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Top managers in public organizations: A systematic literature review and future research directions

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Abstract

Despite increasing attention, top management research has been heavily dominated by a focus on private companies with much less emphasis on the top managers in public organizations. We present a systematic literature review of 212 studies focused on public sector top managers published between 2005 and 2020. First, the paper provides descriptive results suggesting that the empirical focus on top managers in the public sector is increasing, though still limited compared to research on upper echelons in private firms. Second, we develop an empirically based "systems" model illustrating the role and function of top managers in public organizations. We use the model to show that the components of top management are interdependent, adaptive, and embedded in complex relationships in the system, and to identify avenues for future research.

Evidence for practice

- With decades of public management reforms, top managers have become increasingly important actors with discretion and autonomy to fundamentally affect operations and performance in public organizations.
- Based on a systematic review of 212 studies, this article presents public sector top managers as actors in a system that responds to internal and external inputs and engages in a series of decisional, interpersonal, and informational processes to obtain individual and organizational outcomes.
- Top management in the public sector is different from the private sector, and integrating public values and political influence into top management work is important to achieve public service outcomes.

INTRODUCTION

Upper echelon theory famously posits that organizations are reflections of their top managers (Hambrick & Mason, 1984). Since its early formulations, this idea has spurred a substantial stream of research documenting how top managers shape organizational processes and outcomes in organizations. Researchers in the public administration field have increasingly recognized the key role that top managers play in public organizations. Within the past decades, we have seen an increasing number of studies that put top managers at center stage to understand the workings of public organizations. Researchers have been increasingly interested in the impact of demographic characteristics of top managers (Opstrup & Villadsen, 2015) and linked top management (TM) to important outcomes such as innovation (Anessi-Pessina & Sicilia, 2020), performance (Avellaneda, 2016), and policy diffusion (Yi & Liu, 2022).

Despite the increasing attention, TM research has been dominated by a focus on private companies with much less focus on the top managers in public organizations.[1] One of the reasons that may explain this is that in the public sector, administrative top managers are executing politicians' decisions and priorities. While they are often in charge of large organizations and substantial budgets, in the public sector, top managers operate outside of the public spotlight. But operating

under the radar does not mean top managers are unimportant. They work closely with politicians, engage in strategizing, and fundamentally affect organizations' performance (Leach & Lowndes, 2007). Top managers in public organizations certainly merit attention of their own.

This paper adds to our theoretical understanding of the role of top managers in public organizations by integrating insights from existing research. By now, several reviews of upper echelons research in private firms have been conducted to examine the state-of-the-art in this area and establish new avenues for theory developing and research (Finkelstein, Hambrick, & Cannella, 2009; Samimi, Cortes, Anderson, & Herrmann, 2022). To our knowledge, there has been no similar attempt to synthesize current knowledge on TM in public organizations.

With this paper, we seek to take stock of existing research to understand existing knowledge about top managers in public organizations and, on this background, generate new theoretical insights about how top managers influence organizations' processes and outcomes. We present a systematic review of 212 studies focused on top managers in public organizations published from 2005 to 2020. We take inspiration from systems theory to theorize how TM can be understood as a complex system of inputs, actors, processes, and interactions that together explain organizational outcomes (Nadler & Tushman, 1980).

Based on existing research, we develop an integrative and comprehensive model of the top management "system" that allows us to make three important contributions to existing research. First, the model presents a taxonomy of research on the role of top managers in public organizations by identifying the main components and explaining how TM dynamics contributes to the outcomes of public organizations. Second, the systems-based model illustrates top managers' roles in public organizations as much more multifaceted and complex than what is highlighted in individual studies. The findings also suggest that TM dynamics in public organizations are different from TM dynamics in private organizations. Finally, the model helps delineate an agenda for future research. We argue that public organizations reflect their upper echelons, and we need more research to understand this topic better.

METHODOLOGY

We take a point of departure in a systematic literature review to take stock of the research on top management in the public sector. As we describe below, our focus is on research that provides insights into who top managers are, what they do, and how they contribute to organizational outcomes. This section will describe our search strategy, eligibility criteria, and selection methods.

Literature search

We carried out a literature search in two databases, Web of Science and Scopus, using different word combinations to identify TM research in the public sector. The detailed search terms can be found in Table A1 in Appendix S1. To focus on recent research, we limit our search to the period from 2005 to 2020. The initial search identified 7875 records. We included research articles in academic journals but have not included books.

Eligibility criteria

Research from our original search was included in the systematic review if it met all the following eligibility criteria:

- Field: Studies should have top managers in the public sector as a central focus. The public sector is defined as those parts of economies that are either owned or directly controlled by the state.
- Topic: The studies should have TM as an explicit and core focus. This study follows the upper echelons theory to focus on those managers occupying the top administrative positions in public organizations. This means that, for instance, we do not include studies using surveys where top managers were among the respondents but not constituting the core focus. We also exclude research that studies top managers from the point of view of employees or politicians.
- Delimitation of TM: We are interested in the appointed top managers in public organizations and initially exclude elected politicians. In some settings, these roles conflate when politicians, such as mayors, perform both political and administrative work. These studies are included when authors explicitly focus on the administrative role and theorize the mayors as top managers or chief executives rather than politicians (e.g., Avellaneda, 2016). Further, public organizations often are part of a complex hierarchy of different organizations, administrative levels, and jurisdictions, so compared to private firms, it can be unclear who is part of the top manager category. We define public sector top managers as *individuals or teams in charge of well-defined and relatively independent organizational entities lending discretion to top managers* and include studies accordingly.
- Study design: Only empirical studies were included in our analysis because we are interested in empirical evidence on top managers in the public sector. All research designs were considered, including questionnaires, case studies, experiments, etc.
- Year of publication: We focus on recent research and include studies published from 2005 to 2020 in our analysis.
- Language: Publications in English-language outlets.

- Publication status: We only included international peer-reviewed journal articles. We did not restrict our results to public administration to ensure we included a broad spectrum of research on top managers in various public organizations.

Study selection

We started the selection process based on the eligibility criteria and followed the steps provided by Moher, Liberati, Tetzlaff, and Altman (2009). The selection process is shown in Figure 1.

First, we screened all records by scanning the titles, abstracts, and keywords. The studies were checked to identify if the records met the eligibility criteria. Second, we filtered our results by reading the full abstract and text if necessary. In this step, records were excluded if they were not TM-focused in nature. For instance, some studies primarily focused on elected politicians, boards, and operational or middle managers but mentioned top managers in their abstract or text. We also removed purely theoretical studies.

Eventually, 212 studies were included in our study. We established a database to extract and code information from each study. An overview of the coding process can be found in Appendix S1. Figures 2 and 3 show the increasing development of research in this area and the main journals publishing TM research. Other descriptive

FIGURE 1 PRISMA flow diagram.

analyses and a full list of all included articles can be found in Appendix S1.

ANALYSIS: A SYSTEMS-BASED MODEL OF TOP MANAGEMENT IN PUBLIC ORGANIZATIONS

The objective of our review of existing research is to provide a theoretical understanding of the role of top managers in public organizations. Through our reading of the research, we iteratively constructed an understanding of the role of top managers in public organizations. We illustrate this in the model presented in Figure 4. Inspired by systems theory (Nadler & Tushman, 1980), the model depicts TM in public organizations as a complex system that, based on contextual inputs and constraints, works to achieve certain outcomes. The model includes four overall components that each include different elements. The core of the model is constituted by the actors (*who top managers are*) and processes (*what top managers do*). Like any social system, the environment shapes and constrains the outcomes achieved by the system. The model presents a taxonomy to understand the multiple roles and functions of TM work.

We were inspired by systems theory when creating the model of top management for three reasons. First, we found that previous research on public sector top managers is highly fragmented concerning the roles, processes, antecedents, and outcomes of TM. The system-based approach is instrumental in providing a comprehensive framework that allows us to connect multiple lines of research on TM and offers a research-grounded illustration of the complexity of TM work that cannot be captured in any individual study. Second, reading the literature, it was clear that we need a framework that enables us to consider TM work from an integrated perspective, where TM work and organizational outcomes are not achieved by any single effort but rely on the function of highly related and interdependent actors and processes (Nadler & Tushman, 1980). Third, the systems approach is conducive to understanding the dynamics of TM and how top managers adapt to up-to-date demands from the environment and the feedback from previous organizational outcomes.

In the following, we present the components of the model and zoom in on the interdependencies.

