

This is a self-archived version of an original article. This version may differ from the original in pagination and typographic details.

Author(s): Auvinen, Elina; Huhtala, Mari; Kinnunen, Ulla; Tsupari, Heidi; Feldt, Taru

Title: Leader motivation as a building block for sustainable leader careers: the relationship between leadership motivation profiles and leader and follower outcomes

Year: 2020

Version: Accepted version (Final draft)

Copyright: © 2020 Elsevier

Rights: CC BY-NC-ND 4.0

Rights url: https://creativecommons.org/licenses/by-nc-nd/4.0/

Please cite the original version:

Auvinen, E., Huhtala, M., Kinnunen, U., Tsupari, H., & Feldt, T. (2020). Leader motivation as a building block for sustainable leader careers: the relationship between leadership motivation profiles and leader and follower outcomes. Journal of Vocational Behavior, 120, Article 103428. https://doi.org/10.1016/j.jvb.2020.103428

Leader motivation as a building block for sustainable leader careers: The relationship between leadership motivation profiles and leader and follower outcomes

Auvinen, E., Huhtala, M., Kinnunen, U., Tsupari, H., & Feldt, T. (2020)

AUTHOR ACCEPTED MANUSCRIPT

Abstract

This study investigates leaders' motivation to lead (MTL) as a personal resource for building a sustainable career as a leader. Using a person-centered methodology, we identified different latent profiles of leadership motivation. These motivational profiles were compared with leaders' occupational well-being and leadership-related career intentions, and with followerrated leader behaviors and LMX relationship quality. The survey data consisted of 1003 Finnish leaders from various sectors of working life. Of these leaders, 233 recruited their followers to participate in this study, resulting in 987 follower participants. Latent Profile Analysis identified four distinctive MTL profiles: 1) Affective-Identity-based MTL (42%), 2) Low overall MTL (41%), 3) Low Affective-Identity and High Non-Calculative MTL (12%) and 4) High Affective-Identity and Social-Normative MTL (5%). Leaders in the profile with low affective-identity MTL and high non-calculative MTL experienced the poorest occupational well-being, were likely to resign from their current leadership position or apply for less challenging leadership positions, and received the most unfavorable assessments from their followers regarding their leader behaviors and LMX. Leaders whose motivation was based on high affective-identity and social-normativity had good occupational well-being and were most likely to pursue a more challenging career as a leader. To conclude, personal leadership motivation plays an important role in leaders' well-being and in their followers' satisfaction. Thus to create and support sustainable leader careers, both leader candidates themselves and practitioners in HRM and executive selection should consider the underlying motivational resources for leadership. This can help to better align individual careers with the employing organization and create better person-career fit.

Keywords: Motivation to Lead, resources, sustainable career, occupational well-being, career intentions, follower-rated leader behaviors, LMX, person-centered research

1 Introduction

Motivation to lead (MTL; Chan & Drasgow, 2001) refers to an individual's willingness to lead others, which affects their personal decision to pursue leadership training, roles, and responsibilities, and the intensity and persistence of these leadership aspirations (Chan & Drasgow, 2001). It therefore has a central role in leadership emergence and effectiveness (Badura, Grijalva, Galvin, Owens, & Joseph, 2019). However, leadership-related career advancement is seen as less and less attractive (Chudzikowski, 2012; Crowley-Henry, Benson, & Al Ariss, 2019; Sutela & Lehto, 2014; Torres, 2014), partly because of the increasing demands related to individual leadership behavior and character (Yukl, 2013) and working in societies that are increasingly uncertain, complex, and ambiguous (Johansen, 2012). If fewer people want to work as leaders, it is important to understand leaders' motivational underpinnings in more detail to be aware of what makes their careers sustainable. The sustainable careers framework (see e.g., De Vos, Van der Heijden, & Akkermans, 2020) explains how careers are constructed within both contextual and time-related perspectives as a function of individual resources (Hobfoll, 2001) towards happiness, health and productivity and providing meaning to the individual (Chudzikowski, Gustafsson, & Tams, 2019; De Vos et al., 2020; Van der Heijden & De Vos, 2015).

If fewer individuals seek leader positions nowadays, it is even more important that those who occupy these positions would make career choices according to their personal needs and inner values to maintain a leader career in a given context. Constructing such a career with good person-career fit that provides meaning to an individual requires awareness of one's motivational resources. On the other hand, maintaining and creating more personal resources in a given work role or position also supports career continuity. Situations or contexts that demand someone to emerge as a leader despite an individual's initial, possibly low or lacking motivational resources may create a risk for non-sustainable leader careers because of poor person-career fit and lack of meaning. These situations may also could trigger a negative career

spiral, leading to subsequent resource loss and resulting in hampered career construction over time.

We aim to contribute to the MTL and sustainable career literature by investigating differences in leadership motivation among individuals who already work in leadership positions. We examine how differences in leaders' MTL associate with indicators of career sustainability, namely leaders' personal well-being at work and leadership-related career plans. Furthermore, it is presumable that leader's motivation for the job matter also from the followers' perspective, but thus far, we lack the research on the topic. In this study, we investigate MTL in relation to followers' assessments of their leader's people- and task-oriented leadership behaviors and their dyadic leader-follower relationship quality. These findings will be of practical interest to recruiters, I/O psychologists, occupational health psychologists, career counsellors, and to those working in the field of human resources management and development: more detailed understanding of motivational resources for leading others is useful for executive selection and career coaching, for leaders themselves and potential leaders-to-be. It is in the best interest of both individuals and organizations that people with high leadership potential, i.e., having a strong leader identity and personal leadership motivation, would pursue leadership positions and stay in their leadership careers with feelings of satisfaction and fulfillment.

1.1 Multidimensional leadership motivation as a resource for sustainable leader careers MTL (Chan & Drasgow, 2001) is a multidimensional concept consisting of three dimensions that represent distinctive but related motivational constructs, which have different antecedents and outcomes (for a meta-analysis, see Badura et al., 2019). In the next paragraphs, we will provide a novel perspective about different dimensions of MTL acting as personal resources (Hobfoll, 1998; 2001) in the course of a sustainable leader career (De Vos et al., 2020; van der Heijden & De Vos, 2015).

Chan and Drasgow (2001) defined a three-dimensional concept of MTL based on the Theory of Reasoned Action (Fishbein & Ajzen, 1975), which posits that intended behavior is influenced by both personal attitudes and social norms. According to Chan and Drasgow (2001), *Affective-Identity MTL* refers to the positive valence associated with leading others. Individuals with high Affective-Identity MTL usually consider themselves natural born leaders and they enjoy leading others. *Social-Normative MTL* is based on social norms: one might lead out of duty or a sense of responsibility, or because they consider leader status to be normatively valued. Finally, *Non-Calculative MTL* refers to positive perceptions of leadership opportunities despite their potential costs or negative consequences (Badura et al., 2019). Individuals with high Non-Calculative MTL are likely to lead out of a general willingness, without weighing the possible costs and benefits related to leading others (Chan & Drasgow, 2001; Porter, Gerhardt, Fields, & Bugenhagen, 2019).

These dimensions represent distinctive but related motivational construct with different antecedents and outcomes (Badura et al., 2019). For example, Affective-Identity MTL has shown to correlate positively with extraversion, leadership self-efficacy, and past leadership experience, whereas Social-Normative MTL has associated with agreeableness, conscientiousness and individualism (Chan & Drasgow, 2001). Non-Calculative MTL has been shown to associate with emotional stability and collectivist values, and to act as an antecedent to servant leadership (Amah, 2018). Previous studies have examined these dimensions separately, thus giving limited evidence about how they operate simultaneously at individual level. Studying all three MTL dimensions jointly within the same individual can create a more detailed understanding of the role of different motivational combinations or motivational resources play for leaders' careers.

We approach individual differences in leadership motivation by applying the Conservation of Resources theory (Hobfoll, 1998; 2001). According to Hobfoll's theory, people

are motivated to protect (conserve) their existing resources while acquiring new ones. In line with the definition in the Conservation of Resources theory, we argue that MTL can be defined a resource that results in leader emergence and effectiveness, because it reflects different reasons ("whys") behind an individual's decision to strive for a leader position and attain certain goals (Hobfoll, 2001; see also Halbesleben, Neveu, Paustian-Underdahl, & Westman, 2014). MTL captures personal differences in what kinds of individual objectives leaders strive towards: for example, personal satisfaction or positive affect, identification with their work role, higher status, or serving a larger purpose.

In order to answer the question of how different MTL dimensions could act as motivational resources, we integrate the Conservation of Resources theory with the MTL model. We base our theoretical arguments on the current knowledge about different motivational elements of the MTL dimensions (for a meta-analysis, see Badura et al., 2019). Affective-Identity MTL resembles intrinsic motivation, as it is based on the agentic, identitylike motivation for leadership. Intrinsic motivation per se can function as a personal resource, as it relates to self-esteem, positive affect, efficacy, persistence and well-being (Ryan & Deci, 2001b). Social-Normative MTL depicts a more extrinsic motivational component, which integrates both agentic and communal orientations, stemming from external factors such as social norms and supposed responsibilities to others. Extrinsic motivation can also be autonomous and have a resemblance to intrinsic motivation: motivation is integrated when an individual has internalized a cause for a certain behavior (e.g., pursuing a specific work role for a higher status) and adopted it as a part of personal needs or values (Ryan & Deci, 2000b). Non-Calculative MTL is viewed as a "selfless" motivational component, which is related to communal orientations and leading others without expecting any personal benefits. To pursue a leader position regardless of possible disadvantages related to the position might indicate that an individual abandons his or her own self-interests for aiming to larger collective good.

Based on the Conservation of Resources theory we can understand why motivational resources are so important for a sustainable leader career. Sustainable careers are defined as careers that enables individuals to stay "healthy, productive, happy and employable throughout its course" (Van der Heijden & De Vos, 2015, p. 11; Hauw & Greenhaus, 2015) and are constructed within both contextual and time-related perspectives (Chudzikowski, Gustafsson, & Tams, 2019; De Vos et al., 2020). In the framework of sustainable careers, individual resources are seen as essential for constructing a sustainable career and career continuity. An individual as a career actor represents an agent, whose career possibilities are likely to be influenced by and interact with the context (De Vos et al., 2020) and the function of resource gains and losses (Hobfoll, 2001).

