and mutually reinforce each other. Classroom experiences that embody and combine the developmental features and contextual features described above positively influence students' leader identity, in turn providing the foundation for ongoing leadership development and future workplace leadership effectiveness.

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Meaningful Experiences for Leadership Development in Higher Education: Moments that Matter for Shaping Knowledge, Skills, and Identity

From Imposter to Original: How Organizational Leaders Shape and Develop a Leader Identity through Meaning-Making of Experiences

CHAPTER 6

General Discussion and Conclusion

We started this dissertation with the observation that the field of leadership development has evolved substantially over the past few decades, moving from a predominantly skills based and behaviorally driven focus to also including deeper-level and less observable cognitive components of leadership development. In particular, the deeper-level, cognitive component of leader identity has gained considerable scholarly attention. This is because theory suggests and initial empirical work is starting to confirm the key role played by leader identity in leadership development processes (e.g., ongoing leader development, leadership emergence, leadership behavior and effectiveness). With this growing evidence of the important role of leader identity in leadership processes, so does the need to gain a better understanding of *what* leader identity entails and *how* leader identity can be shaped and developed. This was the focus of the studies presented in this dissertation. In other words, to reiterate, across this dissertation as a whole, our purpose was to gain a better understanding of the content of leader identity and the process of leader identity development. By doing so, we aim to contribute to theory-building and provide insights for practice. In the following sections, we highlight the most novel findings of the studies presented in this dissertation and discuss these in light of theoretical and practical implications.

Leader Identity Intrapersonal Process: The "What" of Leader Identity

To gain a better understanding of what the concept of leader identity entails, we started with a study that explored how leader identity manifests in students. The findings of this study are presented in chapter 2 of this dissertation. Here, we highlight two prominent findings. First, we learned that leader identities varied across students in strength, integration, and meaning. Findings show that students' leader identities ranged from weak to moderate to strong leader identities and from not integrated to partially to fully integrated leader identities and that students' leader identities carried different meanings. For example, students with a weak leader identity mentioned that they are not a leader and refer to themselves as follower or team member. The integration of a leader identity in their global self-concept is absent.

Second, findings provide empirical support that the meaning of students' leader identity is related to their leadership-structure schema *and* their person schema of others as leaders. In other words, how students think about leadership and view others as leaders is related to whether or not they view themselves as a leader. More specifically, it shows that leader identity is the consequence of a two-fold cognitive mechanism of (1) degree of alignment and (2) broadness

of perspective. The first mechanism consists of an alignment process between the self-schema as a leader and the leadership-structure schema and the self-schema of a leader and the person schema of others as a leader. In other words, the extent to which students' leadership-structure schema and person schemas of others as leaders align with their self-schema as a leader relates positively to their leader identity strength.

For example, students who believe that leadership is a hierarchical position in an organization and a personal characteristic of a born leader that cannot be learned and developed, and who believe that they do not occupy such a position and do not possess the abilities that they attribute to a prototypical leader, do not consider themselves a leader. This mechanism was found in similar ways for other leader identities. In the case of strong leader identity for example, we found that students who believe that leadership is a hierarchical position in an organization and a synonym for experience that is gained over time and through learning and development, and believe that they occupy such a position and possess the abilities that they attribute to a prototypical leader, do consider themselves a leader. This suggests that the degree of alignment between cognitive schemas of leadership creates a favorable or unfavorable condition to make the next step: developing as a leader.

The second mechanism is related to the content or 'broadness' of the leadership-structure schema and determines whether the potential outcome of the first mechanism is achieved: being a leader. That is, the content or 'broadness' of students' leadership-structure schema serves as an enabler or disabler for possible future alignment between the cognitive schemas of leadership. We found that in the case of a weak leader identity, students did not consider being a leader as a possible future identity, even though they mentioned having some leadership experience and possessing certain leadership abilities. This while in the case of a provisional leader identity, where students also mentioned having some leadership experience and possessing certain leadership abilities, students did consider being a leader as a possible future identity. This means that in addition to alignment, something else was needed to achieve the potential of the first mechanism: a broader, developmental perspective on leadership, i.e., the belief that leadership can be learned and developed.

The results from this study in chapter 2 show that students who believe that leadership can be learned and developed, do consider being a leader as a possible future identity. Students who do not believe that leadership can be

learned and developed, do not consider being a leader as a possible future identity. In this way, a broader developmental leadership-structure schema, i.e., leadership is made, facilitates envisaged future alignment between the cognitive schemas of leadership. A narrower, non-developmental leadership-structure schema, i.e., leadership is born, inhibits envisaged future alignment between the cognitive schemas of leadership. Combined, this indicates that leader identity is the consequence of a two-fold cognitive mechanism of degree of alignment and broadness of perspective. Phrased differently, people claim a leader identity based on their understanding of leadership and compared to who they view as leaders. The more alignment there is between these various views and the broader and more complex an individual's view on leadership and being a leader, the stronger the leader identity.

These findings confirm and provide critical support for theoretical claims previously made which emphasize that leader identity is grounded in meaning-making and that leader identity is influenced by an individuals' understanding of leadership and who they consider a leader (Day, Harrison, & Halpin, 2009; DeRue & Ashford, 2010; DeRue & Myers, 2014; Epitropaki, Kark, Mainemelis, & Lord, 2017; Ibarra, 1999; Komives, Owen, Longerbeam, Mainella, & Osteen, 2005; Lord & Hall, 2005). They also contribute to and reinforce the nascent empirical evidence on the relationship between leader identity and leadership-structure schema (Komives et al., 2005; Sessa et al., 2016; Zheng & Muir, 2015) and the relationship between leader identity and person schemas of others as a leader (Guillén, Mayo, & Korotov, 2015). In addition, these findings indicate that shaping and developing leader identity involves aligning views on leadership and being a leader as well as broadening and increasing complexity in understandings of leadership.

In chapter 5 of this dissertation, the research shows that this is indeed the case. Findings of the study as presented in this chapter show that development in leader identity strength occurs as the meaning of the individuals' identity moves through three cognitive shifts. These are: (1) a development in cognitive complexity, (2) a development in schema alignment, and (3) a development in self-concept clarity (findings chapter 5). It was found that individuals that came to see and consider themselves as a leader to a high degree, (1) transitioned from a rather narrow and rigid to a more broader and complex view on leaders and leadership, (2) moved from schema misalignment and artificial alignment in schemas to authentic alignment and schema integration, and (3) transitioned from feeling like an imposter in the leader role and doubting their own capabilities as a leader to fully embracing the leader role and feeling like an original.

These three cognitive shifts underlying leader identity development co-evolved and reinforced each other and together helped the organizational leaders transition to a changed sense of self as a leader. These findings point to the importance of schema growth, alignment, and integration in the development and maintenance of leader identity. These findings elaborate scholarly understanding of leader identity development by offering empirical evidence for the theoretical notion that leader identity development involves a process of schema growth and alignment (Ashford & DeRue, 2012; Zaar, Van den Bossche, & Gijselaers, 2020). We further deepen the understanding of the intrapersonal developmental process by providing novel evidence of leader identity development as a gradual process of schema growth, alignment, and integration, and by unraveling the details of this process.

Leader Identity Developmental Process: The "How" of Leader Identity

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In the studies as presented in chapter 3, 4, and 5 of this dissertation, we explored how leader identity is shaped and developed via experiences and meaning-making of experiences. The results of this exploration indicate a conceptual framework for leader identity development via meaning-making of experiences. This conceptual model is depicted in Figure 6.1. The dark grey boxes of this conceptual model represent what we already knew from existing empirical research. The light grey boxes correspond to findings of the empirical studies reported in this dissertation and that fill current research gaps.

In broad strokes, the model suggests that leader identity development involves a gradual process of schema growth, alignment, and integration through the development of cognitive complexity, schema alignment, and self-concept clarity. This gradual process unfolds as people engage in varied developmental experiences over time and in meaning-making of these experiences. Developmental experiences are experiences that trigger and stimulate a meaning-making system through which individuals determine the value, relevance, and usefulness of the experience and draw lessons learned that inform future thinking, acting, and being. These experiences become meaningful for leader identity development when they function as social settings that both activate and stimulate meaning-making processes and meaning-making activities (i.e., identity work). Individuals who actively engage in particular ways of meaning-making to form, repair, maintain, strengthen, or revise a sense of self as a leader, are able to shape and develop an original sense of self as a leader. These findings reflect theory suggesting that developmental experiences

