Criteria to appraise top executives for ambidextrous leadership

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Abstract

Purpose – This paper determines and analyses criteria for top executives to use in appraisal systems to promote ambidextrous leadership, enhancing the organization's ability to identify persons who can lead ambidextrously or determining the development potential of existing top executives.

Design/methodology/approach – Using a theoretical-conceptual, triangulated approach, the investigation in this paper examines the requirements for top executives to lead ambidextrously. In a subsequent review and frequency analysis, the specific attributes/behaviours a top executive should possess are examined. Analysis of the application of these appraisal criteria is theoretical.

Findings – The criteria listed in this paper (e.g. ambition, courage, vision) can be used to foster ambidextrous leadership when hiring or evaluating performance. These and/or the criteria already existing in an organization should be classified in one of the two categories presented (1. one-dimensional criteria: differentiation between exploration/exploitation is not necessary; 2. multidimensional criteria: differentiation between exploration and exploitation, opening and closing leadership, and first- and second-order changes is necessary) to differentiate the criteria and thereby illuminate their application in the areas of exploration and exploitation. Thus, a corresponding assessment of applicants and/or job holders for ambidextrous leadership is possible.

Originality/value – This theoretical analysis contributes to the literature on top executives' recruitment, performance management, career and succession planning, focusing on ambidextrous leadership and organizational development by elucidating a differentiated concept for appraisal criteria so that the right person can be appointed to the top executive position or assigned to the necessary personnel development programme. Thus identified, a top executive may be positioned to maintain, improve or install ambidextrous leadership and practice in an organization.

Keywords Ambidextrous leadership, Ambidextrous organization, Ambidextrous top executives, CEO, Recruiting criteria, Criteria for appraisal

Paper type Research paper

1. Introduction

In a dynamic business environment, both radical and incremental innovation are necessary for the long-term competitiveness of an organization (Ali *et al.*, 2021). Through transformational leadership, Chief Executive Officers (CEOs) can drive this innovation (Zuraik and Kelly, 2019). Innovation can be understood as a change process (Beuren *et al.*, 2021), but many processes of change are not successfully completed (Ulrich *et al.*, 2012). It is often said in the literature that fewer than 30% of change projects are successful (Al-Haddad and Kotnour, 2015; Arazmjoo and Rahmanseresht, 2020; Imran *et al.*, 2016), or that necessary change has not even begun. Negative examples such as Firestone, Blockbuster and Polaroid, and positive examples such as Amazon, Apple or Netflix, show how essential change and innovation are. The companies given as negative examples here focused on familiar, well-established processes and markets without taking relevant changing trends into account when expedient, thereby losing their customer base and being ousted from the market. In contrast, companies such as Amazon use available resources optimally (exploitation) while also exploring new markets (exploration) (O'Reilly and Tushman, 2016), which comes under the heading of organizational ambidexterity.

Exploitation in an organization, characterized by the predictable outcomes of (incremental) process optimization, is less risky than servicing new markets (exploration) because the latter

involves more uncertainty: because of missing information (Christensen, 2015; Kung *et al.*, 2020), it is unclear to what extent and at what price the new product or service will be acceptable to customers. For this reason, there may be more enthusiasm for exploitation than for exploration. To avoid a self-destructive path dependency as with Blockbuster, top executives can counteract this. Top executives are considered in this paper because they play a critical role (Carmeli and Halevi, 2009; Gupta and Mahakud, 2020; Scheepers and Storm, 2019; Wood and Vilkinas, 2007) and have organization-wide influence, not only with regard to formal, legal aspects but also as a key source for influencing organizational culture (Sarros *et al.*, 2011; Sattayaraksa and Boon-itt, 2018). Their decisions and actions can trigger a cascading chain reaction down to the lowest hierarchical levels (Sinha, 2019). Furthermore Venugopal *et al.* (2017) consider top executives' role modelling to be essential to facilitate ambidexterity in organizations.

In the area of ambidexterity and leadership, research to date has concentrated on various questions, such as how diversity in the top management team fosters organizational ambidexterity (Li, 2013) and how leadership style affects ambidexterity (Chang *et al.*, 2019; Siachou and Gkorezis, 2018; Snehvrat *et al.*, 2018), focusing in particular on the transformational style of leadership (Snehvrat *et al.*, 2018). These studies are of high importance because of their analysis of the ambidexterity concept. Notwithstanding their relevance to understanding ambidexterity in organizations, they do not examine the criteria that executives at the highest hierarchical level should fulfil to promote ambidextrous leadership. In this regard, a research gap exists, in that there is a lack of any holistic analysis dealing with the interplay between organizational ambidexterity and ambidextrous leadership, the latter including the different requirements for top executive roles.

Burke (2006) estimates that most leaders (50–75%) do not meet the requirements placed on them; Furnham (2018) suggests that as many as half of all leaders and managers fail and derail. One reason for this may be inadequate selection procedures, leading to unsuitable candidates being appointed to these roles. Day (2009, p. 159) believes that "there is a lot wrong with executive selection". Problems in the selection/evaluation process have been raised in other studies. According to Anderson and Kleiner (2003), for example, evaluations of CEOs are often not carried out, or biased data are used when selecting top executives (Knoll and Sternad, 2021). According to Wood and Vilkinas (2007), the necessary characteristics of successful CEOs remain unexplored. Ishizaka and Pereira (2016) further find that performance appraisals of existing employees, which provide the basis for identifying development needs and are relevant for promotions, pay rises, etc., are often totally avoided, despite their relevance to organizational performance. In addition, Na-Nan *et al.* (2022) find that most companies use the same appraisal forms for different employees regardless of role and have no clear targets to guide performance appraisals. The authors conclude that such appraisals are not reliable. Based on these considerations, it becomes clear that the selection and appraisal process for top executives needs to be optimized.

The appraisal process must be based on relevant criteria that enable assessors to evaluate a candidate's leadership potential (Knoll and Sternad, 2021). Different leadership styles reflect certain criteria which may be more relevant to each style. If we take servant leadership, for example, Mcquade *et al.* (2021) concluded that the skills of empathy, listening, communication and trust are essential. Different criteria may be more relevant to other leadership styles. While there may be some crossover with criteria used in assessing candidates for ambidextrous leadership and those used to assess other leadership styles, criteria should not simply be applied en masse. Within leadership practice and theories of leadership style, there are many different and sometimes opposing approaches—e.g. between democratic leadership and autocratic leadership (Bass and Bass, 2008)—meaning the demands placed on the focus of CEOs are not uniformly relevant across styles of leadership (House *et al.*, 2014). Both the content and the number of criteria can differ across the evaluation of different leadership styles: for example, Loh *et al.* (2019) show that the demands required by servant

leadership and lean leadership differ. For these reasons, it is crucial to consider those criteria which can be specifically linked to the idea of ambidextrous leadership, whether or not those criteria may be in whole or in part relevant to other leadership styles.

The purpose of this paper is to determine what these criteria should be when identifying ambidextrous top executives. In this paper, a criterion is, for example, a trait, an attitude, a competency or other attribute, the important thing being that it is used in the appraisal of top executives. While these different criteria are sometimes difficult to disentangle, they all have an influence on a CEO's ability to perform the complex tasks involved in running an organization (Jaggia and Thosar, 2021). The appraisal criteria are analysed here in two ways: an analysis of which criteria are relevant, and an analysis of how they should be differentiated and employed to evaluate ambidextrous leadership.

1.1 Design/methodology/approach

In the next section, a theoretical-conceptual, triangulated approach is used to investigate the requirements which in theory are necessary for top executives when the aim is to foster both exploration and exploitation in organizations. As in Bennett (2019) or Laser (2017, 2021), where different theories are triangulated, the concepts—leader/manager, transactional/transformational leadership, and exploration/exploitation—are brought together and used to explain the attributes necessary for a top executive to lead ambidextrously. Triangulation can provide a broader range of theoretical contexts by analysing the research subject from more than one perspective or using more than one approach (Denzin, 2017; Flick, 2008). The object of the research can thus be addressed within these theoretical contexts to provide a greater amount of data (Flick, 2008). By including several theories, more requirements can be worked out or specified than if only one theory were used. For example, starting from role theory, this paper analyses how opening and closing leadership behaviours may be supplemented by additional considerations to promote exploration and exploitation. By cross-referencing the theories, a statement that a closing leadership behaviour is helpful for exploitation can be concretized, for example, demonstrating a relationship between exploitation, closing leadership and the role of the manager. Since a conducive relationship exists in the exercise of the managerial role to closing leadership and exploitation (Maier, 2015), the managerial requirements are also relevant to understand how exploitation can be fostered, providing a further means by which to determine the relevant criteria for ambidextrous leadership. Furthermore, triangulation can reduce bias (Mathison, 1988) and overcome methodological limitations (Denzin, 2017).