Conservation of Resources theory (Hobfoll, 1998; 2001) is one of the fundamental theories of conceptual model of sustainable careers (De Vos et al. 2018). According to the theory's main principles, it is more harmful for the individual to lose resources than it is helpful to gain the resources they have lost (Hobfoll, 2001). The resource investment principle means that people tend to invest resources in order to avoid resource loss, to recover from resource losses, and to gain new resources (Hobfoll, 2001). Thus, individuals with high initial resources are better off investing their resources, because then they will be equipped with a larger resource pool (Hobfoll, 2001). For example, leaders who are highly motivated, i.e., have personal resources to lead others can gain more resources. For example, they might experience positive feelings from being able to act in a satisfying leadership role. Consequently, they are likely to invest more resources in their performance as a leader, such as invest more time in interactions with their followers. In contrast, those individuals who lack resources are more inclined to conserve their remaining resources defensively (Hobfoll, 2001). Thus, if an individual does not have sufficient motivation to lead others while s/he is employed in a leader position, this can lead to a negative spiral of resource loss and subsequent striving to conserve his/her remaining

resources. Consequently, the individual may struggle to cope with his/her leadership responsibilities, and working in a leader position with scarce resources may result in leader turnover and discontinuity of a leader career.

The evidence on previous MTL studies (Badura et al., 2019) led us to suggest that motivational resources, that is, different MTL dimensions, would relate to the key concepts of sustainable career framework – agency, meaning, proactivity and adaptability – differently. Individuals whose motivational resources are characterized with high level of Affective-Identity MTL would be intrinsically motivated to leadership careers. They usually have a lot of past leadership experience, which would indicate that they find leader career meaningful and very probably they would proactively shape their surrounding context to enable maintaining a leader position and a good person-career fit in the future. Those with high Social-Normative MTL, i.e., more extrinsic motivational resources, would represent a combination of agency and collective interests, as their motivational source for leadership careers lies mostly on external factors. However, they usually have past leadership experience, too, indicating that they most likely derive a sense of meaning from such a career. Despite their individualistic values, they are usually also agreeable (Badura et al., 2019), which may indicate higher adaptability to the contextual demands. Individuals with "selfless" motivational resources, reflected by high Non-Calculative MTL, are found to be prone to altruistic motivational stance towards leader positions, which may relate to non-agentic approach and lack of proactivity when it comes to constructing a leader career. They often value harmony and collectivist values (Badura et al., 2019), which could indicate that they would strongly adapt and adjust themselves to the contextual demands, putting their own interest aside for the sake of a greater collective good.

As careers nowadays are rather person- than organization-driven, individuals themselves are more responsible for their career-related decisions and outcomes (De Vos & Van der Heijden, 2017). Individuals' motivational resources may have an impact on how they navigate

their career, align it with their own and organizational needs and balance between proactivity and adjustment to the contextual demands (De Vos et al., 2020). For example, in some organizations an individual might accept a leadership position if s/he is appointed to it regardless of his/her initial career choices and aspirations (extrinsic motivational resources required), or when no one else will accept the role ("selfless" motivational resources required), especially if the situation urgently requires someone to lead. In order to investigate these differences between MTL dimensions (i.e., motivational resources), how they interact with contextual factors and associate with sustainable career indicators in more detail, we need to consider that individuals can have different combinations of the three MTL dimensions.

1.2 Capturing individual differences of Motivation to Lead

Based on MTL's multidimensional nature and different antecedents and correlations within each MTL dimension, it would be unlikely that individuals in different occupational contexts would all share similar motivations to lead. Thus, we will broaden the MTL literature by examining the three different MTL dimensions simultaneously to see whether individuals in leader positions manifest individual combinations of leadership motivation. Furthermore, because the role of context has been under-acknowledged in previous MTL studies, we study these individual differences in different occupational contexts (i.e., among leaders who work within the sectors of academia, business, the technical field, and social and health care). Based on the dimensional nature of MTL, we propose the following:

Hypothesis 1 (H1): Leaders represent different profiles of Motivation to Lead (i.e., individual combinations of Affective-Identity, Social-Normative and Non-Calculative MTL), i.e. have different motivational resources for leading others.

These individual motivational combinations, or profiles, can be investigated by using a person-centered methodology (Howard & Hoffman, 2017; Wang, Sinclair, Zhou, & Sears,

2013). It enables to examine the existence of individual motivation configurations and possible variation between them. Previous studies on MTL have been conducted using variable-centered methods, which treat the study populations as homogeneous groups (Meyer & Morin, 2016; Wang et al., 2013) and thereby assume that leaders share a similar motivation to lead others. Person-centered methods, on the other hand, allow the possibility that the sample under investigation might be constituted of several subsamples of the phenomenon in question. That is, these methods acknowledge heterogeneity within a population and aim to identify possible sub-populations that represent the studied variable(s) differently (Meyer & Morin, 2016). Of the various person-centered methods, we have adopted Latent Profile Analysis in this research. It enabled us to study whether there are different individual combinations of MTL dimensions that differ from each other. Therefore, person-centered analyses permit us to study the interdependence between variables, which variable-centered methods would overlook (Meyer & Morin, 2016). Because this study is the first attempt to investigate MTL using personcentered methods, we cannot form any confirmatory hypotheses neither concerning the exact number and content of the emerging MTL profiles nor whether a certain dimension of MTL proves to be superior to others as a motivational resource.

1.3 Associations between leadership motivation and indicators of career sustainability

The framework of sustainable careers was designed to develop systemic and dynamic understanding of how individual careers evolve towards *happiness*, *health and productivity* (De Hauw & Greenhaus, 2015; De Vos et al., 2020). In this study, we examine how individual MTL is related to these indicators of career sustainability. First, we studied burnout and work engagement as indicators of leaders' occupational well-being (related to the sustainable career indicator of *health*; De Hauw & Greenhaus, 2015; De Vos et al., 2020), as they are well established constructs showing both the positive and negative sides of well-being at work.

Burnout is defined as a psychological syndrome developed as a response to chronic job-related stressors resulting in experiences of emotional exhaustion (feelings of strain and fatigue), cynicism (a distal attitude towards one's work or colleagues and to generally losing interest in one's work), and reduced professional efficacy (feelings of incompetence in one's job) (Maslach & Jackson, 1981; Maslach, Schaufeli, & Leiter, 2001). Work engagement, on the other hand, is defined as "a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (Schaufeli, Salanova, González-Romá, & Bakker, 2002, p. 74). Vigor refers to high levels of mental energy while working, and the willingness and determination to invest effort in one's work. Dedication is characterized by a sense of significance, enthusiasm, inspiration, and pride in one's work. Absorption refers to being fully concentrated and deeply immersed in one's work (Schaufeli, Bakker, & Salanova, 2006). Even though previous research has not investigated how MTL relates with occupational well-being, we propose based on the Conservation of Resources theory (Hobfoll, 2001) that leaders with low MTL (i.e., low motivational resources) are likely to show poorer well-being than leaders with high MTL.

Hypothesis 2a (H2a): The poorest occupational well-being (high burnout and low work engagement) is related to profiles with low motivational resources while in a leader position.

Hypothesis 2b (H2b): The highest occupational well-being (low burnout and high work engagement) is related to profiles with high motivational resources while in a leader position.

Next, we investigated the leaders' career intentions as an indicator of *happiness* in the sustainable careers model (De Vos et al., 2020). These career intentions include whether current leaders will seek less or more challenging leadership positions in the future compared to their

current position, or whether they intend to resign from their leadership position altogether. Thus, we propose that these intentions capture the leaders' satisfaction with their position and their aspirations towards career continuity. They are therefore essential outcomes of motivational resources, and central indicators of subjective career satisfaction. Hitherto, only one (variable-oriented) study has investigated how MTL associates with leadership aspirations (Cziraki, Read, Laschinger, & Wong, 2018). However, Cziraki et al. (2018) assessed leadership aspirations only as a generic concept, associating it with only one MTL component (Affective-Identity). As we examine different combinations of the MTL dimensions in relation to the aforementioned three types of career intentions, we provide a wider understanding of how different motivational bases for leadership associate with leader careers. The above-discussed role of resources for career sustainability led us formulate the following hypothesis:

Hypothesis 3a (H3a): Career intentions directed away from leadership positions (i.e., aiming to resign from the leadership position or applying to less demanding leadership position) are related to profiles with low motivational resources while in the leader position.

Hypothesis 3b (H3b): Career intentions directed towards leadership positions (i.e., applying for more demanding leader positions) are related to profiles with high motivational resources while in the leader position.

Finally, we investigated follower-rated leader performance as an indicator of *productivity* (De Vos et al., 2020), in this study. As leadership does not take place in a vacuum, it is also important to consider how leaders' personal motivation affects their followers' perceptions of their leader. Thus far, this kind of hierarchical approach to MTL and follower outcomes has been ignored in MTL research. We focused on the follower perspective on a leader's performance by exploring whether followers have different perceptions of their leader,

depending on the leader's MTL profile. We also investigated how followers rated their leader's people- and task-oriented leadership behaviors, and the quality of their leader-member exchange (LMX) relationship (Graen & Uhl-Bien, 1995). People- and task-oriented behaviors are key elements of effective leadership in enhancing the individual employees' and the company's performance (Yukl, Gordon, & Taber, 2002). LMX has been related to followers' attitudes and well-being (Schyns & Wolfram, 2008), and it is therefore important to find out more about the potential associations between a leader's MTL and follower-rated LMX. We aimed to expand the existing literature on MTL by exploring how followers evaluate their leaders' behaviors and the dyadic relationship with their leader by combining leader selfevaluations with their followers' ratings, as this also lowers the risk of common method bias (Edwards, 2008). Based on the Conservation of Resources theory described earlier, individuals with high initial resources are better off investing their resources, and individuals who lack resources are more likely to conserve their remaining resources in a defensive manner (Hobfoll, 2001). Thus, leader's MTL is likely to associate with their people- and task-oriented behaviors towards and relationships with followers. This led us to hypothesize the following about a leader's motivational profile and its associations with follower perceptions:

Hypothesis 4a (H4a): Unfavorable follower ratings on people- and task-oriented leadership behaviors and LMX quality are related to profiles with low motivational resources while in a leader position.

Hypothesis 4b (H4b): Favorable follower ratings on people- and task-oriented leadership behaviors and LMX quality are related to profiles with high motivational resources while in a leader position.