prompt and facilitate meaning-making from experiences (Hammond, Clapp-Smith, & Palanski, 2017; Liu, Venkatesh, Murphy, & Riggio, 2021; Lord & Hall, 2005) and that meaning-making augments the impact of developmental experiences on learning outcomes (DeRue, Nahrgang, Hollenbeck, & Workman, 2012; Dragoni, Tesluk, Russell, & Oh, 2009). We discuss these findings in more detail in the following sections.
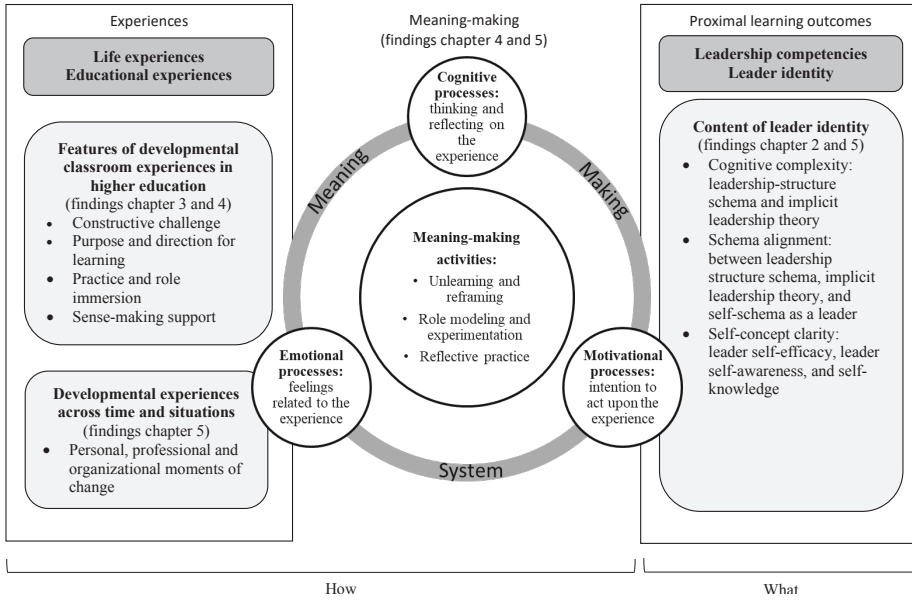
Figure 6.1 Conceptual Model for Leader Identity Development via Meaning-Making of Experiences

Proximal learning outcomes

Starting at the right side of the model (Figure 6.1), the box shows the proximal outcomes of the leadership development process. Our findings show that developmental experiences impact knowledge-based, skills-based, and identity-related learning outcomes, or a combination of these. Specifically, we found that formal experiences in higher education matter for enhancing cognitive schemas of leaders and leadership, increasing leadership skills, and strengthening self-views and identity as a leader (findings chapter 4). These results extend a burgeoning stream of academic work that positions formal experiences in higher education as critical platforms in the lifespan journey of leadership development for shaping leadership capacity *and* leader identity (Komives & Dugan, 2014; Liu et al., 2021).

Furthermore, findings in relation to learning outcomes suggest a relationship between changes in cognitive schemas and skills, and between changes in cognitive schemas and identity (findings chapter 4). These findings support theory indicating that leader identity interacts with other proximal learning outcomes (Murphy & Johnson, 2011; Zaar, Van den Bossche, & Gijselaers, 2021). These findings also supports initial evidence indicating that changes in cognitive schemas of leaders and leadership and leader identity are related (Zaar et al., 2020). These findings emphasize the multidimensional nature of learning and interrelatedness of learning outcomes (Day, 2010; Wallace, Torres, & Zaccaro, 2021).

Meaning-making

Moving to the center of the model (Figure 6.1), we see a visualization of the meaning-making system. The present research shows that meaning-making plays a prominent role in the process of leader identity development (findings chapter 4 and 5). Findings indicate that meaning-making consists of a dynamic interplay of cognitive, emotional, and motivational processes (findings chapter 4). It induces a heightened sense of arousal (emotional processes), prompts thinking and reflection (cognitive processes), and provides the incentive to change course or take action (motivational processes). Taken together, these three processes of meaning-making provide the conscious cognitive state, the psychological state, and the incentive for learning and development. These findings advance current leadership development literature by providing valuable novel insight into the intra-individual learning and development process involved with leadership development (DeRue & Myers, 2014). We show that in addition to cognitive and emotional processes, motivational processes are also involved with meaning-making. These results provide an opportunity in offering a stronger empirical basis that paves the way for further consideration of the elements of meaning-making in relation to developmental experiences and learning outcomes of these experiences.

The visualization of the meaning-making system also depicts the meaning-making activities (i.e., identity work) that people engage in to form, repair, maintain, strengthen, or revise a sense of self as a leader. Findings of the study as presented in chapter 5 show that these meaning-making activities revolved around unlearning and reframing, role modeling and experimentation, and reflective practice. It was found that the unlearning, reframing, and reflective practice enabled organizational leaders to mindfully engage with experiences encountered and yield cognitive control of emotion. The role modeling

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and experimentation enabled organizational leaders to explore adopting provisional identities with greater openness and flexibility and learn from these explorations. These findings point to the value of deep thinking and purposeful acting as complementary modes of identity work and indicate that deliberate and conscious engagement in these ways of meaning-making pave the way for development in leader identity. These findings support the proposition that the development of leader identity involves a process of meaning-making that requires agency (Epitropaki et al., 2017). These findings expand and enrich existing literature on leader identity development by specifying the ways of meaning-making that are involved with shaping a sense of self as a leader (Ibarra, 1999, 2015; Lord & Hall, 2005).

Experiences

Continuing to the left-hand side of the model (Figure 6.1), the box portrays the variety of experiences that can offer a platform for leadership development. These experiences range across time and contexts and include a large diversity of personal, professional, and organizational moments of change as well as formal education (findings chapter 4 and 5). The extent to which these experiences results in outcomes of leadership development is dependent on specific developmental features embedded in the experience (findings chapter 3 and 4). These so-called developmental experiences create a learning environment that fits the developmental needs and requirements of the learner by appropriately balancing aspects of challenge and support in ways of meaning-making. In this way, developmental experiences set the learning process in motion.

Zooming in on experiences in formal education, this research provides empirical evidence of the features that make formal classroom experiences in higher education settings developmental for leadership. (findings chapter 4). These developmental classroom experiences are characterized by presenting a constructive challenge, demonstrating purpose and direction for learning, providing room for practice and role immersion, and offering sense-making support. These findings extend current leadership development research by advancing an understanding of the features that make formal experiences in higher education developmental. The current research demonstrates that developmental classroom experiences contain specific features and shows the fine-grained details of these features. It offers much-needed insights to the field for building contextually valid approaches to leadership development in higher education (Day, Riggio, Tan, & Conger, 2021; Klimoski & Amos, 2012).

Main Theoretical Contributions

Taken together, the studies presented in this dissertation contribute several new insights to the field of leadership development and education and the field of learning and cognition. Table 6.1 presents an overview of these main contributions. First, the findings advance existing identity-based leader development literature by providing novel insights into the content of leader identity. We provide new empirical evidence that an individual's self-schema as a leader is related to their leadership-structure schema *and* their person schema of others as leaders, and that leader identity is related to a two-fold cognitive mechanism of degree of alignment and broadness of perspective. These findings suggest the importance of getting better insights into the cognitive basis for individual differences in leadership skills, emergence, behavior, and effectiveness (Epitropaki et al., 2017). These findings highlight the relevance of cognitive approaches to leadership development.

Second, our findings contribute to the experiences-grounded leadership development literature by providing insights on the features that make formal classroom experiences in higher education developmental for leadership. We offer details on these features and show how formal classroom experiences that contain these features prompt and facilitate a meaning-making system and impact learning outcomes of knowledge, skills, and identity. These findings provide a key contribution for scholars who have called for a greater understanding of and evidence on how experiences translate into leadership development, and particularly into leader identity development (Day et al., 2021; Liu et al., 2021). These findings emphasize the important role of experiential learning in the process of leadership development.

Third, the findings enrich the literatures on identity-based leader development and experiences-grounded leadership development by providing new insights into the intra-individual learning and development process involved with leadership development in general and leader identity development in specific. The present dissertation offers new empirical evidence that leadership development through learning from experiences involves a meaning-making system that consists of a dynamic interplay of cognitive, emotional, and motivational processes. Taken together, these three processes of meaning-making provide the conscious cognitive state, psychological state, and incentive for learning and development. This translates into learning outcomes of enhanced leadership knowledge, increased leadership skills, and stronger self-views and identity as a leader.

Table 6.1 Overview of Main Theoretical Contributions

Title	Field/theory/literature	Main contributions
How Business Students Think About Leadership: A Qualitative Study on Leader Identity and Meaning-Making (Chapter 2)	Leadership development and education Learning and cognition • Identity-based leader development	• Leader identity is grounded in meaning-making • Variety in leader identity strength and meaning is influenced by an individual's leadership-structure schema and an individual's implicit leadership theory • Leader identity is related to a two-fold cognitive mechanism of (1) degree of schema alignment, and (2) broadness of perspectives
New Avenues for Leadership Education and Development: Shaping Leader Identity Through Meaning-Making from Experiences (Chapter 3)	Leadership development and education Learning and cognition » Experiences-grounded leadership development » Identity-based leader development	• Formal classroom experiences can serve as a holding environment for leader identity development when they (1) contain developmental features that challenge existing ways of meaning-making of leadership and being a leader, (2) contain developmental features that support new ways of meaning-making of leadership and being a leader, and (3) are embedded in a psychological safe, collaborative, and respectful micro learning environment
Meaningful Experiences for Leadership Development: Moments that Matter for Shaping Knowledge, Skills, and Identity (Chapter 4)	Leadership development and education Learning and cognition » Experiences-grounded leadership development » Identity-based leader development	• Developmental classroom experiences in higher education present a constructive challenge, demonstrate purpose and direction for learning, provide room for practice and role immersion, and offer sense-making support • Developmental classroom experiences prompt and facilitate meaning-making • Meaning-making consists of a dynamic interplay of cognitive, emotional, and motivational processes • Meaning-making augments the impact of developmental experiences on learning outcomes, making the experiences meaningful for leadership development • Meaningful experiences relate to learning outcomes of knowledge, skills, and identity