Inputs

In our model, inputs are contextual factors of a system shaping how organizations operate (Nadler & Tushman, 1980). For research on top managers, the relevant inputs into the system are a repository of resources and a combination of tangible and intangible constraints, demands, and threats that condition how the system operates (Scott & Davis, 2015). Such inputs may fuel the system
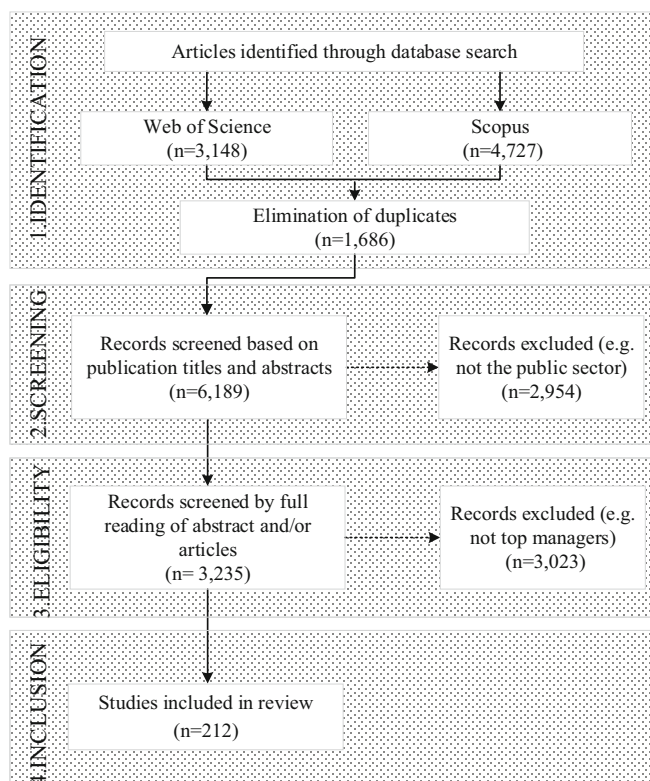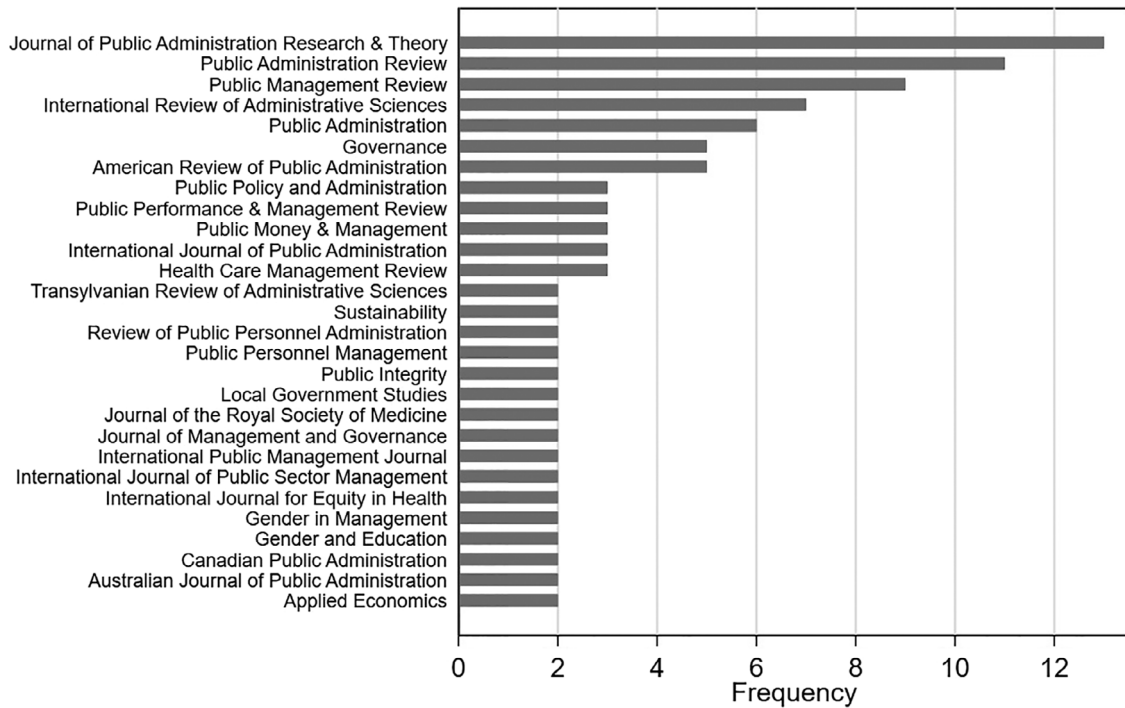
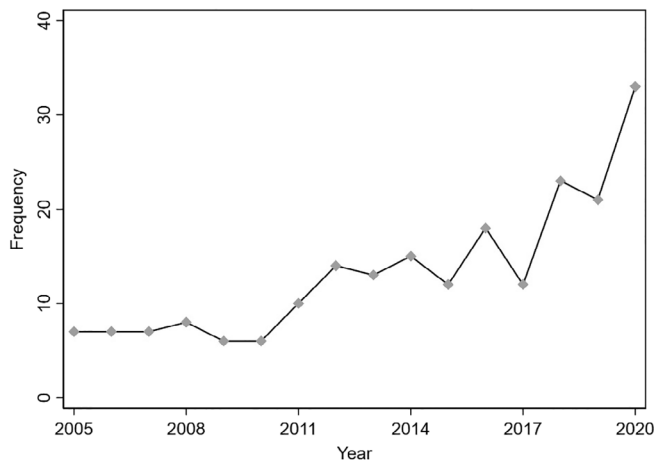**FIGURE 2**   Top management studies in different journals.

FIGURE 3   Published studies on top management in the public sector by year.

directly or may work as moderators that illustrate how the operation of the entire system is contextually contingent.

We found that many studies focus on inputs to the system, including social, political, and organizational inputs (see examples in Table 1).

A few studies focus on the social environment outside the organization. Among these inputs, for instance, the economic situation (McCabe, Feiock, Clingermayer, & Stream, 2008) and sociocultural constraints (Kodagoda, 2019) have been related to TM turnover. A second input dimension is the political environment, suggesting how TM is profoundly

affected by being part of a political system. For instance, research finds political changes to be related to top managers' turnover (or survival) (Petrovsky, James, Moseley, & Boyne, 2017). Finally, a range of studies looks at the organizational environment more broadly. For instance, Krøtel, Ashworth, and Villadsen (2019) zoom in on the link between organizational growth and women in TM. Elements such as organizational culture and structure (Wright & Pandey, 2010) and managerial discretion and incentives (Cahan, Chua, & Nyamori, 2005) also function as important organizational contexts that shape the work of top managers.

It is noteworthy that we only have a few studies that directly include the citizens as input for TM work. While the role of representation may traditionally lie with politicians and frontline workers, knowledge about local community dynamics is more important for TM work implementing and administrating political decisions than what current research reflects (but see McCabe et al., 2008). As noted above, inputs act as contextual factors that may shape a system and as important moderators to explain how the system operates. There is still plenty of room to better understand how TM is contingent on contextual factors. This could concern a tangible dimension, such as the level of discretion, or more intangible parts of the institutional environment.

Actors

Actors of the TM system are defined as managers atop the organizational hierarchy responsible for operating the
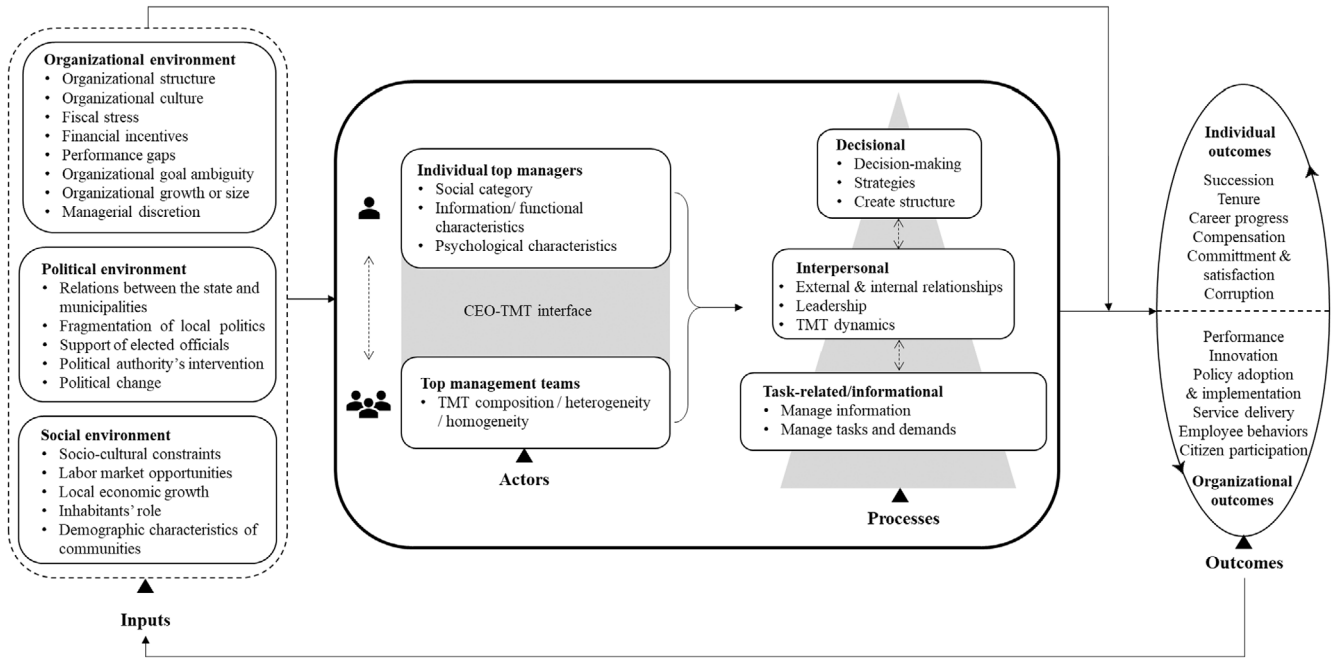
FIGURE 4 The systems-based model of top management in the public sector.

TABLE 1 Inputs of top management.

Elements	Examples
Organizational environment (22.2%)	• Organizational structure (Wright & Pandey, 2010) • Organizational culture (Kodagoda, 2019) • Fiscal stress (Tekniepe & Stream, 2012) • Financial incentives (Wood & Marchbanks, 2007) • Performance gaps (Boyne et al., 2010) • Organizational goal ambiguity (Andrews & Mostafa, 2019) • Organizational growth or size (Krøtel et al., 2019) • Managerial discretion (Cahan et al., 2005)
Political environment (9.9%)	• Political change (Petrovsky et al., 2017) • Fragmentation of local politics and relations between the State and municipalities (Haveri, Paananen, & Airaksinen, 2018) • Political authority's intervention (Giauque et al., 2009)
Social environment (8.0%)	• Local economic growth (McCabe et al., 2008) • Sociocultural constraints (Kodagoda, 2019) • Municipal inhabitants' changing role from participatory residents to exacting customers (Haveri et al., 2018) • Demographic characteristics of communities (McCabe et al., 2008)

Note: Percentages are calculated out of the total sample ($n = 212$). The same article can include several elements.

organization and achieving organizational outcomes. It consists of two levels: individuals (top manager) and groups (top management team (TMT)).

Individual top managers

Table 2 summarizes research focusing on individual top managers.

