

Power to the people—And then? A multilevel leadership perspective on organizational decentralization

Hendrik Huettermann¹ | Stefan Berger² | Max Reinwald³ | Heike Bruch⁴

¹Department of Economics and Management, Bundeswehr University Munich, Munich-Neubiberg, Germany

²Faculty of Economics and Business, University of Groningen, Groningen, The Netherlands

³LMU Munich School of Management, Ludwig-Maximilians-Universität München, Munich, Germany

⁴Institute for Leadership and HRM, University of St. Gallen, St. Gallen, Switzerland

Correspondence

Hendrik Huettermann, Department of Economics and Management, Bundeswehr University Munich, Werner-Heisenberg-Weg 39, 85577 Munich-Neubiberg, Germany. Email: hendrik.huettermann@unibw.de

Abstract

As organizations strive for more flexibility, decentralized decision-making has been at the core of many modern HR approaches. Yet, on a company-wide scale, it remains unclear whether decentralized decision-making structures improve organizational performance. Our study aims to illuminate prior ambiguous evidence by examining an employee-level mechanism underlying the organizational-level relationship between decentralization and performance, and scrutinizing the critical role of formal leaders for empowering employees in decentralized structures. Integrating the perspective of organizational structure as opportunities and constraints with social information processing theory, we argue that transferring decision-making authority to lower organizational levels positively affects employees' emergent leadership, but only to the extent that direct supervisors engage in empowering leadership and guide employees' behaviors in decentralized structures. Our predictions are supported by a multilevel, multisource field study of 5807 individuals across 144 companies. We further find that emergent leadership yields a positive effect on organizational performance. By developing a multilevel model that explicates both an employee-level mechanism and a contingency of the decentralization–organizational performance link, our study enriches understanding of the key role that formal leaders play for achieving the strategic goals of decentralized decision-making in organizations.

KEYWORDS

decentralized decision-making, emergent leadership, empowering leadership, organizational performance, organizational structure

1 | INTRODUCTION

How employees' potential can be leveraged as a source of competitive advantage is a major theme in HR management (Jiang & Messersmith, 2018). In recent decades, HR researchers and practitioners have developed a number of approaches aimed at enhancing

organizational performance by motivating employees to take agency. Examples include high-involvement work systems (Boxall & Macky, 2009), empowering HR practices (Subramony, 2009), and self-managing teams and organizations (M. Y. Lee & Edmondson, 2017). While these approaches differ regarding the specific practices involved, a unifying element among them is the assumption that organizations can best tap employees' potential by giving them greater decision-making authority (Aiken & Hage, 1966; Mintzberg, 1979).

Stefan Berger and Max Reinwald contributed equally to this study.

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial-NoDerivs](https://creativecommons.org/licenses/by-nc-nd/4.0/) License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2024 The Authors. *Human Resource Management* published by Wiley Periodicals LLC.

This puts the principle of structural *decentralization*, or downward shifts of formal and informal authority (M. Y. Lee & Edmondson, 2017), at the core of many contemporary HR approaches. The expectation is that, by decentralizing decision-making structures, companies mobilize their employees' motivational and cognitive resources, which in turn improves corporate performance (Anderson & Brown, 2010).

Organizational design research thus holds great potential to inform HR management on the promises of decentralized decision-making. Yet despite its long-standing tradition, the organizational design literature is largely inconclusive on whether decentralization achieves its purpose of improving organizational performance (Dalton et al., 1980; McEvily et al., 2014; Porter & Lawler, 1965; Sandhu & Kulik, 2019). Still, many organizations engage in costly and often painful company-wide decentralization efforts (Bernstein et al., 2016). There is thus a clear need for a better understanding not just of *whether* decentralization—as an underlying principle of many modern HR approaches—is the right choice for an organization, but also *how* and *when* it can produce the benefits it promises.

We propose that one root cause for the limited progress of prior research can be found in its strong collective-level perspective when examining how decentralization impacts organizational performance. Most studies have construed decentralization as an organizational context that all employees react to uniformly (Ambrose & Schminke, 2003). Yet this assumption seems hardly tenable for decentralized structures that provide employees with more autonomy and thereby likely increase variability in individual reactions (Dickson et al., 2006). What forms do these individual reactions take, and how do they aggregate across individuals and thereby influence organizational effectiveness? These questions remain largely unexplored, prompting calls to integrate multiple levels in organizational structure research (Porter & Schneider, 2014) and to unpack “micromediating mechanisms” (Greer et al., 2018, p. 603).

Among the variations in how employees react to decentralization is the possibility that they do not make effective use of greater autonomy. For example, some employees may infer that colleagues with longer tenure or a higher salary should take more ownership, while others may not be aware of opportunities for taking on responsibility in their daily work context. To tackle this challenge, formal leadership has been proposed to become even more—rather than less—important in decentralized organizations, as leaders can help employees make adequate sense of what decentralized structures mean for them personally and thereby support companies in achieving their strategic goals (M. Y. Lee & Edmondson, 2017). The challenge for leaders becomes fostering consistent employee behavior without introducing rigid regulatory mechanisms that might run counter to the spirit of decentralization. Thus, decentralized structures require a form of leadership that does not emphasize formal authority but rather encourages employees to take agency and make productive use of their autonomy (Bernstein et al., 2016).

To illuminate prior inconsistent evidence and shed light on the critical role of leadership in decentralized structures, our study adopts a multilevel leadership perspective and scrutinizes *informal* leadership

as an explanatory mechanism and *formal* leadership as a contingency of the decentralization–organizational performance link. In developing our model, we follow the logic of foundational organizational theory (Katz & Kahn, 1978), which suggests that employees may generally react to increased autonomy in decentralized organizations by taking on informal leadership responsibility (i.e., showing high levels of *emergent leadership*; Acton et al., 2019). However, as formal structures need to be “continuously and creatively embellished and pieced out” (Katz & Kahn, 1978, p. 536), we suggest that *empowering leadership* by direct supervisors plays a key role in determining how employees react to decentralization (Sharma & Kirkman, 2015). To theorize the inter-individual variability in employee reactions, we integrate the perspective of organizational structure as opportunities and constraints with social information processing theory (Salancik & Pfeffer, 1978). We posit that to make unambiguous sense of decentralized structures, employees also require an empowering direct formal supervisor who concurs with the signals sent by decentralization and encourages them to take agency by giving color, elaboration, and reality to the principles of decentralization in their immediate work context. By fostering employees' emergent leadership, we suggest that the interplay of organizational decentralization and supervisors' empowering leadership indirectly benefits organizational performance (Katz & Kahn, 1978).

We aim to make three major contributions. First, we shed light on the question of whether, how, and when organizational performance gains can be realized via decentralized decision-making authority. As the principle of decentralization is at the core of many modern HR approaches (Boxall & Macky, 2009; Subramony, 2009), our findings are thus particularly relevant for HR research and practice. In addition, we address a major debate in organizational design research on potential performance benefits of decentralization (Dalton et al., 1980; McEvily et al., 2014; Porter & Lawler, 1965). Our study integrates macro- and micro-perspectives on decentralization by developing a multilevel model that explicates how the increased autonomy resulting from decentralization manifests across organizational levels and when it generates value for the company (Kozlowski & Klein, 2000; Porter & Schneider, 2014).

Second, we advance understanding of the critical role of formal leaders for shaping employee reactions to organizational structure (Anderson & Brown, 2010). We examine how a particular leadership style (i.e., empowering leadership) can support employees' sensemaking and thereby help to realize the strategic benefits of a specific organizational structure (i.e., decentralization). In doing so, we also contribute to research on empowering leadership that has received increasing attention in particular from an HR perspective (Chuang et al., 2016; Coun et al., 2022). By examining the interplay between structural decentralization and supervisor empowering leadership, we elucidate how empowerment at different organizational levels affects employee behavior (Maynard et al., 2012) and echo calls for a more complex picture of the role empowering leadership (A. Lee et al., 2018).

Finally, we extend the theoretical scope of the literature on distributed forms of leadership beyond individual-level antecedents

(e.g., demographics or personality) to the role of structure as a factor that can be more directly shaped by organizations (Acton et al., 2019; Wellman, 2017). In addition, we scrutinize whether employees' leadership emergence also benefits the organization's bottom-line, thus putting the proposition to the test that "those organizations in which influential acts are widely shared are most effective" (Katz & Kahn, 1978, p. 571).

2 | THEORETICAL BACKGROUND

Decentralization has been the focus of academic research since the early 1960s (Chandler, 1962; Mintzberg, 1979; Pugh et al., 1963). As a structural characteristic at the organizational level, decentralization refers to the extent to which decision-making authority is shared and moved downward to lower organizational levels (Hempel et al., 2012; Lin & Germain, 2003; Porter & Lawler, 1965). Today, the core notion of decentralized decision-making has found its way into many contemporary HR approaches (Richardson et al., 2002). In contrast to the bureaucracy and line of command that often exist in more centralized structures, employees in decentralized organizations generally enjoy greater freedom in how they carry out their work and interact with colleagues (M. Y. Lee & Edmondson, 2017).

Organizational design scholars have traditionally seen the removal of bureaucratic constraints in decentralized organizations as a way to unleash employees' motivational and cognitive potential and thereby realize performance gains at the level of the organization (Aiken & Hage, 1966; Pfeffer, 1991). Yet empirical evidence has shown the link between decentralization and organizational performance to be highly inconsistent over the past decades, revealing positive, negative, and non-significant effects (Csaszar, 2012; Dalton et al., 1980; Lin & Germain, 2003; Porter & Lawler, 1965; Richardson et al., 2002). These findings have given rise to a contingency perspective, and studies have identified critical organizational-level boundary conditions of decentralization (e.g., particular organizational strategies and environments; Andrews et al., 2007; Richardson et al., 2002).

While adopting a contingency perspective has significantly improved our understanding of decentralized forms of organizing, we believe research in this area still falls short of fully capturing the complexity of structural effects. A central limiting factor of past work is that it has focused almost exclusively on a single level of analysis when examining organizational-level outcomes; hence, researchers have assumed homogeneity—either implicitly or explicitly—in how individuals react to decentralized structures. This disregard for potential variability might explain the inconsistent findings of prior studies, as differences in individual reactions might cancel each other out when outcomes are only viewed at the organizational level (Kozlowski & Klein, 2000). To avoid this pitfall, we suggest taking a multilevel perspective to consider how decentralized structures shape employees' reactions and how these reactions aggregate to and manifest at the organizational level (Greer et al., 2017; Porter & Schneider, 2014).

Importantly, such a multilevel focus also allows for considering employee-level contingencies in individuals' immediate work context, which may determine how they react to decentralization. In this regard—"somewhat ironically" (Bernstein et al., 2016, p. 49)—in particular formal leadership has been proposed to become even more important in less-hierarchical than in traditional management structures. Formal leaders may be crucial for employees' sensemaking of the often abstract principles of decentralization in their everyday work environment (Nishii & Paluch, 2018; Podolny et al., 2004) and thereby significantly influence whether and how employees make use of their increased autonomy, thus constituting a central enabler for decentralization's strategic objectives (M. Y. Lee & Edmondson, 2017).

With our multilevel perspective, we follow the paradigm of structural individualism by considering employees' behavior as a micro-level explanatory mechanism of the macro-level relationship between organizational decentralization and performance (Coleman, 1990). Structural individualism suggests that a deep understanding of macro-mechanisms must account for how macro-factors constrain and generate individual actions and interactions, which in turn manifest at the collective level. A similar argument is made by the microfoundations movement in strategy and organizational theory research, proposing that "work on organizational design and structure inherently has microfoundational components in that structures and designs implicate individuals, their interactions and potential aggregate outcomes" (Felin et al., 2015, p. 585).

2.1 | Decentralization and emergent leadership

We focus on the mechanism of employees' emergent leadership to conceptually capture the assumption in organizational design research that decentralization increases an employee's autonomy, spurring her or him to take responsibility, exert influence, and utilize cognitive and informational resources to make decisions that benefit the organization (Aiken & Hage, 1966; Porter & Lawler, 1965; Pugh et al., 1963). Emergent leadership is conceptualized as individuals engaging in leadership behavior although no formal authority has been vested in them (Schneier & Goktepe, 1983). It refers to leader-like behavior that encompasses making self-contained decisions with the aim of contributing to the achievement of the organization's goals. This notion of emergent leadership adequately covers the mechanisms proposed in the decentralization literature. Specifically, it embodies the core idea in foundational organizational theory that the right structural distribution of leadership responsibility within organizations is key to enhancing organizational effectiveness (Katz & Kahn, 1978). In line with prior work, we conceptualize emergent leadership as an individual-level construct with implications for the collective, as more employees within the collective emerge as leaders (Hanna et al., 2021).

The effects of organizational structure can be understood by considering how a given structure constrains or provides flexibility to individuals' cognition and behavior (Johns, 2006, 2018; Pfeffer, 1991). In

organizations with highly centralized structures, employees need approval from higher up the chain of command for most actions and are primarily concerned with implementing decisions made by their superiors in the organizational hierarchy (Hempel et al., 2012; Knight et al., 2018). These bureaucratic constraints can result in passive mindsets and behaviors by clearly defining who must defer to whom; individuals come to expect specific behaviors from others based on their formal authority (Walter & Bruch, 2010; Wellman, 2017). By contrast, decentralized structures provide more opportunities to employees. They increase the number of communication channels available, support information flow, and provide people with more discretion in their daily work (Spreitzer, 1996; Wong et al., 2011). As such, these structures should allow individuals to make and influence decisions, and to take on responsibility, which spurs the emergence of informal leadership (Hempel et al., 2012; Z. Zhang et al., 2012).