Table 6.1 Continued

Title	Field/theory/literature	Main contributions
From Imposter to Original: How Organizational Leaders Shape and Develop a Leader Identity Through Meaning-Making of Experiences (Chapter 5)	Leadership development Learning and cognition » Experiences-grounded leadership development » Identity-based leader development	• Leader identity develops over time and across situations when individuals transition through personal, professional, and organizational moments of change • Development in leader identity strength occurs as the meaning of leader identity moves through three cognitive shifts: a development in (1) cognitive complexity, (2) schema alignment, and (3) self-concept clarity • Leader identity development in strength and meaning occurs through active engagement in constructive meaning-making of experiences to form, repair, maintain, strengthen, or revise a sense of self as a leader • Identity work revolves around unlearning and reframing, role modeling and experimentation, and reflective practice

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In addition, we offer first empirical evidence that leader identity develops as a process of schema growth, alignment, and integration, and augment the existing literature by unpacking the activities involved in this meaning-making process. Findings show that identity work revolves around unlearning and reframing, role modeling and experimentation, and reflective practice. These findings offer novel contributions to the field and address calls for research that shows how schemas develop over time (DeRue & Myers, 2014) and for more research on the ways through which individuals craft a sense of self as a leader (Epitropaki et al., 2017; Petriglieri & Stein, 2012).

Implications for Leadership Development Practice
Recommendations for higher education
In the introduction of this dissertation, we described how leadership development is increasingly an integral part of higher education. We highlighted how, at the same time, business schools face increasing criticism for their approach to leadership development. Critics argue that business schools are not adequately preparing their students for the ambiguity and complexity of leadership challenges in the workplace and are producing graduates that are ill-prepared to lead (Benjamin & O'Reilly, 2011; Bennis & O'Toole, 2005).

Our findings may help business schools and leadership educators to address these concerns and customize their leadership development to better fit the developmental needs of their students in undergraduate leadership education. Findings indicate that leadership development initiatives that provide students with tailored developmental experiences and a framework for understanding the cognitive basis of leadership development could help students (and in particular female students) to be better prepared to take a lead in the challenges ahead in the workplace. Based on our findings, we offer three concrete recommendations for incorporating a customized and cognitive approach in the design and delivery of leadership development programs in higher education. These are: (1) teach leadership development, not leadership (2) develop leaders by asking open questions instead of providing fixed answers, and (3) support students' leadership development through meaningful experiences.

First, we recommend to teach leadership development, not leadership. Our findings as presented in chapter 2 show, that across the levels of leader identity, students mostly share a similar leadership-structure schema in viewing leadership as a hierarchical position in an organization. There is no group with a dominant leadership-structure schema as shared, i.e., who view leadership as

a relationship between people or as an emergent and collective process. While organizations are embracing collective and shared forms of leadership (DeRue & Myers, 2014) and leadership scholars are conceptualizing leadership as a broader, mutual influence process independent of any formal role or hierarchical structure (Day et al., 2009; DeRue & Ashford, 2010), our students still seem to hold a relatively narrow and traditional view on leadership. Furthermore, our results show that students with a weak leader identity do not only hold this relatively narrow and traditional view on leadership, they also understand leadership as something that cannot be learned and developed.

The dominant approach for teaching leadership is based on theories of leadership that associate leadership with formal positions in organizations and on long lists of traits, skills, and behaviors of extraordinary individuals (Petriglieri & Petriglieri, 2015). Our findings indicate that this is not helpful for broadening students' view on leadership and in promoting students' ability to see themselves as leaders. We posit that leadership can mean different things in different contexts, is exhibited by and among people at all stages of the lifespan, and can be learned and developed. By shifting the focus in our leadership education from teaching leadership as a static superior-subordinate exchange in organizations to teaching leadership development, thereby emphasizing that leadership is malleable and a context-sensitive and emergent process, we conceptualize leadership in a way that is broader and more helpful to shaping students' leader identity. This could create a better fit between students' cognitive schemas of leadership and thereby engender a greater propensity for students to step up and take on leadership. As research shows that broadening an individual's understanding of leadership can lead to a stronger leader identity (Zheng & Muir, 2015), and that individuals with a stronger leader identity are more likely to emerge as leaders (Kwok, Hanig, Brown, & Shen, 2018), this could be a fruitful avenue to pursue. We then support our students in being able to see themselves as leaders and prepare them for the complexity and ambiguity of leadership as found in organizational settings.

Second, develop leaders by asking open questions instead of providing fixed answers. Our findings show a wide range of cognitive schemas that students hold regarding leadership and leaders. It ranges from students with a weak leader identity who believe that leadership cannot be learned and that being a leader is about carrying the weight of sole responsibility on your shoulders to students with a strong leader identity who believe that leadership a continuous journey of learning and development and that being a leader is a positive

challenge. In our experience, leadership courses generally do not take this variety of cognitive schemas of leadership into account and do not ask their students questions on how they think about leadership and leaders. Instead, they mostly focus on providing fixed answers about which leadership skills and behaviors characterize effective leaders and are needed to be able to acquire a positional leadership role in an organization. By starting leadership development initiatives with asking open questions about the meaning of leadership and leaders, we can assess students' current cognitive schemas of leadership, show the variety existing in perspectives on leadership, and set the scene for revisiting the meaning of leadership.

As an illustration, we build our leadership development activities around the three fundamental questions we used for this research study: *"What is leadership?"*, *"Who is a leader?"*, and *"Are you a leader?"*. We use these questions at the start of our leadership development initiatives as instruments for eliciting and assessing the variety of cognitive schemas of leadership that our students hold. These questions can serve as tools for an open discussion and dialogue in the classroom about - often taken-for-granted and deep-rooted - assumptions and beliefs about leadership. Subsequently, using research on leader identity, leadership-structure schema, and implicit leadership theory, we offer students a research grounded and empirically based framework to create awareness of how cognitive schemas of leadership influence leadership development, leadership emergence, leadership behavior and effectiveness. This encourages students to engage in reflection about their own assumptions and beliefs regarding leadership and leaders, to realize that purposeful leadership development encompasses more than knowledge and skill building, and to identify personal areas for learning and development. In this way, we aim to teach leadership more critically (Collinson & Tourish, 2015) and humanize the field of leadership (Petriglieri & Petriglieri, 2015).

Third, support students' leadership development through meaningful experiences. Our data shows that not experiences per se, but being able to make meaning of the experiences that one encounters (McCall, 2004), receiving support in the meaning-making of experiences (McCauley, Van Velsor, & Ruderman, 2010), and receiving relational recognition for enacting leadership (DeRue & Ashford, 2010), is related to establishing a leader identity. We observed that students with a weak leader identity believed that they had little experience with leadership and felt that they did not receive validation or acknowledgment for their attempts at enacting leadership. Students with a

strong leader identity believed that they had a lot of experience with leadership and indicated that they had received recognition for and feedback on their attempts at enacting leadership. These findings indicate that being offered experiences is not the same as being able to learn from experiences.

Our findings as reported in chapter 4 indicate that meaningful experiences for leadership development are experiences that contain specific developmental features through which they activate and stimulate meaning-making of the experience. Results show that formal classroom experiences impact students' leadership development when they present a constructive challenge, demonstrate purpose and direction for learning, provide room for practice and role immersion, and offer sense-making support. Together, these features of developmental classroom experiences trigger a meaning-making system through which students interpret and distill lessons from experiences. This results in multiple learning outcomes as lessons learned from developmental classroom experiences. Students indicate knowledge-based, skills-based, and identity-related learning outcomes, or a combination of these. Specifically, we show that meaningful experiences matter for enhancing cognitive schemas of leaders and leadership, increasing leadership skills, and strengthening self-views and identity as a leader.

The insights of this study suggest that leadership educators can be the architects of moments that matter for leadership development. The results on what we call meaningful experiences for leadership development demonstrate the value of formal experiences that present constructive challenge, demonstrate purpose and direction for learning, provide room for practice and role immersion, and offer sense-making support. It shows that formal classroom experiences that incorporate this collaborative, learner-centered, and experiential approach stimulate and facilitate a dynamic system of meaning-making. These experiences then go beyond building a particular knowledge and skills base and also shape cognitive schemas, self-views and leader identity. Designing and delivering formal classroom experiences based on the findings of this study might then indeed just be the key to unlocking the developmental potential of formal classroom experiences in higher education and for enabling leadership education to serve as a critical platform in the lifespan process of leadership development.

Recommendations for organizations

In the introduction of this dissertation, we mentioned how leadership development is often a strategic priority for many organizations. We highlighted that, while organizations invest heavily in leadership development, they still struggle to adequately enhance leadership capacity and fill the leadership pipeline. There seems to be a lack of leaders that are able to effectively navigate complex leadership challenges in the dynamic workplace and a need of more people taking on leadership responsibility throughout all levels of the organization (Wellman, Ashford, Sanchez-Burks, & DeRue, 2022). Our findings may help organizations to tackle these issues and design and deliver leadership development trajectories that stimulate continuous and ongoing leader development, leadership emergence, leadership behavior and effectiveness by facilitating leader identity development via meaning-making across time and situations. The findings indicate that leadership development trajectories that do so can help organizational leaders to find their leadership voice and develop an original sense of self as a leader.