Subsequently, a review and frequency analysis are performed, examining sources with different research foci to determine which attributes or behaviours a top executive should possess. These criteria are then analysed to determine how they should be differentiated and used in the appraisal process to foster ambidextrous leadership. Conclusions are then drawn. Finally, limitations and future research recommendations are discussed.

1.2 Contribution

The contribution of this paper lies in the theoretical exploration of those attributes and behaviours of top executives that may promote ambidexterity in an organization. This focus informs the criteria necessary for recruitment, performance management, and career and succession planning, with the aim of identifying candidates who may be recruited as ambidextrous top executives or CEOs for ambidextrous leadership, or quantifying the development needs of existing top executives or CEOs. Even if there are already selection criteria for top executives in an organization, the question arises as to whether these support ambidextrous leadership or if they should be modified. Specifically, this paper offers theoretical and practical value by answering the following questions:

(1) What criteria should ambidextrous top executives fulfil to promote an ambidextrous leadership style?

(2) In determining criteria for recruitment, succession planning and current performance evaluation of executives in the differentiated areas (exploration/exploitation) or roles (leader/manager), the question should be considered as to how these criteria should be differentiated and applied to the evaluation of candidates for top ambidextrous leadership posts.

2. Requirements for top executives from different theoretical perspectives on ambidextrous leadership

In this point, three theoretical perspectives are highlighted: (1) ambidextrous leadership; (2) the roles of manager and leader; and (3) transformational and transactional leadership. By including (2) and (3), additional criteria can be determined and more specifications can be made to foster ambidextrous leadership.

2.1 Ambidextrous leadership

Leadership can create an organizational context to promote both exploration and exploitation, such as by using opening and closing leadership behaviours (Rosing *et al.*, 2011). Opening leadership behaviour means that the superior ensures increased variance in employee behaviours, which is conducive to exploration (Alghamdi, 2018; Rosing *et al.*, 2011; Zacher *et al.*, 2016). Closing leadership behaviour means that variance in employees' behaviour is reduced, which is conducive to exploitation (Alghamdi, 2018; Zacher *et al.*, 2016; Zacher and Rosing, 2015). Opening leadership promotes new ideas/innovation, and a subsequent switch to closing leadership will ensure that these ideas/innovations are implemented (Luu *et al.*, 2019). Ambidextrous top executives switch between opening and closing leadership as the situation requires (Rosing *et al.*, 2011). Thus, the two behaviour sets (opening and closing leadership), while oppositional, can complement one another (Jia *et al.*, 2021; Kung *et al.*, 2020).

In this paper, the definition of ambidextrous leadership is linked to the goal of facilitating an ambidextrous organization. The term "ambidextrous leadership" is generally used in this paper to refer to the promotion of exploration and exploitation by leadership, including the mindset of a top executive within their own areas of responsibility, including, but not exclusive to, when directing the behaviour of employees. If the CEO can change focus between exploration and exploitation as needed and is adequately skilled in both areas, then there is ambidextrous leadership. An ambidextrous top executive is only spoken of here if he or she is carrying out ambidextrous leadership. According to this definition, not only is the behavioural influence on employees considered, but also the mindset and behaviour of top executives in their own areas of responsibility. Further concepts, such as in the following sections, are included to broaden the focus and reduce the risk of relevant criteria being ignored due to an overly narrow consideration.

2.2 Role of leader and manager

According to Kotter (1990), the term "leadership" implies that leaders are responsible for the (long-term) orientation of an organization, which is not limited to formulating a vision or strategy: it goes beyond merely informing employees to convincing them of the value of the vision and strategy with the aim of motivating them to act accordingly. More specifically, leaders are responsible for ensuring that change projects are successfully realized. On the other hand, managerial duties include planning, budgeting, organizing and controlling (Fox, 1991; Kotter, 2012). Management is responsible for predictable output and ensuring that routine tasks are consistently performed according to the plan (Kotter, 1990). According to Dover and Dierk (2010), executives in the managerial role are risk averse.

Kotter (1990) found that those in charge generally cannot manage and lead equally well. One reason for this could be the differing and sometimes contradictory role requirements for managers and leaders (Bennis, 2009); another is that the different strengths and weaknesses of top executives (Anderson and Kleiner, 2003) can mean that both roles are not optimally fulfilled. Zaleznik (2004) concludes that "managers and leaders are very different kinds of people. They differ in motivation, personal history, and in how they think and act." In the context of this premise, a differentiated approach to the two roles is important because it provides a primary source from which to elicit and explain key criteria for appointing top executives, for personnel development programmes or, in general, for feedback systems.

Due to the different demands made of leadership and management, these roles are differentiated in this paper. Roles are sets of (normative) behavioural expectations, rights and duties (Berthel and Becker, 2017; Gjerde and Ladegård, 2019) associated with given positions in the social structure by the role owner him- or herself and by others; roles are viewed as functional by the social system within which they are embedded (Ashforth, 2001). By using role theory, a differentiated analysis of the necessary requirements of a leader and a manager—and therefore of those in the role—is possible.

2.3 Transactional and transformational leadership
Transactional and transformational leadership styles are used in this paper because their effectiveness is generally supported by empirical cross-cultural studies (House *et al.*, 2014). Furthermore, according to Berraies and Zine El Abidine (2019), an appropriate mix between these two leadership styles is conducive to exploitative and explorative innovations.

Transactional leadership is based on the idea of reward and punishment (Afsar *et al.*, 2017; Bass and Bass, 2008; Berraies and Zine El Abidine, 2019), appealing to the respective self-interests of employees and employer. The manager assumes the role of instructor (Stock-Homburg, 2013) and, for example, uses management by exception (Vito *et al.*, 2014) or management by objectives to achieve staff compliance with guidelines. This limits any variance in employee behaviour and, as such, resembles closing leadership, which is linked with the exploitation of existing knowledge (Kassotaki, 2019) and incremental changes (incremental changes which reinforce existing schemata are also called changes of the first order; see Bartunek and Moch, 1987, 1994). Tung (2016) found that transactional leadership has a negative effect on employee creativity whereas transformational leadership has a positive effect.

In transformational leadership, the top executive takes on the role of the coach or mentor (Bass and Bass, 2008; Berthel and Becker, 2017), motivating their subordinates with a vision (Atapattu and Ranawake, 2017; Pradhan and Jena, 2019) that identifies the higher purposes of the organization, which can lead to second-order changes (transformative changes to existing schemata within the organization; see Bartunek and Moch, 1987, 1994) and may increase innovation among subordinates. Limitations on variance in employee behaviour should be adjusted accordingly, for which open leadership behaviours are useful.

2.4 Merging the concepts of ambidextrous leadership, role theory and transactional and transformational leadership
In the following, different interrelations of the above theories are demonstrated.

A connection exists between the roles of manager/leader and transactional/transformational leadership. According to Bass and Bass (2008) and Peck *et al.* (2006), this connection manifests insofar as managers can be seen as transactional and leaders can be seen as transformational.

There is a relationship between the roles of manager/leader and exploration/exploitation (O'Reilly and Tushman, 2016), such that in the area of exploitation, management skills may be of particular importance (Maier, 2015): hence transactional leadership or closing leadership

behaviour (Zacher *et al.*, 2016) can be used. Leadership skills are necessary for exploration (Maier, 2015), and so transformational leadership or opening leadership behaviour can be utilized to foster exploration (Zacher *et al.*, 2016).

There is a connection between closing/opening leadership and organizational exploration/ exploitation in that closing leadership behaviours are linked to exploitation (Alghamdi, 2018; Zacher *et al.*, 2016), and opening behaviours to exploration (Alghamdi, 2018; Rosing *et al.*, 2011). New ideas and innovations are encouraged through opening leadership behaviours, while closing behaviours ensure they are implemented (Luu *et al.*, 2019).

There is also a connection between ambidextrous leadership (exploration/exploitation) and transactional/transformational leadership (Kafetzopoulos, 2022). Baškarada *et al.* (2017) and Berraies and Zine El Abidine (2019) assume that to lead ambidextrously, a top executive must be competent in both transactional and transformational leadership. Asif (2017, 2019), Baškarada *et al.* (2016), Bryant (2003) and Jansen *et al.* (2009) note that there is a significant link between transformational leadership and exploration and between transactional leadership and exploitation. Kassotaki (2019) also links transformational leadership with exploration.