Typical examples of individual top managers in the public sector include chief administrative officers (CAOs) in municipalities (Avellaneda, 2016), top civil servants heading ministerial departments in state governments (Hansen, Steen, & de Jong, 2013), or university presidents (Rutherford & Lozano, 2018). We identify three types of overall individual attributes in the studies, including social category, functional/informational characteristics, and psychological characteristics.

Social category
A substantial stream of research in our review has been interested in the demographic attributes of top managers. This focus is aligned with early ideas of upper echelons theory, suggesting that understanding who the top managers are is important for understanding how they perceive and interpret the world and make decisions (Hambrick & Mason, 1984).

The most frequently studied attribute is gender. Some studies focus on how male and female top managers may have different values, perspectives, and experiences to bring to the job (Opstrup & Villadsen, 2015). Interestingly, while female top managers tend to be regarded as role models by emerging managers, they show a similar set of styles in managing people as their male counterparts when occupying leadership positions (Křečková, Zadražilová, & Řezanková, 2016).

Compared to gender, race has received much scarcer research attention at the organizational apex. This may be because where women face a glass ceiling, racial

TABLE 2 Attributes of top managers.

Elements	Variables	Examples
Social category (26.4%)	Gender (22.6%)	• Gender segregation in the upper tiers (Krøtel et al., 2019)
	Race/ethnicity (2.8%)	• Racial profile of the municipal CAO (O'Flynn & Mau, 2014)
	Age (8.0%)	• Young versus old managers (Anessi-Pessina & Sicilia, 2020; Avellaneda, 2012)
	Knowledge, skills, and competencies (20.8%)	• Level of education (Damanpour & Schneider, 2006) • Managerial competencies (Vainieri et al., 2019)
	Tenure (12.7%)	• Agency heads' length of tenure (Petrovsky et al., 2017) • Years with the current organization (Rattus & Randma-Liiv, 2019)
Information/functional characteristics (38.7%)	Experience, insider vs. outsider origin, career patterns (17.0%)	• Administrators' previous career (Kim & Oh, 2016) • Insider/outsider origin of chief executives (Teodoro, 2013)
	Function, position, and profession (3.8%)	• Managerial functions (Meier et al., 2006)
	Political affiliations (2.8%)	• Political party affiliations of top executives (Capuno & Panganiban, 2012)
	Managerial roles and identity (9%)	• Top manager's identity (Bourgault & Van Dorpe, 2013) • Gender role identity (Zhang, Qiu, Dooley, & Choudhury, 2021)
Psychological characteristics (20.8%)	Personality, managerial confidence (4.2%)	• Risk-taking propensity (Mat Ludin et al., 2017) • Managerial confidence in administrative capacity (Zhang, Stritch, & Welch, 2020)
	Perceptions and awareness (9.9%)	• Perceptions of autonomy (Kleizen, Verhoest, & Wynen, 2018)
	Values, beliefs, preferences, and attitudes (3.8%)	• Public managers' values (Lapuente et al., 2020) • Top managers' attitude toward innovation (Damanpour & Schneider, 2006)
	Motivation and managerial aspirations (2.4%)	• Public service motivation (Farley, Rauhaus, & Eskridge, 2020) • Managerial aspirations (Zhang et al., 2021)

Note: Percentages are calculated out of the total sample ($n = 212$). The same article can include several elements or variables.

minorities may face a solid brick ceiling when it comes to occupying the most senior positions in public organizations. Indeed, O'Flynn and Mau (2014) report that only one out of 159 respondents (municipal chief administrative officers) self-identified as a visible minority.

Age is often studied together with a range of other demographic factors, leaving the theorizing about the age of public sector executives limited. Among interesting findings, older managers have been found to be risk-averse (Avellaneda, 2012), less innovative (Anessi-Pessina & Sicilia, 2020), engage in less collaboration (Esteve, Boyne, Sierra, & Ysa, 2013), and are more likely to leave the organization (Rattus & Randma-Liiv, 2019).

Demographic characteristics of top managers are widely studied, yet most studies involve correlational evidence of determinants and consequences. Little research focuses on intersectionality and how work experiences vary between demographic groups.

Functional/informational characteristics

This stream of research is interested in the knowledge and skills of top managers, which are often indicated by the educational backgrounds or experience of top managers. Examples include Damanpour and Schneider (2006)

arguing that "education might provide individuals with specific knowledge required for task performance and novel problem solving" to hypothesize that top managers' education is positively related to innovation outcomes. Top managers with a law education are suggested to pay more attention to legal requirements (Avellaneda, 2012), whereas those with a degree in business administration are found to have a better ability to interact with politicians and fellow managers on financial matters (Anessi-Pessina & Sicilia, 2020).

Other studies are concerned with the longevity of employment and career dynamics reflected in either tenure or experience. Different amounts of tenure in a position yield different advantages. Shorter tenure relates to more openness and new idea development (Esteve et al., 2013), whereas longer tenure is associated with stability and organization-specific knowledge. In our review, a small group of studies focuses on sector experience in either the public or private sector and its effects on outcomes such as managerial values (Lapuente, Suzuki, & Van de Walle, 2020) and revenue expansion (Avellaneda, 2012). A handful of studies are interested in differences between inside and outside executive successors (Petrovsky et al., 2017).

Despite the research mentioned, we still need more knowledge about the antecedents of functional and

informational characteristics of top managers. Diverse skills and knowledge are likely to be crucial assets when public organizations engage with increasingly complex tasks that require collaboration across sector boundaries and often across borders.

Psychological characteristics

In the original description of upper echelons theory, Hambrick and Mason (1984) suggested that "An emphasis on background characteristics, rather than on psychological dimensions, seems essential at this point in the development of an upper echelons perspective" (p. 196), and the authors acknowledged that attention to psychological aspects would be crucial to moving the research agenda forward. We identified a small stream of studies interested in top managers' personalities and values and how they perceive and interpret their roles and identities. For example, Bourgault and Van Dorpe (2013) study how managerial reforms have changed the identity of top managers in four OECD countries.

There is still some way to go to understand how top managers' work and interactions are enabled and constrained by various cognitive and psychological processes. Recent advances in behavioral public administration may be helpful, as suggested in recent studies (Bello-Gomez & Rutherford, 2023; Lapuente et al., 2020; Suzuki & Hur, 2020).

Top management teams

TMTs are a small group consisting of the top manager of a public organization and its top-tier executives (Finkelstein et al., 2009). While TMTs play important roles in public organizations, the number of studies on TMTs is still limited (10 percent). Among them, TMT composition or diversity has gained the most attention, suggesting that heterogeneous TMTs not only provide diverse ideas, knowledge, capabilities, and perspectives for strategic choices but also perform better (Opstrup & Villadsen, 2015).

TMTs have received widespread research attention in the general management literature (Georgakakis, Heyden, Oehmichen, & Ekanayake, 2022). It is a significant gap in existing research that we do not know much about how TMTs operate in public organizations. We need studies that explore TMT composition and dynamics to increase our knowledge of how TMTs shape individual and organizational outcomes. While identifying members of TMTs has traditionally been difficult in public organizations, such data has become increasingly accessible with the prevalence of government websites, potentially assisted by web-scraping tools.

Processes

By processes, we refer to those actions or operations that top managers employ to transform inputs into organizational outcomes. Referring to Mintzberg's (1973) classification of managerial roles, existing research has explored a wide range

TABLE 3 Processes of top management.

Elements	Variables	Examples
Decisional processes (13.7%)	Decision-making (4.2%)	• Budget-balancing decisions (Anderson & Smirnova, 2006)
	Strategies (4.2%)	• Managerial fiscal strategies (Kim & Oh, 2016) • The extent and direction of strategic change (Naranjo-Gil & Hartmann, 2007)
	Create structure (6.1%)	• The use of management accounting systems (Naranjo-Gil & Hartmann, 2007) • Internal audit quality and risk-management implementation (Mat Ludin et al., 2017)
Interpersonal processes (26.4%)	External and internal relationships (13.2%)	• Executive-politician relationships (Leach & Lowndes, 2007) • Structural embeddedness of political executives (Villadsen, 2011)
	Leadership (9.4%)	• Transformational and transactional leadership style (Othman et al., 2012)
	TMT dynamics (4.7%)	• TMT culture (Davies et al., 2007; Prenestini, Calciolari, Lega, & Grilli, 2015) • Cognitive, motivational, affective, and coordination processes in TMTs (Barnett & McCormick, 2012)
Task-related/ informational processes (1.9%)	Manage information (0.5%)	• Information sharing process (Vainieri et al., 2019) • Accounting information manipulation (Anessi-Pessina & Sicilia, 2020)
	Manage tasks and demands (1.4%)	• Responses to external change and uncertainty (Matthews et al., 2011)

Note: Percentages are calculated out of the total sample (*n* = 212). The same article can include several elements or variables.

of TM processes, including decisional, interpersonal, and informational actions. We summarize this and provide examples in Table 3. Studies have focused more on interpersonal and decisional processes and less on informational processes.

Decisional processes

Decision-making

Top managers' decision-making is a complex process where they need to navigate constraints to pursue multiple

goals (Anderson & Smirnova, 2006). It is argued that public sector chief executive officers (CEOs) rely more on objective information and rationalism than those in other sectors (Stenstrom, 2015). Unlike decisions made by line managers or middle-level managers, senior managers' decisions not only imply critical resource allocation internally but may also affect opportunities and constraints of external actors. Studies on this stream suggest that TM decisions and their involvement in the decision-making processes are constrained by a range of situational factors, e.g., performance gaps (Boyne, James, John, & Petrovsky, 2010).

We observe that there is little research on understanding the processes of decision-making. We know little about, for example, how a problem enters the TM agenda, how solutions are developed and adopted, and the role of power dynamics in different decision-making processes.

Strategies

Strategies designed and adopted by top-level leaders are focused on achieving organizational objectives based on their interpretation of the environments and demands (Kim & Oh, 2016). Researchers suggest that strategies are anticipated to bring more long-term benefits, e.g., organizational sustainability (Anessi-Pessina & Sicilia, 2020), and can be affected by top managers' characteristics (Donatella & Tagesson, 2020).