Four concrete suggestions follow from the present dissertation to facilitate leader identity development via meaning-making: (1) create schema awareness (2) stimulate schema openness, (3) integrate opportunities for deliberate practice, and (4) foster and guide reflection. The mechanisms underlying these recommendations are the same as the recommendations offered for incorporating a cognitive approach in the design and delivery of leadership development programs in higher education.

A first crucial factor for leader identity development via meaning-making is creating schema awareness. As schemas reside in people's minds and are largely unobservable, it is important to start by making these schemas explicit. Often these beliefs are so embedded in the self that one is not even aware of holding such a belief (Day et al., 2009). Voicing beliefs, understandings, and long-held assumptions triggers awareness of those views. This is important as individuals can only move to a more complex way of understanding, once they realize that they hold certain beliefs, assumptions, and views (Kegan, 1982). The present findings suggest that eliciting current schemas occurs when people go personal, professional, and organizational moments of change that challenge their current ways of meaning-making and that trigger them to create new meaning.

A second essential factor for leader identity development via meaning-making, is to stimulate schema openness. This can be achieved by making alternative

schemas available and creating awareness of the value of unlearning and reframing for schema change and growth (Lord & Maher, 1993). Research shows that people generally need support in creating or identifying alternate schemas (Ibarra, Wittman, Petriglieri, & Day, 2014). As people can only learn what their current schema, that is their current way of constructing meaning, enables them to learn, people are usually not able to do this on their own. In other words, identity work, while being a deeply personal activity, requires a social activity as well. It demands an environment in which people co-create or socially construct meaning (Weick, 1995) and that assists people in letting go of prevailing perspectives and to open up to new perspectives via unlearning and reframing. This also emphasizes the importance of starting with eliciting current schemas. By eliciting current schemas, and making alternative schemas available, prompts and resources for unlearning and reframing are provided.

Based on our findings, one way in which alternative schemas can be made available, is to offer sources for finding new ways of understanding leadership and being a leader. This could be done, for example, by offering people leadership development programs and training that explicitly incorporate a cognitive approach to leadership development and that take a learner-centered, collaborative approach to learning and development. These types of programs or training would include examples of alternative schemas, such as shared leadership (e.g., Chiu, Owens, & Tesluk, 2016), context and leadership (e.g., Osborn, Uhl-Bien, & Milosevic, 2014), contextual leadership development (e.g., Eva, De Cieri, Murphy, & Lowe, 2020), and leaders of different genders (e.g., Ely & Rhode, 2010), races and ethnic backgrounds (e.g., Sims, 2022), and age groups (e.g., Recchia, 2011). They would also include aspects of discussion and dialogue to exchange interpretations, have an open discussion about these interpretations, and use disagreement and constructive criticism on held views as talking points for generating learning.

A third crucial element for leader identity development via meaning-making is to integrate opportunities for deliberate practice. Deliberate practice refers to dedicated, highly effortful practice on a particular task with appropriate feedback in order to improve performance in a particular domain or skill (Ericsson, Krampe, & Tesch-Romer, 1993). Research on deliberate practice shows that this improvement is built on the development of schemas. It is proposed that deliberate practice can effectively enhance learning from experiences by enabling individuals to perform tasks with a clear intention and through constructive feedback. This very much resembles the meaning-

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making activities of role modeling and experimentation as described by the organizational leaders in our sample.

The observation, interaction, and experimentation within and across experiences offers a structural opportunity to transfer knowledge to know-how and apply understandings learned to real-life settings (Zaar et al., 2021). This, in combination with constructive feedback, can assist in giving meaning to and consolidating meanings associated to the self as a leader (Ibarra, 1999; Ibarra, Snook, & Guillén Ramo, 2010). Cognitive theories of learning (Kraiger, Ford, & Salas, 1993) posits that feedback availability helps with reducing evaluation uncertainties that arise when presented with challenging situations. It reduces the likelihood that cognitive resources are diverted away from the task and the learning process. Theories and models of learning and leadership development (Avolio, 2004; Ericsson et al., 1993; Kolb, 1984) in particular emphasize the importance of availability of systematic and evaluative feedback as it provides the learner with essential input on the appropriateness and usefulness of thoughts, emotions, and behavior for attaining learning goals and objectives. It gives them an evaluative assessment of where they are now: their current strengths as a leader, the level of their current performance or leader effectiveness, and their primary leadership development needs (McCauley et al., 2010).

A fourth and last important element for leader identity development via meaning-making is to foster and guide reflection. This can be done by stimulating individuals to engage in activities to take a time-out from doing, stepping back from the task or assignment, and reviewing what has been done and experienced (Kolb, 1984). Particularly in combination with eliciting current schemas and making alternative schemas available, this allows individuals to move away from instant assessment of situations by pattern recognition, and become more susceptible for and open to incorporating new understandings from the situation. Based on our findings, reflection can be fostered and guided by providing room for regular individual reflection moments and offering guidance in reflection. For the latter, coaching was explicitly mentioned by the organizational leaders as being very helpful. Time scheduled with a coach can offer the space needed for reflection as well as offer guidance in thinking back on what happened and what was done. Furthermore, a coach can help gain awareness of one's beliefs, understandings, and assumptions regarding leadership and being a leader, and can help with identifying as well as dealing with potential restrictive thinking, biases, prejudices, and stereotyping, that are related to schemas (Lord & Foti, 1986).

Methodological Reflections and Future Research Directions

The studies presented in this dissertation have several limitations, yet at the same time offer fertile grounds for future research. First, the qualitative nature of our research and its cross-sectional research design precludes us from drawing any causal inferences on the leader identity developmental process. We could not provide time-dependent differences in students' cognitive schemas. Given that our work demonstrates how cognitive schemas can be analyzed and used for understanding different cognitive views about leadership, future research should collect data on how students develop cognitive schemas of leadership over time. Longitudinal research could provide such important insights. We also cannot provide insight in the temporal relationship between formal classroom experiences, meaning-making, and learning outcomes. Future studies could explore this relationship over time by means of a longitudinal study. In addition, future studies might build on our qualitative study by designing a quantitative examination on the process of learning leadership from formal experiences. This type of study could then test temporal relationships, as well as allow for examination of individual differences (e.g., learning orientation, self-regulation). In line with this, future research could also operationalize quantitative verifications of the findings of the current study and conduct a quantitative, longitudinal investigation on how organizational leaders develop a leader identity over time.

Second, our studies were conducted within a single setting and focused at a particular developmental stage. We looked at first-year bachelor students at one university and at Dutch organizational leaders working in the Netherlands. The findings may thus not be generalizable. Future research should therefore include different target groups in different educational and career stages, such as for example graduate students or graduates early in their career. We also encourage future research that replicates these studies in different settings. In particular, considering the general doubt in research and practice expressed about the value of formal experiences for the development of executive talent (Day et al., 2021; McCall, 2004), we feel that investigating when and how formal experiences matter for leadership development of working professionals would be an intriguing area for future research. Other studies could also for example explore when and how informal and nonformal experiences matter for leadership development of individuals.

Third, our research could be subject to biases. In our study as reported in chapter 4, we used retrospective data that was self-reported to capture

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factual information. As our study asked participants to describe experiences that occurred in the past, response or recall bias that distorts the accuracy or completeness of recollections retrieved, could be prevalent (Podsakoff, Mackenzie, & Podsakoff, 2012). To minimize this risk, from the onset, we used standardized and structured questions, blinded the study subjects to the study research questions, limited the timeframe of the retrieved recollections to a maximum of six months, and collected a sufficiently large sample (Huber & Power, 1985; Pratt, 2009). Future research could further minimize this risk by incorporating multi-rater data. For example, by asking educators to elaborate on the features of formal experiences that they designed and that students categorized as important for their leadership development or by asking instructors and peers to rate students on learning outcomes acquired after engaging in a formal classroom experience together.

We also note the use of purposeful sampling and the sample of Dutch organizational leaders in our study as reported in chapter 5. We selected the participants for our study from our network of executive development relations. As such, the present sample may have inadvertently consisted of people prone to an open approach to leader identity development. In addition, we selected Dutch people with a formal leader role and thus our findings may not generalize to individuals in non-formal leadership positions or organizational leaders of other nationalities. To enhance the rigor of findings, future research could use non-purposeful sampling to rule out potential sample bias and aim for a sample of organizational leaders with other nationalities. It would also be of great interest to investigate how people in non-formal leadership positions shape and develop a leader identity through meaning-making from experiences across time and experiences.

The findings from our studies also generate interesting future research paths. In particular, the individual differences related to gender that we observed in our studies could offer an interesting research avenue. Results from our study as presented in chapter 2 show that variation between students' leader identities are also related to gender; weak leader identities were predominantly held by female students. In addition, in our study of organizational leaders in chapter 5, we found that the female organizational leaders in our study benefited from having a gender congruent feedback partner and that leader identity development did not occur for two of the female leaders in our sample. Given that previous studies have highlighted the difficulties for women to claim and maintain a leader identity (Ely, Ibarra, & Kolb, 2011), this would make a fruitful

line of research to follow up on. Apart from these variables, we did not examine systematic differences for different types of students or other individual differences in organizational leaders. Future research could aim to collect data showing which individual differences can further explain differences in cognitive schemas of leadership and in meaning-making of experiences.