For a simplified illustration of the relationships between the concepts on an individual level, see Figure 1. Related aspects of leadership style (transactional and transformational, opening and closing leadership), leader and manager roles, and orientation towards exploitation and exploration are juxtaposed. The third dimension (the diagonal axis in Figure 1) is the ability to switch between exploration and exploitation, leader and manager role, opening and closing leadership, and transactional and transformational leadership as a given situation requires. The position to which employees are assigned within an area in Figure 1 relates to analysis of the underlying criteria (see the following Tables 1 and 2). If, for example, all criteria are fulfilled
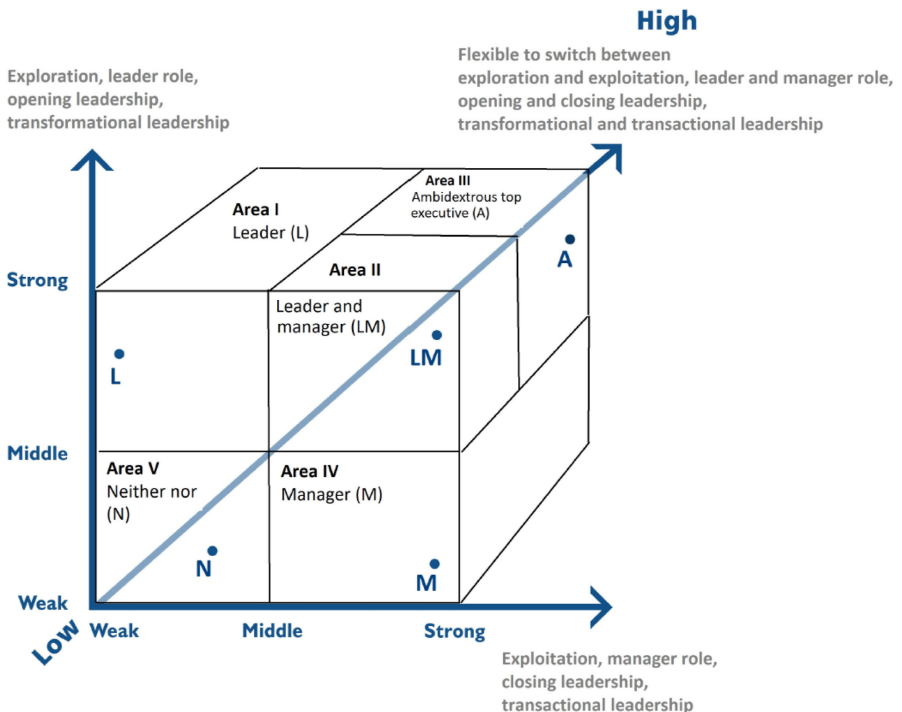

Figure 1.
Categories for top executives after aggregating the concepts that form organizational ambidexterity, transactional/ transformational leadership and management/ leadership roles

by an employee, this person is assigned to the ideal ambidextrous executive position in the upper right corner of area III.

Points A, M, L and LM in Figure 1 represent persons who may be suitable for management/leadership tasks. They differ according to their abilities. For example, A is particularly qualified in both leadership and management. In addition, this person can adapt their behaviour to drive exploration or exploitation when necessary, enabling direct advancement of the organization in either area. Persons falling into area III can be seen as ambidextrous top executives. People who are not currently suitable as managers and/or leaders are assigned to area V.

From this triangulated approach, it can be seen that:

(1) In addition to the tension between exploration and exploitation at an organizational level (March, 1991), there exists a similar tension at the individual level, in that the requirements placed on top executives are sometimes of an opposing nature, such as opening and closing leadership behaviour. If we also take into account that an individual's personality entails a persistent disposition (Lauer, 2014) which influences behaviour (Keller and Weibler, 2017) and is not easily changed (Loh *et al.*, 2019; Mintzberg, 2013a, b), it becomes clear that an individual may not be able to switch easily between opening and closing leadership behaviour as circumstances demand.

In the best-case scenario, people with strengths in all the requirements/criteria will be placed at the highest level. However, if one considers that the requirement profile of a manager differs significantly from that of a leader (Kotter, 1990, 2012) and that people have different strengths and weaknesses, it becomes understandable that some people are more suitable for exploration or the role of leader, and others for exploitation or that of manager. For this reason, it makes sense to differentiate between exploration and exploitation and between the roles of leader and manager, with the proviso that the distinction between these areas and roles is blurred and that an ambidextrous top executive should ideally be competent in both areas and both roles.

(2) Based on the relationships between the concepts dealt with here (e.g. that transformational leadership is conducive to the execution of the role of the leader, which is conducive to organizational exploration), the selection of the criteria for appraisal of top executives for ambidextrous leadership can be expanded. That is to say, all relevant criteria from the triangulated concepts can be taken into account in the appraisal process for ambidextrous top executives, and the matching of candidates to requirements may also be made more concrete: for example, the fulfilment of control tasks associated with the management role characterize closing leadership behaviour and, as such, are conducive to exploitation.

3. Preliminary review of the requirements for top executives

As can be seen from the previous point, in addition to criteria from the concept of ambidextrous leadership, criteria from the concepts of transactional/transformational leadership and the role requirements for leaders/managers can also be used to select the criteria for top executives to promote ambidextrous leadership, because of the relationships between them. In this way, a broader range of criteria can be considered than if only one of these concepts is referenced—hence the value of the triangulated approach.

Necessary behaviours and competencies are examined as part of an inductive approach, firstly in a general review (using a database characterized by the inclusion of different source types—research papers, biographies—and different key topics—for example, the traits and behaviours of CEOs), providing a holistic approach to developing profile requirements. In the next step, a frequency analysis (Mayring, 2015) is carried out using this dataset. The intention is not to use the review/frequency analysis to identify the most important attributes

(regardless of how frequently or infrequently these attributes are mentioned in this paper), but in the sense of the triangulated approach. That is to say, the intention is to provide a comprehensive overview of relevant attributes and requirements so that they can then be used as criteria for the evaluation of top executives. The extent to which these criteria are relevant to an organization (which may vary over time) should be evaluated continually within each organization to determine the fit between that organization's requirements (which vary according to business sector and culture and depend on factors such as the current organizational development phase) and the characteristics and behaviours of the top executive or CEO. In the next section, these criteria are analysed to determine how they can be used as appraisal criteria for ambidextrous top executives.

Table 1 shows the necessary requirements for top executives cited in various publications. The literature search was carried out using DeepDyve, Google Scholar and Google's general search engine, with the aim of providing a comprehensive overview of necessary criteria, albeit not an exhaustive one: not all papers listed in a journal for a certain period were used, for example. When deciding which papers to use, care was taken that different foci (requirements for leaders/CEOs/top executives and transformational leadership) were taken into account, whereby an array of diverse requirements was placed in the foreground. In the first column in Table 1 the authors of the studies are listed, and in brackets the theme to which the requirements are related. The second column lists the traits, competencies and behaviours that top executives should possess.

No., author, year and theme	Requirements for top executives
1. Aljuhmani *et al.* (2021) (Firm performance and CEOs attributes)	High level of narcissism
2. Araujo-Cabrera *et al.* (2017) (Influence of CEO openness and extraversion on firm performance)	Openness and extraversion
3. Bass and Bass (2008) (Criteria of transformational leaders)	Charismatic, with the ability to inspire and motivate, to stimulate intellectually and to be considerate to each individual
4. Bennis (2009) (Attributes of leaders)	Broad education, boundless curiosity, boundless enthusiasm, contagious optimism, belief in people and teamwork, willingness to take risks, devotion to long-term growth rather than short-term profit, commitment to excellence, adaptive capacity, empathy, authenticity, integrity, vision
5. Botelho *et al.* (2017) (Important behaviours of CEOs)	Decisiveness, engaging for impact, reliability, adaptability
6. Caldwell (2003) (Key attributes of change leaders)	Inspiring vision, entrepreneurship, integrity and honesty, learning from others, openness to new ideas, risk-taking, adaptable and flexible, creative, experimentation, willingness to use power
7. Cavazotte *et al.* (2012) (Effects of leader intelligence, personality and emotional intelligence on transformational leadership and managerial performance)	Intelligence, conscientiousness, managerial experience, low neuroticism
8. Collins (2011) (Attributes and behaviour of great CEOs)	Makes productive contributions through talent, knowledge, skills, and good work habits; contributes individual capabilities to the achievement of group objectives and works effectively with others in a group setting; organizes people and resources toward the effective and efficient pursuit of predetermined objectives; catalyses commitment to and vigorous pursuit of a clear and compelling vision, stimulates higher performance standards; builds enduring greatness through a paradoxical blend of personal humility and professional will; ambitious, fearless, wilful, modest

Table 1.
Requirements for top executives according to different authors

(*continued*)