There is no previous research about MTL as a resource or any previous empirical evidence on how different MTL dimensions might vary in the way they function as resources. Therefore, we cannot specify hypotheses with relation to specific MTL dimensions and their associations.

Instead, we adopt an exploratory approach to identify what kind of combinations of motivational resources are depicted as good enough to be able to perform and flourish in the leader position from the perspective of sustainable career and its indicators.

2 Method

2.1 Data collection and participants

The sample used in this study was collected from various sources in order to produce data that would broadly represent the leader population in Finland. As a majority of employees in Finland are members of labor unions organized according to industry (64.5% in 2013; Ahtiainen, 2015), trade unions were chosen as collaborative partners in the data collection. The data collection began in spring 2017 in four Finnish trade unions: the Finnish Union of University Professors, Finnish Union of University Researchers and Teachers, Finnish Business School Graduates, and Academic Architects and Engineers in Finland TEK. An electronic questionnaire was sent to all members aged 18–65 years of the first two trade unions mentioned here, and an electronic questionnaire was sent to a random sample of 3,000 members of the latter two unions. For the four trade unions, the response rates were 45%, 26%, 17%, and 13%, respectively, and the number of respondents in total was 891. An additional data collection was launched in order to increase the number of participants to whom our study was targeted. This data collection took place during fall 2017 in collaboration with the Confederation of Unions for Professional and Managerial Staff in Finland (Akava), a confederation of trade unions for those with a university degree or other higher education. The questionnaire was delivered as an open invitation with a link to an electronic questionnaire via Akava's leader network, and altogether 141 responses were collected. Within this trade union, the respondents were leaders in the social and health care sector. Finally, participants were also recruited from an executive MBA (EMBA) program. Contact persons from the EMBA program delivered the questionnaire to potential participants (n = 644), of whom 161 responded (response rate 25%). In the very final phase, psychology students volunteered to recruit highly educated leaders (n = 23) from among their acquaintances, as a part of their studies. To summarize, we combined different data collection techniques in order to reach a diverse convenience sample of leaders (N = 1,003) from different sectors with a common background in higher education, because it has been shown that the proportion of highly educated (tertiary level) workers is increasing while the amount of those with less education is decreasing (Eurofound, 2017).

2.1.1 Leader participants

This study focused on those participants who held managerial positions and who had provided data on the MTL measure (n=1,003). Of these participants, 380 (38%) were professors, 94 (9%) university teachers and other academics, 175 (17%) business sector leaders, 100 (10%) engineers, 104 (10%) social and health sector leaders, and 151 (15%) leaders either from the EMBA program or recruited by students. Participants from the EMBA program and the leaders recruited by students represented various sectors (e.g., real estate management, media and marketing, finance and insurance, food retailing, industry, and the service sector), and they were combined as one data source in the further analysis. Of the participants, 48% were women. The average age of the participants was 51.5 years (SD=8.8), the mean of past leadership experience was 12.9 years (SD=8.4), 93% had a permanent job and 98% were working full-time.

Of the 1,003 leaders who participated, 233 were willing to recruit their followers to participate in the research and provide evaluations on leader behaviors and dyadic relationship with leader. This group of leaders was female-dominated (55%) and had proportionately more leaders from the social and health care sector (26%), the EMBA program, and those recruited by students (38%). There were fewer professors (23%), university teachers and other academics (6%), business sector leaders (3%) and engineers (2%) compared to the whole sample. These

leaders were more often (96%) employed in a permanent job than those in the whole sample.

All leader analyses were conducted with the whole leader sample.

2.1.2 Follower participants

The hierarchical sample included altogether 987 followers from the aforementioned 233 leaders. The data from the leaders and followers were matched: followers' ratings were combined with the data of their closest supervisor who had recruited them to participate in the study. The number of follower participants per leader ranged between 1 and 14 (M = 4.2). Of the followers studied here, 67% were women, the majority (58%) were aged 31–50 years, and the average duration of the relationship with the supervisor (who had delivered the invitation to take part in the survey) was 3.5 years (SD = 3.4).

2.2 Measures

2.2.1 Leader measures

Motivation to Lead. MTL was measured using a 15-item version of the Motivation to Lead Questionnaire (Bobbio & Rattazzi, 2006), which is the shortened version of the original 27-item version developed by Chan and Drasgow (2001). MTL-15 covers the three subscales of MTL. The original English version was translated into Finnish and later translated back into English. We chose nine items to use in the present study because the confirmatory factor analysis supported the three-dimensional structure of the 9-item version better (χ 2 (24) = 71.003, p < .001, RMSEA = 0.045, SRMR = 0.036, CFI = 0.971, TLI = 0.957) than the three-dimensional structure based on the 15-item version of the questionnaire (χ ² (87) = 621.543, p < .001, RMSEA = 0.091, SRMR = 0.095, CFI = 0.759, TLI = 0.709). In MTL-9, each subscale includes three items; e.g., "I am the type of person who likes to be in charge of others" (Affective-Identity MTL), "It is appropriate for people to accept leadership roles or positions when they are asked" (Social-Normative MTL), and "I never expect to get more privileges if I

agree to lead a group" (Non-Calculative MTL). All items were answered on a 5-point Likert scale (1 = totally disagree - 5 = totally agree), higher scores indicating higher motivation. All scale items are available on request from the first author.

Burnout. A nine-item version of the Bergen Burnout Inventory (Feldt et al., 2014; Salmela-Aro et al., 2011) was used to measure three dimensions of burnout: exhaustion (3 items; e.g., "I am snowed under with work"), cynicism (3 items; e.g., "I feel dispirited at work and I think of leaving my job") and inadequacy (3 items; e.g., "My expectations for my job and my performance have reduced"). All items were answered on a 6-point Likert-type scale ranging from 1 (totally disagree) to 6 (totally agree), higher scores showing higher burnout.

Work engagement. A nine-item version of the Utrecht Work Engagement Scale (Schaufeli et al., 2002; Seppälä et al., 2009) was used to measure three dimensions of work engagement: vigor, dedication and absorption. Each dimension was measured with three items (e.g., "At work, I feel that I am bursting with energy" for vigor, "I am proud of the work I do" for dedication, and "I get carried away when I'm working" for absorption). Items were answered on a frequency-based scale ranging from 1 to 7 (1 = never, 7 = daily), higher scores indicating more frequent experiences of work engagement.

Leadership-related career intentions. To measure leaders' personal expectations for their future careers, three items were generated for the purposes of this study. The existing instruments for capturing leadership-related career intentions (e.g., Chan et al., 2012) were considered too broad, as they focus on these intentions on a very general level (e.g., "I plan to become a general leader or manager in the near future"). Instead, we generated new items that would capture the relevant context variation within our study population. A large proportion of the participants worked in universities, where leadership positions are found at very different levels (e.g., the dean, the head of department, or the manager of a single research project), all of which involve a different set of demands and personal responsibilities. The universities are

not unique in this respect. Different levels of management attract individuals in different ways (see Torres, 2014), and therefore we wanted to ask whether the participants actually sought leadership career advancement, or whether they aimed to avoid leadership tasks in the future. To assess this, first, a brief instruction was presented ("Please assess your career plans for the coming five years") before the following statements: 1) I will resign my leadership role, 2) I will seek more demanding leadership positions, and 3) I will seek less demanding leadership positions. The statements were answered on the scale 1 (very unlikely) to 5 (very likely) and were used as single items in further analysis. The descriptive statistics for all leader measures are presented in Table 1.

[INSERT TABLE 1 HERE]

2.2.2 Follower measures

Satisfaction with leader behaviors. Six items based on the previous literature were developed for the purposes of this study to represent both people- and task-oriented leader behaviors (Yukl et al., 2002). Followers were instructed to assess their leader, that is, the person who had recruited them for the study. First, a brief instruction ("Please assess your satisfaction with your leader on the following attributes") was presented, followed by a list of different leader attributes. Followers rated their satisfaction with their leader's behavior on each attribute on a 5-point scale (1 = not at all, 5 = very satisfied). To test the structure of this six-item scale, we first conducted an exploratory factor analysis (using Oblimin rotation), where a two-factor solution emerged. The fit indices provided by confirmatory factor analysis supported also two-factor solution: (χ 2 (8) = 60.530, p < .001, RMSEA = 0.081, SRMR = 0.036, CFI = 0.978, TLI = 0.958). All factor loadings were statistically significant, ranging between 0.68 and 0.96. Thus, two sum scores were used in further analyses: *people-oriented behaviors* (3 items: inspiring

others, motivating others and giving feedback) and *task-oriented behaviors* (3 items: ability to make decisions, responsibility and planning).

Leader-member exchange (LMX) relationship quality was measured with the LMX-7 scale (Graen & Uhl-Bien, 1995), which has been shown to be psychometrically superior to other LMX scales (Gerstner & Day, 1997). Followers were instructed to assess items that concerned their relationship with their closest supervisor (the person who had recruited them for the study) on a five-point Likert scale, higher scores indicating a better relationship quality. Example items were "How well does your leader understand your work problems and needs?" and "How would you characterize your working relationship with your leader?". The mean score of the total scale was used in further analysis. The descriptive statistics for all follower measures are presented in Table 2.

[INSERT TABLE 2 HERE]

2.2.3 Demographic factors

Based on previous research on MTL (e.g., Chan & Drasgow, 2001) and the heterogeneity of the leaders being studied, we investigated the following demographic factors: age (in years), gender (1 = female, 2 = male), occupational background (1 = professor, 2 = university researcher or other academic, 3 = business sector, 4 = engineer, 5 = social and health care, 6 = EMBA alumni or other), and past leadership experience (in years). These demographic factors were used as control variables when investigating the associations between leaders' motivational profile and other variables. In the statistical analyses for followers, we controlled for the following background factors: follower's age (categorical: age groups "-20", "21-30", "31-40", "41-50", "51-60" and "61+"), gender (categorical: 1 = female, 2 = male), and the duration of the leader-follower relationship (in years).