Importantly, an inherent assumption built into the perspective of opportunities and constraints is that structure is a property of the organization that all employees are exposed to and respond to in a uniform way. Following this logic, centralized structures should result in more passive employee attitudes and behaviors overall, while decentralized structures should, across the board, foster perceptions of increased decision-making latitude and responsibility, leading to higher levels of emergent leadership. However, there is good reason to challenge this notion. Organizational designs characterized by loose, flexible, and decentralized structures are often vague and unspecific, providing employees with only generic cues for what might be appropriate behaviors in their day-to-day work (Dickson et al., 2006). Thus, employees in decentralized organizations may assess their autonomy and opportunities for self-direction in very different ways (Barker, 1993; Johns, 2018; Nishii & Wright, 2008). In other words, individuals working in decentralized structures will not automatically conclude assuming informal leadership responsibility is appreciated or encouraged, nor are they likely to have a clear idea of what doing so might look like. In either case, they may not see informal leadership as something they can or should step into. More generally, they may simply not know how to make productive use of autonomy in their daily work context.

Therefore, we need to better understand employees' idiosyncratic reactions to organizational structure. When are they likely to make use of opportunities for taking on responsibility? How and why will some emerge as informal leaders and others not? Concurring with classical organizational theory (Katz & Kahn, 1978) as well as more recent works on less-hierarchical forms of organizing (Bernstein et al., 2016; M. Y. Lee & Edmondson, 2017), we suggest that the way in which employees make use of greater autonomy depends on factors in their immediate work context—especially their relationship with their supervisor. Decentralization does not mean an erasure of supervision. Rather, supervisors must take on the role of making for their followers the often abstract principles of decentralization concrete and relevant to their daily work (Katz & Kahn, 1978). In this regard, the employee-supervisor relationship is especially important if decentralization is to stimulate emergent leadership.

2.2 | The moderating role of empowering leadership

Direct supervisors have been proposed as strong candidates for shaping employees' reactions to organizational structure (Katz & Kahn, 1978) due to their “meaning-making capacity” (Podolny et al., 2004) in employees' immediate work context.¹ Leaders can “draw the attention of followers to particular aspects of the broader HR and organizational structure and transform cues that are ambiguous, implicit, loosely coupled, and complex into a concrete pattern of meaning for followers” (Nishii & Paluch, 2018, p. 320). Past work has proposed that organizational-level factors, such as decentralized structures, and individual-level factors, such as a supervisor's leadership behavior, are unlikely to have independent effects on employee behavior; rather, employees look to multiple sources in their organizational context to arrive at an omnibus understanding of appropriate work behavior (Leroy et al., 2018).

To understand the interplay between organizational structure and leadership, and how leaders shape employees' reactions and thereby help to achieve the strategic objectives of decentralized structures, we integrate the perspective of organizational structure as opportunities and constraints with social information processing theory (Salancik & Pfeffer, 1978). The conceptualization of structure as opportunity-giving and -constraining forces suggests that decentralized structures open the possibility for emergent leadership but are too vague to reliably shape behavior. Social information processing theory suggests that individuals make meaning of the organizational environment by holistically processing information in their social context (Salancik & Pfeffer, 1978). When decentralized structures—as part of the organizational environment—provide only generic or vague information about the behavior expected of employees, those employees are likely to obtain additional cues from their immediate work context to develop a coherent perception of the workplace, and to understand what is expected of them (Goldman, 2001). Researchers focused on social information processing note that individuals particularly attend to cues from individuals who are proximate and valued, turning distal cues into highly salient and actionable information (Bhave et al., 2010). Direct supervisors are these proximal and valued sources of information, given their responsibility for employees and their formal authority.

From a social information processing perspective, leadership cues that are aligned with and complement the structural empowerment emerging from decentralized structures with psychological empowerment are particularly effective in shaping employee behavior (Conger & Kanungo, 1988). One form of leadership that provides especially strong informational cues for creating psychological empowerment is empowering leadership. This leadership style is premised on the vertical dyad linkage between a leader and follower and pieces out the autonomy of decentralized structures (X. Zhang & Bartol, 2010).² According to Ahearne et al. (2005), empowering leaders encourage their direct reports to participate in decision-making, point out the availability of freedom from bureaucratic

constraints, highlight the significance of their work, and are confident of success. The combination of sharing power with their teams and providing a helpful and supportive environment can provide employees with important information about desired workplace behaviors (Fausing et al., 2015; N. S. Hill & Bartol, 2016).

Social information processing theory suggests that emergent leadership behavior is most consistently shaped in employees when informational cues from the decentralized organizational structure are reinforced by informational cues from the empowering leaders. This core notion is in line with that of situational strength (Mischel, 1973), which argues that the alignment of social cues from different sources (for example, organizational structure and leaders) is central to reliably shaping employee behavior. We suggest that empowering leadership serves two important functions in strengthening the effects of decentralization.³

First, it aligns with the informational cues provided by the organizational structure itself. Empowering leadership encourages autonomy and power-sharing, which also happen to be important features of decentralized organizations; this alignment enhances employees' understanding of what decentralization means for the way they can act and make decisions in their daily work (Sharma & Kirkman, 2015). For example, leaders can clarify the somewhat abstract principle of decentralization by pointing out to employees that they do not need prior approval for every action they take and by granting them a voice in important decisions. This way, employees are more likely to correctly interpret the general intention of structural decentralization as permission to operate with greater autonomy and decision-making latitude in their daily work.

Second, empowering leadership complements, on top of concurring with, decentralized structures by providing a supportive environment that offers meaning and encouragement to employees (Leroy et al., 2018). For example, empowering leaders can show confidence in employees' self-directed decision-making or point out the purpose of decentralized structures within the organization's broader strategy. As a result, employees will have an enhanced understanding of how to use the freedom provided by decentralized structures, and of why their autonomy matters; it is at once guidance and encouragement to explore their agency (Bernstein et al., 2016). By seeing the larger context and understanding the expectations of the organization, employees can better infer how they can make adequate use of their increased autonomy in decentralized structures (Fausing et al., 2015; N. S. Hill & Bartol, 2016).

In sum, empower leaders act in accordance with the signals sent by the organizational structure, making them clearer, more salient, and more understandable in the context of employees' day-to-day work. In addition, by providing encouragement and meaning, empowering leadership goes beyond the signals sent by decentralized structures, boosting employees' willingness to take on responsibility in decentralized structures (Cheong et al., 2019). Accordingly, employees are likely to make use of the opportunities provided by decentralization by exhibiting higher levels of emergent leadership.

By contrast, when the direct supervisors do not exhibit empowering leadership, the signals sent by those supervisors in the employees'

proximate work environment do not align with the opportunities for participation and decision-making signaled by the decentralized structure. Under low empowering leadership, the lack of power-sharing, the absence of a facilitative environment for autonomy and development, and sometimes even the suppression of personal initiative and self-guided actions and decisions contradict the cues from the decentralized structure. In these scenarios, social information processing theory suggests that the employees will be less likely to use the structural autonomy granted because they will feel insecure about which behavior is considered appropriate (Salancik & Pfeffer, 1978).

Hypothesis 1. The relationship between organizational decentralization and employees' emergent leadership is moderated by supervisors' empowering leadership, such that the relationship is positive and strengthens as empowering leadership increases.

2.3 | Consequences for organizational performance

Our multilevel model suggests that leadership emergence of employees is an important factor promoting organizational performance (Katz & Kahn, 1978). Such "bottom-up emergence" (Kozlowski & Klein, 2000) or "transformational mechanisms" (Hedström & Ylikoski, 2010) take a central role in foundational writings on multilevel theory. In fact, some management scholars see the bottom-up effect as relevant because "microassumptions are interesting to the extent that they produce higher-level predictions" (Greve, 2013, p. 111).

The bottom-up emergence of collective-level phenomena can be explained in terms of individuals and their properties, actions, and interactions with one another (Hedström & Ylikoski, 2010). Aggregate performance outcomes have been proposed to be the result of both compositional and configurational processes, including the independent behaviors of an organization's members and the complex and dynamic combination of their actions (Kozlowski & Klein, 2000). Drawing on this general notion of bottom-up emergence, we propose that the emergence of multiple informal leaders promotes organizational performance through emergent leaders' independent efforts as well as their social interactions with colleagues. To support this claim, we draw on motivational and cognitive frameworks from research on decentralization and participation in decision-making (Miller & Monge, 1986; Wagner et al., 1997).

Emergent leaders are likely to show higher motivation due to their enhanced feelings of responsibility and ownership as well as their strong involvement and influence in organizational processes and decision-making (Z. Zhang et al., 2012). Informal leaders may aim to make a greater impact by working harder and bringing greater personal resources to bear (Carson et al., 2007). Their higher individual efforts may contribute not only to personal and organizational goals but may also translate into colleagues increasing their own efforts as a result of a social comparison processes. Empirical studies have shown

that motivation and effort among members of the same organization tend to converge (Barrick et al., 2015; Gardner et al., 2011). As the number of emergent leaders increases, we would expect higher overall levels of effort across the members of an organization.

In addition to improving motivation, emergent leaders may also contribute to higher organizational performance by improving the flow and use of information (Katz & Kahn, 1978; Mehra et al., 2006). With a higher number of emergent leaders, decision-making generally moves to lower organizational levels, meaning decisions are made more efficiently, not slowed by long lines of command or excessive red tape. Yet this improvement is only possible with better pools of information shared among non-managerial employees who have more information on their direct work than their formal leaders or managers (Miller & Monge, 1986). With greater flow and availability of information, decisions also tend to be more actionable in the face of operational challenges. Moreover, multiple emergent leaders can help with planning, developing colleagues, and building a supportive climate, exceeding what any formal leader alone can manage (Z. Zhang et al., 2012).

In sum, both the independent acts of multiple emergent leaders and their interactions with colleagues are likely to aggregate into enhanced organizational performance. Initial evidence for such an effect has already been provided by team-level research (Z. Zhang et al., 2012).

Hypothesis 2. Employees' emergent leadership is positively related to organizational performance.

2.4 | Integrated model

We consider how the interplay of organizational-level structure and supervisory leadership influences employee behavior and organizational performance. Concurring with the general assumption that organizations with shared leadership responsibility are more effective (Katz & Kahn, 1978), we suggest that decentralizing decision-making authority can increase employees' emergent leadership, but only to the extent that the direct supervisors lead in an empowering way (Hypothesis 1). In building this hypothesis, we argue that empowering leaders make the signals sent by decentralized structure more prominent and comprehensible for followers and motivate them to take on responsibility within such structures. As a result, we suggest that employees with direct supervisors who show empowering behaviors are more likely to make use of the autonomy and opportunities offered by decentralization and show increased levels of emergent leadership.

In a further step, we expect that by enhancing employee motivation and the quality of decisions, higher levels of emergent leadership improve organizational performance (Hypothesis 2). This implies a bottom-up effect of emergent leadership on organizational performance (Kozlowski & Klein, 2000). Accordingly, as more individuals in an organization emerge as informal leaders, emergent leadership becomes a meaningful feature of the organization as a whole and

enhances organizational performance through motivational benefits and better information flows. Indeed, past work has argued that multiple emergent leaders can heighten a unit's overall leadership capacity and thereby benefit its performance (Z. Zhang et al., 2012). Our overall theoretical model is summarized in the following conditional indirect effect hypothesis:

Hypothesis 3. The indirect relationship between organizational decentralization and organizational performance is mediated by employees' emergent leadership and moderated by supervisors' empowering leadership. The indirect relationship is positive and strengthens as empowering leadership increases.

3 | METHODS

3.1 | Research setting and sample

Data were collected in German small and medium-sized enterprises (SMEs) in two successive years (2016 and 2017) as part of a larger benchmarking project. A majority of companies in most economies are SMEs (Ardic et al., 2011), and in Germany, they make up 99 in every 100 companies, accounting for 35% of national revenues and employing more than 70% of the working population (Federal Association of German Industry, 2018). Decentralization has been a prevalent structural characteristic of SMEs (Covin & Slevin, 1989; Love et al., 2002; Meijaard et al., 2005) and a particularly pertinent topic as they grow, adopting decision-making structures that expand beyond a few founding members (Greiner, 1998; Martin et al., 2016; Scott & Bruce, 1987). A total of 145 companies participated in the study, one of which did not provide information on all the variables contained in our conceptual model and was therefore removed from the final sample. Of the remaining 144 SMEs, 47% operated in the service industry, 29% in production and manufacturing, 12 in finance and insurance, and 12% in trade. The average number of employees was 355.76 (SD = 496.04).