While there is growing research interest in strategic management in public organizations (Ferlie & Ongaro, 2015), the specific role played by TM is much less studied. There are still gaps in our understanding of how and when top managers make short- or long-term strategies and deal with resistance to implementing these strategies. Further, it is under explored how top managers' psychological characteristics play a role in making strategies.

Creating structure

Top managers in public organizations play a significant role in creating structures that enable and control the workflow of organizations. Structures serve routine purposes, such as collecting a broad set of information, planning, controlling, allocating resources, making decisions, and evaluating performance (Bobe & Kober, 2020a). Top managers also employ them to buffer shocks from environmental changes and risks (Mat Ludin, Mohamed, & Mohd-Saleh, 2017). Studies have linked the structures implemented by top managers to organizational outcomes, including policy success, stability, and sustainability (Naranjo-Gil, 2016). It is argued that there are variations in the extent of use of these systems, and such differences may be reflected by top managers' demographics (Bobe & Kober, 2020b) and psychological characteristics (Mat Ludin et al., 2017).

Few studies have explored the external incentives or constraints for top managers in creating structures and how the formalized structures maintain flexibility in responding to external changes. An opportunity is to explore how top managers' external networks affect the internal structure or system implementation (O'Toole & Meier, 1999).

Interpersonal processes

External and internal relationships

Top managers are suggested to be involved in complex relationships. This includes relationships upward with political principals (Leach & Lowndes, 2007), outward with other organizations or partners (Esteve et al., 2013), and downward with functional departments or subordinates (Hansen et al., 2013). A prominent focus is the relationship between political leaders and chief executives. It is suggested that political-administrative leaders are highly interdependent, meanwhile, tension and conflicts exist. For example, Giauque, Resenterra, and Siggen's (2009) study shows that there is a significant level of interdependence between politicians and administrative managers when they design, decide, and implement public policies.

Further, several studies consider top managers' various networks and interactions as important intangible assets for organizations to achieve specific outcomes. For instance, Joon-ho Kim and Jung (2015) explore how a CEO's social network facilitates the exchange and integration of knowledge and contributes to quality management activities. Teodoro (2013) shows that outside hires have more interactions with elected officials than insiders, and Esteve et al. (2013) suggest that participating in managerial training programs makes top managers more likely to collaborate in networks.

TM research, so far, has given little attention to top managers' relationships with clientele, including citizens, businesses, and non-governmental organizations. We also need more knowledge about the relationship between internal and external relations and how organizations' absorptive capacity affects the value gained from external relations.

Leadership

Top managers' leadership is described to set a clear vision for organizations. A noticeable line of research explores how two popular leadership styles, transformational leadership, and transactional leadership, benefit organizations by increasing employees' commitment (Othman, Mohammed, & De Silva, 2012) and organizational engagement in sustainable procurement practices (Roman, 2017). Another line of research traces the antecedents of leadership. For instance, Wright and Pandey (2010) investigate the impact of organizational structure (e.g., bureaucratic characteristics) on transformational leadership practices of municipal CAOs in the US.

Studies have generally explored leadership downward to employees. New leadership practices highlight shared or distributed leadership (Barnett & McCormick, 2012). Further exploring when and why a shift from a single leader to team-centered leadership happens and the

consequences of shared leadership could add insights into TM leadership studies.

TMT dynamics

While individual leaders are critical to organizational outcomes, it is also important to understand TMT dynamics. A noticeable focus is TMT cultures that have been related to different organizational outcomes (Davies, Mannion, Jacobs, Powell, & Marshall, 2007). For instance, a hierarchical culture emphasizing control and stability can enhance efficiency and financial performance (Prenestini & Lega, 2013). Another line of research shows more descriptive evidence of TMT communication and processes. For example, Bang (2012) shows that even top-level managers refrain from discussing misunderstandings in TMT meetings because they perceive it as a negative act. Barnett and McCormick (2012) summarize different team processes enabling TMT to adapt and perform effectively.

There is a notable paucity of evidence concerning the top manager-TMT interface, studied widely in the private sector context (Georgakakis et al., 2022). How TMT members shape the opinion or role of the top manager and the power dynamics between the CEO-TMT members have been subject to little attention in the public sector. New advances in analysis of meetings and video materials may enable us to learn more about TMT dynamics.

Task-related and informational processes

Manage information

Top managers gather, process, and share information with internal employees and external stakeholders. Internal information sharing is found to mediate the relationship between managerial competencies and organizational performance (Vainieri, Ferrè, Giacomelli, & Nuti, 2019). More negatively, organizational revenue misrepresentation is a way for top managers to manipulate financial information shared with stakeholders to gain external support (Anessi-Pessina & Sicilia, 2020), and upper echelons sometimes take advantage of information asymmetries and withhold information from their political principals (Béchard, 2020).

We lack knowledge of how top managers take advantage of their privilege in framing and distributing information when they interact with citizens and contribute to public service delivery. For example, open data and government are becoming a worldwide trend. What are the roles of TM in this process, and how do citizens' coalitions reshape TM information sharing?

Manage tasks and demands

Public-sector organizations are subject to tasks and demands that are numerous, vague, and conflicting. A line of research explores top managers' experience or response to multiple demands and their underlying reasons. For instance, Matthews, Ryan, and Williams (2011)

suggest that there are three categories of responses from top managers in responding to environmental changes and demands, entailing passive maladaptive, active maladaptive, and active adaptive responses.

Few studies have explored how ambiguity created by multiple goals and demands can affect TM processes and their subsequent outcomes. Examining how upper echelons interpret conflicts and ambiguity and thus assign their attention to multiple goals with a variety of importance could add insights to this line of research.

Outcomes

Outcomes can be understood as the products of the TM system. A wide range of individual and organizational outcomes have been linked to TM (Table 4).

Individual outcomes

Many studies are interested in turnover at the top. Executive turnover is regarded as an essential event in the life of an organization and can help organizations adapt to changing demands and boost their capacity to access new resources or better utilize existing ones. Meanwhile, replacing top managers can be disruptive because it destabilizes organizational routines and creates uncertainty for external and internal stakeholders (Boyne, James, John, & Petrovsky, 2011). Executive turnover has been empirically linked to organizational performance (Boyne et al., 2011; Hill, 2005), corporate capacity (Villadsen, 2016), and employee absenteeism (Løkke & Sørensen, 2020). Another stream of research has been interested in understanding the reasons for executive turnover, including predictors such as organizational performance (Boyne, James, John, & Petrovsky, 2008), individual job satisfaction and insecurity (Rattus & Randma-Liiv, 2019), political change (McCabe et al., 2008), and board structure (Rutherford & Lozano, 2018).

There are opportunities to explore how cognitive and psychological characteristics of top managers lead to different individual outcomes (e.g., career progress, corruption). Further, we lack an understanding of how TMT compositions may affect individual outcomes such as commitment and satisfaction.

Organizational outcomes

Organizational performance has been widely studied. Studies suggest that public sector TM plays a role in diverse outcomes, including financial results (Opstrup & Villadsen, 2015), service performance (Boyne et al., 2011), and school pass rates (Meier, O'Toole, & Goerdel, 2006).

While a substantial proportion of studies predict organizational performance by top managers' demographic

T A B L E 4 Outcomes of top management.

Elements	Variables	Examples
Individual outcomes (26.4%)	Succession (14.6%)	• County manager turnover (Tekniepe & Stream, 2012)
	Tenure (1.4%)	• The duration of political appointee service (Wood & Marchbanks, 2007)
	Career progress (1.9%)	• Promotions to the highest administrative position (Bach & Veit, 2017)
	Compensation (4.7%)	• Executive compensation (Cahan et al., 2005)
	Commitment and satisfaction (2.4%)	• Job satisfaction and organizational commitment among top managers (Guney & Ayranci, 2011)
	Corruption (0.5%)	• Executive corruption behavior (Feng & Johansson, 2018)
Organizational outcomes (31.1%)	Performance (17.0%)	• Financial performance (Opstrup & Villadsen, 2015) • Service performance (Boyne et al., 2011) • Student pass rate (Meier et al., 2006) • Tax collection performance (Petrovsky & Avellaneda, 2014)
	Innovation (2.8%)	• The adoption of innovation (Damanpour & Schneider, 2006),
	Policy adoption and implementation (3.3%)	• Policy isomorphism (Villadsen, 2011) • Implementing environmental sustainability policies (Naranjo-Gil, 2016)
	Service delivery (0.5%)	• Delivery of devolved health services (Capuno & Panganiban, 2012)
	Employee behaviors (2.4%)	• Employee absenteeism (Løkke & Sørensen, 2020) • Organizational commitment among public university lecturers (Othman et al., 2012)
	Citizen participation (0.9%)	• Citizen participation in organizational decision-making (Zhang et al., 2020)

Note: Percentages are calculated out of the total sample ($n = 212$). The same article can include several elements or variables.

attributes, most only empirically observe demographic characteristics and an outcome of interest, leaving the mechanisms to be theoretically inferred. Exceptions

include Kim and Jung (2015) testing of how quality management activities play a role in linking a CEO's characteristics to business performance. As illustrated in our systems model, several other mechanisms potentially explaining the attribute-performance link are so far unexplored. We note that performance outcomes also serve as inputs to subsequent decision-making and actions through a feedback loop in our model.

Top management as a system

In the previous sections, we have presented fragmented components of the TM system in public organizations. However, no system can work without the interaction of different components (Nadler & Tushman, 1980). The functions of top managers and their teams are integrated with complex, adaptive, and dynamic organizational practices and environments. A way to illustrate this is by mapping the co-occurrence of the different elements in existing research. In Figure 5, all lines represent that two elements are part of the same article, and thicker lines indicate higher prevalence. While non-directional, the ties indicate how the different parts of the model have been studied in many combinations in existing research and suggest how some relationships appear more widely studied than others (see Table C1 with the numerical values in Appendix S1).