2.3 Statistical analyses

We conducted Latent Profile Analysis with Mplus (version 8) (Muthén & Muthén, 1998-2017) to identify possible homogeneous subgroups (i.e., profiles) among the leaders, based on the three different dimensions of Motivation to Lead. Latent Profile Analysis uses continuous variables to determine the ideal number of subpopulations that is required to give the best possible representation or summary of the individuals in the whole sample (Howard & Hoffman, 2017) and estimates the parameters of these latent groups (Muthén, 2001). Mean sum scores for each dimension of MTL were used to estimate the number and composition of the latent groups. The estimation methods used were full information maximum likelihood estimation and maximum likelihood with robust standard errors (Muthén & Muthén, 1998-2017). The group solutions were estimated starting from a one-class solution and adding each time one group until the point was reached when increasing the number of groups did not improve the model fit with the data, or the content of the model became theoretically unreasonable.

Several fit indices were used to determine the best fitting model solution, i.e., the number of latent groups: log likelihood, the sample-size adjusted Bayesian information criterion (aBIC), the Lo-Mendell-Rubin adjusted likelihood ratio test (LMR), the Vuong-Lo-Mendell-Rubin test (VLMR) and a Bootstrapped Likelihood Ratio Test (BLTR). The classification quality was determined using entropy and average posterior probabilities. The smallest log likelihood and aBIC values indicate the best model. According to Nylund et al. (2007), the LMR and VLMR tests compare the improvement in fit between k-1 and the k class solutions. They provide a *p*-value that is used to determine if there is a statistically significant improvement in fit after adding one more class. Bootstrapped Likelihood Ratio Test works in a similar manner. Entropy and average posterior probability values range from 0 to 1, and clearer classification is indicated with values closer to 1 (Celeux & Soromenho, 1996). An entropy value of .70 is usually considered critical for classification quality, but the reliability of entropy for selecting the

correct number of classes has been disputed (Tein, Coxe, & Cham, 2013). Celeux and Soromenho (1996) considered that for a statistically reliable class solution, the critical value for posterior probabilities should be .80. In addition, the content, rationality and interpretability of the group solutions were carefully considered when determining the number of latent groups.

After identifying the profiles, the leaders' most likely group membership from the final latent profile solution was used in subsequent analyses, which were performed using SPSS software (Version 24). The aim was to determine whether the latent MTL profiles differed with respect to leaders' background factors (gender, age, past leadership experience, occupational background), their occupational well-being (burnout, work engagement), career intentions and the followers' ratings on leader behaviors and LMX relationship quality. The differences between profiles on background factors were examined using either cross-tabulation with a chi square test (gender, occupational background) or univariate analysis of variance (ANOVA; past leadership experience, age). Further analyses were conducted with ANCOVA in which the differentiating background factors were set as covariates and the measures of leaders' well-being and career intentions were set as criterion variables. When analyzing differences in follower measures, the follower's age, gender and the duration of the leader-follower relationship and leader's occupational background were controlled for in ANCOVA. To control for possible bias resulting from an unbalanced design in ANCOVA, the Bootstrapping method was used.

[INSERT TABLE 3 HERE]

3 Results

3.1 Descriptive results

The correlations between MTL dimensions were mainly weak or non-significant in whole leader sample (see Table 1). Weak correlations indicated that the three MTL dimensions represent distinct phenomena, enabling us to use the person-centered methodology. Thus, all three MTL dimensions were investigated simultaneously as separate variables to identify their

individual combinations (profiles). Based on leader self-evaluations, Affective-Identity MTL was positively associated with well-being and leadership-oriented career intentions. Social-Normative MTL showed weak and non-significant correlations, whereas Non-Calculative MTL had slightly stronger, yet still weak (ranging from -.14 to .04) correlations with the outcome variables. As shown in Table 2, only Affective-Identity MTL correlated with followers' satisfaction with leader behaviors and LMX quality ratings.

3.2 MTL profiles and leaders' background factors

H1 predicted that leaders would have different profile combinations of their individual leadership motivation. Based on the Latent Profile Analysis four latent profiles were found to represent distinctive combinations of the three MTL dimensions. Information about correlations between MTL dimensions within each profile is available from the first author upon a request. The group sizes and fit indices of alternative group solutions are presented in Table 3. The estimation process was terminated after five groups, as the best Log likelihood value was not replicated with start values used from the fifth group onwards. A non-replicable Log likelihood value might indicate a non-trustworthy model due to local maxima (Muthén, 2001). When comparing other group solutions, a two-group solution was rejected because of low entropy values. A three-group solution had the lowest aBIC value, but a low entropy value indicated poor quality of classification. This solution also included one very small group with only 2% of the participants. The four-group solution had the best entropy value, smallest Log likelihood value and sufficient average posterior probabilities (0.86, 0.83, 0.86 and 0.88, indicating fairly good probability of correctly belonging to one's designated group). In addition, the content of the four-group solution was theoretically interpretive as the model produced four clearly distinctive profiles with different emphasis on each of the three MTL dimensions. The fourgroup solution was therefore chosen for further analyses. As the results indicated that different MTL profiles were identified from the leader sample, H1 was supported.

The standardized means (z-scores) of MTL dimensions for the four-group solution and descriptive names for the profiles are presented in Figure 1. A more detailed description of mean differences of MTL in each profile is presented in Table 4. The profile labeled as *Affective-Identity-based MTL profile* included 426 leaders (42 % of the whole leader sample). Their Affective-Identity MTL was clearly above the total mean, while their Non-Calculative MTL and Social-Normative MTL scores were only slightly over the total group mean. The profile labeled as *Low overall MTL profile* consisted of leaders (n = 411; 41 %), whose scores on all MTL dimensions were below the total group mean. The profile labeled as *Low Affective-Identity MTL*, *high Non-Calculative MTL profile* consisted of leaders (n = 119; 12 %), whose Affective-Identity MTL scores were substantially low and Non-Calculative MTL scores were highest among studied leaders. Finally, the profile labeled as *High Affective-Identity MTL and Social-Normative MTL profile* (n = 47; 5 %) was made up of leaders, whose Affective-Identity MTL and Social-Normative MTL scores were clearly higher than in all the other profiles.

[INSERT TABLE 4 HERE]

[INSERT FIGURE 1 HERE]

There was no association between gender and belonging to a certain MTL profile ($\chi^2(3)$ = .679; p = .878), but the relationship between occupational background and MTL profile was significant ($\chi^2(15)$ = 85.38; p < .001). The expected and observed distributions of members in different occupational groups in each MTL profile are presented in Figure 2. Based on the adjusted standardized z scores (-/+2), leaders from the business sector and EMBA program were over-represented in the *Affective-Identity based MTL* profile, while professors, university teachers and researchers and social and health care leaders were under-represented in it. In the

profile Low overall MTL, professors were over-represented and leaders from the EMBA

program and other volunteers were under-represented. In the profile of Low Affective-Identity

MTL, High Non-Calculative MTL, university leaders (i.e., professors) and social and healthcare

sectors were over-represented and leaders from the business sector and the EMBA program

were under-represented. In the High Affective-Identity MTL and Social-Normative MTL profile,

business sector leaders were over-represented and professors were under-represented. To

conclude, leaders from specialized expert work context (academia, social and health care sector)

were overrepresented in the profiles with low overall motivation to lead and especially low

affective motivation to lead.

One-way ANOVA with Bootstrapping showed that the effect of age on profile

membership was significant (F (3, 997) = 9.92, p < .001). According to bootstrapped mean

estimates, leaders with the Low overall MTL profile were oldest (M = 52.9, SD = 0.44) while

leaders with the High Affective-Identity MTL and Social-Normative MTL profile were youngest

(M = 47.9, SD = 1.43). Post hoc analyses using Bonferroni adjustment for multiple

comparisons showed that leaders with the Low overall MTL profile were older than leaders in

the groups of Affective-Identity-based MTL and High Affective-Identity MTL and Social-

Normative MTL. Despite the supposed strong correlation between age and leadership

experience, previous experience as a leader (in years) had no significant effect on group

membership (F(3, 997) = 1.99, p = ns). Therefore, we used only age and occupational

background as control variables in further analysis.

[INSERT FIG. 2 HERE]

[INSERT TABLE 5 HERE]

22

3.3 MTL profiles and leaders' occupational well-being

H2 predicted the poorest occupational well-being (high burnout and low work engagement) to be related to profiles with low motivational resources (H2a), and on the contrary, the highest occupational well-being (low burnout and high work engagement) to be associated with profiles characterized by high motivational resources in the current leader position (H2b). The results of ANCOVA showed a statistically significant difference in burnout and work engagement between the four profiles (see Table 5) supporting H2a and H2b. The highest level of all burnout symptoms – exhaustion, cynicism and inadequacy – was reported by leaders in the *Low Affective-Identity, High Non-Calculative MTL* –profile. They also reported experiencing the lowest level of vigor (once a week, on average). On the other hand, leaders in the profile with *High Affective-Identity and Social-Normative MTL* reported the lowest level of inadequacy among all the groups and they experienced the highest level of work engagement on each dimension. They experienced especially dedication more frequently than others, several times a week, and absorption and vigor a couple of times a week.

Also, the findings concerning other profiles were in line with our hypothesis: the profile with low resources for leadership, *Low overall MTL* leaders, reported experiencing all burnout symptoms less than did *Low Affective-Identity, High Non-Calculative-MTL* leaders but more than leaders in other profiles. On the positive side, leaders whose leadership motivation was mostly intrinsic (*Affective-Identity based MTL profile*) experienced work engagement frequently and reported feelings of vigor and dedication a couple of times a week. The rank order of leadership motivation profiles according to burnout and work engagement are presented in Figure 3.

[INSERT FIG. 3 HERE]

3.4 MTL profiles and leaders' career intentions

H3 predicted that career intentions directed away from leadership positions (i.e., aiming to resign or applying to less demanding leadership position) are related to profiles with low resources of leadership motivation (H3a) and, vice versa, career intentions directed towards leadership positions (i.e., applying for more demanding leader positions) are related to profiles with high resources of leadership motivation (H3b). Again, the results of ANCOVA showed a statistically significant difference in leadership-related career intentions between the four latent profiles (see Table 5) that supported H3a and H3b. Low Affective-Identity MTL, High Non-Calculative MTL leaders reported being likely to resign their leadership position. Low overall MTL leaders also felt that stepping away from a leadership role was a somewhat probable career move for them. These two groups were also most likely to apply for less challenging positions. In contrast, High Affective-Identity MTL and Social-Normative MTL leaders assessed that seeking more challenging leadership positions was a probable career development for them.