We used multiple data sources for each organization: surveys of managerial and non-managerial employees, surveys of HR executives, and annual balance sheets. First, we surveyed employees in the participating companies; the average within-firm response rate was 68%. An algorithm on the survey website randomly directed employees to one of three survey versions. Each version collected basic personal and vocational information, but only one version covered the variables for our analysis (decentralization, emergent leadership, and empowering leadership), thus giving us data from one third of participants (for a similar approach, see Reinwald et al., 2019; Twenge et al., 2010). Robustness checks supported that random assignment worked as expected, yielding no significant differences in respondents' age, gender, and tenure across versions (see Appendix A for details). A second survey, sent to the top HR representative at each firm, provided information about organizational-level control variables. Finally, we drew from the companies' publicly available annual balance sheets to capture organizational performance.

For our analysis, we further split the employee sample into two subgroups: managerial employees (who hold a formal leadership role) ($N = 2450$) and non-managerial employees ($N = 5807$). Since our model focuses on leadership emergence among employees *without* formal leadership responsibility, our analysis used only non-managerial employees' responses to survey questions about empowering leadership and emergent leadership. Organizational decentralization, by contrast, was captured based on an aggregation of managerial employees' ratings to (a) obtain more accurate information about the SME's structural policies (see also, e.g., Jansen et al., 2006) and (b) reduce potential same-source issues (Podsakoff et al., 2012).

Our final sample comprised 5807 valid individual responses across 144 SMEs from employees not holding a formal leadership position.⁴ These employees were 40.11 years old on average ($SD = 11.06$), were predominantly male (55%), and had an average tenure of 8.92 years ($SD = 8.63$).

3.2 | Validation studies: Emergent leadership measure

Given the complexity of our large-scale, multifirm, multilevel data collection, we were not able to obtain peer ratings of emergent leadership behavior in our main study. Instead, we relied on self-ratings, which were found to be a valid alternative in prior research (Chaturvedi et al., 2012; Kent & Moss, 1994). To further explore the validity of self-ratings of emergent leadership behavior, we conducted two validation studies outside the main study's sample.

3.2.1 | Validation study 1: Convergent validity of self-ratings and other ratings

In our first validation study, we examined whether an individual's self-rating converges with ratings by other individuals of his or her emergent leadership behavior. Our sample comprised 167 individuals nested in 53 teams. Data collection was based on a round-robin design where participants rated their own emergent leadership behavior as well as the emergent leadership behavior of all other team members using Kent and Moss's three-item measure (1994)—the same measure of emergent leadership applied in the main study (see below for details). The subjects, undergraduates at a leading European business school, were randomly assigned to teams of three to four members (average team size = 3.15) and were assigned to work on a case study of a restructuring process at a consulting firm. Each team was instructed to prepare a presentation with solutions to several questions and given 60 min to complete the task. The questionnaires were administered when the time allotted was up. No formal leadership structure was imposed on the teams, and the students were not aware of the study's purpose.

Following recommendations by Fleener et al. (2010), we tested self-other rating agreement in emergent leadership behavior based on r_{WG} statistics and found “very strong agreement” ($r_{WG} = 0.97$)

(LeBreton & Senter, 2008, p. 836). We also conducted robustness checks to rule out the possibility that team size, gender, or familiarity would affect self-other rating agreement.

3.2.2 | Validation study 2: Social desirability bias

Our second validation study addressed concerns that a self-rated measure of emergent leadership behavior might be biased by social desirability (Podsakoff et al., 2012). We recruited a working sample matched to the characteristics of our main study's sample (e.g., no formal leadership responsibility) via Prolific (www.prolific.co). Two hundred and nine employees accessed the survey, of which 33 (16%) provided incomplete responses or failed at least one of two attention checks, leading to a final sample size of 176 employees. Similar to our main study, these employees averaged 36.57 years of age ($SD = 9.77$), were predominantly male (54%), and had an average tenure of 6.66 years ($SD = 5.48$). To examine potential social desirability bias, we included the three-item emergent leadership behavior measure applied in the main study (Kent & Moss, 1994) and a four-item measure of social desirability (adapted from Reynolds, 1982). We then applied the directly measured latent method factor technique (Podsakoff et al., 2012), in which a model accounting for social desirability is compared with a model without social desirability factor loadings using a χ^2 difference test. As indicated by a non-significant χ^2 difference test between the two nested models ($\Delta\chi^2_{df=3} = 0.53$; $p = 0.91$), we found no support for retaining the method-effect factor loadings. Hence, our self-rated behavioral measure appears not to be affected by social desirability bias (Podsakoff et al., 2012).

Taken together, and in light of the aforementioned practical constraints, the results of these validation studies led to our decision to rely on self-rated measures of emergent leadership behavior in our main study.

3.3 | Measures

3.3.1 | Emergent leadership

Emergent leadership was measured with the three-item scale developed by Kent and Moss on the individual level (1990, 1994; see also, e.g., Lanaj & Hollenbeck, 2015). Based on the support we obtained in the two validations studies, and in line with prior research (e.g., Chaturvedi et al., 2012), we asked employees to evaluate their own emergent leadership behavior when collaborating with peers or coworkers on the same hierarchical level (sample item: “I assume a leadership role”). The application of a behavioral measure of emergent leadership is consistent with prior research that captured employees' emergent leadership “via items that were descriptive of whether they led or did not lead, but were not normative in terms of whether that leadership was effective or ineffective” (Lanaj & Hollenbeck, 2015, p. 1483) (i.e., no valence-based conflation; Fischer & Sitkin, 2023). The scale's internal consistency was $\alpha = 0.85$.

3.3.2 | Empowering leadership

To measure empowering leadership, we applied the leadership empowerment behavior scale created by Ahearne et al. (2005). In line with our theoretical perspective, the scale has an explicit individual-level referent and respondents were asked to indicate their agreement with 10 statements concerning their direct supervisor. The measure covers the following aspects: providing autonomy from bureaucratic constraints (sample item: “My direct supervisor allows me to do my job my way”); fostering participation in decision-making (“My direct supervisor makes many decisions together with me”); expressing confidence in high performance (“My direct supervisor believes that I can handle demanding tasks”); and enhancing the meaningfulness of work (“My direct supervisor helps me understand how my job fits into the bigger picture”). Internal consistency was $\alpha = 0.92$.

3.3.3 | Organizational decentralization

As noted above, managerial employees were asked to rate organizational decentralization. We captured decentralization with three items (sample item: “Even small matters have to be referred to someone higher up for a final decision”) from the hierarchy of authority subscale by Hage and Aiken (1967), and we coded the responses such that higher scores represented greater decentralization (following, e.g., Richardson et al., 2002). This foundational measure has been shown to be both valid and reliable (Dewar et al., 1980) and is among the most frequently used in organizational design research (Jansen et al., 2006; Knight et al., 2018). Applying a referent-shift composition model (Chan, 1998), we aggregated individuals' responses to the firm level. As recommended by LeBreton and Senter (2008), we investigated interrater reliabilities (ICC_1 and ICC_2) and interrater agreement (mean r_{WG} and $AD_{M(U)}$) for our decentralization scale. To assess aggregation statistics, we used an F test from a one-way ANOVA for ICC_1 (Bliese et al., 2018) and simulated sample-specific cutoff criteria for r_{WG} and $AD_{M(U)}$ (Smith-Crowe et al., 2014).⁵ A significant F test ($ICC_1 = 0.10$; $F = 2.80$; $p < 0.001$; $ICC_2 = 0.64$) and satisfactory interrater agreement statistics ($r_{WG} = 0.59$; $AD_{M(U)} = 1.19$) meeting the simulated cutoff values ($r_{WG} > 0.57$; $AD_{M(U)} < 1.29$) supported aggregation of decentralization ratings to the organizational level. The scale's internal consistency was $\alpha = 0.93$.

3.3.4 | Organizational performance

To capture organizational performance, we employed a temporally lagged measure of firm productivity. Specifically, for firms participating in our survey during 2016 (2017), we collected performance data from the publicly available annual balance sheets as of December 31, 2016 (2017), using the ORBIS database and the German *Unternehmensregister* database. Following prior research (e.g., Huselid, 1995; O. C. Richard et al., 2007), productivity was calculated as annual sales (in euros) divided by number of employees. This measure of

organizational performance reflects employee efforts disassociated from market variations (Huselid, 1995) and has been employed in a number of studies of strategic and human resource management (e.g., Huselid, 1995; O. C. Richard et al., 2007). To facilitate interpretation, we re-scaled the variable by dividing it by 1000 (O. C. Richard et al., 2007). Given that our sample mainly included privately owned SMEs, which are not subject to detailed disclosure requirements under German law, the information we used to calculate productivity was not available for all participating companies; removing those from the sample, we were left with 109 of the 144 companies (76%). We also conducted robustness checks based on subjective organizational performance ratings obtained from top-management team members (available for 124 companies; P. J. Richard et al., 2009). These led to equivalent findings and conclusions (see Appendix B).

3.3.5 | Control variables

A recent integrative review by Badura et al. (2022) suggests that demographic and interpersonal attributes constitute the root causes of leadership emergence at the individual level. Regarding demographic characteristics, we included respondents' *gender* (0 = female; 1 = male), *age* (in years), *organizational tenure* (in years), and *education level* (0 = no university diploma; 1 = university diploma) as control variables in our analyses. Concerning interpersonal attributes, we included the Big-Five trait of *extraversion* as a control because it has “often been classified as the quintessential personality predictor of leadership” (Badura et al., 2022, p. 2076) (see also Grant et al., 2011; Judge et al., 2002) and represents the most frequently studied interpersonal attribute in conjunction with leadership emergence (Ensari et al., 2011). We measured employees' extraversion with a three-item scale from the German version of the Big-Five Inventory, using a five-point response scale (1 = “strongly disagree”; 5 = “strongly agree”) (Schupp & Gerlitz, 2008; see also Rammstedt et al., 2016). A sample item is: “I am someone who is talkative” ($\alpha = 0.85$).

At the organizational level, we controlled for *industry affiliation* (indexed as three dummy variables representing service, finance and insurance, and trade [with production and manufacturing as the reference category]), *firm age* (years since founding date), and *firm size* (number of employees divided by 1000; O. C. Richard et al., 2007), as these characteristics represent proxies for an organization's resources and capital intensity and so may affect its performance (e.g., Pierce & Gardner, 2004). Following prior (de)centralization research (e.g., Jansen et al., 2006; Knight et al., 2018), we also included *organizational formalization* measured with three items from Deshpande and Zaltman (1982; see also, e.g., Jansen et al., 2006), answered on a seven-point Likert scale (1 = “strongly disagree”; 7 = “strongly agree”). A sample item is: “Rules and procedures play a central role in our company.” Similar to our measure of decentralization, we aggregated managerial employees' responses to this measure at the firm level, which was supported by interrater reliability ($ICC_1 = 0.28$; $F = 7.54$; $p < 0.001$; $ICC_2 = 0.87$) and interrater agreement statistics ($r_{WG} = 0.63$ [simulated cutoff: >0.49]; $AD_{M(U)} = 1.14$ [simulated

cutoff: <1.35]) (Smith-Crowe et al., 2014). The scale's internal reliability was $\alpha = .78$. Finally, we controlled for the firms' use of *participatory HR practices* to account for the possibility that emergent leadership is proxying for HR practices that foster employee participation. To this end, we asked HR representatives to respond to one item from Datta et al. (2005) on a percentage scale (0%–100%): “During the past six months, what percentage of employees were involved in HR programs designed to elicit participation and employee input?”

To avoid potential anonymity concerns in the benchmarking project, employees could skip questions about personal information (that is, about their gender, age, education, or organizational tenure), which reduced the sample size for our analyses including these controls to 2513 employees across 142 organizations. All hypothesis tests were first performed without control variables in the interest of statistical power and alignment between hypotheses and empirical tests. Following best practice recommendations, we then examined the robustness of our findings in models including control variables (Becker et al., 2016).

3.4 | Analytical strategy

To examine the cross-level interaction (Hypothesis 1), we utilized random coefficient modeling procedures to disentangle the individual- and organizational-level variances of emergent and empowering leadership (Aguinis et al., 2013; for a similar approach, see, e.g., Chang et al., 2014; Hirst et al., 2018). In line with our theorizing, we estimate decentralization as an organization-level construct (level 2) and empowering leadership as an individual-level construct (level 1) in our test of Hypothesis 1. These analyses were run in R using the “lmer” function within the “lme4” package (Bates et al., 2019). As recommended in the multilevel literature (Aguinis et al., 2013; Bliese et al., 2018), we grand-mean centered organizational decentralization (level 2) and firm-mean centered empowering leadership (level 1). Notably, the cross-level interaction between organizational decentralization (level 2) and empowering leadership (level 1) is “symmetrical” (Aguinis et al., 2013, pp. 1514–1515), such that “there is no restriction on which variable is to be considered the focal predictor or moderator” (Bauer & Curran, 2005, p. 388). In line with Hypothesis 1, we treated empowering leadership (level 1) as the moderator (and report the reversed interaction pattern in the Discussion, see Section 5).