We also note that the findings of our study as presented in chapter 2, triggered us to consider a new perspective on a potential fourth schema being at play and interacting with leader identity, namely a schema on leadership development. A schema on leadership development relates to understandings, beliefs, and assumptions that people hold about how leadership develops or can be developed. It can include views on the malleability of leadership, that is, beliefs about whether leadership is born or made. It can also include views on the context within one can (best) develop as a leader (e.g., family, education, work) and the platforms for developing leadership (e.g., work experiences, formal education, sports activities). Last, it could also include views on what actually is or should be developed (e.g., knowledge, skills, identity). We propose that schemas on leadership development that people hold, could be related to leader identity in a similar fashion as the leadership-structure schema and the person schema of others that people hold. Schemas on leadership development could therewith also contribute to forming the foundation of leader identity meaning, and influence whether people claim a leader identity. For example, a person who views leadership development as something that can be learned and developed, yet who believes that leadership development can only be learned through work experiences in the context of an organization, might not consider oneself a leader if this person is still a student at university.

Furthermore, we suggest that schemas on leadership development that people hold, could be related to leader identity, by in particular influencing self-regulatory processes interacting with leader identity development. Self-regulation refers to the active and intentional engagement in processes to change, alter, or modify oneself (Murphy & Johnson, 2011). For example, if a person believes not to be a leader, because she is still a student, and considers leadership as something that can only be developed in the context of work experiences in an organization, then this person will most likely direct little attention and effort to regulate the self as a leader while being a student. This could indicate that leader identity through the inclusion of schemas on leadership development, drives self-regulatory processes needed for developing as a leader (Epitropaki et al., 2017; Gardner, Avolio, Luthans,

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May, & Walumbwa, 2005; Hannah, Avolio, Luthans, & Harms, 2008). A better understanding of schemas on leadership development could help us to grasp why people are (not) in the driver's seat of their own leadership development.

From a different perspective, this idea of a schema on leadership development was also recently introduced in the general leadership development literature and labeled by Vogel et al. (2020) as implicit leadership development theory. Taking an ecosystems level view, they propose that implicit leadership development theories can describe as the cognitive structures of leadership development processes that stakeholders of leadership development ecosystems hold (e.g., learners, leadership development experts, decision-makers, scholars, leadership development designers). They suggest that an improved understanding of similarities and differences in implicit leadership development theories of stakeholders in a leadership development ecosystem may help understanding potential disconnects between science and practice better, which in turn can help or hinder research-practice partnerships. Following this line of reasoning, we suggest that an understanding of schemas on leadership development that people hold, and in extension the leadership-structure schemas, implicit leadership theories, and leader identities that they hold, could also bring valuable insights into why stakeholders in organizations make certain decisions about leadership development interventions for their employees. We would be keen to see research following up on these proposed relationships and interactions.

Concluding Remarks

We started this dissertation with the observation that both organizations and business schools are struggling with leadership development. A growing need for effective leaders and enhanced leadership capacity in organizations combined with an increased focus and criticism on leadership development approaches are some of the big issues that organizations and higher education institutes are currently facing. We posited that the solutions to these issues may lie in taking a different approach to leadership development.

Based on our findings, we suggest incorporating a cognitive approach to leadership development, and particularly, a focus on shaping and developing leader identity. Such an approach would include moving leadership development initiatives from teaching leadership to teaching leadership development, from offering experiences to designing and delivering meaningful experiences, and from having experiences to thoughtful and active participation in experiences.

Ultimately, renewing leadership development might then be captured by observing three principles: mastery environments, meaningful experiences, and mindful engagement. These three principles convey a constant focus for leadership learning and development that is committed to passion and purpose, connected to brain, mind, and behavior, and informed by deep thinking and deliberate practice. With these three principles to frame the process, we can transform ourselves, our education and training, and our institutions and organizations to become catalysts for leadership development.
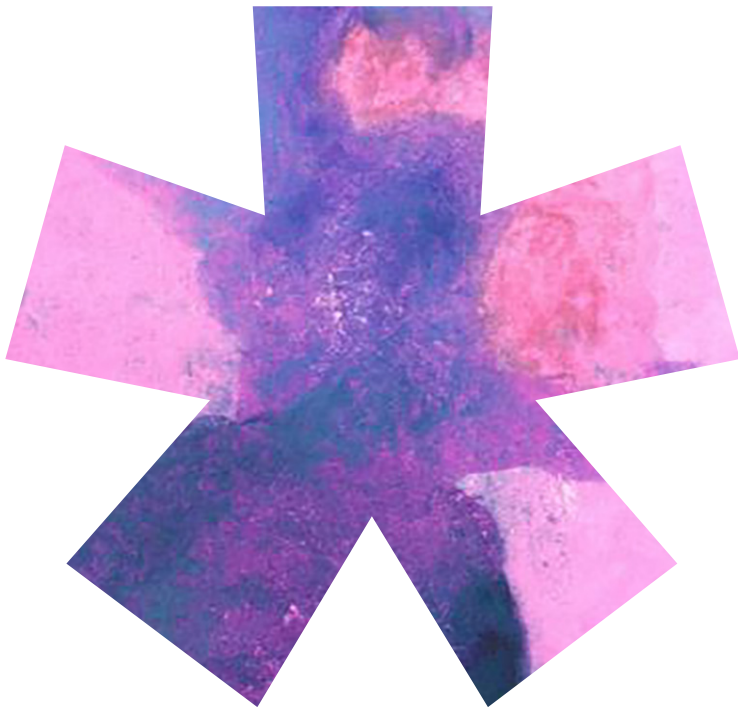
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APPENDICES

CHAPTER APPENDICES

Appendix A: Final Coding Scheme

Theoretical framework : **Leadership-structure schema**
Research question : What is leadership?

CODES:
Personal dominance
According to this knowledge principle, leaders are defined by their inner qualities, personal strength, or integrity. This is a relatively simple way of constructing leadership. The individual leader is expected to act as a sort of a hero, to solve all the group's problems or to rescue people in trouble.

Interpersonal influence
This a more sophisticated or complex way of constructing leadership (than personal dominance). This knowledge principle does not replace personal dominance, but transcends it through greater inclusion of other voices and viewpoints. There are still those situations in which a dominant construction of leadership is best (e.g., emergencies); however, adding interpersonal influence to a leader's world view allows for other kinds of possible responses to a given situation.

Relational dialogue
There are situations in which influencing others to embrace a shared vision is insufficient because the situation, problem, or environment is so novel or complex that there is a need for a collective crafting of possibilities. This principle of relational dialogue is the most sophisticated level and transcends but does not replace the others (e.g., personal dominance and interpersonal influence). Rather than looking to a strong individual leader or granting influence to the collective vision, relational dialogue constructs all persons as leaders and sees that influence emerges as people make commitments to one another and allow others to make claims on them. The fundamental question at this level of complexity is not so much "Who is the leader?" as it is "How can I participate in this leadership process effectively?"

Theoretical framework **: Implicit leadership theory**
Research question   : Who is a leader?

CODES LEADERSHIP TRAITS
Intellectual ability
Intelligence, intellectual ability or cognitive ability is positively related to leadership.

Self-confidence
Self-confidence is the ability to be certain about one's competencies and skills. It includes a sense of self-esteem, self-efficacy, and self-assurance and the belief that one can make a difference.

Determination
Determination is the desire to get the job done and include characteristics such as initiative, persistence, dominance and drive. People with determination are willing to assert themselves, they are proactive, and they have the capacity to persevere in the face of obstacles.

Integrity
Integrity is the quality of honesty and trustworthiness. People who adhere to a strong set of principles, show behavior that is consistent with espoused values, are honest, ethical and trustworthy, and take responsibility for their actions, are exhibiting integrity.

Sociability
Sociability is a leader's inclination to seek out pleasant social relationships. Leaders who show sociability are friendly, outgoing, extraversion, courteous, tactful, and diplomatic. They are sensitive to other's needs and show concern for their well-being.

Emotional intelligence
The ability to manage, perceive and express emotions, to use emotions to facilitate thinking, to understand and reason with emotions, and to effectively manage emotions within oneself and in relationships with others.

Empathy
Empathy is the ability to feel what the other person is feeling. It is to experience their emotions. It is the ability to put yourself in the other person's shoes in a big and meaningful way.

Conscientiousness
The tendency to be thorough, focused, organized, controller, reliable, dependable, and decisive.

Agreeableness
Agreeableness is described as an individual's concern for cooperation and social harmony, and behavior characteristics include being considerate, friendly, generous, helpful, and willing to compromise one's own interests for others.

Openness to experience
Being intellectually curious, open to new ideas, involves imaginative and creative cognition styles. With individualistic and non-conforming ways of thinking and behaving.

Power and dominance
Exercising power and influence to change a course of action or an opinion, to build up the team or the organization and make it successful. Assertive in their thinking style as well as their attitude in dealing with others. This also includes natural authority.

Authority
Authority is the power vested in a particular position.

Creativity and adaptability
Creative individuals make changes, invite disruptive innovation, and are comfortable with ambiguity. They easily adjust to different situation and are flexible. They persevere more in the face of problems and have strong beliefs in the correctness of their ideas. They are willing to take risk that have a strong risk of failing. They are open to experiences and willing to try new methods. They tolerate ambiguity.