No., author, year and theme	Requirements for top executives
9. Collins and Porras (2004) (Leaders of visionary companies)	Architect of a visionary organization, embracing change *and* stability, preserving the core/stimulating progress, seeking consistent alignment
10. Fraude (2015) (Transformational leadership)	Inspiring oneself and others, showing empathy
11. Goleman (2017) (Attributes of good leaders)	Self-awareness (self-confidence, realistic self-assessment, self-deprecating sense of humour), self-regulation (trustworthiness and integrity, comfort with ambiguity, openness to change), motivation (strong drive to maintain optimism, even when organizational commitment is lacking), empathy (expertise in building and retaining talent, cross-cultural sensitivity, service to clients and customers), social skills (effectiveness in leading change, persuasiveness, expertise in building and leading teams, skilled at building rapport)
12. Herrmann and Nadkarni (2014) (Duality of CEO personalities)	Emotional stability and agreeableness towards initiation and implementation of strategic change; extraversion and openness to initiation of strategic change; conscientiousness (positive for implementation but negative in the initiation stage of strategic change)
13. House *et al.* (2014) (Universally desirable and culturally contingent leadership attributes)	Trustworthy, dynamic, decisive, intelligent, dependable, forward planner, excellence oriented, team builder, encouraging, confidence builder, informed, honest, effective bargainer, motive arouser, win-win problem solver, positive, foresight, just, communicative, motivational, coordinator, administrative skilled
14. House *et al.* (2014) (CEO critical leadership competencies)	Visionary, team integrator, administratively competent, decisive, inspirational, performance-orientated, possessing integrity, diplomatic, collaborative, self-sacrificial, modest, participative, bureaucratic
15. Iger (2019) (Necessities for leadership)	Optimism, courage, focus, decisiveness, curiosity, fairness, thoughtfulness, authenticity, relentless in the pursuit of perfection, integrity
16. Judge and Bono (2000) (Transformational leadership [big five personality traits])	Extraversion, agreeableness, openness to experience
17. Kaplan and Sorensen (2016) (Characteristics of top managers)	Hires A-players, develops people, removes underperformers, respectful, efficient, networker, flexible, person of integrity, organized, calm, aggressive, fast, committed, high brainpower, analytical skills, strategic vision, creative, attentive to detail, enthusiastic, persistent, proactive, strong work ethic, high standards, listening skills, open to criticism, good oral communicator, team player, persuasive, holds people accountable
18. Knoll and Sternad (2021) (Global leadership potential characteristics)	Integrity (honest, fair, respectful, ethical behaviour), resilience (resilient and emotionally stable in difficult situations and under pressure and able to handle risk effectively), learning orientation (willingness to learn and develop personally, proactive search for constructive feedback, learning experience and able to create a learning environment for oneself and for others), motivation to lead (desire and passion to get more responsibility or progress into higher levels of the hierarchy and proactively taking on leadership roles), change orientation (challenges the existing system, interest in continuous improvement and innovation and readiness to accept change), drive for results (results-oriented; desire to exceed targets and striving for success even under difficult circumstances), customer orientation (customer-focused working approach and the desire to constantly fulfil or exceed customer expectations), global mindset (having a global perspective), intercultural competence (cultural know-how, awareness and sensitivity, being able to adapt, cross-cultural communication and language skills), interpersonal competence (effective communication to convey messages comprehensively, active listening skills and the ability to build and maintain strong relationships)

(continued)

Table 1.

No., author, year and theme	Requirements for top executives
18. Knoll and Sternad (2021) (Global leadership potential characteristics)	leadership competence (decision making, delegation and conflict transformation competencies, establishment of leadership authenticity that inspires and motivates others), cognitive complexity (ability to think strategically and conceptually, able to recognise patterns, reducing complexity), learning competencies (ability to learn from failure, gather new knowledge, react to feedback quickly, pro-active approach to self-development), change competencies (ability to handle change effectively, lead others through a change situation), business competencies (business knowledge, understanding of the global market, operational expertise), performance (exceptional performance with a demonstration of the right behaviours and values), organizational commitment (engagement and dedication to the company and its future development), mobility (willingness and ability to take on international assignments), experience (general working experience as well as international, cross-cultural and project experience)
19. Kotter (1990) (Leadership/ management)	Intelligence, ambition, integrity, emotional health
20. Lauer (2014) (Transformational leadership)	Target-orientated, willpower, emotional intelligence
21. Manres (2018) (CEO competencies)	Reflectiveness, integrity, persuasiveness, perseverance, leadership skills
22. Mattiaske et al. (2014) (Requirements for top executives)	Flexibility, ability to learn and to work in a team, creativity, readiness for conflict, decisive, integrity, assertiveness, social responsibility
23. Mintzberg (2013a) (Essential qualities for assured managerial/leadership success)	Courageous, committed, curious, confident, candid, reflective, insightful, open-minded/tolerant (towards people, ambiguities, and ideas), innovative, communicative (including being a good listener), connected/informed, perceptive, thoughtful/intelligent/wise, analytic/objective, pragmatic, decisive (action oriented), proactive, charismatic, passionate, inspiring, visionary, energetic/enthusiastic, upbeat/optimistic, ambitious, tenacious/persistent/zealous, collaborative/participative/cooperative, engaging, supportive/sympathetic/empathetic, stable, dependable, fair, accountable, ethical/honest, consistent, flexible, balanced, integrative
24. Olanrewaju and Okorie (2019) (Qualities of a good leader)	Kindness, transparency, vision, inspiration, forward-looking, motivation, honesty, training/empowerment, delegation, accountability, open communication, commitment, assertiveness, confidence, good listener, trustworthy, team building capacity, promotes good maintenance culture, selflessness, courage, approachable, energetic, magnanimous, creative, humble, optimistic, sense of humour, intuitive, decision making skills, focus, gentle, fair, balanced, competent
25. Palaiou and Furnham (2014) (Personality differences between CEOs and staff [big five personality traits])	Low neuroticism, higher scores of extraversion, agreeableness and conscientiousness
26. Peterson et al. (2009) (Positive CEO psychological traits)	Hope, optimism and resilience
27. Probst et al. (2011) (Leadership traits for growth leaders)	External focus that defines success in market terms; clear thinking to simplify strategy into practical actions; imagination and courage to take risks; inclusiveness and connection to energise teams; in-depth expertise in a function or domain
28. Randolph (2019) (Rules for success from a cofounder/CEO of Netflix)	Doing at least 10% more than required; never presenting opinions as facts; courteous and considerate; does not knock, does not complain – sticks to constructive, serious criticism; not afraid to make decisions when in possession of the facts; quantify where possible; open-minded but sceptical; prompt

Table 1.

(*continued*)

No., author, year and theme	Requirements for top executives
29. Resick et al. (2009) (Personality and transformational leadership)	High level of core self-evaluations (core self-evaluations "... encompass fundamental evaluations people make about themselves and their functioning in the environment and represent the overlapping portions of four common traits: (a) self-esteem ... (b) internal locus of control ... (c) generalized self-efficacy ... and (d) neuroticism, described as the degree of control over emotional reactions"; Resick et al., 2009, p. 1367)
30. Seijts and Gandz (2018) (Character of leaders for transformational change)	Drive (passionate, vigorous, results-oriented, demonstrates initiative, strives for excellence), collaborative (cooperative, collegial, open-minded, flexible, interconnected), humanity (considerate, empathetic, compassionate, magnanimous, forgiving), humility (self-aware, modest, reflective, curious, continuous learner, respectful, grateful, vulnerable), integrity (authentic, candid, transparent, principled, consistent), temperance (patient, calm, composed, self-controlled, prudent), just/values justice (fair, equitable, proportionate, even-handed, socially responsible), accountable (takes ownership, accepts consequences, conscientious, responsible), courageous (brave, determined, tenacious, resilient, confident), transcendent (appreciative, inspired, purposive, future-oriented, optimistic, creative), sound judgment (situationally aware, cognitively complex, analytical, decisive, critical thinker, intuitive, insightful, pragmatic, adaptable)
31. Stamoulis et al. (2016) (Best performing CEOs)	Passionate, sense of urgency, focused on substance, keeps problems in perspective, reads situations efficiently and actively, not arrogant, dislikes self-promotion
32. Wood and Vilkinas (2007) (Important CEO characteristics)	Humanistic approach, achievement orientation, a positive outlook, integrity, inclusiveness, balance, learning and self-awareness

Table 1.

A word frequency analysis (Mayring, 2015)—that is, the number of times a criterion occurs in the review, often understood as a numbered list of the occurrence of words in descending order by rank (Bochkarev and Shevlyakova, 2019)—is used in the next step to measure the frequency of the necessary criteria and their central tendency (Ayat et al., 2021). This confirms the overall relevance of each criterion. The frequency distribution shows the prevalence (Kearns et al., 2015) of certain necessary criteria to be fulfilled by CEOs. If one attribute, such as integrity, is mentioned more often than another attribute, such as proactivity, some consensus regarding the relevance of the first is indicated. It is precisely this consensus that less frequently mentioned criteria lack. The categories listed in Table 2 are included in at least two different sources from Table 1: for example, House et al.'s (2014) "decisive" is not counted twice as this criterion is discussed in relation to different topics within the same source. All other requirements listed in one source only (e.g. attention to detail) can be found in Table 1. Table 2 shows in the first column the ranking (from most frequent to least frequent) resulting from the frequency analysis of requirements for top executives, the source numbers appearing in the following columns. The figure "1" in any cell indicates that it was taken from a published source referenced in Table 1. The requirement "integrity", for example, is named in source no. 4 from Table 1. The last column in Table 2 presents the total number of times an attribute was named in the sources analysed.