To test the bottom-up effect of emergent leadership on organizational performance (Hypothesis 2), we aggregated individual emergent leadership (level 1) scores to the organizational level (Croon & van Veldhoven, 2007). Mirroring our conceptual arguments for the bottom-up effect, the aggregated version of the emergent leadership construct (level 2) captures the notion that a higher number of individuals with more pronounced emergent leadership per organization leads to organizational performance gains. In doing so, we applied the two-stage multilevel latent covariate approach developed by Croon and van Veldhoven (2007, p. 48), which resembles a structural equation model in which “the subjects themselves [i.e., individual employees] act as indicators for the unobserved [firm] score.” In the

first step, we estimated the best linear unbiased predictor of the latent organizational-level score of emergent leadership (level 2) for each firm in our sample, using the “micro–macro multilevel” package in R (Lu et al., 2017). In step two, we regressed organizational performance (level 2) on the predicted “latent” organizational-level scores of emergent leadership (level 2) at the organizational level. Several studies have demonstrated that this two-stage approach yields unbiased parameter estimates in micro–macro-type models (Croon & van Veldhoven, 2007; Lüdtke et al., 2008).

To examine the conditional indirect effect of decentralization (level 2) via organizational-level emergent leadership (level 2) on organizational performance (level 2) (Hypothesis 3), we used the Monte Carlo method (20,000 bootstraps) with the R code by Selig and Preacher (2008). A necessary assumption of this approach is that the indirect effects are “fixed (not random), meaning that the magnitude of the effects is equal for all Level 2 units” (Bauer et al., 2006, pp. 143–144); accordingly, the conditional indirect effects were estimated at the organizational level of analysis (Bal & Boehm, 2019).

4 | RESULTS

Table 1 reports descriptive statistics and correlations. Notably, we found no significant correlation between decentralization and organizational performance ($r = -0.00, p = 0.98$).

4.1 | Multilevel confirmatory factor analysis

We fitted a multilevel confirmatory factor analysis (ML-CFA) prior to investigating our hypotheses. Model fit was evaluated based on a combination of incremental (CFI and TLI) and absolute fit indices (RMSEA and SRMR; Hu & Bentler, 1999). To test the measurement model, we included our study variables at their levels of conceptual origin: empowering leadership and emergent leadership at the individual level, and decentralization and performance at the organizational level. Fit statistics for the ML-CFA yielded good overall fit ($\chi^2_{(15)} = 1367.90, p < 0.001$; CFI = 0.98, TLI = 0.97, RMSEA = 0.06, SRMR_{within} = 0.03, SRMR_{between} = 0.03).

4.2 | Hypothesis tests

To test the cross-level interaction predicted in Hypothesis 1, we followed Aguinis et al. (2013) and added predictors and random effects in four consecutive steps (for details see Table 2: Models 1–4). The intercept-only model (Model 1) showed that 95% of the variance in emergent leadership resided at the individual level and 5% at the organizational level. Specifying both random intercepts (Model 2) and random slopes (Model 3) led to significant improvements in model fit (based on Deviance statistics; LaHuis & Ferguson, 2009), underscoring the appropriateness of our multilevel analytical strategy (Bliese et al., 2018). In support of our theoretical rationale, the main effect of

TABLE 1 Descriptive statistics and correlations.

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Individual level (N = 5807)																	
1. Gender	-																
2. Age	0.02	-															
3. Education	0.08*	-0.05*	-														
4. Tenure	-0.03	0.53*	-0.21*	-													
5. Extraversion	-0.03*	-0.10*	-0.02	-0.08*	-												
6. Empowering leadership	0.01	-0.06*	0.08*	-0.08*	0.11*	-											
7. Emergent leadership	0.20*	-0.10*	0.17*	-0.06*	0.16*	0.30*	-										
Organizational level (N = 144)																	
8. Production industry	0.15*	0.09*	-0.06*	0.18*	-0.06*	-0.08*	-0.03*	-									
9. Service industry	0.02	-0.08*	0.18*	-0.25*	0.05*	0.07*	0.08*	-0.60*	-								
10. Finance industry	-0.14*	0.08*	-0.02	0.21*	-0.01	0.05*	-0.03*	-0.24*	-0.34*	-							
11. Trade industry	-0.06*	-0.08*	-0.15*	-0.07*	0.01	-0.04*	-0.05*	-0.24*	-0.35*	-0.14	-						
12. Firm age	-0.05*	0.17*	-0.24*	0.35*	-0.03	-0.15*	-0.10*	0.20*	-0.42*	0.23*	0.11	-					
13. Firm size	-0.05*	-0.04*	-0.14*	-0.02	0.02	-0.01	-0.03*	-0.08	-0.04	-0.01	0.19*	0.31*	-				
14. Org. formalization	-0.11*	0.00	-0.25*	0.12*	0.01	-0.03*	-0.07*	0.14	-0.23*	0.17*	-0.01	0.42*	0.16	-			
15. Participatory HR pract.	-0.02	-0.11*	0.16*	-0.19*	0.05*	0.16*	0.04*	-0.09	0.24*	-0.15	-0.08	-0.23*	-0.15	-0.03	-		
16. Org. decentralization	0.01	-0.01	0.22*	0.00	0.02	0.14*	0.07*	0.05	0.05	0.01	-0.15	-0.31*	-0.14	-0.37*	0.31*	-	
17. Org. performance	0.05*	0.01	0.14*	-0.04*	-0.03	0.03	0.07*	-0.12	0.07	-0.08	0.14	-0.11	-0.11	-0.14	-0.07	-0.00	-
Mean	0.55	40.11	0.28	8.92	3.32	3.60	2.98	0.29	0.47	0.12	0.13	51.07	355.76	4.03	69.96	4.99	509.53
SD	0.50	11.06	0.45	8.64	0.43	0.82	0.99	0.46	0.50	0.32	0.33	43.48	496.04	0.95	38.30	0.72	1087.68

Note: For correlations between individual-level variables and organizational-level variables, firm scores were assigned to individuals. Because nesting is not accounted for in these correlational analyses, statistical significance should be interpreted with caution.
* $d > 0.05$.

TABLE 2 Results for the cross-level interaction (Hypothesis 1).

Level and variable	Emergent leadership				
	Model 1	Model 2	Model 3	Model 4	Model 5
Individual level					
Intercept	2.99*** (0.03)	3.00*** (0.03)	2.99*** (0.03)	3.00*** (0.03)	2.99*** (0.03)
Empowering leadership (EMP)		0.36*** (0.02)	0.38*** (0.02)	0.39*** (0.02)	0.38*** (0.03)
Gender (male = 1, female = 0)					0.32*** (0.04)
Age					-0.01*** (0.00)
Education					0.29*** (0.04)
Tenure					0.01** (0.00)
Extraversion					0.29*** (0.04)
Organizational level					
Organizational decentralization (DEC)		0.06 (0.04)	0.04 (0.03)	0.06 (0.04)	0.01 (0.04)
Cross-level interactions					
DEC × EMP				0.08* (0.03)	0.15** (0.05)
Variance components					
Residual variance	0.930	0.852	0.844	0.844	0.780
Intercept variance	0.051	0.052	0.055	0.051	0.047
Slope variance (EMP)			0.014	0.011	0.014
Model comparisons					
Deviance (-2 log likelihood)	16,225.80	15,702.60	15,680.10	15,674.10	6614.40
Δ Deviance		523.20***	22.50***	6.00*	

Note: *N* = 5807 employees from 144 organizations. Due to missing data for control variables, the sample size for Model 5 was reduced to 2513 employees from 142 organizations. Model comparisons are thus not shown for Model 5.
 p* < 0.05; *p* < 0.01; ****p* < 0.001.

decentralization on emergent leadership was not significant (Model 2: $\gamma = 0.06$; $SE = 0.04$; $p = 0.08$; Model 3: $\gamma = 0.04$; $SE = 0.03$; $p = 0.20$). Yet, there was a significant cross-level interaction effect between decentralization and empowering leadership on emergent leadership (Model 4: $\gamma = 0.08$; $SE = 0.03$; $p < 0.05$), supporting Hypothesis 1.

To better understand the nature of moderation, we plotted the interaction (see Figure 1) and examined simple slopes. Simple-slope tests revealed that the positive relationship between decentralization and emergent leadership was statistically significant at high levels of empowering leadership (+1 SD; $\gamma = 0.13$, $SE = 0.05$, $p < 0.01$), but not significant at mean ($\gamma = 0.06$, $SE = 0.04$, $p = 0.07$) and low levels of the moderator (-1 SD; $\gamma = 0.00$, $SE = 0.04$, $p = 0.95$). We also calculated exact regions of significance (95% confidence intervals) and found that organizational decentralization had a significant positive effect on emergent leadership for firm-mean-centered values of empowering leadership ≥ 0.09 ($\gamma = 0.07$), corresponding with 2913 of the 5807 individuals in our data (50%). Overall, these results provide support for Hypothesis 1.⁶

Next, we examined Hypothesis 2, which predicts a positive effect of emergent leadership on organizational performance. As displayed in Table 3 (Model 1), emergent leadership demonstrated a significant positive effect on organizational performance ($B = 1046.71$, $SE = 433.43$, $p < 0.01$), while the organizational-level effect of

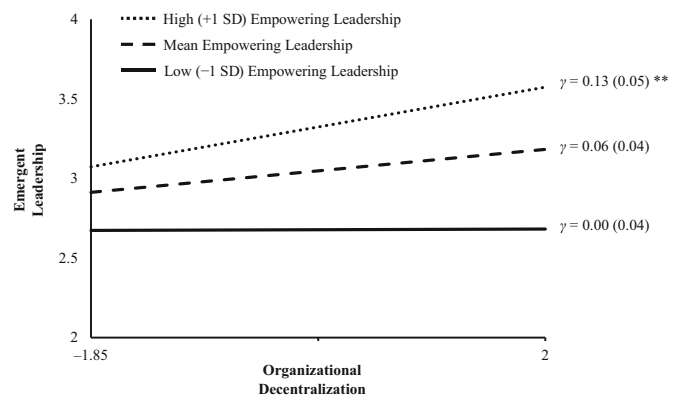


FIGURE 1 Cross-level interaction plot. *N* = 5807 employees from 144 organizations. Organizational decentralization was grand-mean centered and empowering leadership was firm-mean centered. The horizontal axis shows the range of observed sample values. ***p* < 0.01.

decentralization was not statistically significant ($B = -59.30$, $SE = 132.38$, $p = 0.68$). Thus, Hypothesis 2 is supported.

Finally, we tested the conditional indirect effect of decentralization on organizational performance (Hypothesis 3). “Pick-a-point” analyses show that decentralization significantly affected

organizational performance via emergent leadership at high levels (+1 SD; *indirect effect* = 130.63, $p < 0.05$) of empowering leadership. At mean levels (*indirect effect* = 66.57, $p = 0.09$) and at low levels of the moderator (−1 SD; *indirect effect* = 2.41, $p = 0.96$), there was no significant indirect effect. Johnson-Neyman procedures further revealed that the indirect effect was statistically significant for firm-mean-centered empowering leadership values ≥ 0.12 (*indirect effect* = 75.89), corresponding with 2796 of the 5807 employees in our data (48%).

Following Becker et al. (2016), we repeated all hypothesis tests with control variables to check the robustness of our findings (see Table 2, Model 5 and Table 3, Model 2). These analyses led to no changes in our substantive findings and interpretations. We therefore base our conclusions on the model without control variables (Becker et al., 2016). Overall, the model of emergent leadership without control variables yielded a *marginal* R^2 of 0.09 and a *conditional* R^2 of 0.14; that is, the model explained 9% (when considering fixed factors only) and 14% (when considering fixed and random factors) of the variance in emergent leadership. For the model including controls, we obtained a *marginal* R^2 of 0.14 and a *conditional* R^2 of 0.19. Finally, our organizational-level regression model explained 7% of the variance in organizational performance when excluding controls ($R^2 = 0.07$) and 11% of the variance in organizational performance when including controls ($R^2 = 0.11$).

4.3 | Robustness checks and supplementary analyses

We conducted four sets of robustness checks and supplementary analyses to obtain further insights into our multilevel model and examine theoretically intriguing aspects that arose during the revision process (Hollenbeck & Wright, 2017).

First, given the complex nature of organizational performance (P. J. Richard et al., 2009), we conducted additional analyses in which we controlled for the firms' prior performance. Including this control variable allows us to (a) avoid omitted variable bias (and potential other endogeneity concerns; A. D. Hill et al., 2021) and (b) "provide a somewhat stronger basis for drawing causal inferences than do cross-sectional designs" (D'Innocenzo et al., 2016, p. 1296). Consistent with our dependent variable, prior performance was calculated as annual sales (in euros) divided by the number of employees. Given that our sample mainly included privately owned SMEs, which are not subject to detailed disclosure requirements under German law, information on prior and subsequent performance was available for 62 of the 144 organizations in our sample (43%). Similar to prior research (see, e.g., Huselid, 1995), we log-transformed the prior performance measure to reduce its naturally high correlation with subsequent performance. We found a positive and statistically significant effect of emergent leadership on organizational performance ($B = 909.05$, $SE = 409.22$, $p = 0.03$), even after additionally controlling for prior performance ($B = 578.87$, $SE = 149.51$, $p < 0.001$).

TABLE 3 Results for the effect of emergent leadership on organizational performance (Hypothesis 2).