These findings support the use of person-centered methodology: the variable-centered investigation relying only on the negative correlation between Non-Calculative MTL and applying to more demanding leadership positions would have suggested less interest for more demanding leadership positions in *High Affective-Identity MTL and Social-Normative MTL* profile, as these leaders reported the second highest level of Non-Calculative MTL.

3.5 MTL profiles and followers' evaluations

H4 predicted that unfavorable follower ratings on people- and task-oriented leadership behaviors and LMX quality would be related to profiles with low resources of leadership motivation (H4a), and favorable follower ratings on people- and task-oriented leadership behaviors and LMX quality would associate with profiles with high resources of leadership motivation (H4b). The results of ANCOVA showed a statistically significant difference in

followers' satisfaction with their leader's people- and task-oriented leader behaviors and LMX between the four latent profiles (Table 6). Followers of a *Low Affective-Identity MTL*, *High Non-Calculative MTL* leader were most dissatisfied with both their leader's people- and task-oriented leader behaviors. These followers rated their LMX relationship with their leader as lower compared to followers of *Affective-Identity-based MTL* and *Low overall MTL* leaders. In conclusion, only H4a gained support. It is worth noticing that leaders with the *High Affective-Identity MTL and Social-Normative MTL* profile got the most favorable satisfaction ratings from their followers (as H4b suggested), but the difference failed to reach the level of statistical significance possibly due to the small group size, which might have reduced the statistical power when comparing these groups.

[INSERT TABLE 6 HERE]

4 Discussion

Our first aim was to gain a more detailed understanding of how leaders differ in their motivational resources for leading others by examining profiles of leadership motivations. Our second aim was then to study how these motivational profiles associate with career sustainability indicators. Focal outcomes were investigated both at the individual (leader self-ratings) and hierarchical (followers' ratings of their leader) level. We found that there is individual variation in leadership motivation among those who are currently working as leaders.

Four distinctive profiles of leadership motivation were identified. The *Affective-Identity-based MTL profile* was the largest, including 42 % of the leaders. In this profile, the level of identity-like, intrinsic leadership motivation was substantially higher than the other two motivational aspects. The second largest profile, with 41 % of the leaders, was the *Low overall MTL profile*, characterized by a below-average level of leadership motivation altogether. Two smaller profiles were considered atypical: *Low Affective-Identity MTL, High Non-Calculative MTL profile* consisted of 12 % of the leaders, including very low levels of affective, identity-

like leadership motivation and high selfless leadership motivation. The *High Affective-Identity MTL and Social-Normative MTL profile* was the smallest one with only 5 % of the leaders, characterized with the highest levels of both identity-like, affective motivation and more extrinsic, normative motivation.

In line with our hypotheses, motivational profile membership associated with leaders' occupational well-being, leadership-related career intentions, and followers' evaluations of leader behaviors and the dyadic relationship with the leader, indicating relationships between motivational resources and career sustainability indicators. In this regard, the most crucial differences were between the *Affective-Identity-based MTL* and *High Affective-Identity- and Social-Normative MTL* profiles, which showed the most positive outcomes, and the *Low Affective-Identity, High Non-Calculative MTL* profile, which was related to the most unsatisfactory outcomes from both the leader's own and the followers' perspective. Leaders in the four profiles also differed from each other in terms of their background factors (age and occupational background). However, unlike in previous studies, we did not find an association between a leader's (higher) age and Affective-Identity MTL (Chan & Drasgow, 2001).

From the resource perspective (Hobfoll, 2001), leaders in the Affective-Identity-based MTL profile seemed to have high enough motivational resources to perform well in their leader position. These leaders frequently experienced work engagement and rated their burnout symptoms to be at the second lowest level among all the studied leaders. They also considered that applying for more demanding leadership positions was likely in their future career and gained favorable ratings on their leadership behaviors from their followers. When leader's motivation is based on the Affective-Identity dimension, it relates with positive outcomes both for the leaders themselves and for their followers. These findings together indicate that identity-based motivation for leadership could be a valuable personal resource: these leaders are likely to experience a good person-career fit and are able to respond to the demands of the position,

which may support the construction of a meaningful career via a positive spiral and resource gain process (Hobfoll, 1989; De Vos et al., 2020).

Leaders in the Low overall MTL profile seemed to be equipped with low motivational resources to sustain a leader position. Their motivational profile indicated that they may not actually like leading others very much or do not value the status that the position gives them. They also described the lowest level of selfless motivation. We found that having such a low level of motivational resources can have several negative consequences. First, a low level of overall motivation for leading others associated with poor occupational well-being: These leaders' burnout symptoms were at the second highest level and they experienced work engagement only two or three times a week. This finding is in line with Conservation of Resources theory, because defending existing (initially low) resources demands extra effort and can lead to resource depletion (Hobfoll, 2001). Second, poorly motivated leaders also wanted to resign from their leader position or to seek a less challenging leading position, which indicates poor person-career fit. The association between low motivational resources and leaders' desire to step down from the leadership ladder can be seen as the leaders' attempt to avoid progressive resource loss in the future. Motivational resources are important, when there is an evidence of diminished interest for leader positions (Chudzikowski, 2012; Crowley-Henry et al., 2019; Sutela & Lehto, 2014; Torres, 2014). As presented in the Introduction, leaders are likely to face more and increasingly diverse challenges in modern societies that are characterized by volatility, uncertainty, and complexity. If an individual does not possess sufficient resources for leading others, (e.g., has a low level of intrinsic motivation for leadership), it is possible that leader positions will appear unattractive to these people. Leaders who have low motivational resources can find it difficult to derive personal meaning from their current career. This could further prevent them from constructing a sustainable leader career in

the future or even result in a negative career spiral due to resource loss (Hobfoll, 1989; De Vos et al., 2020).

The two remaining profiles represented atypical combinations based on the extreme ends of the motivational dimensions. First, leaders in the Low Affective-Identity MTL, High Non-Calculative MTL profile evaluated their Affective-Identity motivation to be very low while their Non-Calculative MTL was the highest among the whole group of participants. This kind of selfless motivation is indeed necessary if a person accepts a leadership position despite a very low positive valence towards it. However, the occupational well-being of these leaders was significantly lower and their desire to resign from their leader position was stronger compared to other leaders. They also received unsatisfactory evaluations of their leader behaviors (both people- and task-oriented behaviors) and the LMX quality from their followers. This raises a concern about how these leaders adapt and adjust to their context over time, as a high level of selfless motivational resources does not seem to be enough for career sustainability. Instead, the combination of high selfless and low affective motivation, which characterized these leaders, seemed to be unfavorable not only to the leaders themselves but also to their followers. As stated earlier (Ryan & Deci, 2001b) intrinsic motivation could be a resource itself, or it could help to attain a goal and create more resources. For these leaders, substantially low level of most intrinsic component of leadership motivation, Affective-Identity MTL, could indicate insufficiency of motivational resources. To avoid potential loss of initially scant resources, these leaders would want to detach themselves from the leadership responsibilities by resigning the role altogether, which may also signify lack of person-career fit and personal meaning. In this instance, adaptation to the context (occupying a leader position with low motivation towards it) may pose a severe risk for career that unfolds as non-sustainable in the end.

Lastly, leaders in the *High Affective-Identity MTL and Social-Normative MTL* profile evaluated both their Affective-Identity and Social-Normative MTL as very high, whereas their

Non-Calculative MTL was on an average level. These leaders are probably equipped with sufficient pool of resources for a leader position, which also associates with favorable outcomes. Their self-rated work engagement was significantly higher than among the other leaders, they reported the lowest level of inadequacy at work of the burnout symptoms, and they were most likely to pursue an even more challenging career as a leader. These leaders seemed to be highly motivated to work as leaders as they wanted to continue on their chosen track, indicating good person-career fit (De Vos et al., 2020). The combination of experienced work engagement and willingness to seek more challenging leader career may reflect subjective career satisfaction and probability of shaping one's career proactively towards leader responsibilities also in the future. Working in a leader position for an intrinsic reasons and being able to fulfill one's perceived responsibility may give satisfaction and create an upward spiral of gaining resources (Hobfoll, 2001) and a positive spiral from the career perspective. However, this profile consisted of only 47 leaders, giving only limited evidence of the positive effects of leadership motivation as a personal resource.

4.1 Theoretical contributions and practical implications

This study has several theoretical and methodological strengths contributing to the existing streams of literature. We examined individual differences in leadership motivation using a person-centered approach where all three dimensions of MTL were investigated simultaneously. Our approach resulted in the recognition of different profiles of personal leadership motivation, including atypical combinations. These minority groups of leaders would not have been identified by using a variable-centered approach (i.e., examining every dimension one at a time or as a one-dimensional composite score). Our findings contribute to a more detailed and nuanced understanding on different manifestations of leadership motivation.

Most MTL studies have thus far applied self-evaluation designs among student samples or within military settings (e.g., Chan & Drasgow, 2001; Hong, Catano, & Liao, 2011; Kasemaa, 2016; Krishnakumar & Hopkins, 2014; Waldman et al., 2013). Our study broadened the research on leader motivation to a sample of highly educated leaders who represented various occupational sectors, answering the call of focusing on populations with more diversity beyond military and student populations in MTL research (Bobbio & Rattazzi, 2006). Studying individuals who currently work as leaders improves the possibilities of implementing the findings in practice, giving important new insights into the diverse motivational backgrounds of leaders who are working in different occupations in different sectors. To increase the reliability of the findings compared to using only self-reported data, we also included a hierarchical leader-follower analysis to our study.

Our study also offers a new, resource-oriented and contextually aware perspective on leadership motivation, which can contribute to sustainable careers' research. Thus far, to the best of our knowledge, motivation as a resource for building a sustainable career has not received attention in the literature. In the changing world of careers, it should be of utmost importance to pay attention to the content and level of motivation and how motivational resources are composed, as motivational resources are linked with key cornerstones of sustainable careers construction: meaning, agency and person-career fit. Investigation of motivational resources also puts the role of agency in the sustainable careers framework (De Vos et al., 2020) in a new light. We found that not all leaders occupy their current position with similar types of (or equally strong) personal motivation. Therefore, we can assume that beyond an agentic, intended pursuit towards the current leader role, also other factors (such as occupational or organizational context) might have affected their leader role occupancy.