Knowledge of task and business
Knowing what the tasks and business is about. Knowing the details of the organization. Making effective plans, strategies, and decisions. Being an expert in one's field.

Drive and passion
Passionate, motivated and with high energy. Active, expressive and energetic. Having a dream or vision and pursuing this fervently.

Vision
Individual has a strong idea of direction to take.

Responsibility
Being responsible and taking responsibility. Being accountable.

Self-awareness
Self-awareness is having a conscious knowledge on your own personality, including strength, weaknesses, thoughts, beliefs, motivation, and emotions.

CODES LEADERSHIP SKILLS
Cognitive skills
Cognitive skills are the foundation of the leadership skill requirements. Related to basic cognitive capacities, such as collecting, processing, and disseminating information and learning and are the fundamental skills required for a large portion of the activities in which leaders are engaged. These skills include such oral communication skills as speaking to effectively convey information such as what needs to be accomplished and why it needs to be done and active listening to appropriately comprehend and question in order to achieve a complete understanding. Written communication skills are also fundamental, and they include writing to effectively communicate audience-specific messages and reading comprehension skills to understand voluminous and complex written information. Another important cognitive skill requirement is the ability to learn and adapt. This is facilitated by the possession of active learning skills enabling leaders to work with new information and grasp its implications. These skills allow leaders to adapt behaviors and strategies to deal with emergent, non-routine, and dynamic components of their jobs. Finally, skills in the area of critical thinking are important in order to use logic to analyze the strengths and weaknesses of various approaches to the work.

Interpersonal skills

These involve the interpersonal and social skills relating to interacting with and influencing others. This category grows out of what previous research has referred to as social capacities, Social Judgment, Social Complexity and Differentiation and Human Relation skills. Interpersonal skills involve social perceptiveness to allow for an awareness of other's reactions and understanding of why they react the way they do. The interpersonal category of leadership skill requirements also includes the skills required for coordination of actions of oneself and others, and negotiation skills to reconcile differences among employee perspectives and establish mutually satisfying relationships, and persuasion skills to influence others to more effectively accomplish organizational objectives.

Business skills

Business skill requirements, involves skills related to specific functional areas that create the context in which most leaders work. Business skills involving the management of material resources and operations analysis are important as managers make decisions about procuring and allocating equipment, technology, and materials. In addition, business skills involve the specific skills for management of personnel resources to identify, motivate, develop, and promote individuals in their work as well as management of financial resources of the organizational unit.

Strategic skills

Strategic skill requirements are highly conceptual skills needed to take a systems perspective to understand complexity, deal with ambiguity, and to effect influence in the organization. These include the important planning-related skills of visioning, and systems perception that require the development of an image of how a system should work and determining when important changes to the system have occurred or are likely to occur. This is related to the environmental scanning skills of identification of downstream consequences and identification of key causes, which provide the understanding of causal relationships in the environment and their long-term outcomes. This concept is referred as the creation of a causal map that defines the important elements, events, and relationships in the leader's environment. The identification of the components of this map allows leaders to recognize relationships among problems and opportunities, and then choose appropriate strategies to deal with them. Strategic skills also have a significant problem solving component. Problem identification skills become increasingly important for these jobs to determine the true nature

of problems faced by the organization. Leaders often also have the important role of evaluating alternative courses of action to solve organizational problems, referred to as solution appraisal and objective evaluation skills.

CODES LEADERSHIP BEHAVIOR

Task-oriented behavior

For task-oriented behavior the primary objective is to accomplish work in an efficient and reliable way. The primary purpose of task- oriented behaviors is to ensure that people, equipment, and other resources are used in an efficient way to accomplish the mission of a group or organization. Specific component behaviors include planning and organizing work-unit activities, clarifying roles and objectives, monitoring work-unit operations, and resolving work-related problems.

Relations-oriented behavior

For relations-oriented behavior the primary objective is to increase the quality of human resources and relations, which is sometimes called "human capital". Leaders use relations-oriented behaviors to enhance member skills, the leader-member relation- ship, identification with the work unit or organization, and commitment to the mission. Specific component behaviors include supporting, developing, recognizing, empowering.

Change-oriented behavior

For change-oriented behavior the primary objectives are to increase innovation, collective learning, and adaptation to the external environment. Specific component behaviors include advocating change, articulating an inspiring vision, encouraging innovation, and facilitating collective learning. The first two component behaviors emphasize leader initiation and encouragement of change, whereas the second two component behaviors emphasize leader facilitation of emergent change processes.

External leadership behavior

For external leadership behavior the primary objectives are to acquire necessary information and resources, and to promote and defend the interests of the team or organization. In addition to influencing internal events in the work unit, most leaders can facilitate performance with behaviors that provide relevant information about outside events, get necessary resources and assistance, and promote the reputation and interests of the work unit. Three distinct external behaviors include networking, external monitoring, and representing.

Theoretical framework **: Leader identity**
Research question : Are you a leader?

CODES
Yes, claiming
I am a leader; I consider myself to be a leader. Claiming refers to the actions people take to assert their identity as either a leader or a follower.

No, claiming
I am not a leader; I do not consider myself a leader. Claiming refers to the actions people take to assert their identity as either a leader or a follower.

Yes, granting
I am a leader; Others consider me to be a leader. Granting refers to the actions that a person takes to bestow a leader or follower identity onto another person.

No, granting
I am not a leader; Others do not consider me a leader. Granting refers to the actions that a person takes to bestow a leader or follower identity onto another person.

Partly, depending on situation
Depending on the situation, I can be a leader; In certain situations, I consider myself a leader.

Appendix B: Data structure that emerged from the content analysis

Codes	Themes	Subcategories	First-order categories
Novelty Diversity Responsibility	Challenging and difficult	Constructive challenge	Features of developmental classroom experiences
Autonomy Psychological safety Social recognition	Attainable and constructive		
Valuable and applicable	Crafting relevance and crafting connection	Purpose and direction for learning	
Practice and experimentation	Practice and immersion	Practice and role immersion	
Developmental relationships Support Team work	Collaborative learning Discussion and dialogue Feedback for learning	Sense-making support	
Change in perspectives	Thinking and reflection	Cognitive processes	Meaning-making system
Emotionally evocative	Positive or negative emotions	Emotional processes	
Change in affect	Motivation and intent	Motivational processes	
Change in perspectives Change in worldview	Leadership-structure schema Implicit leadership theory	Knowledge-based outcomes	Learning outcomes of developmental classroom experiences
Change in behavior Change in skills	Presentation and communication skills Self-management and learning skills Interpersonal skills	Skills-based outcomes	
Change in self-views Change in self-awareness	Leadership self-awareness Leadership self-efficacy Leader identity	Identity-related outcomes	

Appendix C: Interview protocol

Thank you for your participation in our research study. The purpose of this interview is to gain a better understanding of influential moments in your life that shaped your leadership development trajectory. The interview lasts about one hour and is recorded, so that later on we can transcribe and analyze it. The transcribed interview will be sent to you by email for review and approval. The information that we collect with this research study will be anonymized, so that results cannot be led back to individuals or organizations. Do you have any questions before we now start this interview?

1. Kindly place the items brought with on the table in chronological order. Then, for each item, briefly indicate when (e.g., timeframe, age) and where (e.g., work context, family setting) these moments took place.

2. We now turn to the first item in your chronological line of moments. For this moment, please share your story.
   a. What happened?
   b. How did you feel?
   c. Who were there?
   d. What did you do or what make you take action?
   e. What was the effect or what insight did you gain?

3. We now turn to the second item in your chronological line of moments. Also for this moment, please share your story.
   a. What happened?
   b. How did you feel?
   c. Who were there?
   d. What did you do or what make you take action?
   e. What was the effect or what insight did you gain?
(This question was subsequently repeated for the other items brought with)

4. Looking back at all these moments, what are changes in patterns or ways of working that you initiated from those moments on?
   a. Please provide some examples.
   b. Why made you do this?
   c. What did it bring you? What worked?
   d. Which moment was the most influential or biggest challenge and why?

5. Why did you select these moments?
   a. Why were these moments important to you?
   b. Could you elaborate on why these moments mattered at that moment in time?
   c. Which moment accelerated your leadership development and why?

6. Imagine that you would now bump into someone that used to know you well, but has not seen you in years. What changes would this person see in you?

7. What would you pass on to others as an important lesson learned from your leadership development trajectory?

8. What does your future in terms of leadership development look like?
   a. Do you think there are still new moments to learn for you out there?
   b. From which moments do you think you can still learn something new?

This is the end of our interview. Is there any additional information that you would like to add to this interview? Thank you for your cooperation.

*

Appendix D: Coding scheme

Category: leader identity strength

Codes	Descriptions
Weak/moderate leader identity	Individual does not consider oneself as a leader or only identifies as a leader to a certain extent.
Strong leader identity	Individual identifies as a leader to a great extent.