Variable	Organizational performance	
	Model 1	Model 2
Intercept	489.84*** (101.86)	471.43*** (88.13)
Organizational decentralization	−59.30 (132.38)	−86.60 (174.37)
Emergent leadership	1046.71** (433.43)	998.60* (409.17)
Service industry dummy		3.99 (181.94)
Finance and insurance industry dummy		−60.05 (134.69)
Trade industry dummy		433.46 (323.89)
Firm age		−0.59 (1.34)
Firm size		−494.75 (265.26)
Organizational formalization		−69.25 (114.98)
Participatory HR practices		−2.09 (3.48)
F-statistic	3.78*	1.39

Note: $N = 109$ organizations. Organizational performance was measured as productivity (i.e., sales divided by number of employees) and re-scaled by dividing the variable by 1000. Similarly, firm size was divided by 1000. Production industry was used as a reference category for industry dummy variables. Unbiased organizational-level values for emergent leadership were estimated using the two-stage multilevel latent covariate approach by Croon and van Veldhoven (2007).

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Second, to further substantiate the adequacy of our multilevel approach, we explored whether the latent, organizational-level part of empowering leadership (estimated using best linear unbiased predictor techniques; Croon & van Veldhoven, 2007) functions as a moderator of the organizational-level link between decentralization and organizational-level emergent leadership. We found that organizational-level empowering leadership did not moderate the relationship between organizational decentralization and organizational-level emergent leadership ($B = 0.12$, $SE = 0.09$, $p = 0.18$). This underscores the importance of our multilevel approach.

Third, although our model's theoretical focus is on the macro- and micro-levels (Coleman, 1990), there may be methodological reasons to believe that meso-level processes influence our findings. To address such concerns, we conducted a robustness check in which we additionally controlled for employees' nesting in organizational units (that is, we employed a three-level multilevel model). Conversations with the participating companies revealed that not all relied on teamwork to the same extent and often had different definitions of a "team" (e.g., stable work teams vs. flexible project teams; Hollenbeck et al., 2012). Therefore, we were only able to capture the level of the

business unit—defined as a permanent entity that is nested in an organization, specified in the organization chart, and held accountable for specific goals (Coleman, 1990)—in our additional analyses. Because eight organizations did not provide information on unit-level nesting, the three-level dataset was reduced to 5285 individuals nested in 961 business units across 136 organizations. Controlling for employees' nesting in business units did not affect our result patterns, especially with regard to the cross-level interaction between empowering leadership and decentralization ($\gamma = 0.07$, $SE = 0.03$, $p = 0.02$).

Fourth, prompted by a reviewer comment, we examined whether the bottom-up effect of emergent leadership on organizational performance was stronger for individuals who are more socially integrated in the organization. To empirically grasp this proposition, we (a) utilized organizational tenure as proximal indicator of an employee's degree of social integration (Steffens et al., 2014) and (b) split our individual-level sample into two groups per organization: shorter-tenured employees (defined as “employees with organizational tenure of 3 years or less”; Russo et al., 2013, p. 213) and longer-tenured employees (those with tenure longer than 3 years). We then estimated the best linear unbiased predictor of the latent organizational-level score of emergent leadership for both groups per organization (Croon & van Veldhoven, 2007) and re-examined the bottom-up effect for both groups. We found that the emergent leadership of longer-tenured employees (as a proxy for individuals with an, on average, higher degree of social integration) yielded a positive and significant effect on organizational performance ($B = 454.19$, $SE = 227.10$, $p = 0.04$). Similarly, the emergent leadership of shorter-tenured employees yielded a significant positive ($B = 232.74$, $SE = 93.32$, $p = 0.01$) yet economically weaker (i.e., a 49% smaller effect size) effect on organizational performance. These post-hoc results can be viewed as tentative evidence that supports our theoretical rationale suggesting that the emergent leadership of all employees in an organization (i.e., shorter- and longer-tenured) can potentially contribute to the organization's performance. That said, we found initial evidence that employees who are more socially integrated (as captured by organizational tenure) had a greater impact on organizational performance.

5 | DISCUSSION

Decentralized decision-making authority is a core principle underlying many contemporary HR approaches. Yet a long-standing question in organizational design research is whether decentralizing organizational structures indeed improves corporate performance. To illuminate prior inconsistent findings, we developed a multilevel theoretical model that integrates both an employee-level mechanism and a contingency of the decentralization–performance link. Results from a field study of 5807 employees across 144 organizations support the assumption that decentralized structures can foster employees' propensity to emerge as informal leaders and thereby indirectly enhance company performance. Importantly, however, this strategic benefit of decentralization is only leveraged when the direct supervisors show

high levels of empowering leadership, supporting employees in making productive use of their increased autonomy in decentralized structures.

5.1 | Theoretical implications

By developing a fully articulated multilevel model of the consequences of organizational decentralization (Felin et al., 2015; Molloy et al., 2011; Porter & Schneider, 2014), we make three notable contributions. First, our study addresses a long-standing debate in organizational design research on whether decentralized structures benefit organizational performance, and the conditions under which this might occur (Aiken & Hage, 1966; Porter & Lawler, 1965; Sandhu & Kulik, 2019). We hope this gives new momentum to a field that has been characterized as “stagnating” in recent years (McEvily et al., 2014). In addition, and particularly because decentralized decision-making has become an underlying principle of many contemporary HR approaches (such as empowering HR practices or self-managed teams; Coun et al., 2022; Magpili & Pazos, 2018), our work underscores the importance of looking at potential mechanisms and contingencies of transferring decision-making authority down the organizational hierarchy.

Our multilevel perspective on decentralization can thereby generally advance how scholars think about the performance effects of hierarchical structures (McEvily et al., 2014). While early studies chiefly focused on direct links with organizational performance, the few more recent analyses have mainly concentrated on organizational (i.e., macro-level) boundary conditions of organizational structure (Csaszar, 2012; Lin & Germain, 2003; Richardson et al., 2002). Drawing on contingency theory (Lawrence & Lorsch, 1976), these studies underscore the importance of “fit” between an organization's structure and environment. Our findings suggest that restricting the idea of fit to the macro-level has limited the power of the contingency perspective (Joseph & Gaba, 2020). It appears that macro-level organizational design also needs to correspond with micro-level factors to realize the performance benefits of organizational structure (Drazin & van Ven, 1985). In this regard, in particular, organizational leaders have been conceptually proposed as key agents for realizing the strategic goals of macro-level organizational structure (Anderson & Brown, 2010) and especially for realizing the benefits of decentralized decision-making (Bernstein et al., 2016; M. Y. Lee & Edmondson, 2017).

The logic of fit between macro- and micro-level factors and the crucial role of line managers for implementing organizational-level policies is also consistent with recent theoretical developments in the HR literature. Decentralization is an aspect of organizational design, not a specific HR practice (but see H. W. Lee & Kim, 2020). However, we show how employees react differently to this structural feature depending on their supervisor's leadership style. This approach may help to address the gap in current multilevel HR research that has been criticized for largely ignoring individual variation in how employees experience and respond to organizational-level HR

approaches (Peccei & van de Voorde, 2019). Moreover, our work aligns with recent conceptual insights on how HR approaches and leadership interact (e.g., Kehoe & Han, 2020). Similar to our work, these studies develop a more elaborate understanding of the leader's role in shaping an employee's interpretations of organizational-level factors. Rather than considering supervisors as mere executors and facilitators of HR policies, this work draws attention to the role of leaders as translators, adaptors, and meaning-makers of generic HR principles (Leroy et al., 2018; Nishii & Paluch, 2018).

Second, our study adds to research on empowering leadership as a leadership style that is particularly relevant from an HR perspective (Chuang et al., 2016; Coun et al., 2022; Harris et al., 2014; Magni & Maruping, 2013). Specifically, we address the debate on how employee behavior is influenced by empowering factors with different degrees of salience on multiple organizational levels. As Maynard et al. (2012, p. 1266) point out, prior work has devoted little attention to “whether being empowered at one level enhances, complements, neutralizes, or compensates for empowerment effects at other levels.” We find that decentralization as a distal organizational factor only has a notable impact on employees' emergent leadership when supervisor empowering leadership as a more proximal factor provides color and context to this distal factor. In addition, our study may also inform empowering leadership research into when (i.e., depending on an organization's formal design) this leadership style is more or less effective (Cheong et al., 2019; Sharma & Kirkman, 2015).

To further explore this issue, we exploited the symmetrical nature of the interaction effect between decentralization and empowering leadership (Aguinis et al., 2013) and calculated simple slopes of empowering leadership at high (+1 SD) and low (−1 SD) levels of decentralization. Results indicated that the positive effect of empowering leadership on employees' informal leader emergence decreases by 27% when moving from a highly decentralized organization ($\gamma = 0.45; p < 0.001$) to an organization with low decentralization ($\gamma = 0.33; p < 0.001$). As these results indicate, direct supervisors can only partially succeed in creating an empowering microcosm for their followers when there is a lack of decentralization in the organization's formal design, significantly undermining their empowerment efforts. Our study addresses the lack of research into the complex interactive interplay of organizational factors and empowering leadership in shaping organizational outcomes (A. Lee et al., 2018).

Finally, our study contributes to the emergent leadership literature. As foundational organizational theory has proposed, distributing leadership responsibility is key to enhancing organizational effectiveness (Katz & Kahn, 1978), and prior emergent leadership studies have built upon this notion (Carnabuci et al., 2018; Gerpott et al., 2019). Yet prior research has at most investigated team-level consequences of emergent leadership (Wellman et al., 2019; Z. Zhang et al., 2012). Our work provides more powerful evidence for its broader organizational-level performance benefits. In addition, our study widens the scope of research on the antecedents of emergent leadership, whereas prior analyses focused on individual-level factors, particularly personality and demographics (Badura et al., 2018; Ensari et al., 2011; Hanna et al., 2021). These factors have only limited

predictive validity (Ensari et al., 2011), and recent theoretical work has criticized the individual-level paradigm of past research (Wellman, 2017; also see Acton et al., 2019). Our results lend support to this criticism, since decentralization and empowering formal leadership jointly explain a significant amount of variance in emergent leadership above and beyond demographics and personality. Our study thus moves beyond the assumption that the same individuals, due to their personal attributes, emerge as informal leaders in different structural and formal leadership settings (Johns, 2006, 2018).

5.2 | Practical implications

Many companies have embraced the notion that transferring decision-making authority to lower organizational levels will enhance corporate performance, giving rise to the popularity of HR approaches such as empowering HR management (Coun et al., 2022) and self-directed teams (M. Y. Lee & Edmondson, 2017). However, based on our findings and concurring prior research, decentralized decision-making structures do not directly influence performance—a pattern that holds across companies from different industries. While decentralization does not, in principle, harm performance, its potential benefits do not automatically materialize, and decision-makers should avoid blind enthusiasm for decentralized forms of organization. Our findings highlight the importance of combining decentralization with leaders who empower their followers to make productive use of the increased decision-making discretion.

Empowering leadership can thereby benefit the financial bottom line of decentralized organizations. To estimate the dollar value of empowering leadership in our sample, we calculated the impact on organizational performance of increasing empowering leadership from moderate to high levels (i.e., from the sample mean to +1 SD above it) in a decentralized organization (+1 SD above the sample mean of decentralization; for a similar procedure, see, e.g., Huselid, 1995; Iverson & Zatzick, 2011). A one SD increase in empowering leadership indirectly (via emergent leadership) raises annual sales on average by EUR 47,395 (USD 51,546) per employee. This figure represents more than 9% of the mean annual sales per employee in our sample (EUR 509,530 or USD 554,150), illustrating the crucial impact of complementing decentralized structures with high levels of empowering leadership.

Companies are thus well-advised to invest in the empowering leadership of formal supervisors when they have implemented or are aiming for more decentralized structures, holding important implications for HR management. To foster empowering leadership, HR executives should prioritize empowering behaviors in the selection, development, and appraisal of leaders. When it comes to selection, HR managers can use simulation exercises and apply situational judgment tests or role-plays, including situations in which leadership candidates are expected to show empowering behaviors (O'Leary et al., 2017). Regarding leadership development, senior managers' empowering behaviors have been proposed to play a key role in promoting line managers' empowering leadership (Sharma &

Kirkman, 2015), which points to the role modeling function of the organization's senior and top management (for first evidence, see Park & Hassan, 2018). Moreover, leadership training programs based on action theory, involving mental model creation, role-play, and extensive feedback, may be a viable way to learn empowering leadership behaviors and facilitate the transfer of learned behaviors to the workplace (Tuckey et al., 2012). Finally, empowering leadership behaviors could be further promoted by including them in 360-degree reviews and promotion decisions (Harris et al., 2014). Such orchestrated efforts by HR management in selection, development, and appraisal should result in leaders who actively empower their employees to take on responsibility, and thereby contribute to a competitive advantage of decentralized organizations over more centralized firms.

5.3 | Limitations and future research

The first limitation is that much of our research design is cross-sectional. Although we obtained time-lagged data for organizational performance and our model is based on sound theoretical reasoning, causal inference should be made with caution. We encourage future research to further strengthen our findings by replicating them with repeated measures of all variables.

Second, given the complexity of our data collection involving more than 5800 employees from 144 organizations, we had to rely on a self-rated, behavioral measure of emergent leadership (Kent & Moss, 1994). We conducted two separate validation studies that provide support for the convergence of self- and other-ratings of emergent leadership behavior and partly alleviate potential social desirability concerns. Moreover, our main study findings allow us to establish a substantive nomological network surrounding our self-rated measure of emergent leadership behavior, including crucial theoretical antecedents of emergent leadership such as gender, tenure, education, and extraversion, as well as key theoretical consequences such as objective company performance (Badura et al., 2022; Hanna et al., 2021). Nevertheless, we hope that future research replicates our findings using other-ratings of emergent leadership behavior (Gerpott et al., 2019; Lanaj & Hollenbeck, 2015).