The study findings partially contrasts the ideas of Theory of Reasoned Action that lies behind the MTL model and states that intended behavior is influenced by both personal attitudes and social norms (Fishbein & Ajzen, 1975). The MTL model is based on the idea of agentic leader development and leadership potential (Chan & Drasgow, 2001) and has not thoroughly considered the role of person-context interactions in these processes. Based on these findings, the individual, agentic perspective on leadership motivation should be augmented by contextual factors when investigating the sustainability of leader careers. In order to better understand how (low) personal motivation towards the current position might affect future career choices and career alignment, future studies should examine different organizational and situational factors in addition to agency and individual MTL indicators. For example, organizations might differ in their cultural norms or shared attitudes towards leader positions; in some expert organizations leader positions may be considered unavoidable yet undesired roles that fall to everyone in turn. Future studies could also identify potential "situational triggers" that might affect the process of leader emergence. Such triggers could include stepping into a position of leadership in order to fill a void that has occurred within the organization because of workforce transitions (e.g., retirement). These broader, contextual viewpoints would give us a more systemic understanding of leader emergence and sustainable leader career paths.

From a practical perspective, our findings show that personal leadership motivation as a building block for a sustainable leader career can relate to leader performance, which should be of interest to organizations. Working in a demanding leadership positon with low or insufficient motivational resources may risk an organization for potential loss of income due to reduced organizational performance. Although we did not directly test the association between leaders' motivational resources and objective organizational performance, this argument has been strongly theoreticized (Ryan & Deci, 2000a). On an individual level, low motivation might lead to poor occupational well-being, which can not only cause personal distress, but also result in additional costs for organizations. To summarize, it is beneficial for both the success of the organization and for the individual's well-being and meaningfulness, when one's career is

aligned to meet both task-related and personal needs. Thus, creating sustainable careers should be a shared responsibility between individuals and their employing organizations (Straub, Vinkenburg, & Van Kleef, 2019). Therefore, we agree with Badura et al. (2019) in recommending that the multidimensional MTL measure should be included in survey protocols that aim to recognize people with a high potential for leadership in executive selection and human resource management/development.

Another practical point for HRM/D practitioners relates to the dynamic nature of MTL and potential of gaining new resources. There is evidence that individuals with Affective-Identity MTL benefitted more from leadership training, which led to increased leadershiprelated competencies (Stiehl, Felfe, Elprana, & Gatzka, 2015). This aligns with the idea of MTL as a resource and resource accumulation in the form on resource gain spirals (Hobfoll, 2001; 2011). Coaching or training that is targeted towards fostering leadership motivation could then result in larger resource pool at both individual and organizational levels. Individual tailoring of career opportunities and development possibilities would also benefit those who initially lack motivational resources for leading others. Especially in the context of expert work within different occupations (such as in academia, in the light of this study), individuals can have very different motivation and resources for leadership. Within these contexts, career progression should also be viewed critically. Should all experts be encouraged or even pushed to climb the career ladder towards leader positions, if they lack personal motivation towards leadership? What other options are provided for career advancement and career construction within these fields? Organizations with a sustainable career culture (McDonald & Hite, 2018) would respond to these concerns by fostering employee well-being as well as their career success and longevity.

Lastly, for leaders themselves, it is important to reflect on their personal reasons behind initial leader emergence and decision to become a leader. From the sustainable careers'

perspective, motivational resources seem to associate with occupational well-being indicators in a way that can resemble resource gain and loss spirals (Hobfoll, 2001). Thus, increasing self-awareness of personal motivational resources could provide useful information for individuals that can help them to better align their careers with the needs of their employing organization (Chudzikowski, Gustafsson, & Tams, 2019). This could support them in constructing a meaningful career in the current employment context.

4.2 Limitations and further research

We aimed to integrate the concept of MTL into the streams of literature on sustainable careers and the Conservation of Resources theory by focusing on leader motivation as a leader's personal resource. Although this perspective offered a novel and relevant approach to MTL, our study had limitations, most of which relate to the study design and data collection that restrict the possibility of drawing strong inferences from our findings. Career research usually entails longitudinal settings (De Vos et al., 2020), and our cross-sectional study design did not allow an examination of causal or mediated associations between the focal concepts of this study. Future studies should utilize longitudinal settings and investigate MTL profiles longitudinally to gain understanding of the stability and fluctuation of leadership motivation. It has been suggested that MTL is dynamic by its nature (Chan & Drasgow, 2001), and from the resource perspective, it would be valuable to investigate whether or not MTL profiles change over time: is it possible that initially high leadership motivation would increase over time, which would support the idea of resource accumulation (Hobfoll, 2001)? From the perspective of the sustainability of leader careers, the investigation of the possible changes in leadership motivation and their association with concurrent changes in well-being is needed. Future studies should also examine whether MTL moderates the association between contextual factors (e.g., support for leaders in the organization, attitudes towards leadership), leader emergence and performance, or if leader's occupational well-being moderates the relationship between leadership motivation and leader performance.

Lastly, focusing only on quite experienced, highly educated white-collar leaders may have affected the resulting number and content of latent profiles, as the findings from a data-driven profile analysis are always somewhat sample-specific. Further studies should investigate MTL profiles among more diverse samples of working adults, with different levels of education, at different stages in their career, and on a wider range of managerial levels. Leaders working at different levels are faced with different challenges, and each level can include different central tasks (such as administrative work, managing operations, and/or personnel management). This may suggest that the composition of the MTL profiles and their associations with different outcomes could vary depending on the leadership level.

4.5 Conclusion

Given the contemporary trend of falling interest in leader positions (Chudzikowski, 2012; Crowley-Henry et al., 2019; Sutela & Lehto, 2014; Torres, 2014), individuals with high leadership potential and motivational resources for leadership are needed who will maintain and build a sustainable career as a leader. This study showed that not all leaders share similar motivational resources, even though they all occupy leader positions: there are people working as leaders who experience quite a low desire to lead. Our findings highlight the importance of personal motivation to lead in relation to indicators of career sustainability – occupational well-being, leadership-related career intentions, and follower assessments on leader behaviors. It is likely that low or insufficient motivational resources for leading others can affect the construction of sustainable leader careers, as deriving meaning from a non-motivating career with a poor person-career fit appears unrewarding. HRM practitioners and recruitment experts should acknowledge that leaders can work with different motivational bases (intrinsic/affective,

LEADERS' MOTIVATION PROFILES AND SUSTAINABLE CAREER

extrinsic/social-normative, and selfless/non-calculative motivations for leading others), and pay attention to motivational resources in the selection of future executives and in supporting their sustainable careers.

5 References

- Ahtiainen, L. (2015). *Palkansaajien järjestäytyminen Suomessa vuonna 2013*. [Wage earners' unionization in Finland in 2013]. Retrieved from http://urn.fi/URN:ISBN:978-952-327-027-5
- Amah, O. E. (2018). Determining the antecedents and outcomes of servant leadership. *Journal of General Management*, 43(3), 126-138. https://doi.org/10.1177/0306307017749634
- Badura, K. L., Grijalva, E., Galvin, B. M., Owens, B. P., & Joseph, D. L. (2019). Motivation to lead: A meta-analysis and distal-proximal model of motivation and leadership. Journal of Applied Psychology. http://dx.doi.org/10.1037/apl0000439
- Bobbio, A., & Rattazzi, A. M. M. (2006). A contribution to the validation of the motivation to lead scale (MTL): A research in the Italian context. *Leadership*, 2(1), 117-129. https://doi.org/10.1177/1742715006057240
- Celeux, G., & Soromenho, G. (1996). An entropy criterion for assessing the number of clusters in a mixture model. *Journal of Classification*, *13*(2), 195-212.
- Chan, K., & Drasgow, F. (2001). Toward a theory of individual differences and leadership. *Journal of Applied Psychology*, 86(3), 481-498. http://dx.doi.org/10.1037/0021-9010.86.3.481
- Chan, K. Y., Moon-ho, R. H., Chernyshenko, O. S., Bedford, O., Uy, M. A., Gomulya, D., Sam, Y. L., & Phan, W. M. J. (2012). Entrepreneurship, professionalism, leadership: A framework and measure for understanding boundaryless careers. *Journal of Vocational Behavior*, 81(1), 73-88. https://doi.org/10.1016/j.jvb.2012.05.001
- Chudzikowski, K., Gustafsson, S., & Tams, S. (2019). Constructing alignment for sustainable careers: Insights from the career narratives of management consultants. *Journal of Vocational Behavior*. https://doi.org/10.1016/j.jvb.2019.05.009
- Chudzikowski, K. (2012). Career transitions and career success in the 'new' career era. *Journal of Vocational Behavior*, 81(2), 298-306. https://doi.org/10.1016/j.jvb.2011.10.005
- Crowley-Henry, M., Benson, E. T., & Al Ariss, A. (2019). Linking talent management to traditional and boundaryless career orientations: Research propositions and future directions. *European Management Review*, 16(1), 5-19. https://doi.org/10.1111/emre.12304
- Cziraki, K., Read, E., Laschinger, H. K. S., & Wong, C. (2018). Nurses' leadership self-efficacy, motivation, and career aspirations. *Leadership in Health Services*, *31*(1), 47-61. https://doi.org/10.1108/LHS-02-2017-0003
- De Hauw, S., & Greenhaus, J. H. (2015). Building a sustainable career: The role of work–home balance in career decision making. In *Handbook of research on sustainable careers*. Edward Elgar Publishing.
- De Vos, A., & Van der Heijden, B. I. (2017). Current thinking on contemporary careers: the key roles of sustainable HRM and sustainability of careers. *Current opinion in environmental sustainability*, 28, 41-50. https://doi.org/10.1016/j.cosust.2017.07.003
- De Vos, A., Van der Heijden, B. I., & Akkermans, J. (2020). Sustainable careers: towards a conceptual model. *Journal of Vocational Behavior*, 117, 1-13. https://doi.org/10.1016/j.jvb.2018.06.011