Requirements for top executives by frequency ranking	No. of author from Table 1																																Total sum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
1. Integrity			1	1		1	1				1			1	1	1	1	1	1	1	1	1	1							1		1	12
2. Openness		1		1	1	1	1				1	1				1	1						1	1				1		1			9
3. Optimism				1			1				1					1			1				1	1		1				1			7
3. Decisiveness			1			1		1						1	1						1												6
4. Inspiring										1				1	1			1		1		1	1										6
4. Visionary				1		1								1		1	1		1				1	1						1			6
5. Creativity						1				1	1					1	1					1								1			5
5. Empathy				1						1	1												1	1						1			5
5. Fair						1	1								1		1	1			1		1	1						1			5
5. Flexibility						1							1					1					1	1									5
5. Honest						1							1			1		1				1	1	1									5
5. Intelligence				1	1	1	1										1		1														5
6. Adaptability				1	1										1			1					1							1			4
6. Authentic				1	1												1	1					1	1									4
6. Committed											1						1						1	1						1			4
6. Confident																		1				1	1	1						1			4
6. Courageous															1			1					1	1						1			4
6. Curious				1											1		1						1										4
6. Extraversion		1										1				1									1								4
6. Learning						1											1	1				1	1										4
6. Listening																	1						1	1				1					4
6. Reflective																					1		1						1	1			4
7. Accountable								1				1							1				1		1					1			3
7. Agreeableness																									1								3
7. Ambition																			1														3
7. Analytical																1							1	1					1				3
7. Balanced							1																1		1							1	3
7. Conscientious			1																											1			3
7. Considerate																												1		1			3
7. Cooperative																							1							1			3
7. Effective decision making														1				1										1					3
7. Engaging				1	1													1															3
7. Enthusiasm				1						1							1						1										3
7. Excellence oriented													1		1		1																3
7. Focused				1																			1	1						1			3
7. Inspired																														1	1		3
7. Modest								1		1				1									1							1			3

(continued)

Table 2.
Frequency analysis of identified requirements for top executives

Requirements for top executives by frequency ranking	No. of author from Table 1																																Total sum
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
7. Motivational			1										1					1															3
7. Passionate																							1							1	1		3
7. Persuasive											1										1									1			3
7. Resiliency																	1									1				1			3
7. Respectful																	1	1												1			3
7. Results oriented																		1												1		1	3
7. Risk-taking				1																							1					1	3
7. Self-aware				1																										1		1	3
7. Team builder								1					1											1									3
7. Team player											1		1				1																3
7. Trustworthy											1		1									1											3
8. Assertiveness																						1		1									2
8. Calm													1			1														1			2
8. Charismatic			1																				1										2
8. Communicative																							1	1									2
8. Consistent																							1							1			2
8. Dependable													1										1										2
8. Effective in leading change											1							1															2
8. Energetic																		1						1									2
8. Ethical																		1					1										2
8. Fast																	1						1										2
8. High standards															1		1																2
8. Humility																								1						1			2
8. Inclusiveness																										1						1	2
8. Informed													1									1											2
8. Insightful																						1								1			2
8. Intuitive																								1						1			2
8. Leadership skills																		1			1												2
8. Low neuroticism							1																		1								2
8. Magnanimous																								1	1								2
8. Motivated											1													1									2
8. Overachieve targets																	1							1									2
8. Persistence																	1						1										2
8. Pragmatic																							1							1			2
8. Proactive													1				1																2
8. Socially responsible																						1	1										2
8. Stable																								1						1			2
8. Transparent																		1												1			2

Table 2.

Among the sources analysed above, there exists some variation in the focus of research. Given that not every publication cited considered the same attributes, their frequency in Table 2 cannot be used as an indicator of relative importance among attributes (weighting): for example, it cannot be said that the most frequently mentioned criterion (mode) "integrity" is four times more important than "modesty". The attributes that were most often examined in the respective publications have an increased probability of occurring more often in this frequency analysis, which may lead to distortions.

A person cannot be fully described using the criteria listed here, meaning these appraisal criteria can only be viewed as one possible way of evaluating top executives.

4. Analysis of the application of ambidextrous leadership appraisal criteria
The studies cited in Tables 1 and 2 deal with leadership, but they are not related specifically to the concept of an ambidextrous top executive. For this reason, in this section, criteria from the previous point are considered and categories using some examples are created to determine and specify how the criteria can be used in the appraisal process to identify candidates for ambidextrous leadership.

For a more in-depth look at the requirements that a top executive should fulfil to promote leadership that fosters both exploration and exploitation, two categories are introduced. Generally, it is assumed that all criteria given in Tables 1 and 2 are relevant but that the content of some criteria can be different in relation to different areas (exploration and exploitation) and different roles (leader or manager). If a distinction is made between areas or roles, the question arises as to whether this differentiation has an impact on how the criteria in Tables 1 and 2 should be applied in the evaluation process to foster exploration and exploitation. A taxonomy employing two categories introduced is used here.

4.1 Category 1: one-dimensional criteria
Some criteria are universal and do not vary according to area (exploration or exploitation). These should be fulfilled by all top executives regardless of their primary responsibilities in exploration and exploitation within the organization. Criteria such as integrity, empathy, flexibility, intelligence, team player, creativity, emotional health, self-evaluative, respectfulness, social responsibility and an ethical stance can be considered relevant to both exploration and exploitation with no distinction between roles or leadership styles, and to be unaffected by the nature or scale of organizational change.

The flexibility to switch between behaviours conducive to exploration and exploitation is not required here because the criteria in this category are always relevant for both exploration and exploitation and there would be no obvious reason for differentiating the criterion. Therefore, the criteria in this category are to be assessed one-dimensionally according only to the extent to which the person to be assessed fulfils the criterion.

4.2 Category 2: multidimensional criteria
Criteria for ambidextrous leadership should be fulfilled by executives, with the caveat that the content of each criterion differs in relation to the respective area or role. Some criteria may vary in content: for example, what the criterion of ambition entails for a leader or for exploration may differ in content for a manager or for exploitation; a top executive with strengths in the area of exploitation, the role of manager and transactional leadership may be more motivated by planning and organizational tasks, whereas a top executive with strengths in the area of exploration, the role of leader and transformational leadership may be

more motivated to set the vision and strategic direction of the organization. Same criteria, different content.

When selecting or appraising a top executive, it is important to ensure that the selection/appraisal criteria are aligned with the content of the specific area or role being recruited for or evaluated. Otherwise, the criteria could be too abstract for the assessors, with the result that the assessment would not be reliable (Na-Nan *et al.*, 2022). In order for the assessor to know how to apply the criteria in concrete terms, it is important to differentiate (e.g. between exploration and exploitation).

In this second category, a distinction between different dimensions is relevant— between exploration and exploitation or opening and closing leadership—and the degree of flexibility to switch between these two areas or leadership styles can therefore be differentiated in this category.

In category 2, the criteria should also be differentiated in relation to first- and second-order change. Lower executives are not responsible for organizational change that is dramatic and transformative, but rather for incremental, predictable change (Kotter, 2012), which can be defined as first-order change. Investment decisions affecting the whole organization involve risks that are the responsibility of the CEO or the top management team, for example, and demand courage commensurate with second-order change. Lower executives are required to be courageous regarding first-order changes—for example, when entering into negotiation of the obstacles encountered when advancing first-order change, addressing any resistance from employees and smoothing the path towards implementation. Lower executives therefore need to be courageous within the bounds of their role, but the roles of lower executive and CEO involve different orders of the criterion "courage".

The possible dimensions listed so far according to which a criterion can be assessed are summarized in Table 3.

Within these dimensions, a criterion can be differentiated—e.g. according to opening and closing leadership in relation to second-order change—in order to obtain a more exact appraisal than would be the case if the dimensions were combined.

The criterion $\times$ (e.g. ambition) is to be assessed according to		
Dimensions	Exploration, opening leadership	Exploitation, closing leadership
First order changes	Degree of fulfilment by the CEO 0–100%	Degree of fulfilment by the CEO 0–100%
Second order changes	Degree of fulfilment by the CEO 0–100%	Degree of fulfilment by the CEO 0–100%

Table 3.
Dimensions for selection criteria for ambidextrous leadership

5. Discussion and conclusions

The characteristics and behaviours of the CEO constitute an influential factor in the practice of ambidextrous leadership. Hence the first question in this paper, the criteria that a top executive should meet in order to promote ambidextrous leadership. The criteria identified in this paper were determined via a literature review. This review of the necessary criteria for top executives to lead ambidextrously identified a variety of requirements, such as integrity, ambition and openness, but not all potentially relevant criteria have been determined through this inductive approach. Other criteria could be determined via a deductive approach—for example a growth mindset (Dweck, 2017).