Third, there are particularities of our sample that might limit the generalizability of our findings. Specifically, we tested our proposed relationships in SMEs, which often do not possess as many managerial layers and steep hierarchies as larger corporations, thus restricting the range of observed values of decentralization and potentially attenuating our results (Sackett & Yang, 2000). The fact that we still find robust empirical evidence for the proposed relationships in our model, we believe, strengthens our findings, since the informational cues sent by decentralized structures might be even more pronounced in larger companies. Still, we call on further research to replicate our findings in non-SME samples.

Apart from these limitations, our study offers several promising avenues for further research. In this regard, we encourage future studies to theoretically and empirically zoom in on the specific

emergence mechanisms and contingency factors that underlie the bottom-up effect of emergent leadership on organizational performance. Indeed, and also from the perspective of multilevel theory in general, there is an urgent need to better “identify the specific aggregation mechanism that generated the collective result” in micro-macro-type models (Cowen et al., 2022, p. 6). In supplementary analyses, we found that the emergent leadership of longer-tenured employees yielded a stronger effect on organizational performance, potentially due to these employees' higher degree of social integration in the organization (Steffens et al., 2014). We hope that future research builds on these insights and applies more elaborate (e.g., network-based) measures to model the specific patterns of informal leadership emergence at the organizational level.

Another potentially fruitful area of further inquiry concerns how a leadership perspective can resolve prior inconsistent findings on the process of decentralization. For example, Barker (1993) illustrates how the shift from hierarchical to concertive control in an organization can result in suboptimal change dynamics and outcomes. By contrast, Hollenbeck et al. (2011) find that teams experience particular difficulties when moving from a decentralized to a centralized structure. Leadership may be the key to a better understanding of such dynamic processes. In organizations undergoing major structural changes, employees may perceive these transition phases as disruptive events that strongly influence their sensemaking (Morgeson & DeRue, 2006), and leaders may support employees' sensemaking of the changing organizational environment. Thus, in organizations undergoing major structural changes, the interplay between decentralization and empowering leadership may be even more pronounced.

ACKNOWLEDGMENT

Open Access funding enabled and organized by Projekt DEAL.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

DATA AVAILABILITY STATEMENT

Research data are not shared.

ENDNOTES

¹ According to social information processing theory, we utilize the terms “meaning-making” and “sense-making” interchangeably to describe the process through which individuals interpret their environment and rationalize their personal actions based on the aspects emphasized by a leader in the employee's work environment (Salancik & Pfeffer, 1978; see also Nishii & Paluch, 2018). It is important to note that sense-making and meaning-making need to be distinguished from the process of conveying value-based purpose to followers.

² As the empowerment process is likely to be in large part subjectively construed and leaders may adapt their empowering behavior to each employee (Vecchio et al., 2010; X. Zhang & Bartol, 2010), we focus on the leader-follower relationship to capture how leaders may adjust to the single follower's need for elaboration of the more abstract principle of decentralization. Still, as reported in the Robustness Checks section, we (a) examine whether collective (i.e., organization-level) empowering

leadership moderates the relationship between decentralization and emergent leadership, and (b) control for employees' unit-level nesting.

- ³ We acknowledge that empowering leaders may exert also a direct effect on emergent leadership as they provide the employee with the opportunity to pursue self-directed work and personal growth (Sharma & Kirkman, 2015). Yet, based on social information processing theory, we take a more comprehensive perspective by looking at the joint effect of decentralization and empowering leadership which together co-create more consistent cues about appropriate employee behavior.
- ⁴ We note that we also obtained information on employees' unit-level nesting for 136 of the 144 organizations in our sample (i.e., the meso-level structure of the organizations). In the Robustness Checks section, we report additional analyses in which we account for employees' nesting in units and organizations (i.e., a three-level multilevel model). The results and conclusions in these robustness checks are in line with our main study findings.
- ⁵ r_{WG} and $AD_{M(j)}$ simulations are based on 10,000 iterations and 95% confidence intervals, taking into account group size, number of items, number of response options, and degrees of inter-item correlation (i.e., by estimating a specific inter-item correlation matrix) (Smith-Crowe et al., 2014).
- ⁶ In line with recommendations by McNeish et al. (2017), we conducted an alternative test of Hypothesis 1 and examined the interaction effect in an individual-level regression model, using cluster-robust standard errors to control for nesting in firms. Results and interpretations were virtually identical across both procedures, underscoring the robustness of our findings (for details, see Appendix C).

REFERENCES

- Acton, B. P., Foti, R. J., Lord, R. G., & Gladfelder, J. A. (2019). Putting emergence back in leadership emergence: A dynamic, multilevel, process-oriented framework. *The Leadership Quarterly*, 30(1), 145–164. <https://doi.org/10.1016/j.leaqua.2018.07.002>
- Aguinis, H., Gottfredson, R. K., & Culpepper, S. A. (2013). Best-practice recommendations for estimating cross-level interaction effects using multilevel modeling. *Journal of Management*, 39(6), 1490–1528. <https://doi.org/10.1177/0149206313478188>
- Ahearne, M., Mathieu, J., & Rapp, A. (2005). To empower or not to empower your sales force? An empirical examination of the influence of leadership empowerment behavior on customer satisfaction and performance. *Journal of Applied Psychology*, 90(5), 945–955. <https://doi.org/10.1037/0021-9010.90.5.945>
- Aiken, M., & Hage, J. (1966). Organizational alienation: A comparative analysis. *American Sociological Review*, 31(4), 497–507. <https://doi.org/10.2307/2090773>
- Ambrose, M. L., & Schminke, M. (2003). Organization structure as a moderator of the relationship between procedural justice, interactional justice, perceived organizational support, and supervisory trust. *Journal of Applied Psychology*, 88(2), 295–305. <https://doi.org/10.1037/0021-9010.88.2.295>
- Anderson, C., & Brown, C. E. (2010). The functions and dysfunctions of hierarchy. *Research in Organizational Behavior*, 30, 55–89. <https://doi.org/10.1016/j.riob.2010.08.002>
- Andrews, R., Boyne, G. A., Law, J., & Walker, R. M. (2007). Centralization, organizational strategy, and public service performance. *Journal of Public Administration Research and Theory*, 19(1), 57–80. <https://doi.org/10.1093/jopart/mum039>
- Ardic, O. P., Mylenko, N., & Saltane, V. (2011). *Small and medium enterprises: A cross-country analysis with a new data set* (World Bank Policy Research Working Paper 5538). World Bank.
- Badura, K. L., Galvin, B. M., & Lee, M. Y. (2022). Leadership emergence: An integrative review. *Journal of Applied Psychology*, 107(11), 2069–2100. <https://doi.org/10.1037/apl0000997>
- Badura, K. L., Grijalva, E., Newman, D. A., Yan, T. T., & Jeon, G. (2018). Gender and leadership emergence: A meta-analysis and explanatory model. *Personnel Psychology*, 71(3), 335–367. <https://doi.org/10.1111/peps.12266>
- Bal, P. M., & Boehm, S. A. (2019). How do i-deals influence client satisfaction? The role of exhaustion, collective commitment, and age diversity. *Journal of Management*, 45(4), 1461–1487.
- Barker, J. R. (1993). Tightening the iron cage: Concertive control in self-managing teams. *Administrative Science Quarterly*, 38(3), 408–437. <https://doi.org/10.2307/2393374>
- Barrick, M. R., Thurgood, G. R., Smith, T. A., & Courtright, S. H. (2015). Collective organizational engagement: Linking motivational antecedents, strategic implementation, and firm performance. *Academy of Management Journal*, 58(1), 111–135. <https://doi.org/10.5465/amj.2013.0227>
- Bates, D., Maechler, M., Bolker, B., & Walker, S. (2019). *lme4: Linear mixed-effects models using Eigen and S4*. R package version 1.1–21. <https://cran.r-project.org/web/packages/lme4/index.html>
- Bauer, D. J., & Curran, P. J. (2005). Probing interactions in fixed and multilevel regression: Inferential and graphical techniques. *Multivariate Behavioral Research*, 40(3), 373–400. https://doi.org/10.1207/s15327906mbr4003_5
- Bauer, D. J., Preacher, K. J., & Gil, K. M. (2006). Conceptualizing and testing random indirect effects and moderated mediation in multilevel models: New procedures and recommendations. *Psychological Methods*, 11(2), 142–163. <https://doi.org/10.1037/1082-989X.11.2.142>
- Becker, T. E., Atinc, G., Breaugh, J. A., Carlson, K. D., Edwards, J. R., & Spector, P. E. (2016). Statistical control in correlational studies: 10 essential recommendations for organizational researchers. *Journal of Organizational Behavior*, 37(2), 157–167. <https://doi.org/10.1002/job.2053>
- Bernstein, E., Bunch, J., Canner, N., & Lee, M. (2016). Beyond the holacracy hype: The overwrought claims—And actual promise—Of the next generation of self-managed teams. *Harvard Business Review*, 94(7–8), 38–49.
- Bhave, D. P., Kramer, A., & Glomb, T. M. (2010). Work-family conflict in work groups: Social information processing, support, and demographic dissimilarity. *Journal of Applied Psychology*, 95(1), 145–158. <https://doi.org/10.1037/a0017885>
- Blair, G., Cooper, J., Coppock, A., Humphreys, M., Sonnet, L., & Fultz, N. (2018). Package ‘estimat’. *Stat*, 7(1), 295–318.
- Bliese, P. D., Maltarich, M. A., & Hendricks, J. L. (2018). Back to basics with mixed-effects models: Nine take-away points. *Journal of Business and Psychology*, 33(1), 1–23. <https://doi.org/10.1007/s10869-017-9491-z>
- Boxall, P., & Macky, K. (2009). Research and theory on high-performance work systems: Progressing the high-involvement stream. *Human Resource Management Journal*, 19(1), 3–23. <https://doi.org/10.1111/j.1748-8583.2008.00082.x>
- Carnabuci, G., Emery, C., & Brinberg, D. (2018). Emergent leadership structures in informal groups: A dynamic, cognitively informed network model. *Organization Science*, 29(1), 118–133. <https://doi.org/10.1287/orsc.2017.1171>
- Carson, J. B., Tesluk, P. E., & Marrone, J. A. (2007). Shared leadership in teams: An investigation of antecedent conditions and performance. *Academy of Management Journal*, 50(5), 1217–1234. <https://doi.org/10.2307/20159921>
- Chan, D. (1998). Functional relations among constructs in the same content domain at different levels of analysis: A typology of composition models. *Journal of Applied Psychology*, 83(2), 234–246. <https://doi.org/10.1037/0021-9010.83.2.234>
- Chandler, A. D. (1962). *Strategy and structure: Chapters in the history of the industrial enterprise*. MIT Press.
- Chang, S., Jia, L., Takeuchi, R., & Cai, Y. (2014). Do high-commitment work systems affect creativity? A multilevel combinational approach to