We highlight two implications of the relationships of different elements in the TM system. First, different components are closely interconnected and interdependent. A good example is that the changes in TMT compositions may lead to changed TMT dynamics, resulting in entirely different outcomes (Opstrup & Villadsen, 2015). Such changes in TMT compositions are often due to new environmental requirements (e.g., a change in political leadership or prior performance) (Boyne et al., 2010). The congruence, or fit, between different components is essential to maintain an effective and healthy system (Nadler & Tushman, 1980). Further, we observe that different elements within each overall component in the model sometimes occur in the same article (indicated by gray lines in Figure 5). This suggests that the combinations of the elements (e.g., a fit between decision style, strategies, and leadership) may be important in TM systems. There is potential to use qualitative comparative analysis to explore how different combinations of elements may lead to different outcomes.

Second, the TM system is open and adaptive to its environment and dependent on external flows of personnel, resources, and information. This is reflected by the direct influence of inputs on TM attributes and processes and the indirect impact on the relationship between TM processes and outcomes (see Figure 4). External environments shape, support, and constrain TM and how outcomes are achieved. At the same time, the TM system provides feedback about how well it works and is adaptive to changing environments and situations.
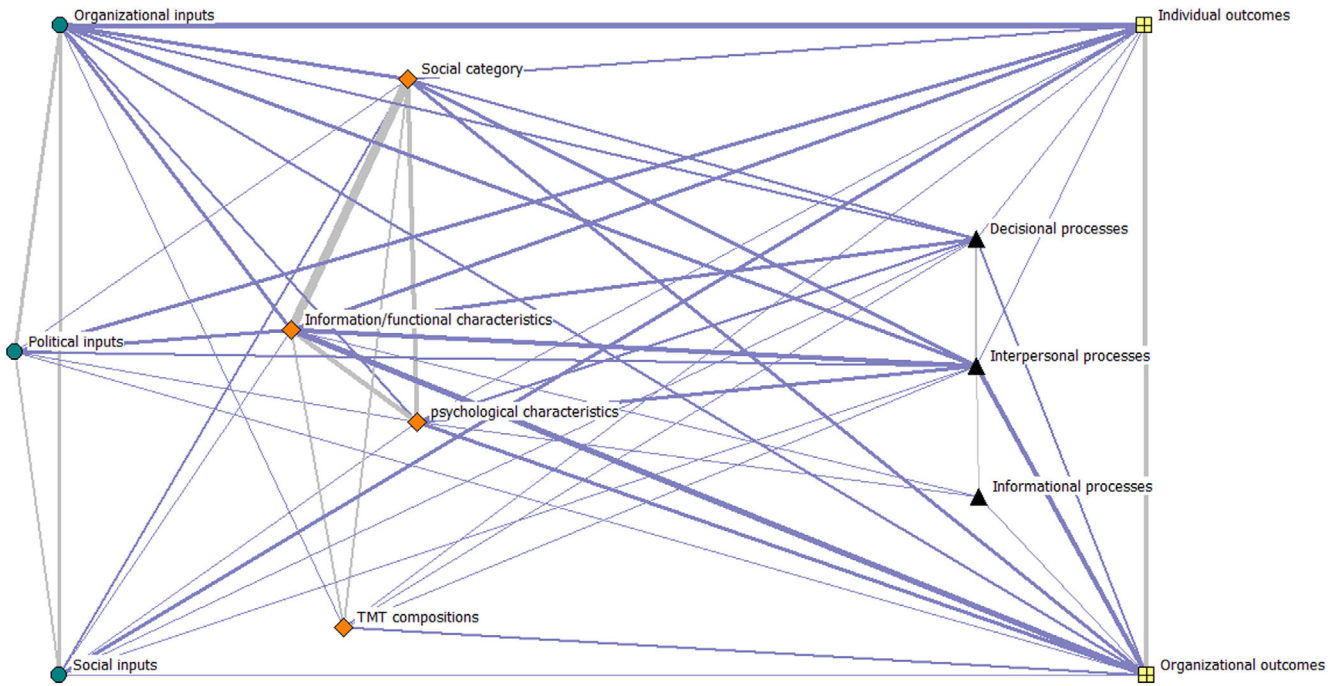
FIGURE 5 Co-occurrence of different elements in the top management framework.
Note: The lines indicate that two elements are part of the same article. The blue lines indicate cross-dimensional co-occurrence, and the gray lines mean within-dimensional co-occurrence. Thicker lines indicate that more articles include the combination of elements. The nodes with the same color and symbol represent that they are in the same dimension in our top management framework.

DISCUSSION

We set out to synthesize existing knowledge on top managers in the public sector. Our review of 212 recent studies from 2005 to 2020 presents a system-based model of TM to illustrate that the roles and functions of top managers in public organizations are multifaceted and complex. By integrating the identified articles, we found that top managers, or TMTs, take inputs from broad environment and produce a variety of individual and organizational outcomes via a series of decisional, interpersonal, and informational processes. While a wide range of elements and their connections with TM have been well identified, the relationships between some elements (e.g., the role of TM processes on organizational outcomes; the impact of top management teams, or psychological characteristics of top managers) have been underexplored. However, the model leaves some important questions unanswered. In the following, we discuss how public sector TM differs from that in the private sector. We also discuss the theoretical and methodological implications of this review.

Is top management different in the public sector?

While we have summarized the roles and functions of public top managers in existing research, we see the potential to further understand how top managers work differently in the public sector than in the private sector. At first sight, most elements in the systems model are relatively generic and do not suggest that top management in the public sector is radically different from that in the private sector. However, this conclusion is premature and masks the fact that our review has provided numerous examples of idiosyncratic public sector elements relating to different components in the systems model (see Table 5). Not all articles include distinctive elements of the public sector, but as the table illustrates, TM has notable characteristics in the public sector.

Public-sector organizations differ from private-sector organizations with different ownership, funding, and control (Moulton, 2009). It has been argued that public organizations are distinct in their organizational environments, their goals and structures, and the value of managers (Antonsen & Jørgensen, 1997). While we identified several studies that have paid attention to the publicness of TM outcomes and political and social environments, how the relative dimensions of publicness affect the composition and operations of TM is not well understood. Notably, for a few of the dimensions, we did not identify any elements of publicness or political authority in the reviewed research. This can indicate that this question has not been asked or that there are no differences between the public and private sectors. Further scrutinizing the dimensions of publicness is critical to understanding how TM components and combinations contribute to achieving public service outcomes across various implementing structures (Moulton, 2009).

TABLE 5 Public attributes of top management in the public sector.

Components	Elements	Examples	Publicness	
			Public value	Political authority
Inputs	Organizational environment	Prior public service performance (Boyne et al., 2010)	√	
		Fiscal stress at local government (Tekniepe & Stream, 2012)		√
	Political environment	Political change (Petrovsky et al., 2017)		√
	Social environment	Citizen's approval/pressure (Rottinghaus, 2014)	√	
		Community characteristics or jurisdictional adversity (McCabe et al., 2008)	√	√
Attributes	Social category	Passive versus active representation (Bowling, Kelleher, Jones, & Wright, 2006)	√	√
	Information/functional characteristics	Party affiliation (Capuno & Panganiban, 2012)		√
	Psychological characteristics	Public service motivation (Farley et al., 2020)	√	
	TMT composition	n/a	n/a	n/a
Processes	Decisional processes	City borrowing decision (Clinger, Feiock, McCabe, & Park, 2008)	√	√
	Relational processes	Executive-politician relationships (Leach & Lowndes, 2007)		√
	Informational processes	n/a	n/a	n/a
Outcomes	Individual outcomes	Executive-politician job mobility (Raadschelders & Van der Meer, 2014)		√
	Organizational outcomes	Policy isomorphism (Villadsen, 2011)		√
		Service delivery (Capuno & Panganiban, 2012)	√	
		Tax collection performance (Petrovsky & Avellaneda, 2014)	√	√

Note: We combine Bozeman's (1987) and Antonsen and Jørgensen's (1997) dimensional approaches of publicness to discern the publicness of the elements in the top management system. The provided examples were evaluated to determine whether they primarily include public value (e.g., accountability and welfare provision) or whether they are affected by political stakeholders.

Theoretical opportunities of public sector top management research

A wide and broad range of theories has been applied in existing research. Table 6 provides an overview of the most studied theories in the studies and examples of some of the research questions that have been asked within each line of inquiry.

Theories help us understand the mechanisms behind different components or relationships of the TM system. We see great potential in using our framework and insights from existing studies to develop new theories of TM in the public sector. One possibility is to focus on the established theories, e.g., upper echelons theory and representative bureaucracy theory, to theorize further how they can be used to understand top-level managers in the public sector. A second possibility is to develop new middle-range theories to understand the mechanisms of various TM processes by integrating insights from organizational-level theories. For example, by combing institutional theory and resource-based view, we may explore how environmental pressure affects new executives' view of their capabilities and thus resources and attention allocation to different functions.

Methodological opportunities for TM research

Our review provides a helpful overview of the methods and settings used in existing research (Figures B1-B3 in Appendix S1) and enables us to point to some methodological opportunities for future research. While research on TM has been conducted in a wide variety of countries, the US and Western Europe are still the dominant settings for studies. While we see a need for more studies in other settings, a significant research opportunity may be to conduct cross-national comparisons that will help us understand the importance of cultural and institutional differences for TM dynamics (see Suzuki and Hur (2020) as an example). Further, Meier, Rutherford, and Avellaneda's (2017) book is valuable in understanding what roles context may play theoretically (context as interactive and framing variables) and how to choose suitable contexts empirically in comparative research. Besides, given the burgeoning literature on TM in generic management journals, we observe surprisingly few sector comparisons. This is important as sector comparisons could help us better understand when and how ideas from studies in the private sector are likely to travel to the public sector (see Bello-Gomez and Rutherford (2023) as an example).

TABLE 6 Theories applied in top management studies.