The large number of criteria listed here indicates that the ambidextrous leadership concept is broader and more comprehensive than some other concepts of leadership, with the implication that the ambidextrous executive needs a generalist rather than a specialized behaviour profile (Kafetzopoulos, 2022). Moreover, the relevant priority of an area of operation, such as exploration, and the corresponding criteria necessary for promoting this

area, can vary over time, meaning that attempts to predetermine specific permanent weighting of these or any other criteria are redundant, because an ambidextrous executive needs to fulfil all criteria as and when required.

That top executives, due to their personal preferences and characteristics, might be more inclined to one area (exploration or exploitation) and specifically promote this area, while an ambidextrous top executive should be a flexible generalist, may open up a discrepancy between idealistic demands and practical realization. Idealistic demands, such as that the ambidextrous top executive should have extraordinary strengths in all areas, might not be met in practice. To avoid this eventuality in the selection process, the focus could be shifted away from the top executive who fulfils all criteria to a degree that is above the average to fulfilment of the criteria of an ambidextrous top executive to a minimum degree. These minimum criteria being met in an initial appraisal process, further assessments could be made as to which candidate is best suited for the CEO position.

An ambidextrous top executive must possess the flexibility to produce the right behaviours relating to one or another set of necessary criteria on demand according to the needs of the moment. The possibility that a requirement is not met initially but learned as needed, if at all possible, could lead to a top executive not being able to draw on the skills required by a given situation, which demonstrates the value of taking all identified criteria as essential for the position of an ambidextrous top executive at all times, providing full confidence in that person's ability to respond flexibly to changing demands.

The relevance of the criteria in the ambidextrous leadership concept can vary over time. Only one criterion (the flexibility requirement) can be said always to be relevant, whereas other leadership concepts may have more than one criterion as a constant. The typical criteria for charismatic leadership, for example, are a "strong need for power, high self-confidence and strong convictions" (De Vries et al., 1999, p. 110).

Now that the criteria have been gathered, the second question in this paper arises regarding how these criteria should be applied in the appraisal process. One part of this question relates to the flexibility requirement in ambidextrous leadership, with the aim of making this abstract concept more concrete so it can be applied in the appraisal process for ambidextrous top executives.

The second question addresses how the criteria from the review in this paper should be differentiated and applied to the evaluation of candidates for top ambidextrous leadership posts. To determine how the criteria should be applied in the evaluation of candidates for top ambidextrous leadership posts, a taxonomy was created in which the criteria were divided into two categories: (1) one-dimensional criteria and the extent to which the person to be assessed fulfils each criterion; and (2) multidimensional criteria, where (top) executives should fulfil the criteria, with some contingent variation in the content of each criterion regarding exploration or exploitation, opening and closing leadership, and first-order or second-order changes.

The criteria in the first category should not be differentiated according to the areas of exploration and exploitation because, for example, there would be no obvious reason for differentiating the criterion "intelligence" by requiring higher intelligence in the area of exploration than in the area of exploitation.

In contrast to category 1, the flexibility requirement is relevant in category 2. In category 2, criteria such as ambition should be differentiated because the specific content of some criteria may differ, for example, between exploration and exploitation. Because the relative importance of exploration or exploitation can change over time, flexibility is necessary to shift focus accordingly. Thus, the abstract flexibility requirements of the ambidextrous leadership concept can be made concrete, meaning that they can be applied in the assessment process.

This taxonomy is intended to help assessors use the criteria in a differentiated manner to carry out a more detailed analysis of whether the person being assessed fulfils the requirements.

One aspect of switching focus between the areas of exploration and exploitation is the requirement of top executives to switch between opening and closing leadership styles to influence employee behaviour. It should be noted, however, that other CEO responsibilities, and the skills and abilities required to fulfil these, should not be overlooked—for example, budget allocation. Assessment should then consider opening and closing leadership but also differentiate and appraise skills relevant to all other relevant areas falling under the CEO role.

6. Limitations and future research recommendations

In attempting a holistic conceptual representation of the idealized ambidextrous top executive by linking role theory and leadership theory, some influencing factors—for example, salary expectations—will not be taken into account.

Furthermore, additional criteria could be determined via a deductive approach, perhaps by assuming that due to the connections between the concepts of manager and leader, opening and closing leadership, transactional and transformational leadership, and exploration and exploitation, all relevant criteria relating respectively to these concepts are also relevant for ambidextrous leadership, rather than inductively deriving criteria from studies of CEO ambidexterity in practice. This would counter the inherent limitation of an inductive approach, as used in this paper, of limiting criteria to those found in the sources used.

Future research could also address whether a criterion such as being cooperative correlates more closely with one concept than another—for example, whether cooperative behaviour correlates with exploration but less with the leadership role.

References

Afsar, B., Badir, Y.F., Saeed, B.B. and Hafeez, S. (2017), "Transformational and transactional leadership and employee's entrepreneurial behavior in knowledge-intensive industries", *The International Journal of Human Resource Management*, Vol. 28 No. 2, pp. 307-332.

Al-Haddad, S. and Kotnour, T. (2015), "Integrating the organizational change literature: a model for successful change", *Journal of Organizational Change Management*, Vol. 28 No. 2, pp. 234-262.

Alghamdi, F. (2018), "Ambidextrous leadership, ambidextrous employee, and the interaction between ambidextrous leadership and employee innovative performance", *Journal of Innovation and Entrepreneurship*, Vol. 7 No. 1, pp. 1-14.

Ali, S., Wu, W. and Ali, S. (2021), Adaptive marketing capability and product innovations: the role of market ambidexterity and transformational leadership (evidence from Pakistani manufacturing industry), *European Journal of Innovation Management*, ahead of print.

Aljuhmani, H.Y., Emeagwali, O.L. and Ababneh, B. (2021), "The relationships between CEOs' psychological attributes, top management team behavioral integration and firm performance", *International Journal of Organization Theory and Behavior*, Vol. 24 No. 2, pp. 126-145.

Anderson, B. and Kleiner, B.H. (2003), "How to evaluate the performance of chief executive officers effectively", *Management Research News*, Vol. 26 Nos 2/3/4, pp. 3-11.

Araujo-Cabrera, Y., Suarez-Acosta, M. and Aguiar-Quintana, T. (2017), "Exploring the influence of CEO extraversion and openness to experience on firm performance", *Journal of Leadership and Organizational Studies*, Vol. 24 No. 2, pp. 201-215.

Arazmjoo, H. and Rahmanseresht, H. (2020), "A multi-dimensional meta-heuristic model for managing organizational change", *Management Decision*, Vol. 58 No. 3, pp. 526-543.

Ashforth, B.E. (2001), *Role Transitions in Organizational Life: an Identity-Based Perspective*, Routledge, Mahwah, NJ.

Asif, M. (2017), "Exploring the antecedents of ambidexterity: a taxonomic approach", *Management Decision*, Vol. 55 No. 7, pp. 1489-1505.

Asif, M. (2019), "Exploring the role of exploration/exploitation and strategic leadership in organizational learning", *International Journal of Quality and Service Sciences*, Vol. 11 No. 3, pp. 409-423.

Atapattu, M. and Ranawake, G. (2017), "Transformational and transactional leadership behaviours and their effect on knowledge workers' propensity for knowledge management processes", *Journal of Information and Knowledge Management*, Vol. 16 No. 3, pp. 1-23.

Ayat, M., Imran, M., Ullah, A. and Kang, C.W. (2021), "Current trends analysis and prioritization of success factors: a systematic literature review of ICT projects", *International Journal of Managing Projects in Business*, Vol. 14 No. 3, pp. 652-679.

Bartunek, J.M. and Moch, M.K. (1987), "First-order, second-order, and third-order change and organization development interventions: a cognitive approach", *The Journal of Applied Behavioral Science*, A Publication of the NTL Institute, Vol. 23 No. 4, pp. 483-500.

Bartunek, J.M. and Moch, K.M. (1994), "Third-order organizational change and the western mystical tradition", *Journal of Organizational Change Management*, Vol. 7 No. 1, pp. 24-41.

Baškarada, S., Watson, J. and Cromarty, J. (2016), "Leadership and organizational ambidexterity", *Journal of Management Development*, Vol. 35 No. 6, pp. 778-788.

Baškarada, S., Watson, J. and Cromarty, J. (2017), "Balancing transactional and transformational leadership", *International Journal of Organizational Analysis*, Vol. 25 No. 3, pp. 506-515.

Bass, M. and Bass, R. (2008), *The Bass Handbook of Leadership, Theory, Research and Managerial Applications*, 4th ed., Free Press, New York, NY.

Bennett, T.C. (2019), "Triangulating intrusion in privacy law", *Oxford Journal of Legal Studies*, Vol. 39 No. 4, pp. 751-778.

Bennis, W. (2009), *On Becoming a Leader*, Basic Books, New York, NY.

