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Reference:

Zaar Sonja, Van den Bossche Piet, Gijssels Wim.- How business students think about leadership : a qualitative study on leader identity and meaning-making
Academy of management learning and education - ISSN 1537-260X - 19:2(2020), p. 168-191
Full text (Publisher's DOI): <https://doi.org/10.5465/AMLE.2017.0290>
To cite this reference: <https://hdl.handle.net/10067/1705590151162165141>

How business students think about leadership: a qualitative study on leader identity and meaning-making

Published as:

Zaar, S., Van den Bossche, P., & Gijselaers, W. (2020). How Business students think about leadership: A qualitative study on leader identity and meaning making. *Academy of Management Learning & Education*, 19(2), 168-191. doi:<https://doi.org/10.5465/amle.2017.0290>

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.

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 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). In this article we will 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 influenced 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 through 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 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?

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 voluntarily 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 1.

 Insert Table 1 about here

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.

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 (Frieze, 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 1. 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)

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 ($\mu_{\text{weak}} - \mu_{\text{provisional}} = .703, p = .021$), and also younger than those with a strong leader identity ($\mu_{\text{strong}} - \mu_{\text{provisional}} = .791, p = .001$). Second, students with a moderate leader identity were found to be younger than those with a strong leader identity ($\mu_{\text{strong}} - \mu_{\text{moderate}} = .452, p = .014$). 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 ($\chi^2(3) = 12.30, p = .006$). 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 ($\chi^2(96) = 106.93, p = .209$).

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.

“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.

Examining the person schema of others as leaders of students with a weak leader identity, findings show 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 a weak leader identity 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 a weak leader identity 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 a weak leader identity 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. On top of this, they believe that leadership cannot be learned and developed. Our findings show that their leadership-structure schema, i.e., the 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

Looking into the leadership-structure schema of students with a provisional leader identity (N=64), findings here also 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 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.

Examining the person schema of others as leaders of students with a provisional leader identity, findings show 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 a provisional leader identity 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 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

The findings on the leadership-structure schema of students with a moderate leader identity (N=238) show here too that the meaning of these students' leader identity is related to their understanding of leadership. Our data displays 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.

Examining the person schema of others as leader of students with a moderate leader identity, findings here also show that these students compare their abilities with the abilities they attribute to a prototypical leader. These students mention that 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

Examining the leadership-structure schema of students with a strong leader identity (N=139), findings show once again 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)

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 a strong leader identity claim their leader identity based on full alignment between their self-schema as a leader and their leadership-structure schema.

Examining the person schema of others as leader of students with a strong leader identity, 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 a strong leader identity 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)

On top of that, 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 a strong leader identity 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 identity.

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 provides an overview of the main findings.

Insert Table 2 about here

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 identity 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. 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.

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

The present 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 the introduction of this article, 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 to teach 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 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 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 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 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 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 shown 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. Since 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 identity. 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 -and 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.

ACKNOWLEDGEMENTS

The authors wish to thank the anonymous reviewers and the associate editor for their truly valuable comments and highly constructive feedback that helped us improve this article in the reviewing process. We would also like to thank the five coders for their immense effort and dedication in contributing to the coding of the voluminous dataset.

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TABLES

TABLE 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.
-

TABLE 2**Overview of Main Findings**

Self-schema as a leader	Weak leader identity (N=69) <i>I am not a leader</i>	Provisional leader identity (N=64) <i>I am not a leader yet, but I can be a leader in the future</i>	Moderate leader identity (N=238) <i>I am a leader, but only to some degree and in certain situations</i>	Strong leader identity (N=139) <i>I am a leader</i>
Leadership-structure schema	Leadership ... <ul style="list-style-type: none"> • is a hierarchical position in an organization • is synonym for the innate traits and abilities of the leader • cannot be learned and developed 	Leadership ... <ul style="list-style-type: none"> • is a hierarchical position in an organization • is synonym for experience • can be learned and developed 	Leadership ... <ul style="list-style-type: none"> • is a hierarchical position in an organization • is synonym for experience • can be learned and developed 	Leadership ... <ul style="list-style-type: none"> • 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 ... <ul style="list-style-type: none"> • is the person in the hierarchical leadership position • is born 	The leader ... <ul style="list-style-type: none"> • occupies a formal leadership position • is a person with experience • is made 	The leader ... <ul style="list-style-type: none"> • occupies a formal leadership position • is the most experienced person in the group • is made 	The leader ... <ul style="list-style-type: none"> • 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

APPENDIX 1

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 relationship, 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?

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.