Theory	Main concepts	Example research questions
Upper echelons theory	• Organizational outcomes are reflections of the experience, values, and personality of their top managers. • Demographic characteristics of top managers can be used as proxies of their cognitive frames.	• Whether mayors' demographics influence municipal success in expanding revenue (Avellaneda, 2012) • Whether the characteristics of top managers make a difference to the extent of inter-organizational collaboration (Esteve et al., 2013)
Agency theory or principal-agent theory	• Shareholders (principals) hire top managers (agents). Each side acts in its own self-interest, and when the interests of the principal and agent diverge, the classic principal-agent issue occurs. • The agency costs result from monitoring agents' behaviors and making sure that the interests of principals and agents are aligned. • Public top managers have a variety of principals and goals.	• Relationship between executive compensation and performance (Cheng, 2014) • Chair-chief executive roles and relationships (Heald & Steel, 2015)
Institutional theory	• Environmental pressures, social norms, and cultural expectations can shape organizational decision-making and changes. It highlights the role that outside factors play in shaping an organization and its top management.	• Whether the structural embeddedness of political executives impacts policy isomorphism in municipalities (Villadsen, 2011) • How executive succession influences the comprehensiveness of structural changes (Villadsen, 2012)
Resource-based view and Resource dependence theory	• *Resource-based view*: Organizations in the public sector, like those in the private sector, are constrained by their resources and compete with peers. It emphasizes how resources affect what strategies an organization takes and how well it performs. • *Resource dependence theory*: Public organizations have varying degrees of interdependence on both internal and external resources.	• How histories of structural reforms affect senior managers' evaluation of their organization's discretion (Kleizen et al., 2018) • How top management commitment (TMC) mediates the impact of external institutional pressures on internal organizational resource allocation (Zheng, Chen, Huang, & Zhang, 2013)
Leadership theories	• *Transformational leadership theory*: Transformational leaders lead through a vision and may be more qualified to manage an organization than other types of leaders in situations with significant organizational ambiguity and uncertainty. • *Shared leadership*: Shared leadership is the antithesis of traditional vertical leadership, in which authority is passed down to TMT members. Shared leadership stresses the lateral distribution of power and influence across all TMT members.	• How top management teams' shared leadership is related to organizational ambidexterity in public-sector organizations (Umans, Smith, Andersson, & Planken, 2020)
Representative bureaucracy theory	• Bureaucracies' representativeness of the public, in terms of their demographics, such as race, ethnicity, and gender ("passive representation"), is associated with preferable outcomes for groups with shared demographics ("active representation") (Gilad & Alon-Barkat, 2018)	• Trends and patterns in gender representation among executives (Bowling et al., 2006) • How senior civil servants managed their dual identities as bureaucrats and citizens, and how their social identification enhanced their motivation for policy change (Gilad & Alon-Barkat, 2018)
Social role theory/ social identity theory	• *Social role theory*: Gender disparities and similarities reflect gender role beliefs, which in turn represent people's conceptions of men's and women's social roles in society. • *Role incongruity theory*: Women are perceived to be less favorable in leadership positions. The incongruity emerges when there is a contradiction between the social roles that women play in society and the need of being in positions of leadership.	• How gender and gender role identity, separately and jointly, affect managerial aspirations (Zhang et al., 2021)
Gender-related metaphors	• *The glass ceiling*: the actual or perceived barrier or cap that prevents women to be promoted to top-level leadership positions. • *The glass cliff*: Organizations tend to hire women in times of crisis when the chance of failure is high. • *Queen bee phenomenon*: Women tend to distance themselves from other women in organizations where men hold most leadership roles. Such women seek	• The effect of female leadership on gender differences in public and private organizations (Arvate, Galilea, & Todescat, 2018) • Whether organizational growth improves gender integration in the upper echelons of the public sector (Krøtel et al., 2019)

(Continues)

T A B L E 6 (Continued)

Theory	Main concepts	Example research questions
	individual achievement by adapting to the organization's masculine culture. • *The glass prison*: a mentality in which individuals persuade themselves that males desire to control the workplace and positions of power while putting women in the background as underperformers and unsuccessful leaders.	
Theory of executive succession	• New executives make a small but significant difference. The effect of executive succession is contingent on the new incumbents' motives, means, and opportunities.	• The immediate and the long-term effects of managerial succession on performance (Hill, 2005) • Whether executives hired from outside interact with their elected officials differently than those who were promoted from within (Teodoro, 2013)
Theory of public service motivation	• Integration into an organization fosters motivations to execute tasks or contribute to the public due to shared beliefs, values, and knowledge.	• How and when leader humility contributes to the well-being of employees in the public sector (Luu, 2020)
Stakeholder theory	• Organizations are conscious of and responsive to the various demands of their stakeholders.	• How stakeholder's expectations affect an organization in adopting sustainable practices (Roman, 2017)

Our last suggestion is to apply multi- or mixed-method approaches to TM studies. A substantial majority of studies have employed quantitative methods throughout our research period (76.9 percent). Qualitative methods have many complementary advantages and are, for instance, valuable in explaining the in-depth mechanisms of the correlations established by quantitative studies. We only identified 5.7% of studies that used mixed methods, further indicating that more methodological pluralism is needed in this research area.

CONCLUSION

This paper has presented the first review of research on administrative top managers in the public sector. An empirically based systems model was introduced to illustrate how public sector top managers respond to various needs and demands from the environment and the feedback of a variety of outcomes. These key actors engage in a range of decisional, interpersonal, and informational processes to produce individual as well as organizational outcomes. We further show how the components of top management are interdependent, adaptive, and embedded in complex relationships in the system.

With decades of public management reforms, top managers have become increasingly important actors with discretion and autonomy to fundamentally affect how public organizations operate and perform. We see this reflected in our review with an upward trend in research in recent years. We welcome this development and hope this review can help inspire future studies on this important topic.

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ENDNOTE

1 An indication of this can be found by exploring citations to Hambrick and Mason's (1984) classical article. Of the 4280 citations by the end of 2020 (in Web of Science), 61% are made by journals in the management field, and only 1.6% (69 citations) are by journals in the field of public administration.

REFERENCES

Anderson, Stephen H., and Natalia V. Smirnova. 2006. "A Study of Executive Budget-Balancing Decisions." *The American Review of Public Administration* 36(3): 323–36. https://doi.org/10.1177/0275074005280953.

Andrews, Rhys, and Ahmed Mohammed Sayed Mostafa. 2019. "Organizational Goal Ambiguity and Senior Public Managers' Engagement: Does Organizational Social Capital Make a Difference?" *International Review of Administrative Sciences* 85(2): 377–95. https://doi.org/10.1177/0020852317701824.

Anessi-Pessina, Eugenio, and Mariafrancesca Sicilia. 2020. "Do Top Managers' Individual Characteristics Affect Accounting Manipulation in the Public Sector?" *Journal of Public Administration Research and Theory* 30(3): 465–84. https://doi.org/10.1093/jopart/muz038.

Antonsen, Marianne, and Torben Beck Jørgensen. 1997. "The "Publicness" of Public Organizations." *Public Administration* 75(2): 337–57. https://doi.org/10.1111/1467-9299.00064.

Arvate, Paulo Roberto, Gisele Walczak Galilea, and Isabela Todescat. 2018. "The Queen Bee: A Myth? The Effect of Top-Level Female Leadership on Subordinate Females." *The Leadership Quarterly* 29(5): 533–48. https://doi.org/10.1016/j.leaqua.2018.03.002.

Avellaneda, Claudia N. 2012. "Do Politics or Mayors' Demographics Matter for Municipal Revenue Expansion?" *Public Management Review* 14(8): 1061–86. https://doi.org/10.1080/14719037.2012.662442.

Avellaneda, Claudia N. 2016. "Government Performance and Chief Executives' Intangible Assets: Motives, Networking, and/or Capacity?" *Public Management Review* 18(6): 918–47. https://doi.org/10.1080/14719037.2015.1051574.

Bach, Tobias, and Sylvia Veit. 2017. "The Determinants of Promotion to High Public Office in Germany: Partisan Loyalty, Political Craft, or Managerial Competencies?" *Journal of Public Administration Research and Theory* 28(2): 254–69. https://doi.org/10.1093/jopart/mux041.

Bang, Henning. 2012. "What Prevents Senior Executives from Commenting upon Miscommunication in Top Management Team Meetings?" *Qualitative Research in Organizations and Management: An*

International Journal 7(2): 189–208. https://doi.org/10.1108/17465641211253093.

Barnett, Kerry, and John McCormick. 2012. "Leadership and Team Dynamics in Senior Executive Leadership Teams." *Educational Management Administration & Leadership* 40(6): 653–71. https://doi.org/10.1177/1741143212456909.

Béchard, Benoît. 2020. "Senior Civil Servants in Quebec and Strategic Information Transmission: A Game Theory-Driven Approach." *Canadian Public Administration* 63(1): 93–116. https://doi.org/10.1111/capa.12362.

Bello-Gomez, Ricardo A., and Amanda Rutherford. 2023. "Predicting Executive Vacancies: An Organizational Approach." *Public Administration* 101(1): 236–70. https://doi.org/10.1111/padm.12770.

Bobe, Belete J., and Ralph Kober. 2020a. "University Dean Personal Characteristics and Use of Management Control Systems and Performance Measures." *Studies in Higher Education* 45(2): 235–57. https://doi.org/10.1080/03075079.2018.1504911.

Bobe, Belete J., and Ralph Kober. 2020b. "Does Gender Matter? The Association between Gender and the Use of Management Control Systems and Performance Measures." *Accounting & Finance* 60(3): 2063–98. https://doi.org/10.1111/acfi.12365.

Bourgault, Jacques, and Karolien Van Dorpe. 2013. "Managerial Reforms, Public Service Bargains and Top Civil Servant Identity." *International Review of Administrative Sciences* 79(1): 49–70. https://doi.org/10.1177/0020852312467739.

Bowling, Cynthia J., Christine A. Kelleher, Jennifer Jones, and Deil S. Wright. 2006. "Cracked Ceilings, Firmer Floors, and Weakening Walls: Trends and Patterns in Gender Representation among Executives Leading American State Agencies, 1970–2000." *Public Administration Review* 66(6): 823–36. https://doi.org/10.1111/j.1540-6210.2006.00651.x.