- Edwards, J. R. (2008). To prosper, organizational psychology should... overcome methodological barriers to progress. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior, 29*(4), 469-491. https://doi.org/10.1002/job.529
- Eurofound (2017), *Sixth European Working Conditions Survey Overview report (2017 update)*, Publications Office of the European Union, Luxembourg.
- Feldt, T., Rantanen, J., Hyvönen, K., Mäkikangas, A., Huhtala, M., Pihlajasaari, P., & Kinnunen, U. (2014). The 9-item bergen burnout inventory: Factorial validity across organizations and measurements of longitudinal data. *Industrial Health*, *52*(2), 102-112. https://doi.org/10.2486/indhealth.2013-0059
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, and behavior: An introduction to theory and research.* Reading, MA: Addison Wessley.
- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The Leadership Quarterly*, 6(2), 219-247.
- Gerstner, C. R., & Day, D. V. (1997). Meta-Analytic review of leader—member exchange theory: Correlates and construct issues. *Journal of Applied Psychology*, 82(6), 827.
- Halbesleben, J. R., Neveu, J. P., Paustian-Underdahl, S. C., & Westman, M. (2014). Getting to the "COR" understanding the role of resources in conservation of resources theory. Journal of Management, 40(5), 1334-1364. https://doi.org/10.1177/0149206314527130
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513-524.
- Hobfoll, S. E. (1998). *Stress, culture, and community: The psychology and philosophy of stress.* New York: Plenum Press.
- Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: advancing conservation of resources theory. *Applied Psychology*, *50*(3), 337-421. https://doi.org/10.1111/1464-0597.00062
- Hobfoll, S. E. (2011). Conservation of resource caravans and engaged settings. *Journal of occupational and organizational psychology*, 84(1), 116-122.
- Hong, Y., Catano, V. M., & Liao, H. (2011). Leader emergence: The role of emotional intelligence and motivation to lead. *Leadership & Organization Development Journal*, 32(4), 320-343. https://doi.org/10.1108/01437731111134625
- Howard, M. C., & Hoffman, M. E. (2018). Variable-centered, person-centered, and person-specific approaches: where theory meets the method. *Organizational Research Methods*, 21(4), 846-876. https://doi.org/10.1177/1094428117744021
- Johansen, R. (2012). *Leaders make the future: Ten new leadership skills for an uncertain world.* San Francisco, CA: Berrett-Koehler Publishers.

- Kasemaa, A. (2016). The adaptation of the motivation to lead instrument to the Estonian military context. *Journal of Management and Business Administration*, 24(1), 64-88. https://doi.org/10.7206/jmba.ce.2450-7814.164
- Krishnakumar, S., & Hopkins, K. (2014). The role of emotion perception ability in motivation to lead. *Management Research Review*, *37*(4), 334-347. https://doi.org/10.1108/MRR-07-2012-0161
- McDonald, K. S., & Hite, L. M. (2018). Conceptualizing and creating sustainable careers. *Human Resource Development Review*, 17(4), 349-372. https://doi.org/10.1177/1534484318796318
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. Journal of Organizational Behavior, 2(2), 99-113. https://doi.org/10.1002/job.4030020205
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52(1), 397-422. https://doi.org/10.1146/annurev.psych.52.1.397
- Muthén, L.K., & Muthén, B.O. (1998-2017). *Mplus User's Guide*. Eighth Edition. Los Angeles, CA: Muthén & Muthén.
- Muthén, B. (2001). Latent variable mixture modeling. In Marcoulides, G. A. & Schumacker, R. E. (Eds.), *New developments and techniques in structural equation modeling* (pp. 1–33). Mahwah, NJ: Lawrence Erlbaum.
- Nylund, K. L., Asparouhov, T., & Muthén, B. O. (2007). Deciding on the number of classes in latent class analysis and growth mixture modeling: A Monte Carlo simulation study. *Structural Equation Modeling*, 14(4), 535-569. https://doi.org/10.1080/10705510701575396
- Porter, T. H., Gerhardt, M. W., Fields, D., & Bugenhagen, M. (2019). An exploratory study of gender and motivation to lead in millennials. *The Journal of Social Psychology*, *159*(2), 138-152. https://doi.org/10.1080/00224545.2019.1570902
- Ryan, R. M., & Deci, E. L. (2000a). Self-determination theory and the facilitation of intrinsic motivation, social development and well-being. *American Psychologist*, 55, 68–78.
- Ryan, R. M., & Deci, E. L. (2000b). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25, 54–67.
- Salmela-Aro, K., Rantanen, J., Hyvönen, K., Tilleman, K., & Feldt, T. (2011). Bergen burnout inventory: Reliability and validity among finnish and estonian managers. *International Archives of Occupational and Environmental Health*, 84(6), 635-645. https://doi.org/10.1007/s00420-010-0594-3
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement*, 66(4), 701-716. https://doi.org/10.1177/0013164405282471
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, *3*(1), 71-92. https://doi.org/10.1023/A:1015630930326
- Schyns, B., & Wolfram, H. J. (2008). The relationship between leader-member exchange and outcomes as rated by leaders and followers. *Leadership & Organization Development Journal*, 29(7), 631-646. http://dx.doi.org/10.1108/01437730810906362

- Seppälä, P., Mauno, S., Feldt, T., Hakanen, J., Kinnunen, U., Schaufeli, W., & Tolvanen, A. (2009). The construct validity of the utrecht work engagement scale: Multisample and longitudinal evidence. *Journal of Happiness Studies*, 10(4), 459-481. http://dx.doi.org/10.1007/s10902-008-9100-y
- Stiehl, S. K., Felfe, J., Elprana, G., & Gatzka, M. B. (2015). The role of motivation to lead for leadership training effectiveness. *International Journal of Training and Development*, 19(2), 81-97.
- Straub, C., Vinkenburg, C. J., & van Kleef, M. (2019). Career customization: Putting an organizational practice to facilitate sustainable careers to the test. *Journal of Vocational Behavior*. https://doi.org/10.1016/j.jvb.2019.103320
- Sutela, H., & Lehto, A. M. (2014). *Työolojen muutokset 1977–2013*. [Changes in work during years 1977 to 2013]. Helsinki: Tilastokeskus.
- Tein, J., Coxe, S., & Cham, H. (2013). Statistical power to detect the correct number of classes in latent profile analysis. *Structural Equation Modeling: A Multidisciplinary Journal*, 20(4), 640-657. https://doi.org/10.1080/10705511.2013.824781
- Torres, N. (2014). Most people don't want to be managers. *Harvard Business Review*. Retrieved from https://hbr.org/2014/09/most-people-dont-want-to-be-managers.
- Van der Heijden, B. I., & De Vos, A. (2015). Sustainable careers: Introductory chapter. In *Handbook of research on sustainable careers*. Edward Elgar Publishing.
- Waldman, D. A., Galvin, B. M., & Walumbwa, F. O. (2013). The development of motivation to lead and leader role identity. *Journal of Leadership & Organizational Studies*, 20(2), 156-168. https://doi.org/10.1177/1548051812457416
- Wang, M., Sinclair, R., Zhou, L., & Sears, L. (2013). Person-centered analysis. Methods, applications, and implications for occupational health psychology. In L. Tetric, M. Wang, & R. Sinclair (Eds.), *Research methods in occupational health psychology: Measurement, design, and data analysis* (pp. 249–373). New York, NY: Routledge.
- Yukl, G. A. (2013). Leadership in organizations. New York, NY: Pearson.
- Yukl, G., Gordon, A., & Taber, T. (2002). A hierarchical taxonomy of leadership behavior: Integrating a half century of behavior research. Journal of leadership & organizational studies, 9(1), 15-32. https://doi.org/10.1177/10717919020090010

Table 1Descriptive information and Pearson's intercorrelations of study variables on leader measures (N = 1~003~leaders) in whole leader data.

	M	SD	α	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
Motivation to Lead														
1. Affective-Identity MTL	3.37	.72	.75	-										
2. Social-Normative MTL	3.16	.77	.70	.10**	-									
3. Non-Calculative MTL	3.39	.84	.73	05	.13**	-								
Burnout														
4. Exhaustion	3.17	1.16	.75	17**	.02	02	-							
5. Cynicism	2.33	1.11	.83	21**	.01	06*	.49**	-						
6. Inadequacy	2.55	1.26	.79	20**	.03	04	.49**	.79**	-					
Work engagement														
7. Vigor	5.65	1.11	.87	.25**	01	02	39**	63**	55**	-				
8. Dedication	5.92	1.08	.89	.18**	01	.02	27**	62**	55**	.79**	-			
9. Absorption	5.89	.98	.83	.15**	.01	01	10**	43**	38**	.61**	.72**	-		
Career intentions														
10. Resigning leadership position	1.98	1.14		23**	04	.04	.24**	.36**	.28**	26**	23**	15**	-	
11. Applying in less demanding leadership position	1.90	.98		18**	06	01	.31**	.36**	.30**	27**	24**	19**	.46**	-
12. Applying in more demanding leadership position	2.61	1.27		.28**	01	14**	13**	09**	05	.14**	.08*	.02	20**	09**

Notes: *p < .05, **p < .01. Career intentions used as single items in analyses. Motivation to Lead scores range 1–5, Burnout scores range 1–6, work engagement scores range 1–7, career intentions scores range 1–5.

Table 2 Descriptive information and Pearson's intercorrelations of study variables on leader's MTL (N = 233) and follower (N = 987) measures in hierarchical data.

	M	SD	α	1	2	3	4	5
Leader's Motivation to Leada								
1. Affective-Identity MTL	3.50	.77	.81					
				-				
2. Social-Normative MTL	3.11	.77	.76	.15***	-			
3. Non-Calculative MTL	3.42	.85	.68	03	.16***	-		
Satisfaction with leader behaviors ^b								
4. People-oriented leader behaviors	3.84	.89	.89	.09**	.01	02	-	
5. Task-oriented leader behaviors	4.13	.74	.82	.12***	02	.03	.67***	-
Relationship with leader ^b								
6. LMX	4.04	.78	.89	.10**	01	.01	.71***	.68**

Notes: ** p < .01, *** p < .001. *a = Leaders' self-evaluations, *b = Followers' ratings of their leader. All scores ranged from 1 to 5.