- employee creativity. *Journal of Applied Psychology*, 99(4), 665–680. <https://doi.org/10.1037/a0035679>
- Chaturvedi, S., Zyphur, M. J., Arvey, R. D., Avolio, B. J., & Larsson, G. (2012). The heritability of emergent leadership: Age and gender as moderating factors. *The Leadership Quarterly*, 23(2), 219–232. <https://doi.org/10.1016/j.leaqua.2011.08.004>
- Cheong, M., Yammarino, F. J., Dionne, S. D., Spain, S. M., & Tsai, C.-Y. (2019). A review of the effectiveness of empowering leadership. *The Leadership Quarterly*, 30(1), 34–58. <https://doi.org/10.1016/j.leaqua.2018.08.005>
- Chuang, C.-H., Jackson, S. E., & Jiang, Y. (2016). Can knowledge-intensive teamwork be managed? Examining the roles of HRM systems, leadership, and tacit knowledge. *Journal of Management*, 42(2), 524–554. <https://doi.org/10.1177/0149206313478189>
- Coleman, J. S. (1990). *Foundations of social theory*. Belknap Press of Harvard University Press.
- Combs, J. G., Crook, T. R., & Shook, C. L. (2005). The dimensionality of organizational performance and its implications for strategic management research. In D. J. Ketchen & D. D. Bergh (Eds.), *Research methodology in strategy and management* (2nd ed., pp. 259–286). Elsevier.
- Conger, J. A., & Kanungo, R. N. (1988). The empowerment process: Integrating theory and practice. *Academy of Management Review*, 13(3), 471. <https://doi.org/10.2307/258093>
- Coun, M. J. H., Peters, P., Blomme, R. J., & Schaveling, J. (2022). 'To empower or not to empower, that's the question'. Using an empowerment process approach to explain employees' workplace proactivity. *The International Journal of Human Resource Management*, 33(14), 2829–2855. <https://doi.org/10.1080/09585192.2021.1879204>
- Covin, J. G., & Slevin, D. P. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal*, 10(1), 75–87. <https://doi.org/10.1002/smj.4250100107>
- Cowen, A. P., Rink, F., Cuypers, I. R. P., Grégoire, D. A., & Weller, I. (2022). Applying Coleman's boat in management research: Opportunities and challenges in bridging macro and micro theory. *Academy of Management Journal*, 65(1), 1–10. <https://doi.org/10.5465/amj.2022.4001>
- Croon, M. A., & van Veldhoven, M. J. P. M. (2007). Predicting group-level outcome variables from variables measured at the individual level: A latent variable multilevel model. *Psychological Methods*, 12(1), 45–57. <https://doi.org/10.1037/1082-989X.12.1.45>
- Csaszar, F. A. (2012). Organizational structure as a determinant of performance: Evidence from mutual funds. *Strategic Management Journal*, 33(6), 611–632. <https://doi.org/10.1002/smj.1969>
- Dalton, D. R., Todor, W. D., Spendolini, M. J., Fielding, G. J., & Porter, L. W. (1980). Organization structure and performance: A critical review. *Academy of Management Review*, 5(1), 49–64. <https://doi.org/10.5465/amr.1980.4288881>
- Datta, D. K., Guthrie, J. P., & Wright, P. M. (2005). Human resource management and labor productivity: Does industry matter? *Academy of Management Journal*, 48(1), 135–145. <https://doi.org/10.5465/amj.2005.15993158>
- Deshpande, R., & Zaltman, G. (1982). Factors affecting the use of market research information: A path analysis. *Journal of Marketing Research*, 19(1), 14–31. <https://doi.org/10.1177/002224378201900102>
- Dewar, R. D., Whetten, D. A., & Boje, D. (1980). An examination of the reliability and validity of the Aiken and Hage scales of centralization, formalization, and task routineness. *Administrative Science Quarterly*, 25(1), 120–128. <https://doi.org/10.2307/2392230>
- Dickson, M. W., Resick, C. J., & Hanges, P. J. (2006). Systematic variation in organizationally-shared cognitive prototypes of effective leadership based on organizational form. *The Leadership Quarterly*, 17(5), 487–505. <https://doi.org/10.1016/j.leaqua.2006.07.005>
- D'Innocenzo, L., Luciano, M. M., Mathieu, J. E., Maynard, M. T., & Chen, G. (2016). Empowered to perform: A multilevel investigation of the influence of empowerment on performance in hospital units. *Academy of Management Journal*, 59(4), 1290–1307. <https://doi.org/10.5465/amj.2013.1073>
- Drazin, R., & van de Ven, A. H. (1985). Alternative forms of fit in contingency theory. *Administrative Science Quarterly*, 30(4), 514–539. <https://doi.org/10.2307/2392695>
- Ensari, N., Riggio, R. E., Christian, J., & Carslaw, G. (2011). Who emerges as a leader? Meta-analyses of individual differences as predictors of leadership emergence. *Personality and Individual Differences*, 51(4), 532–536. <https://doi.org/10.1016/j.paid.2011.05.017>
- Fausang, M. S., Joensson, T. S., Lewandowski, J., & Bligh, M. (2015). Antecedents of shared leadership: Empowering leadership and interdependence. *Leadership and Organization Development Journal*, 36(3), 271–291. <https://doi.org/10.1108/LODJ-06-2013-0075>
- Federal Association of German Industry. (2018). *Der Deutsche Mittelstand: Daten, Zahlen, Fakten [German SMEs: Data, figures, facts]*. Industrie-Foerderung Gesellschaft mbH.
- Felin, T., Foss, N. J., & Ployhart, R. E. (2015). The microfoundations movement in strategy and organization theory. *Academy of Management Annals*, 9(1), 575–632. <https://doi.org/10.5465/19416520.2015.1007651>
- Fischer, T., & Sitkin, S. B. (2023). Leadership styles: A comprehensive assessment and way forward. *Academy of Management Annals*, 17(1), 331–372. <https://doi.org/10.5465/annals.2020.0340>
- Fleener, J. W., Smither, J. W., Atwater, L. E., Braddy, P. W., & Sturm, R. E. (2010). Self-other rating agreement in leadership: A review. *The Leadership Quarterly*, 21(6), 1005–1034. <https://doi.org/10.1016/j.leaqua.2010.10.006>
- Gardner, T. M., Wright, P. M., & Moynihan, L. M. (2011). The impact of motivation, empowerment, and skill-enhancing practices on aggregate voluntary turnover: The mediating effect of collective affective commitment. *Personnel Psychology*, 64(2), 315–350. <https://doi.org/10.1111/j.1744-6570.2011.01212.x>
- Gerpott, F. H., Lehmann-Willenbrock, N., Voelpel, S. C., & van Vugt, M. (2019). It's not just what is said, but when it's said: A temporal account of verbal behaviors and emergent leadership in self-managed teams. *Academy of Management Journal*, 62(3), 717–738. <https://doi.org/10.5465/amj.2017.0149>
- Goldman, B. M. (2001). Toward an understanding of employment discrimination claiming: An integration of organizational justice and social information processing theories. *Personnel Psychology*, 54(2), 361–386. <https://doi.org/10.1111/j.1744-6570.2001.tb00096.x>
- Grant, A. M., Gino, F., & Hofmann, D. A. (2011). Reversing the extraverted leadership advantage: The role of employee proactivity. *Academy of Management Journal*, 54(3), 528–550. <https://doi.org/10.5465/amj.2011.61968043>
- Greer, L. L., de Jong, B. A., Schouten, M. E., & Dannals, J. E. (2018). Why and when hierarchy impacts team effectiveness: A meta-analytic integration. *Journal of Applied Psychology*, 103(6), 591–613. <https://doi.org/10.1037/apl0000291>
- Greer, L. L., van Bunderen, L., & Yu, S. (2017). The dysfunctions of power in teams: A review and emergent conflict perspective. *Research in Organizational Behavior*, 37, 103–124. <https://doi.org/10.1016/j.riob.2017.10.005>
- Greiner, L. (1998). Evolution and revolution as organizations grow. *Harvard Business Review*, 76(3), 55–60.
- Greve, H. R. (2013). Microfoundations of management: Behavioral strategies and levels of rationality in organizational action. *Academy of Management Perspectives*, 27(2), 103–119.
- Hage, J., & Aiken, M. (1967). Relationship of centralization to other structural properties. *Administrative Science Quarterly*, 12(1), 72–92. <https://doi.org/10.2307/2391213>
- Hanna, A. A., Smith, T. A., Kirkman, B. L., & Griffin, R. W. (2021). The emergence of emergent leadership: A comprehensive framework and directions for future research. *Journal of Management*, 47(1), 76–104. <https://doi.org/10.1177/0149206320965683>

- Harris, T. B., Li, N., Boswell, W. R., Zhang, X., & Xie, Z. (2014). Getting what's new from newcomers: Empowering leadership, creativity, and adjustment in the socialization context. *Personnel Psychology*, 67(3), 567–604. <https://doi.org/10.1111/peps.12053>
- Hedström, P., & Ylikoski, P. (2010). Causal mechanisms in the social sciences. *Annual Review of Sociology*, 36(1), 49–67. <https://doi.org/10.1146/annurev.soc.012809.102632>
- Hempel, P. S., Zhang, Z.-X., & Han, Y. (2012). Team empowerment and the organizational context: Decentralization and the contrasting effects of formalization. *Journal of Management*, 38(2), 475–501. <https://doi.org/10.1177/0149206309342891>
- Hill, A. D., Johnson, S. G., Greco, L. M., O'Boyle, E. H., & Walter, S. L. (2021). Endogeneity: A review and agenda for the methodology-practice divide affecting micro and macro research. *Journal of Management*, 47(1), 105–143. <https://doi.org/10.1177/0149206320960533>
- Hill, N. S., & Bartol, K. M. (2016). Empowering leadership and effective collaboration in geographically dispersed teams. *Personnel Psychology*, 69(1), 159–198. <https://doi.org/10.1111/peps.12108>
- Hirst, G., van Knippenberg, D., Zhou, Q., Zhu, C. J., & Tsai, P. C.-F. (2018). Exploitation and exploration climates' influence on performance and creativity: Diminishing returns as function of self-efficacy. *Journal of Management*, 44(3), 870–891. <https://doi.org/10.1177/0149206315596814>
- Hollenbeck, J. R., Beersma, B., & Schouten, M. E. (2012). Beyond team types and taxonomies: A dimensional scaling conceptualization for team description. *Academy of Management Review*, 37(1), 82–106. <https://doi.org/10.5465/amr.2010.0181>
- Hollenbeck, J. R., Ellis, A. P. J., Humphrey, S. E., Garza, A. S., & Ilgen, D. R. (2011). Asymmetry in structural adaptation: The differential impact of centralizing versus decentralizing team decision-making structures. *Organizational Behavior and Human Decision Processes*, 114(1), 64–74. <https://doi.org/10.1016/j.obhdp.2010.08.003>
- Hollenbeck, J. R., & Wright, P. M. (2017). Harking, sharking, and tharking. *Journal of Management*, 43(1), 5–18. <https://doi.org/10.1177/0149206316679487>
- Hu, L.-T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal*, 38(3), 635–672. <https://doi.org/10.5465/256741>
- Iverson, R. D., & Zatzick, C. D. (2011). The effects of downsizing on labor productivity: The value of showing consideration for employees' morale and welfare in high-performance work systems. *Human Resource Management*, 50(1), 29–44. <https://doi.org/10.1002/hrm.20407>
- Jansen, J. J. P., van den Bosch, F. A. J., & Volberda, H. W. (2006). Exploratory innovation, exploitative innovation, and performance: Effects of organizational antecedents and environmental moderators. *Management Science*, 52(11), 1661–1674. <https://doi.org/10.1287/mnsc.1060.0576>
- Jiang, K., & Messersmith, J. (2018). On the shoulders of giants: A meta-review of strategic human resource management. *The International Journal of Human Resource Management*, 29(1), 6–33. <https://doi.org/10.1080/09585192.2017.1384930>
- Johns, G. (2006). The essential impact of context on organizational behavior. *Academy of Management Review*, 31(2), 386–408. <https://doi.org/10.2307/20159208>
- Johns, G. (2018). Advances in the treatment of context in organizational research. *Annual Review of Organizational Psychology and Organizational Behavior*, 5, 21–46. <https://doi.org/10.1146/annurev-orgpsych-032117-104406>
- Joseph, J., & Gaba, V. (2020). Organizational structure, information processing, and decision-making: A retrospective and road map for research. *Academy of Management Annals*, 14(1), 267–302. <https://doi.org/10.5465/annals.2017.0103>
- Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and leadership: A qualitative and quantitative review. *Journal of Applied Psychology*, 87(4), 765–780. <https://doi.org/10.1037//0021-9010.87.4.765>
- Katz, D., & Kahn, R. L. (1978). *The social psychology of organizations* (2nd ed.). Wiley.
- Kehoe, R. R., & Han, J. H. (2020). An expanded conceptualization of line managers' involvement in human resource management. *Journal of Applied Psychology*, 105(2), 111–129. <https://doi.org/10.1037/apl0000426>
- Kent, R. L., & Moss, S. E. (1990). Self-monitoring as a predictor of leader emergence. *Psychological Reports*, 66(3), 875–881. <https://doi.org/10.2466/pr0.1990.66.3.875>
- Kent, R. L., & Moss, S. E. (1994). Effects of sex and gender role on leader emergence. *Academy of Management Journal*, 37(5), 1335–1346. <https://doi.org/10.2307/256675>
- Knight, A. P., Menges, J. I., & Bruch, H. (2018). Organizational affective tone: A meso perspective on the origins and effects of consistent affect in organizations. *Academy of Management Journal*, 61(1), 191–219. <https://doi.org/10.5465/amj.2016.0671>
- Kozlowski, S. W. J., & Klein, K. J. (2000). A multilevel approach to theory and research in organizations. In K. J. Klein & S. W. J. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions* (pp. 3–90). Jossey-Bass.
- LaHuis, D. M., & Ferguson, M. W. (2009). The accuracy of significance tests for slope variance components in multilevel random coefficient models. *Organizational Research Methods*, 12(3), 418–435. <https://doi.org/10.1177/1094428107308984>
- Lanaj, K., & Hollenbeck, J. R. (2015). Leadership over-emergence in self-managing teams: The role of gender and countervailing biases. *Academy of Management Journal*, 58(5), 1476–1494. <https://doi.org/10.5465/amj.2013.0303>
- Lawrence, P. R., & Lorsch, J. W. (1976). *Organization and environment*. HBS Press.
- LeBreton, J. M., & Senter, J. L. (2008). Answers to 20 questions about interrater reliability and interrater agreement. *Organizational Research Methods*, 11(4), 815–852. <https://doi.org/10.1177/1094428106296642>
- Lee, A., Willis, S., & Tian, A. W. (2018). Empowering leadership: A meta-analytic examination of incremental contribution, mediation, and moderation. *Journal of Organizational Behavior*, 39(3), 306–325. <https://doi.org/10.1002/job.2220>
- Lee, H. W., & Kim, E. (2020). Workforce diversity and firm performance: Relational coordination as a mediator and structural empowerment and multisource feedback as moderators. *Human Resource Management*, 59(1), 5–23. <https://doi.org/10.1002/hrm.21970>
- Lee, M. Y., & Edmondson, A. C. (2017). Self-managing organizations: Exploring the limits of less-hierarchical organizing. *Research in Organizational Behavior*, 37, 35–58. <https://doi.org/10.1016/j.riob.2017.10.002>
- Leroy, H., Segers, J., van Dierendonck, D., & den Hartog, D. (2018). Managing people in organizations: Integrating the study of HRM and leadership. *Human Resource Management Review*, 28(3), 249–257. <https://doi.org/10.1016/j.hrmr.2018.02.002>
- Lin, X., & Germain, R. (2003). Organizational structure, context, customer orientation, and performance: Lessons from Chinese state-owned enterprises. *Strategic Management Journal*, 24(11), 1131–1151. <https://doi.org/10.1002/smj.348>
- Love, L. G., Priem, R. L., & Lumpkin, G. T. (2002). Explicitly articulated strategy and firm performance under alternative levels of centralization. *Journal of Management*, 28(5), 611–627. <https://doi.org/10.1177/014920630202800503>