Boyne, George A., Oliver James, Peter John, and Nicolai Petrovsky. 2008. "Executive Succession in English Local Government." *Public Money & Management* 28(5): 267–74. https://doi.org/10.1111/j.1467-9302.2008.00655.x.

Boyne, George A., Oliver James, Peter John, and N. Petrovsky. 2010. "Does Public Service Performance Affect Top Management Turnover?" *Journal of Public Administration Research and Theory* 20(Supplement 2): i261–79. https://doi.org/10.1093/jopart/muq024.

Boyne, George A., Oliver James, Peter John, and Nicolai Petrovsky. 2011. "Top Management Turnover and Organizational Performance: A Test of a Contingency Model." *Public Administration Review* 71(4): 572–81. https://doi.org/10.1111/j.1540-6210.2011.02389.x.

Bozeman, Barry. 1987. *All Organizations Are Public: Bridging Public and Private Organizational Theories*. San Fransisco, CA: Jossey-Bass.

Cahan, Steven F., Frances Chua, and Robert Ochoki Nyamori. 2005. "Board Structure and Executive Compensation in the Public Sector: New Zealand Evidence." *Financial Accountability and Management* 21(4): 437–65. https://doi.org/10.1111/j.0267-4424.2005.00228.x.

Capuno, Joseph J., and Marian Panganiban. 2012. "The Ties that Do Not Bind: Party Affiliations and the Delivery of Devolved Health Services in The Philippines." *Philippine Political Science Journal* 33(1): 63–80. https://doi.org/10.1080/01154451.2012.684517.

Cheng, Shaoming. 2014. "Executive Compensation in Public Higher Education: Does Performance Matter?" *Research in Higher Education* 55(6): 581–600. https://doi.org/10.1007/s11162-014-9328-9.

Clinger, James C., Richard C. Feiock, Barbara Coyle McCabe, and Hyung-Jun Park. 2008. "Turnover, Transaction Costs, and Time Horizons: An Examination of Municipal Debt Financing." *The American Review of Public Administration* 38(2): 167–79. https://doi.org/10.1177/0275074007305606.

Damanpour, Fariborz, and Marguerite Schneider. 2006. "Phases of the Adoption of Innovation in Organizations: Effects of Environment, Organization and Top Managers1." *British Journal of Management* 17(3): 215–36. https://doi.org/10.1111/j.1467-8551.2006.00498.x.

Davies, H. T. O., R. Mannion, R. Jacobs, A. E. Powell, and M. N. Marshall. 2007. "Exploring the Relationship between Senior Management Team Culture and Hospital Performance." *Medical Care Research and Review* 64(1): 46–65. https://doi.org/10.1177/1077558706296240.

Donatella, Pierre, and Torbjörn Tagesson. 2020. "CFO Characteristics and Opportunistic Accounting Choice in Public Sector Organizations." *Journal of Management and Governance* 25: 509–34. https://doi.org/10.1007/s10997-020-09521-1.

Esteve, M., George A. Boyne, V. Sierra, and T. Ysa. 2013. "Organizational Collaboration in the Public Sector: Do Chief Executives Make a Difference?" *Journal of Public Administration Research and Theory* 23(4): 927–52. https://doi.org/10.1093/jopart/mus035.

Farley, Webb, Kathryn Beth Rauhaus, and Robert Eskridge. 2020. "Gender Representation, Professional Experiences, and Socialization: The Case of City Managers." *Public Personnel Management* 50(1): 56–83. https://doi.org/10.1177/0091026020903073.

Feng, Xunan, and Anders C. Johansson. 2018. "Underpaid and Corrupt Executives in China's State Sector." *Journal of Business Ethics* 150(4): 1199–212. https://doi.org/10.1007/s10551-016-3190-y.

Ferlie, Ewan, and Edoardo Ongaro. 2015. *Strategic Management in Public Services Organizations: Concepts, Schools and Contemporary Issues*. London: Routledge. https://doi.org/10.4324/9780203736432.

Finkelstein, Sydney, Donald C. Hambrick, and Albert A. Cannella. 2009. "Top Management Teams." In *Strategic Leadership: Theory and Research on Executives, Top Management Teams, and Boards*. New York (NY): Oxford University Press.

Georgakakis, Dimitrios, Mariano L. M. Heyden, Jana D. R. Oehmichen, and Udari I. K. Ekanayake. 2022. "Four Decades of CEO–TMT Interface Research: A Review Inspired by Role Theory." *The Leadership Quarterly, Strategic Leadership and Strategic Management* 33(3): 101354. https://doi.org/10.1016/j.leaqua.2019.101354.

Giauque, David, Fabien Resenterra, and Michaël Siggen. 2009. "Modernization Routes and Relations between Political and Administrative Spheres in Switzerland." *International Review of Administrative Sciences* 75(4): 687–713. https://doi.org/10.1177/0020852309351478.

Gilad, Sharon, and Saar Alon-Barkat. 2018. "Enhancing Democracy Via Bureaucracy: Senior Managers' Social Identities and Motivation for Policy Change." *Governance* 31(2): 359–80. https://doi.org/10.1111/gove.12300.

Guney, Salih, and Ten Ayranci. 2011. "An Appliell Imrestigation of Job Satisfaction Aml Organizational Commitment among Top Managers at Private and Public Establishments." *International Business Management* 5(6): 366–81.

Hambrick, Donald C., and Phyllis A. Mason. 1984. "Upper Echelons: The Organization as a Reflection of its Top Managers." *Academy of Management Review* 9(2): 193–206. https://doi.org/10.5465/amr.1984.4277628.

Hansen, Morten Balle, Trui Steen, and Marsha de Jong. 2013. "New Public Management, Public Service Bargains and the Challenges of Interdepartmental Coordination: A Comparative Analysis of Top Civil Servants in State Administration." *International Review of Administrative Sciences* 79(1): 29–48. https://doi.org/10.1177/0020852312467550.

Haveri, Arto, Henna Paananen, and Jenni Airaksinen. 2018. "Narratives on Complexity: Interpretations on Local Government Leadership Change." *Administrative Culture* 19(1): 37–53. https://doi.org/10.32994/ac.v19i1.207.

Heald, David, and David Steel. 2015. "Making the Governance of Public Bodies Work: Chair–Chief Executive Relationships in Practice." *Public Money & Management* 35(4): 257–64. https://doi.org/10.1080/09540962.2015.1047266.

Hill, Gregory C. 2005. "The Effects of Managerial Succession on Organizational Performance." *Journal of Public Administration Research and Theory* 15(4): 585–97. https://doi.org/10.1093/jopart/mui034.

Kim, Joon-ho, and Seung-hye Jung. 2015. "Study on CEO Characteristics for Management of Public art Performance Centers." *Journal of Open Innovation: Technology, Market, and Complexity* 1(1): 5. https://doi.org/10.1186/s40852-015-0007-7.

Kim, Jungbu, and Seong Soo Oh. 2016. "Local Managerial Strategies for External Versus Own Source Fiscal Resources: Do Administrators'

Previous Career and Education Matter?" *The American Review of Public Administration* 46(1): 28–50. https://doi.org/10.1177/0275074014526637.

Kleizen, Bjorn, Koen Verhoest, and Jan Wynen. 2018. "Structural Reform Histories and Perceptions of Organizational Autonomy: Do Senior Managers Perceive less Strategic Policy Autonomy when Faced with Frequent and Intense Restructuring?" *Public Administration* 96(2): 349–67. https://doi.org/10.1111/padm.12399.

Kodagoda, Thilakshi. 2019. "Gendered Norms and HRM Practices at Workplace: Evidence from Public Banking Sector in Sri Lanka." *Indian Journal of Human Development* 13(2): 211–20. https://doi.org/10.1177/0973703019870882.

Křečková, Zuzana, Dana Zadražilová, and Hana Řezanková. 2016. "The Added Value of Women in Management: The Czech Case." *Prague Economic Papers* 25(3): 354–73. https://doi.org/10.18267/j.pep.588.

Krøtel, Sarah M. L., Rachel E. Ashworth, and Anders R. Villadsen. 2019. "Weakening the Glass Ceiling: Does Organizational Growth Reduce Gender Segregation in the Upper Tiers of Danish Local Government?" *Public Management Review* 21(8): 1213–35. https://doi.org/10.1080/14719037.2018.1550107.

Lapuente, Victor, Kohei Suzuki, and Steven Van de Walle. 2020. "Goats or Wolves? Private Sector Managers in the Public Sector." *Governance* 33(3): 599–619. https://doi.org/10.1111/gove.12462.

Leach, Steve, and Vivien Lowndes. 2007. "Of Roles and Rules: Analysing the Changing Relationship between Political Leaders and Chief Executives in Local Government." *Public Policy and Administration* 22(2): 183–200. https://doi.org/10.1177/0952076707075892.

Løkke, Ann-Kristina, and Kenneth Lykke Sørensen. 2020. "Top Management Turnover and its Effect on Employee Absenteeism: Understanding the Process of Change." *Review of Public Personnel Administration* 41(4): 723–46. https://doi.org/10.1177/0734371X20931911.

Luu, Tuan Trong. 2020. "Can Humble Leaders Nurture Employee Well-Being? The Roles of Job Crafting and Public Service Motivation." *Personnel Review* 50(3): 789–811. https://doi.org/10.1108/PR-12-2019-0701.

Mat Ludin, Khairul Rizan, Zakiah Muhammaddun Mohamed, and Norman Mohd-Saleh. 2017. "The Association between CEO Characteristics, Internal Audit Quality and Risk-Management Implementation in the Public Sector." *Risk Management* 19(4): 281–300. https://doi.org/10.1057/s41283-017-0022-z.

Matthews, Judy, Neal Ryan, and Trevor Williams. 2011. "Adaptive and Maladaptive Responses of Managers to Changing Environments: A Study of Australian Public Sector Senior Executives." *Public Administration* 89(2): 345–60. https://doi.org/10.1111/j.1467-9299.2010.01866.x.