Berraies, S. and Zine El Abidine, S. (2019), "Do leadership styles promote ambidextrous innovation? Case of knowledge-intensive firms", *Journal of Knowledge Management*, Vol. 23 No. 5, pp. 836-859.

Berthel, J. and Becker, F.G. (2017), *Personal-Management, Grundzüge für Konzeptionen betrieblicher Personalarbeit*, 11th ed., Schäffer-Poeschel Verlag, Stuttgart, Germany.

Beuren, I.M., Souza, G.E. and Bernd, D.C. (2021), "Effects of budget system use on innovation performance", *European Journal of Innovation Management*, Vol. 24 No. 1, pp. 109-129.

Bochkarev, V. and Shevlyakova, A. (2019), "Analysis of the probability distribution of time series of word frequencies", *Journal of Physics: Conference Series*, Vol. 1391 No. 1, pp. 1-4.

Botelho, E., Powell, K. and Raz, T. (2017), *The CEO Next Door: the 4 Behaviors that Transform Ordinary People into World Class Leaders*, Kindle Edition, Virgin Books, London.

Bryant, S.E. (2003), "The role of transformational and transactional leadership in creating, sharing and exploiting organizational knowledge", *Journal of Leadership and Organizational Studies*, Vol. 9 No. 4, pp. 32-44.

Burke, R.J. (2006), "Why leaders fail: exploring the darkside", *International Journal of Manpower*, Vol. 27 No. 1, pp. 91-100.

Caldwell, R. (2003), "Change leaders and change managers: different or complementary?", *Leadership and Organization Development Journal*, Vol. 24 No. 5, pp. 285-293.

Carmeli, A. and Halevi, M.Y. (2009), "How top management team behavioral integration and behavioral complexity enable organizational ambidexterity: the moderating role of contextual ambidexterity", *The Leadership Quarterly*, Vol. 20 No. 2, pp. 207-218.

Cavazotte, F., Moreno, V. and Hickmann, M. (2012), "Effects of leader intelligence, personality and emotional intelligence on transformational leadership and managerial performance", *The Leadership Quarterly*, Vol. 23 No. 3, pp. 443-455.

Chang, Y.-Y., Chang, C.-Y., Chen, C.-W., Chen, Y.C.K. and Chang, S.-Y. (2019), "Firm-level participative leadership and individual-level employee ambidexterity, a multilevel moderated mediation analysis", *Leadership and Organization Development Journal*, Vol. 40 No. 5, pp. 561-582.

Christensen, C.M. (2015), *The Innovator's Dilemma, when New Technologies Cause Great Firms to Fail*, Kindle Edition, Harvard Business Review Press, Boston, MA.

Collins, J. (2011), *Good to Great: Why Some Companies Make the Leap...And Others Don't*, Kindle Edition, Harper Business, London.

Collins, J. and Porras, J.I. (2004), *Built to Last: Successful Habits of Visionary Companies*, Kindle Edition, Harper Business, London.

Day, D.V. (2009), "Executive selection is a process not a decision", *Industrial and Organizational Psychology*, Vol. 2 No. 2, pp. 159-162.

De Vries, R.E., Roe, R.A. and Taillieu, T.C.B. (1999), "On charisma and need for leadership", *European Journal of Work and Organizational Psychology*, Vol. 8 No. 1, pp. 109-133.

Denzin, N.K. (2017), *The Research Act, a Theoretical Introduction to Sociological Methods*, Routledge, New York, NY, Kindle Edition.

Dover, P.A. and Dierk, U. (2010), "The ambidextrous organization: integrating managers, entrepreneurs and leaders", *Journal of Business Strategy*, Vol. 31 No. 5, pp. 49-58.

Dweck, C.S. (2017), *Mindset, Changing the Way You Think to Fulfil Your Potential*, Kindle Edition, Robinson.

Flick, U. (2008), *Triangulation, Eine Einführung*, 2nd ed., VS Verlag für Sozialwissenschaften, Wiesbaden.

Fox, P. (1991), "Exploring managers' jobs", *International Journal of Manpower*, Vol. 12 No. 7, pp. 20-30.

Fraude, S. (2015), "Die Persönlichkeit einer Führungskraft als relevanter Einflussfaktor auf den transformationalen bzw. transaktionalen Führungsstil–Mythos oder Realität der Führungspersönlichkeit?", Dissertation Nr. 4436, Rosch-Buch Druckerei, Zürich, Switzerland.

Furnham, A. (2018), "Learning from failure: what management derailment reveals", available at: https://www.hrmagazine.co.uk/article-details/learning-from-failure-what-management-derailment-reveals#comment-124320 (accessed 18 September 2021).

Gjerde, S. and Ladegård, G. (2019), "Leader role crafting and the functions of leader role identities", *Journal of Leadership and Organizational Studies*, Vol. 26 No. 1, pp. 44-59.

Goleman, D. (2017), *What Makes a Leader*, Harvard Business Review Press, Boston, MA.

Gupta, N. and Mahakud, J. (2020), "CEO characteristics and bank performance: evidence from India", *Managerial Auditing Journal*, Vol. 35 No. 8, pp. 1057-1093.

Herrmann, P. and Nadkarni, S. (2014), "Managing strategic change: the duality of CEO personality", *Strategic Management Journal*, Vol. 35 No. 9, pp. 1318-1342.

House, R.J., Dorman, P.W., Javidan, M., Hanges, P.J. and Sully de Luque, M.F. (2014), *Strategic Leadership across Cultures: The Globe Study of CEO Leadership Behaviour and Effectiveness in 24 Countries*, Sage Publications, London.

Iger, R. (2019), *The Ride of a Lifetime, Lessons in Creative Leadership*, Kindle Edition, Bantam Press, London.

Imran, M.K., Rehman, C.A., Aslam, U. and Bilal, A.R. (2016), "What's organization knowledge management strategy for successful change implementation?", *Journal of Organizational Change Management*, Vol. 29 No. 7, pp. 1097-1117.

Ishizaka, A. and Pereira, V.E. (2016), "Portraying an employee performance management system based on multi-criteria decision analysis and visual techniques", *International Journal of Manpower*, Vol. 37 No. 4, pp. 628-659.

Jaggia, S. and Thosar, S. (2021), "CEO management style: does educational background play a role?", *Managerial Finance*, Vol. 47 No. 10, pp. 1465-1485.

Jansen, J.J.P., Vera, D. and Crossan, M. (2009), "Strategic leadership for exploration and exploitation: the moderating role of environmental dynamism", *The Leadership Quarterly*, Vol. 20 No. 1, pp. 5-18.

Jia, R., Hu, W. and Li, S. (2021), "Ambidextrous leadership and organizational innovation: the importance of knowledge search and strategic flexibility", *Journal of Knowledge Management*, Vol. 26 No. 3, pp. 781-801.

Judge, T.A. and Bono, J.E. (2000), "Five-factor model of personality and transformational leadership", *Journal of Applied Psychology*, Vol. 85 No. 5, pp. 751-765.

Kafetzopoulos, D. (2022), "Ambidextrous leadership: a narrative literature review for theory development and directions for future research", *Baltic Journal of Management*, Vol. 17 No. 2, pp. 206-232.

Kaplan, S.N. and Sorensen, M. (2016), "Are CEOs different? Characteristics of top managers", available at: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&ved=2ahUKEwiT6oz99JrfAhWrMewKHVsrBVsQFjACegQIBxAC&url=https%3A%2F%2Feditorialexpress.com%2Fcgi-bin%2Fconference%2Fdownload.cgi%3Fdb_name%3DAFA2017%26paper_id%3D357&usg=AOvVaw1ZubYdwiHaUodk00Iocpmn (accessed 7 September 2021).

Kassotaki, O. (2019), "Ambidextrous leadership in high technology organizations", *Organizational Dynamics*, Vol. 48 No. 2, pp. 37-43.

Kearns, K.P., Livingston, J., Scherer, S. and McShane, L. (2015), "Leadership skills as construed by nonprofit chief executives", *Leadership and Organization Development Journal*, Vol. 36 No. 6, pp. 712-727.

Keller, T. and Weibler, J. (2017), "Behind managers' ambidexterity: studying personality traits, leadership, and environmental conditions associated with exploration and exploitation", *Schmalenbach Business Review*, Vol. 66 No. 3, pp. 309-333.

Knoll, C. and Sternad, D. (2021), "Identifying global leadership potential", *Journal of Management Development*, Vol. 40 No. 4, pp. 253-272.

Kotter, J.P. (1990), *A Force for Change: How Leadership Differs from Management*, Free Press, New York, NY.

Kotter, J.P. (2012), *Leading Change*, Harvard Business Review Press, Boston, MA.

Kung, C.-W., Uen, J.F. and Lin, S.-C. (2020), "Ambidextrous leadership and employee innovation in public museums", *Chinese Management Studies*, Vol. 14 No. 4, pp. 995-1014.

Laser, J. (2017), *Flexible und stabile Laufbahnplanung: Transition-Management aus der Unternehmens- und Ressourcenperspektive*, Hampp, München.