Category: leader identity meaning

Codes	Descriptions
Theme: cognitive complexity	
Leadership-structure schema	Individual's general understanding of leadership as well as how leadership is organized in groups (e.g., zero-sum, shared, distributed).
Implicit leadership theory	Individual's perspective about others as leaders (e.g., appearance, skills, behaviors, traits).
Theme: schema alignment	
Schema misalignment	Leadership-structure schema, implicit leadership theory, and self-schema as a leader do not match.
Schema alignment	Leadership-structure schema, implicit leadership theory, and self-schema as a leader match.
Theme: self-concept clarity	
Self-awareness	Individual's awareness about one's self-resources (e.g., personal strengths and vulnerabilities) and of how one is seen by and influences others.
Self-efficacy	Individual's confidence about and belief in their own capabilities to take on leadership roles and responsibilities.
Self-knowledge	Individual's clarity and confidence about one's own character, competencies, motivations, feelings, and values.

Category: meaning-making activities

Codes	Descriptions
Unlearning	Choosing to let go of perspectives, opening up to new perspectives.
Reframing	Altering the meaning of an event by putting things into perspective and/or by finding a positive side to a negative event.
Role modeling	Observing and interacting with people who provide information, inspiration and insight. These can be constructive role models (e.g., exemplary bosses, peers, mentors) or negative role models (e.g., difficult people, antagonists).
Experimentation	Trying out new ways, experimenting with provisional selves, and receiving feedback on these attempts.
Feedback	Receiving input on how others view one's strengths and points of development. Receiving valuable information pertaining to the appropriateness or correctness of one's behavior for attaining certain goals.
Reflective practice	Engaging in activities to think about and analyze experiences (reflection) and own behaviors, thoughts, attitudes, motivations in order to determine the 'why' behind them (self-reflection) (e.g., journalling, coaching).

Category: experiences

Codes	Descriptions
Life experiences	Experiences that occur in the context of everyday life, such as parental influences, interactions with friends, travelling, divorce, death, births.
Work experiences	In-the-job and on-the-job experiences that occur in the context of organizations, such as challenging tasks (e.g., restructuring, downsizing, expanding organizations), developmental relationships with colleagues and bosses (e.g., social recognition, identity grants), career transitions.

IMPACT PARAGRAPH

Societal relevance

Leadership development has long been a strategic priority for many organizations (DeRue, Nahrgang, Hollenbeck, & Workman, 2012). Viewing effective leadership as a main driver for organizational success, organizations worldwide are yearly spending billions on leadership development initiatives to build better leaders and enhance collective capacity for leadership (Vogel, Reichard, Batistič, & Černe, 2021).

Higher education, and particularly universities and business schools, have responded to this growing need for effective leaders and enhanced leadership capacity in organizations. Through their leadership education, their research on leadership, and the provision of leadership training, they aim to offer valuable learning platforms for leadership development. Indeed, leadership development is increasingly considered to be an important objective and outcome of universities and business schools around the globe (DeRue, Sitkin, & Podolny, 2011).

Yet, while organizations are investing heavily in leadership development programs and while large numbers of students swarm to undergraduate, graduate, and executive programs that promise to transform them into effective leaders, the last decade has seen a mounting wave of criticism of what happens in those programs (Petriglieri & DeRue, 2018). Questions have been raised from outside and inside management academia not only about whether and how business schools truly fulfill their promise to develop leaders, but also about what kind of leaders they develop (Petriglieri & DeRue, 2018). Critics argue that they are not adequately preparing their students for the ambiguity and complexity of leadership challenges in the contemporary workplace and are producing graduates that are ill-prepared to lead (Benjamin & O'Reilly, 2011; Bennis & O'Toole, 2005).

These issues in organizations and higher education raise two questions: (1) What can be done to support organizations in improving leader effectiveness and enhancing leadership emergence? and (2) What can be done to aid business schools in better preparing their students to take the lead in the complex leadership challenges that lie ahead in the workplace? This dissertation argues that the answer to these questions and the solution to these issues may lie in taking a different approach to leadership development.

Based on the findings of the studies presented in this dissertation, this different approach to leadership development involves incorporating cognitive components of leadership development, and in particular, a focus on leader identity. Main findings of our studies indicate that leader identity is a consequence of a two-fold cognitive mechanism of (1) degree of schema alignment and (2) broadness of perspective. Phrased differently, people claim a leader identity based on their understanding of leadership and compared to who they view as leaders. The more alignment there is between these various views and the broader and complex an individual's view on leadership and being a leader, the stronger the leader identity. These findings indicate that leadership development initiatives should start with an understanding of how people think about leadership and give meaning to being a leader. We believe that leadership development initiatives that create this awareness, that provide individuals with a framework for understanding the cognitive basis for leadership development, and with an understanding of how cognitive schemas of leadership can promote or block leadership development, can help people to be better prepared to take the lead in challenges in the workplace. We then support individuals in being able to see themselves as leaders, prepare them for the complexity and ambiguity of leadership as found in organizational settings, and increase the likelihood of formal and informal leadership emergence.

Our main findings also show that shaping and developing a leader identity involves a gradual process of schema growth and integration through the development of cognitive complexity, schema alignment, and self-concept clarity. This gradual process unfolds as people engage in varied developmental experiences over time and in meaning-making of these experiences. Findings indicate that developmental experiences in higher education settings are characterized by presenting a constructive challenge, demonstrating purpose and direction for learning, providing room for practice and role immersion, and offering sense-making support. Through these developmental features, the experience triggers and stimulates a meaning-making system through which individuals determine the value, relevance, and usefulness of the experience and draw lessons learned that inform future thinking, acting, and being. Individuals who actively engage in particular ways of meaning-making to form, repair, maintain, strengthen, or revise a sense of self as a leader, are able to shape and develop an original sense of self as a leader. This identity work revolves around unlearning and reframing, role modeling and experimentation, and reflective practice. We believe that leadership development initiatives that revolve around creating schema awareness, stimulating schemas openness,

integrating opportunities for deliberate practice, and fostering and guiding reflective practice may aid people to take a more proactive approach to the development of their sense of self as a leader and give them the sense of control needed to be in the driver's seat of their leadership development.

The findings of the studies presented in this dissertation offer various insights for science and practice. For science, the research in this dissertation offers novel insights into the content of leader identity and the process of leader identity development. For practice, the research presented in this dissertation highlights the importance of taking a cognitive approach to leadership development, both for students in higher education as well as for leaders in organizations. For this purpose, we have transferred our insights to academia and practice through various valorization activities that took place during the timeframe of this PhD project, through current valorization activities, and to future valorization activities that have already been set in motion. We discuss these past, current, and future valorization activities in the following section.

Sharing insights

Findings of this dissertation have been shared with the scientific community through presentations at academic conferences, such as the European Association for Work and Organizational Psychology Conferences (EAWOP) and the Developing Leadership Capacity Conference (DLCC), and to member gatherings of academic networks, such as the European Foundation for Management Development (EFMD, Belgium). The findings have also been shared through presentations and workshops for audiences of diverse students and professionals, as well as for support staff and academics at various universities, among which the University of Lausanne (Switzerland), Rotterdam School of Management (The Netherlands), Eindhoven University (The Netherlands), Luiss Guido Carli University (Italy), and of course Maastricht University (The Netherlands).

Findings of this dissertation have also been shared with organizations and organizational networks. For example, we have presented our research at corporate meetings and events of a large variety of profit, non-profit, and not-for-profit organizations (e.g., Housing Cooperations, Public Schools, World Wide Fund for Nature), and as part of corporate leadership development initiatives for networks of early career professionals and entrepreneurs (e.g., Young Management), networks of coaches (e.g., Premium), and networks of CEOs and executives (e.g., Chamber of Commerce). We have also shared the

findings of our studies through leadership development trajectories, coaching, counselling, and mentoring of students, working professionals, and executives. Additionally, the findings of already published parts of this dissertation have been shared with the students that participated in our studies.

Furthermore, findings of the studies that are currently under review will also in due course be shared with the students and organizational leaders that participated in our research studies. The interviews with the organizational leaders that were part of our study in chapter 5 already offered valorization value. Several organizational leaders explicitly mentioned at the end of the interview, that the interview process had offered them 'food for thought', made them 'see certain links and connections, and showed pitfalls' about the findings, and inspired them to 'reflect further' to inform their leadership development trajectory. To illustrate:

> *"I will no doubt reflect back again on this [interview], of what it was all about, and on what I can further learn from it." (N7)*

Last, announcements on studies published have been posted on social media accounts and websites of the authors and the authors' affiliated institutions. Findings of this dissertation have also been captured in short videos and popular press articles to make the insights available to a broad range of academics and practitioners. For example, a short video titled "Talking Business: How Leadership is Learned and Developed" is available on the website and digital media channels of Maastricht University and a short video titled "How Business Students Think about Leadership" is available on digital media channels of the Academy of Management (AoM). A Dutch popular press article with the title "How Business Students Think about Leadership" (In Dutch: Hoe Denken Studenten Bedrijfskunde over Leiderschap) can be found in the (online) Magazine of Labor Issues (in Dutch: Tijdschrift voor Arbeidsvraagstukken). A popular press article with the title "AoM Insights: Three Ways to Build Better Leaders" is available in the online magazine of the Academy of Management (AoM).

Future valorization activities and research are planned around publishing a higher education textbook on student leadership development and on setting up a research line that extends on the findings of this dissertation. For the textbook, a current publication proposal is being discussed with an international higher education publisher. For the research line, a longitudinal research study connecting leader identity and leader health and wellbeing has been set up. This

study qualitatively explores the concept and dimensions of leader health and wellbeing, and longitudinally investigates the relationships between leadership coaching, leader identity development, and leader health and wellbeing. The study uses a mixed-method research design and tracks development of professionals and leaders over a time period of 18 months.