McCabe, Barbara Coyle, Richard C. Feiock, James C. Clingermayer, and Christopher Stream. 2008. "Turnover among City Managers: The Role of Political and Economic Change." *Public Administration Review* 68(2): 380–6. https://doi.org/10.1111/j.1540-6210.2007.00869.x.

Meier, Kenneth J., Laurence J. O'Toole, and Holly T. Goerdel. 2006. "Management Activity and Program Performance: Gender as Management Capital." *Public Administration Review* 66(1): 24–36. https://doi.org/10.1111/j.1540-6210.2006.00553.x.

Meier, Kenneth J., Amanda Rutherford, and Claudia N. Avellaneda. 2017. *Comparative Public Management: Why National, Environmental, and Organizational Context Matters*. Washington D.C.: Georgetown University Press.

Mintzberg, Henry. 1973. *The Nature of Managerial Work*. New York (NY): Harper & Row.

Moher, David, Alessandro Liberati, Jennifer Tetzlaff, and Douglas G. Altman. 2009. "Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement." *PLoS Medicine* 6(7): e1000097. https://doi.org/10.1371/journal.pmed.1000097.

Moulton, Stephanie. 2009. "Putting Together the Publicness Puzzle: A Framework for Realized Publicness." *Public Administration Review* 69(5): 889–900. https://doi.org/10.1111/j.1540-6210.2009.02038.x.

Nadler, David A., and Michael L. Tushman. 1980. "A Model for Diagnosing Organizational Behavior." *Organizational Dynamics* 9(2): 35–51. https://doi.org/10.1016/0090-2616(80)90039-X.

Naranjo-Gil, David. 2016. "The Role of Management Control Systems and Top Teams in Implementing Environmental Sustainability Policies." *Sustainability* 8(4): 359. https://doi.org/10.3390/su8040359.

Naranjo-Gil, David, and Frank Hartmann. 2007. "Management Accounting Systems, Top Management Team Heterogeneity and Strategic Change." *Accounting, Organizations and Society* 32(7–8): 735–56. https://doi.org/10.1016/j.aos.2006.08.003.

O'Flynn, Patrick Eamon, and Tim A. Mau. 2014. "A Demographic and Career Profile of Municipal CAOs in Canada: Implications for Local Governance: Municipal CAOs in Canada." *Canadian Public Administration* 57(1): 154–70. https://doi.org/10.1111/capa.12055.

Opstrup, Niels, and Anders R. Villadsen. 2015. "The Right Mix? Gender Diversity in Top Management Teams and Financial Performance." *Public Administration Review* 75(2): 291–301. https://doi.org/10.1111/puar.12310.

Othman, Jamilah, Kabeer Abdullahi Mohammed, and Jeffrey Lawrence De Silva. 2012. "Does a Transformational and Transactional Leadership Style Predict Organizational Commitment among Public University Lecturers in Nigeria?" *Asian Social Science* 9(1): p165. https://doi.org/10.5539/ass.v9n1p165.

O'Toole, Laurence J., and Kenneth J. Meier. 1999. "Modeling the Impact of Public Management: Implications of Structural Context." *Journal of Public Administration Research and Theory* 9(4): 505–26. https://doi.org/10.1093/oxfordjournals.jpart.a024421.

Petrovsky, Nicolai, and Claudia N. Avellaneda. 2014. "Mayoral Public Sector Work Experience and Tax Collection Performance in Colombian Local Governments." *International Public Management Journal* 17(2): 145–73. https://doi.org/10.1080/10967494.2014.905406.

Petrovsky, Nicolai, Oliver James, Alice Moseley, and George A. Boyne. 2017. "What Explains Agency Heads' Length of Tenure? Testing Managerial Background, Performance, and Political Environment Effects." *Public Administration Review* 77(4): 591–602. https://doi.org/10.1111/puar.12735.

Prenestini, Anna, Stefano Calciolari, Federico Lega, and Roberto Grilli. 2015. "The Relationship between Senior Management Team Culture and Clinical Governance: Empirical Investigation and Managerial Implications." *Health Care Management Review* 40(4): 313–23. https://doi.org/10.1097/HMR.0000000000000035.

Prenestini, Anna, and Federico Lega. 2013. "Do Senior Management Cultures Affect Performance? Evidence from Italian Public Healthcare Organizations." *Journal of Healthcare Management* 58(5): 336–51. https://doi.org/10.1097/00115514-201309000-00007.

Raadschelders, Jos, and Frits M. Van der Meer. 2014. "Administrative Elites in The Netherlands from 1980 to 2011: Making the Invisible Visible." *International Review of Administrative Sciences* 80(4): 726–45. https://doi.org/10.1177/0020852314533454.

Rattus, Reelika, and Tiina Randma-Liiv. 2019. "Leaving the Senior Civil Service – Public Service Bargain and beyond: The Case of Estonia." *Public Policy and Administration* 34(4): 453–74. https://doi.org/10.1177/0952076718804862.

Roman, Alexandru V. 2017. "Institutionalizing Sustainability: A Structural Equation Model of Sustainable Procurement in US Public Agencies." *Journal of Cleaner Production* 143: 1048–59. https://doi.org/10.1016/j.jclepro.2016.12.014.

Rottinghaus, Brandon. 2014. "Surviving Scandal: The Institutional and Political Dynamics of National and State Executive Scandals." *PS: Political Science & Politics* 47(1): 131–40. https://doi.org/10.1017/S1049096513001509.

Rutherford, Amanda, and Jon Lozano. 2018. "Top Management Turnover: The Role of Governing Board Structures." *Public Administration Review* 78(1): 104–15. https://doi.org/10.1111/puar.12838.

Samimi, Mehdi, Andres Felipe Cortes, Marc H. Anderson, and Pol Herrmann. 2022. "What Is Strategic Leadership? Developing a Framework for Future Research, Strategic Leadership and Strategic

Management." *The Leadership Quarterly* 33(3): 101353. https://doi.org/10.1016/j.leaqua.2019.101353.

Scott, W. Richard, and Gerald F. Davis. 2015. *Organizations and Organizing: Rational, Natural and Open Systems Perspectives.* New York (NY): Routledge.

Stenstrom, Cheryl. 2015. "Decision-Making Experiences of Public Library CEOs: A Study Exploring the Roles of Interpersonal Influence and Evidence in Everyday Practice." *Library Management* 36(8/9): 644–52. https://doi.org/10.1108/LM-07-2015-0053.

Suzuki, Kohei, and Hyunkang Hur. 2020. "Bureaucratic Structures and Organizational Commitment: Findings from a Comparative Study of 20 European Countries." *Public Management Review* 22(6): 877–907. https://doi.org/10.1080/14719037.2019.1619813.

Tekniepe, Robert J., and Christopher Stream. 2012. "You're Fired!: County Manager Turnover in Large American Counties." *American Review of Public Administration* 42(6): 715–29. https://doi.org/10.1177/0275074011423572.

Teodoro, Manuel P. 2013. "Moving in, Managing up: Executive Job Formation and Political Behaviour." *Journal of Public Policy* 33(2): 137–64. https://doi.org/10.1017/S0143814X1300007X.

Umans, Timurs, Elin Smith, William Andersson, and William Planken. 2020. "Top Management Teams' Shared Leadership and Ambidexterity: The Role of Management Control Systems." *International Review of Administrative Sciences* 86(3): 444–62. https://doi.org/10.1177/0020852318783539.

Vainieri, Milena, Francesca Ferrè, Giorgio Giacomelli, and Sabina Nuti. 2019. "Explaining Performance in Health Care: How and when Top Management Competencies Make the Difference." *Health Care Management Review* 44(4): 306–17. https://doi.org/10.1097/HMR.0000000000000164.

Villadsen, Anders R. 2011. "Structural Embeddedness of Political Top Executives as Explanation of Policy Isomorphism." *Journal of Public Administration Research and Theory* 21(4): 573–99. https://doi.org/10.1093/jopart/mur007.

Villadsen, Anders R. 2012. "New Executives from inside or outside? The Effect of Executive Replacement on Organizational Change." *Public Administration Review* 72(5): 731–40. https://doi.org/10.1111/j.1540-6210.2012.02565.x.

Villadsen, Anders R. 2016. "The Relation between Executive Succession and Corporate Capacity." *Journal of Public Administration Research and Theory* 50(1): 19–29. https://doi.org/10.1093/jopart/muu036.

Wood, B. D., and M. P. Marchbanks. 2007. "What Determines how Long Political Appointees Serve?" *Journal of Public Administration Research and Theory* 18(3): 375–96. https://doi.org/10.1093/jopart/mum019.

Wright, B. E., and S. K. Pandey. 2010. "Transformational Leadership in the Public Sector: Does Structure Matter?" *Journal of Public Administration Research and Theory* 20(1): 75–89. https://doi.org/10.1093/jopart/mup003.

Yi, Hongtao, and Ivy Liu. 2022. "Executive Leadership, Policy Tourism, and Policy Diffusion among Local Governments." *Public Administration Review* 82(6): 1024–41. https://doi.org/10.1111/puar.13529.

Zhang, Ruijuan, Shaoping Qiu, Larry M. Dooley, and Tamim Choudhury. 2021. "Managerial Aspiration: Do Gender and Gender Role Identity Make a Difference in the Chinese Context?" *Gender in Management: An International Journal* 36(2): 189–204. https://doi.org/10.1108/GM-11-2019-0221.

Zhang, Fengxiu, Justin M. Stritch, and Eric W. Welch. 2020. "Tension in Democratic Administration: Does Managerial Confidence in Administrative Capacity Reduce Citizen Participation in Organizational Decision-Making?" *Public Administration* 98(3): 675–95. https://doi.org/10.1111/padm.12645.

Zheng, Daqing, Jin Chen, Lihua Huang, and Cheng Zhang. 2013. "E-Government Adoption in Public Administration Organizations: Integrating Institutional Theory Perspective and Resource-Based View." *European Journal of Information Systems* 22(2): 221–34. https://doi.org/10.1057/ejis.2012.28.

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