Table 3 *Fit indices and group proportions of Latent Profile Analysis.*

Number of latent groups	Log Likelihood	Entropy	aBIC	LMR, VLMR	BLTR	Latent group proportions n (%)
1	-3487.61		7008.84			1003 (100)
2	-3478.33	0.63	7005.22	0.003, 0.003	0.000	100 (10) / 903 (90)
3	-3470.88	0.70	7005.25	0.189, 0.178	0.068	834 (83) / 20 (2) / 149 (15)
4	-3466.23	0.74	7010.90	0.541, 0.530	0.308	426 (42) / 411 (41) / 119 (12) / 47 (5)
5	-3454.67ª	0.80	7002.71	0.269, 0.261	0.000	118 (12) / 18 (2) / 416 (41) / 396 (39) / 55 (5)

Notes: ^a = the best Log Likelihood value was not replicated with the starting values used. aBIC = the sample-size adjusted Bayesian information criterion, LMR = the Lo-Mendell-Rubin adjusted likelihood ratio test, VLMR = the Vuong-Lo-Mendell-Rubin test, BLTR = a Bootstrapped Likelihood Ratio Test.

Table 4Differences of Motivation to Lead dimensions among four latent profiles for leaders $(N = 1\ 003)$.

	1. AI-based MTL	2. Low overall MTL	3. Low AI, high NC based MTL	4. High AI and SN based MTL	F	Mean differences (pairwise Bonferroni comparisons)
	n = 426 $42%$	n = 411 $41%$	n = 119 12%	<i>n</i> = 47 5%		
	M (SD)	M (SD)	M (SD)	M (SD)		
Motivation to Lead						
Affective- Identity MTL	3.87 (0.28)	3.06 (0.26)	2.09 (0.32)	4.84 (0.19)	1969.99***	4 > 1 > 2 > 3 ***
Social- Normative MTL	3.25 (0.76)	3.02 (0.73)	3.05 (0.73)	3.80 (0.91)	18.82***	1 > 2*** 4 > 1, 2, 3***
Non- Calculative MTL	3.45 (0.83)	3.25 (0.82)	3.59 (0.82)	3.51 (0.92)	6.90***	1 > 2** 3 > 1***

Notes: ** p < .01, *** p < .001. AI = Affective-Identity MTL, NC = Non-Calculative MTL, SN = Social-Normative MTL.

Table 5Bootstrapped mean differences in occupational well-being and career intentions according to four MTL-profiles using ANCOVA analysis (age and occupational background were controlled for).

	1. AI-based MTL	2. Low overall MTL	3. Low AI, high NC based MTL	4. High AI and SN based MTL	F	Partial η2	Mean differences (pairwise Bonferroni comparisons)
	n = 426 $42.4%$	n = 411 $40.9%$	n = 119 11.9%	n = 47 $4.7%$			
	M (SE)	M (SE)	M (SE)	M (SE)			
Burnout							
Exhaustion	3.05 (.06)	3.23 (.06)	3.48 (.11)	2.86 (.18)	5.47**	.02	3 > 1, 2, 4 ** 2 > 1**
Cynicism	2.18 (.05)	2.41 (.06)	2.72 (.11)	1.95 (.17)	9.28***	.03	3 > 1, 4***, 2** 2 > 1, 4**
Inadequacy	2.42 (.06)	2.66 (.07)	2.93 (.11)	1.91 (.18)	9.36***	.03	3 > 1, 4 ***, 2 ** 2 > 1**, 4*** 1 > 4 **
Work							
engagement							
Vigor	5.83 (.05)	5.57 (.06)	5.10 (.10)	6.19 (.16)	17.64***	.05	4 > 2, 3***, 1 ** 1 > 3***, 2**, 1* 2 > 3**
Dedication	6.03 (.05)	5.86 (.05)	5.54 (.13)	6.45 (.12)	9.56***	.03	4 > 2, 3***, 1 ** 1 > 3***
Absorption	6.00 (.04)	5.81 (.05)	5.65 (.12)	6.25 (.12)	6.63***	.02	4 > 2, 3***, 1** 1 > 2, 3**
Career intentions							
Resigning	1.82	2.07	2.41	1.68	11.05***	.03	3 > 1, 4***, 2**
leadership position	(.05)	(.05)	(.10)	(.16)			2 > 4, 1**
Applying	1.80	1.97	2.21	1.41	10.06***	.03	3 > 1, 4***, 2*
less demanding leadership position	(.05)	(.05)	(.09)	(.14)			1, 2 > 4 ***
Applying more demanding leadership	2.83 (.05)	2.48 (.06)	2.21 (.10)	2.91 (.16)	12.84***	.04	4 > 3***, 2* 1 > 2, 3*** 2 > 3*
position Notes: * n < 05 **	* n < 01 ***	n < 001 AI =	- Affactiva Ida	otity MTI NO	T - Non Colo	ulativa MT	I CN - Copiel

Notes: *p < .05, ** p < .01, *** p < .001. AI = Affective-Identity MTL, NC = Non-Calculative MTL, SN = Social-Normative MTL. Burnout scores range 1–6, work engagement scores range 1–7, career intentions scores range 1–5.

Table 6Bootstrapped mean differences in followers' (N = 987) ratings on satisfaction with leader behaviors and relationship with leader (N = 233) according to four MTL-profiles using ANCOVA analysis (follower's age, gender and the duration of leader-follower relationship were controlled for).

	1. AI-based MTL	2. Low overall MTL	3. Low AI, high NC based MTL	4. High AI and SN based MTL	F	Partial η2	Mean differences (pairwise Bonferroni comparisons)
	$n_{\rm L} = 123$	$n_{\rm L} = 66$					
	52.8%	28.3%	$n_{\rm L} = 30$ 12.9%	$n_{\rm L} = 14$ 6.0%			
	$n_{\rm F} = 562$	$n_{\rm F} = 261$					
	56.9%	26.4%	$n_{\rm F} = 112$ 11.3%	$n_{\rm F} = 52$ 5.3%			
	M (SE)	M (SE)	M (SE)	M (SE)			
Satisfaction with leader behaviors							
People-oriented leader behaviors	3.90 (.04)	3.83 (.06)	3.59 (.09)	3.96 (.13)	3.96**	.01	3 < 1**, 2, 4*
Task-oriented leader behaviors	4.18 (.03)	4.09 (.05)	3.89 (.07)	4.32 (.11)	6.06***	.02	3 < 1, 4**, 2*
Relationship with leader LMX	4.09 (.73)	4.01 (.79)	3.82 (.82)	4.09 (.97)	3.88**	.01	3 < 1**, 2*

Notes: *p < .05, **p < .01, ***p < .001. AI = Affective-Identity MTL, NC = Non-Calculative MTL, SN = Social-Normative MTL. $n_L = n$ for leaders, $n_F = n$ for followers. All variables range 1–5.

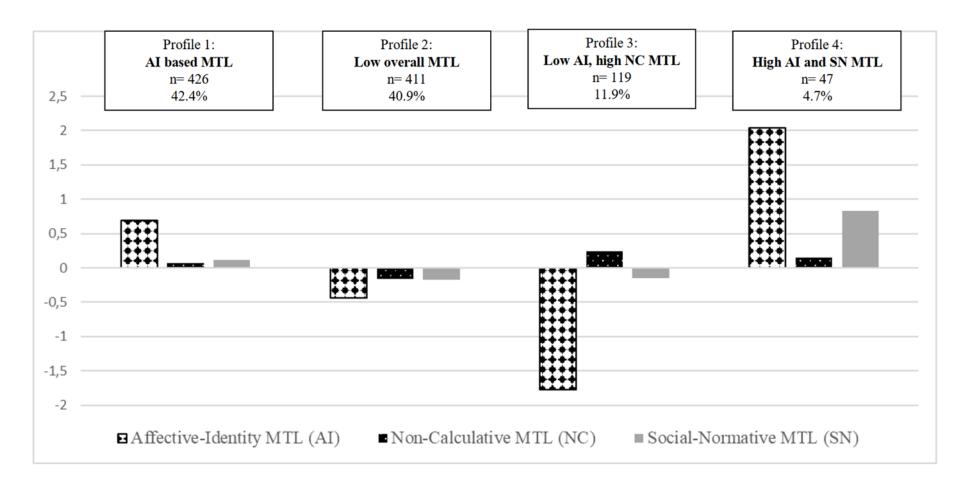


Fig. 1 Four latent profiles based on dimensions of MTL. Standardized scores reported to help interpretation.

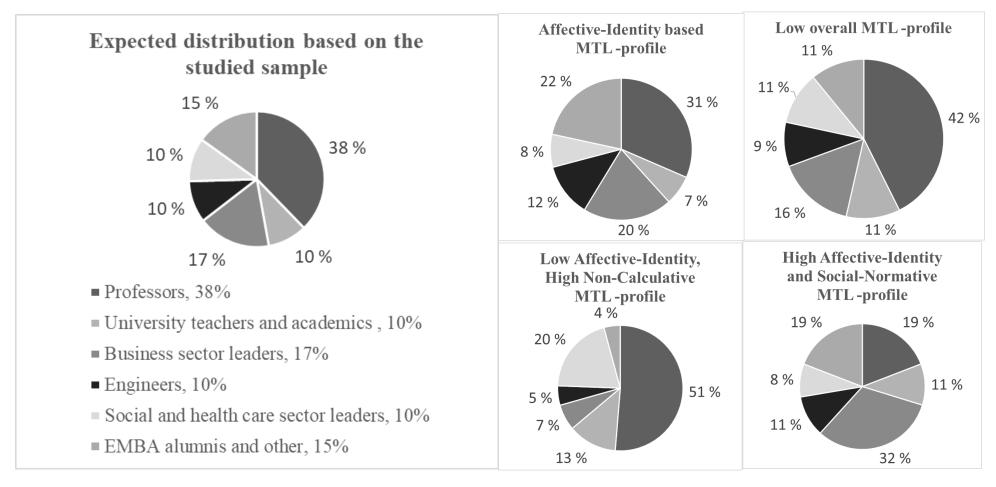


Fig. 2 Expected and observed distributions of members in different occupational groups.

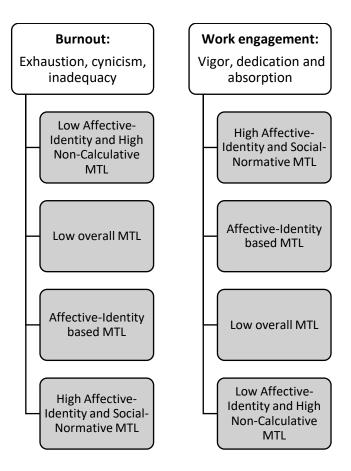


Fig. 3 The rank order of leadership motivation profiles according to burnout and work engagement. Higher level in hierarchy indicates higher level of burnout or work engagement.