Concluding thoughts

The findings from this dissertation offer novel understanding of the content of leader identity and the process of leader identity development. We offer insights into how business schools can best contribute to their students' ongoing development as leaders, how organizations can effectively contribute to the continuous development of their organizational leaders, and how individuals can get into the driver's seat of their own leadership development. The studies included in this dissertation offer suggestions for curricular reform and innovation, draw lessons from the effectiveness of specific pedagogical approaches, and show tools for supporting a holistic approach to leadership development. We believe that these insights are useful to anyone who is captivated by, involved in, or responsible for the complex endeavor of developing mindful approaches, meaningful experiences, and mastery environments for leadership development.

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SUMMARY

Chapter 1 of this dissertation sets the scene for the research studies undertaken. It discusses that organizations worldwide are yearly spending billions on leadership development initiatives to build better leaders and enhance collective capacity for leadership. It recounts that higher education, and particularly universities and business schools, have responded to this growing need for effective leaders and enhanced leadership capacity in organizations by offering various leadership development initiatives. It also highlights that the last decade has seen a mounting wave of criticism of what happens in those programs. Critics argue that business schools, through their current approach to leadership development, are not adequately preparing their students for the ambiguity and complexity of leadership challenges in the contemporary workplace and are producing graduates that are ill-prepared to lead.

These issues in organizations and higher education raise two questions: (1) What can be done to support organizations in improving leader effectiveness and enhancing leadership emergence? and (2) What can be done to aid business schools in better preparing their students to take the lead in the complex leadership challenges that lie ahead in the workplace? This dissertation argues that the answer to these questions and the solution to these issues may lie in taking a different approach to leadership development. More specifically, the present dissertation proposes that this different approach to leadership development involves incorporating cognitive components of leadership development, and in particular, a focus on leader identity. This is because theory suggests and initial empirical work is starting to show the important role of leader identity in leadership development processes (e.g., ongoing leader development, leadership emergence, leadership behavior and effectiveness).

With this growing evidence of the important role of leader identity in leadership processes, so does the need to gain a better understanding of *what* leader identity entails and *how* leader identity can be shaped and developed. This is the focus of the studies presented in this dissertation. In other words, across this dissertation as a whole, the purpose is to gain a better understanding of the content of leader identity (the "what" of leader identity) and the process of leader identity development (the "how" of leader identity). To that end, four studies were conducted that all took a distinct qualitative approach. Through these studies, this dissertation aims to contribute to theory-building and

provide practical insights that can help provide solutions for the big issues that organizations and business schools are struggling with.

In **Chapter 2**, we report on a study undertaken to gain a better understanding of what the concept of leader identity entails. For this purpose, we explored how undergraduate students at business school think about leaders, leadership, and the self as leader. In this study, leader identity was placed at the core of the data analysis and it was examined how schemas on leaders and leadership relate to leader identity. Main findings indicate that leader identity is related to a two-fold cognitive mechanism of (1) degree of schema alignment and (2) broadness of perspective. Phrased differently, people claim a leader identity based on their understanding of leadership and compared to who they view as leaders. The more alignment there is between these various views and the broader and complex an individual's view on leadership and being a leader, the stronger the leader identity. These findings indicate that leadership development initiatives should start with an understanding of how people think about leadership and give meaning to being a leader.

In **Chapter 3**, we present a conceptual study that looks into how leader identity can be shaped and developed in an educational context. A review of literature was conducted to outline a coherent organizing framework for leader identity development through formal classroom experiences. This study integrates and synthesizes existing research lines on experiences-based leadership development and identity-based leader development. These research lines are to date still quite disconnected. By integrating and synthesizing these research lines, this conceptual paper sought to offer a better understanding of the connections between leadership development, leader identity and learning from experiences in order to show possibilities for integrating leader identity work into leadership education and leadership development offerings at business schools. Findings show that classroom experiences can be purposefully leveraged as holding environments for shaping and developing students' identity as a leader through a process of meaning-making, therewith creating a foundation for ongoing leadership development and future workplace leadership effectiveness. Holding environments for leader identity work provide experiences that both challenge existing ways of conceptualizing and practicing leadership and support meaning-making of new perspectives of leadership and being a leader. These experiences are embedded in a micro learning environment that offers safety and reassurance on the learning process.

Chapter 4 follows up on the conceptual paper with an empirical study that explores how formal classroom experiences in higher education become moments that matter for students' leader identity development. In this study, we drew on the in-depth analysis of 487 narrative reports of undergraduate students at business school to investigate the conditions under which (*when*) and the mechanism by which (*how*) formal classroom experiences in higher education translate into outcomes of leadership development (*what*). Findings highlight that learning from formal classroom experiences in the context of higher education is conditional to specific developmental features embedded in the experience and contingent on a meaning-making system that is theorized to mediate between experiences and learning outcomes. The study also shows the multidimensional and interrelated nature of learning outcomes generated through this process.

In **Chapter 5**, we build on the key findings from the studies presented in chapter 2, 3 and 4 and explore how leader identity is shaped and developed via experiences and meaning-making of experiences. In this chapter, we shift our focus from students to organizational leaders and from classroom experiences in the context of higher education to varied experiences over time and across situations. We draw on detailed narratives of the leadership development trajectories of 14 organizational leaders. Through uncovering the in-depth thoughts, experiences, and constructed meaning about the developmental trajectory as a leader, we seek to better understand the ways in which leader identity develops. Findings show that development in leader identity strength occurred as the meaning of the organizational leaders' identity moved through three cognitive shifts: (1) a development in cognitive complexity, (2) a development in schema alignment, and (3) a development in self-concept clarity. These cognitive shifts were accompanied by specific ways of meaning-making, i.e., identity work.

In **Chapter 6**, we offer a general discussion and conclusion on the four studies presented in this dissertation. We synthesize the findings of the studies and offer a conceptual model for leader identity development via meaning-making of experiences. In broad strokes, the model suggests that leader identity development unfolds as a gradual process of schema growth, alignment and integration that involves a dynamic system of meaning-making that is prompted and facilitated by experiences that contain specific developmental features. Through these developmental features, the experience triggers and stimulates a meaning-making system through which individuals determine the value,

relevance, and usefulness of the experience and draw lessons learned that inform future thinking, acting, and being. Individuals who actively engage in particular ways of meaning-making to form, repair, maintain, strengthen, or revise a sense of self as a leader (i.e., identity work), are able to shape and develop an original sense of self as a leader.

We discuss how the findings of the studies presented in this dissertation offer various insights for science and practice. For science, the research in this dissertation offers novel insights into the content of leader identity and the process of leader identity development. For practice, the research presented in this dissertation highlights the importance of taking a cognitive approach to leadership development, both for students in higher education as well as for leaders in organizations. We believe that leadership development initiatives that revolve around creating schema awareness, stimulating schemas openness, integrating opportunities for deliberate practice, and fostering and guiding reflective practice may aid people to take a more proactive approach to the development of an identity as a leader. It will give them the sense of control needed to be in the driver's seat of their leadership development.

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"Which is more important," asked Big Panda, "the journey or the destination?"
"The company." said Tiny Dragon.

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ABOUT THE AUTHOR

 Sonja Zaar is a lecturer and researcher on leadership, learning, and development at the School of Business and Economics of Maastricht University in the Netherlands. She has studied how schemas, meaning-making, experiences, and identity influence leadership development for over 12 years and has participated in leadership development design and delivery for over 20 years. Her current research interests also include self-regulatory processes, leadership coaching, and leader health and wellbeing. She has published in handbooks and international peer-reviewed journals and is a regular speaker at business events and academic conferences. She is also the founder and owner of LearningZone, a learning and development firm dedicated to supporting individuals, groups, and organizations in shaping mindful approaches to and meaningful experiences for leadership development.

Yet, most importantly, Sonja is the proud mom of Noa and Liam, who mean the world to her. Together with her children, she loves to engage in creative explorations of painting and drawing, enjoys being in nature and submerging in the art of shinrin-yoku, and frequently seeks out ways for water fun. As a yogini, karateka, bookworm and fond puzzler, she is mindful about moving through life with a healthy body and mind. An explorer at heart, Sonja also relishes opportunities to travel and immerse in different cultures, customs, and cognitions. This all under the motto: "Today is a great day to learn something new!"

Sonja received a bachelor degree in Oriental Languages and Communication from Zuyd University of Applied Sciences (The Netherlands) and Kyoto University of Foreign Studies (Japan). She received her Master of Business Administration degree from TIAS School for Business and Society (The Netherlands) with modules offered by Cranfield School of Management (UK) and London Business School (UK). Starting her career as a communications specialist in the consultancy business and chemical industry, she soon transitioned to the world of private management education. After a few years, she made the switch to the public sector academic environment to join Maastricht University. Here, in time, she became the Director of MBA programs and International Projects, while also serving as a steering committee member of the European Foundation for Management Development in Brussels (Belgium). These experiences triggered her interest in teaching and researching leadership. She started

giving workshops and trainings for professionals at Maastricht University and became a guest lecturer at several other European universities. Eventually, she transitioned fully to teaching and researching. A choice which to this day, she still embraces wholeheartedly.

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