Laser, J. (2021), "The best equilibrium in organizational flexibility-stability continuums", *International Journal of Organizational Analysis*, Vol. 29 No. 1, pp. 172-193.

Lauer, T. (2014), *Change Management, Grundlagen und Erfolgsfaktoren*, 2nd ed., SpringerGabler, Berlin.

Li, C.-R. (2013), "How top management team diversity fosters organizational ambidexterity: the role of social capital among top executives", *Journal of Organizational Change Management*, Vol. 26 No. 5, pp. 874-896.

Loh, K.L., Mohd Yusof, S. and Lau, D.H.C. (2019), "Blue ocean leadership in lean sustainability", *International Journal of Lean Six Sigma*, Vol. 10 No. 1, pp. 275-294.

Luu, T.T., Dinh, K. and Qian, D. (2019), "Ambidextrous leadership, entrepreneurial orientation and job crafting", *European Business Review*, Vol. 31 No. 2, pp. 260-282.

Maier, J. (2015), *The Ambidextrous Organization: Exploring the New while Exploiting the Now*, Kindle Edition, Palgrave Macmillan, Basingstoke, Hampshire.

Manres (2018), "CEO-Studie 2018", available at: https://www.manres.com/fileadmin/user_upload/www.manres.ch/publikationen/download/CEO_Studie_2018.pdf (accessed 7 September 2021).

March, J.G. (1991), "Exploration and exploitation in organizational learning", *Organization Science*, Vol. 2 No. 1, pp. 71-87.

Mathison, S. (1988), "Why triangulate?", *Educational Researcher*, Vol. 17 No. 2, pp. 13-17.

Mattiaske, W., Holtmann, D. and Fietze, S. (2014), Anforderungen an Spitzenführungskräfte–Retrospektive und Perspektive, available at: https://www.ssoar.info/ssoar/handle/document/40929 (accessed 7 August 2021).

Mayring, P. (2015), *Qualitative Inhaltsanalyse, Grundlagen und Techniken*, 12th ed., Beltz, Weinheim/Basel.

Mcquade, K.E., Harrison, C. and Tarbert, H. (2021), "Systematically reviewing servant leadership", *European Business Review*, Vol. 33 No. 3, pp. 465-490.

Mintzberg, H. (2013a), *Managing*, Kindle Edition, Financial Times.

Mintzberg, H. (2013b), *Simply Managing, what Managers Do—And Can Do Better*, Financial Times Publishing International, San Francisco, CA.

Na-Nan, K., Joungtrakul, J., Smith, I.D. and Sanamthong, E. (2022), "Reliability and validation of an instrument for measuring problems with performance appraisal of automotive parts manufacturing employees", *International Journal of Quality and Reliability Management*, Vol. 39 No. 1, pp. 53-76.

Olanrewaju, O.I. and Okorie, V.N. (2019), "Exploring the qualities of a good leader using principal component analysis", *Journal of Engineering, Project, and Production Management*, Vol. 9 No. 2, pp. 142-150.

O'Reilly, C.A. III and Tushman, M.L. (2016), *Lead and Disrupt, How to Solve the Innovator's Dilemma*, Stanford Business Books, Stanford, CA.

Palaiou, K. and Furnham, A. (2014), "Are bosses unique? Personality facet differences between CEOs and staff in five work sectors", *Consulting Psychology Journal: Practice and Research*, Vol. 66 No. 3, pp. 173-196.

Peck, E., Dickinson, H. and Smith, J. (2006), "Transforming or transacting? The role of leaders in organisational transition", *The International Journal of Leadership in Public Services*, Vol. 2 No. 3, pp. 4-14.

Peterson, S., Walumbwa, F., Byron, K. and Myrowitz, J. (2009), "CEO positive psychological traits, transformational leadership, and firm performance in high-technology start-up and established firms", *Journal of Management*, Vol. 35 No. 2, pp. 348-368.

Pradhan, S. and Jena, L.K. (2019), "Does meaningful work explains the relationship between transformational leadership and innovative work behaviour?", *Vikalpa*, Vol. 44 No. 1, pp. 30-40.

Probst, G., Raisch, S. and Tushman, M.L. (2011), "Ambidextrous leadership: emerging challenges for business and HR leaders", *Organizational Dynamics*, Vol. 40 No. 4, pp. 326-334.

Randolph, M. (2019), *That Will Never Work: The Birth of Netflix and the Amazing Life of an Idea*, Kindle Edition, Endeavour.

Resick, J.R., Whitman, D.S., Weingarden, S.M. and Hiller, N.J. (2009), "The bright-side and the dark-side of CEO personality: examining core self-evaluations, narcissism, transformational leadership, and strategic influence", *Journal of Applied Psychology*, Vol. 94 No. 6, pp. 1365-1381.

Rosing, K., Frese, M. and Bausch, A. (2011), "Explaining the heterogeneity of the leadership-innovation relationship: ambidextrous leadership", *The Leadership Quarterly*, Vol. 22 No. 5, pp. 956-974.

Sarros, C.J., Cooper, B.K. and Santora, J.C. (2011), "Leadership vision, organizational culture, and support for innovation in not-for-profit and for-profit organizations", *Leadership and Organization Development Journal*, Vol. 32 No. 3, pp. 291-309.

Sattayaraksa, T. and Boon-itt, S. (2018), "The roles of CEO transformational leadership and organizational factors on product innovation performance", *European Journal of Innovation Management*, Vol. 21 No. 2, pp. 227-249.

Scheepers, C.B. and Storm, C.P. (2019), "Authentic leadership's influence on ambidexterity with mediators in the South African context", *European Business Review*, Vol. 31 No. 3, pp. 352-378.

Seijts, G.H. and Gandz, J. (2018), "Transformational change and leader character", *Business Horizons*, Vol. 61 No. 2, pp. 239-249.

Siachou, E. and Gkorezis, P. (2018), "Empowering leadership and organizational ambidexterity: a moderated mediation model", *Evidence-based HRM: A Global Forum for Empirical Scholarship*, Vol. 6 No. 1, pp. 94-116.

Sinha, S. (2019), "The emergent-strategy process of initiating organizational ambidexterity", *Journal of Strategy and Management*, Vol. 12 No. 3, pp. 382-396.

Snehvrat, S., Kumar, A., Kumar, R. and Dutta, S. (2018), "The state of ambidexterity research: a data mining approach", *International Journal of Organizational Analysis*, Vol. 26 No. 2, pp. 343-367.

Stamoulis, D., Swift, M., Conklin, E.M. and Forgang, M. (2016), Inside the mind of the chief executive officer, available at: http://www.russellreynolds.com/insights/thought-leadership/inside-the-mind-of-the-chief-executive-officer (accessed 7 September 2021).

Stock-Homburg, R. (2013), *Personalmanagement, Theorien-Konzepte-Instrumente*, 3rd ed., Springer Gabler, Wiesbaden.

Tung, F. (2016), "Does transformational, ambidextrous, transactional leadership promote employee creativity? Mediating effects of empowerment and promotion focus", *International Journal of Manpower*, Vol. 37 No. 8, pp. 1250-1263.

Ulrich, D., Younger, J., Brockbank, W. and Ulrich, M. (2012), *HR from the outside in: Six Competencies for the Future of Human Resources*, McGraw-Hill, New York, NY.

Venugopal, A., Krishnan, T.N., Kumar, M. and Upadhyayula, R.S. (2017), "Strengthening organizational ambidexterity with top management team mechanisms and processes", *The International Journal of Human Resource Management*, Vol. 30 No. 4, pp. 586-617.

Vito, G.F., Higgins, G.E. and Denney, A.S. (2014), "Transactional and transformational leadership: an examination of the leadership challenge model", *Policing: An International Journal of Police Strategies and Management*, Vol. 37 No. 4, pp. 809-822.

Wood, J. and Vilkinas, T. (2007), "Characteristics associated with CEO success: perceptions of CEOs and their staff", *Journal of Management Development*, Vol. 26 No. 3, pp. 213-227.

Zacher, H. and Rosing, K. (2015), "Ambidextrous leadership and team innovation", *Leadership and Organization Development Journal*, Vol. 36 No. 1, pp. 54-68.

Zacher, H., Robinson, A.J. and Rosing, K. (2016), "Ambidextrous leadership and employees' self-reported innovative performance: the role of exploration and exploitation behaviors", *The Journal of Creative Behavior*, Vol. 50 No. 1, pp. 24-46.

Zaleznik, A. (2004), "Managers and leaders: are they different?", available at: https://hbr.org/2004/01/managers-and-leaders-are-they-different (accessed 14 September 2021).

Zuraik, A. and Kelly, L. (2019), "The role of CEO transformational leadership and innovation climate in exploration and exploitation", *European Journal of Innovation Management*, Vol. 22 No. 1, pp. 84-104.

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