- Lu, J. G., Page-Gould, E., & Xu, N. R. (2017). *_micromacromultilevel: Micro-Macro Multilevel Modeling_*. R package version 0.4.0. <https://cran.r-project.org/web/packages/MicroMacroMultilevel/index.html>
- Lüdtke, O., Marsh, H. W., Robitzsch, A., Trautwein, U., Asparouhov, T., & Muthén, B. (2008). The multilevel latent covariate model: A new, more reliable approach to group-level effects in contextual studies. *Psychological Methods*, 13(3), 203–229. <https://doi.org/10.1037/a0012869>
- Magni, M., & Maruping, L. M. (2013). Sink or swim: Empowering leadership and overload in teams' ability to deal with the unexpected. *Human Resource Management*, 52(5), 715–739. <https://doi.org/10.1002/hrm.21561>
- Magpili, N. C., & Pazos, P. (2018). Self-managing team performance: A systematic review of multilevel input factors. *Small Group Research*, 49(1), 3–33.
- Martin, W. L., McKelvie, A., & Lumpkin, G. T. (2016). Centralization and delegation practices in family versus non-family SMEs: A Rasch analysis. *Small Business Economics*, 47(3), 755–769. <https://doi.org/10.1007/s11187-016-9762-5>
- Maynard, M. T., Gilson, L. L., & Mathieu, J. E. (2012). Empowerment—Fad or fab? A multilevel review of the past two decades of research. *Journal of Management*, 38(4), 1231–1281. <https://doi.org/10.1177/0149206312438773>
- McEvily, B., Soda, G., & Tortoriello, M. (2014). More formally: Rediscovering the missing link between formal organization and informal social structure. *Academy of Management Annals*, 8(1), 299–345. <https://doi.org/10.5465/19416520.2014.885252>
- McNeish, D., Stapleton, L. M., & Silverman, R. D. (2017). On the unnecessary ubiquity of hierarchical linear modeling. *Psychological Methods*, 22(1), 114–140. <https://doi.org/10.1037/met0000078>
- Mehra, A., Smith, B. R., Dixon, A. L., & Robertson, B. (2006). Distributed leadership in teams: The network of leadership perceptions and team performance. *The Leadership Quarterly*, 17(3), 232–245. <https://doi.org/10.1016/j.leaqua.2006.02.003>
- Meijaard, J., Brand, M. J., & Mosselman, M. (2005). Organizational structure and performance in Dutch small firms. *Small Business Economics*, 25(1), 83–96. <https://doi.org/10.1007/s11187-005-4259-7>
- Miller, K. I., & Monge, P. R. (1986). Participation, satisfaction, and productivity: A meta-analytic review. *Academy of Management Journal*, 29(4), 727–753. <https://doi.org/10.2307/255942>
- Mintzberg, H. (1979). *The structuring of organizations: A synthesis of the research The theory of management policy series*. Prentice-Hall.
- Mischel, W. (1973). Toward a cognitive social learning reconceptualization of personality. *Psychological Review*, 80(4), 252–283. <https://doi.org/10.1037/h0035002>
- Molloy, J. C., Ployhart, R. E., & Wright, P. M. (2011). The myth of “the” micro-macro divide: Bridging system-level and disciplinary divides. *Journal of Management*, 37(2), 581–609. <https://doi.org/10.1177/0149206310365000>
- Morgeson, F. P., & DeRue, D. S. (2006). Event criticality, urgency, and duration: Understanding how events disrupt teams and influence team leader intervention. *The Leadership Quarterly*, 17(3), 271–287. <https://doi.org/10.1016/j.leaqua.2006.02.006>
- Nishii, L. H., & Paluch, R. M. (2018). Leaders as HR sensegivers: Four HR implementation behaviors that create strong HR systems. *Human Resource Management Review*, 28(3), 319–323. <https://doi.org/10.1016/j.hrmr.2018.02.007>
- Nishii, L. H., & Wright, P. M. (2008). Variability within organizations: Implications for strategic human resource management. In D. B. Smith (Ed.), *The people make the place* (pp. 225–248). Lawrence Erlbaum Associates.
- O'Leary, R. S., Forsman, J. W., & Isaacson, J. A. (2017). The role of simulation exercises in selection. In C. Semedo, E. D. Pulakos, H. Goldstein, & J. Passmore (Eds.), *Wiley Blackwell handbooks in organizational psychology. The Wiley Blackwell handbook of the psychology of recruitment, selection and employee retention* (pp. 247–270). Wiley Blackwell.
- Park, J., & Hassan, S. (2018). Does the influence of empowering leadership trickle down? Evidence from law enforcement organizations. *Journal of Public Administration Research and Theory*, 28(2), 212–225.
- Peccei, R., & van de Voorde, K. (2019). The application of the multilevel paradigm in human resource management—outcomes research: Taking stock and going forward. *Journal of Management*, 45(2), 786–818. <https://doi.org/10.1177/0149206316673720>
- Pfeffer, J. (1991). Organization theory and structural perspectives on management. *Journal of Management*, 17(4), 789–803. <https://doi.org/10.1177/014920639101700411>
- Pierce, J. L., & Gardner, D. G. (2004). Self-esteem within the work and organizational context: A review of the organization-based self-esteem literature. *Journal of Management*, 30(5), 591–622. <https://doi.org/10.1016/j.jm.2003.10.001>
- Podolny, J. M., Khurana, R., & Hill-Popper, M. (2004). Revisiting the meaning of leadership. *Research in Organizational Behavior*, 26, 1–36. [https://doi.org/10.1016/S0191-3085\(04\)26001-4](https://doi.org/10.1016/S0191-3085(04)26001-4)
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63, 539–569. <https://doi.org/10.1146/annurev-psych-120710-100452>
- Porter, L. W., & Lawler, E. E. (1965). Properties of organization structure in relation to job attitudes and job behavior. *Psychological Bulletin*, 64(1), 23–51. <https://doi.org/10.1037/h0022166>
- Porter, L. W., & Schneider, B. (2014). What was, what is, and what may be in OP/OB. *Annual Review of Organizational Psychology and Organizational Behavior*, 1(1), 1–21. <https://doi.org/10.1146/annurev-orgpsych-031413-091302>
- Pugh, D. S., Hickson, D. J., Hinings, C. R., Macdonald, K. M., Turner, C., & Lupton, T. (1963). A conceptual scheme for organizational analysis. *Administrative Science Quarterly*, 8(3), 289–315. <https://doi.org/10.2307/2390971>
- Rammstedt, B., Danner, D., & Martin, S. (2016). The association between personality and cognitive ability: Going beyond simple effects. *Journal of Research in Personality*, 62, 39–44. <https://doi.org/10.1016/j.jrp.2016.03.005>
- Reinwald, M., Huettermann, H., & Bruch, H. (2019). Beyond the mean: Understanding firm-level consequences of variability in diversity climate perceptions. *Journal of Organizational Behavior*, 40(4), 472–491. <https://doi.org/10.1002/job.2344>
- Reynolds, W. M. (1982). Development of reliable and valid short forms of the Marlowe-Crowne social desirability scale. *Journal of Clinical Psychology*, 38(1), 119–125. [https://doi.org/10.1002/1097-4679\(198201\)38:1<119::AID-JCLP2270380118>3.0.CO;2-I](https://doi.org/10.1002/1097-4679(198201)38:1<119::AID-JCLP2270380118>3.0.CO;2-I)
- Richard, O. C., Murthi, B. P. S., & Ismail, K. (2007). The impact of racial diversity on intermediate and long-term performance: The moderating role of environmental context. *Strategic Management Journal*, 28(12), 1213–1233. <https://doi.org/10.1002/smj.633>
- Richard, P. J., Devinney, T. M., Yip, G. S., & Johnson, G. (2009). Measuring organizational performance: Towards methodological best practice. *Journal of Management*, 35(3), 718–804. <https://doi.org/10.1177/0149206308330560>
- Richardson, H. A., Vandenberg, R. J., Blum, T. C., & Roman, P. M. (2002). Does decentralization make a difference for the organization? An examination of the boundary conditions circumscribing decentralized decision-making and organizational financial performance. *Journal of Management*, 28(2), 217–244. <https://doi.org/10.1177/014920630202800205>
- Rogers, E. W., & Wright, P. M. (1998). Measuring organizational performance in strategic human resource management: Problems, prospects and performance information markets. *Human Resource Management Review*, 8(3), 311–331.
- Russo, S. D., Miraglia, M., Borgogni, L., & Johns, G. (2013). How time and perceptions of social context shape employee absenteeism

- trajectories. *Journal of Vocational Behavior*, 83(2), 209–217. <https://doi.org/10.1016/j.jvb.2013.03.005>
- Sackett, P. R., & Yang, H. (2000). Correction for range restriction: An expanded typology. *Journal of Applied Psychology*, 85(1), 112–118. <https://doi.org/10.1037/0021-9010.85.1.112>
- Salancik, G. R., & Pfeffer, J. (1978). A social information processing approach to job attitudes and task design. *Administrative Science Quarterly*, 23(2), 224–253. <https://doi.org/10.2307/2392563>
- Sandhu, S., & Kulik, C. T. (2019). Shaping and being shaped: How organizational structure and managerial discretion co-evolve in new managerial roles. *Administrative Science Quarterly*, 64(3), 619–658. <https://doi.org/10.1177/0001839218778018>
- Schafer, J. L., & Graham, J. W. (2002). Missing data: Our view of the state of the art. *Psychological Methods*, 7(2), 147–177. <https://doi.org/10.1037/1082-989X.7.2.147>
- Schneier, C. E., & Goktepe, J. R. (1983). Issues in emergent leadership: The contingency model of leadership, leader sex, leader behavior. In H. H. Blumberg, A. P. Hare, V. Kent, & M. F. Davies (Eds.), *Small groups and social interactions* (pp. 413–421). Wiley.
- Schupp, J., & Gerlitz, J.-Y. (2008). Big five inventory-SOEP (BFI-S). *Zusammenstellung sozialwissenschaftlicher Items und Skalen (ZIS)*. <https://doi.org/10.6102/zis54>
- Scott, M., & Bruce, R. (1987). Five stages of growth in small business. *Long Range Planning*, 20(3), 45–52. [https://doi.org/10.1016/0024-6301\(87\)90071-9](https://doi.org/10.1016/0024-6301(87)90071-9)
- Selig, J. P., & Preacher, K. J. (2008). *Monte Carlo Method for assessing mediation: An interactive tool for creating confidence intervals for indirect effects*. [Computer software]. <http://quantpsy.org/>
- Sharma, P. N., & Kirkman, B. L. (2015). Leveraging leaders: A literature review and future lines of inquiry for empowering leadership research. *Group & Organization Management*, 40(2), 193–237. <https://doi.org/10.1177/1059601115574906>
- Smith-Crowe, K., Burke, M. J., Cohen, A., & Doveh, E. (2014). Statistical significance criteria for the rWG and average deviation interrater agreement indices. *Journal of Applied Psychology*, 99(2), 239–261. <https://doi.org/10.1037/a0034556>
- Spreitzer, G. M. (1996). Social structural characteristics of psychological empowerment. *Academy of Management Journal*, 39(2), 483–504. <https://doi.org/10.2307/256789>
- Steffens, N. K., Shemla, M., Wegge, J., & Diestel, S. (2014). Organizational tenure and employee performance. *Group & Organization Management*, 39(6), 664–690. <https://doi.org/10.1177/1059601114553512>
- Subramony, M. (2009). A meta-analytic investigation of the relationship between HRM bundles and firm performance. *Human Resource Management*, 48(5), 745–768. <https://doi.org/10.1002/hrm.20315>
- Tuckey, M. R., Bakker, A. B., & Dollard, M. F. (2012). Empowering leaders optimize working conditions for engagement: A multilevel study. *Journal of Occupational Health Psychology*, 17(1), 15–27.
- Twenge, J. M., Campbell, S. M., Hoffman, B. J., & Lance, C. E. (2010). Generational differences in work values: Leisure and extrinsic values increasing, social and intrinsic values decreasing. *Journal of Management*, 36(5), 1117–1142. <https://doi.org/10.1177/0149206309352246>
- Vecchio, R. P., Justin, J. E., & Pearce, C. L. (2010). Empowering leadership: An examination of mediating mechanisms within a hierarchical structure. *The Leadership Quarterly*, 21(3), 530–542. <https://doi.org/10.1016/j.leaqua.2010.03.014>
- Wagner, J. A., Leana, C. R., Locke, E. A., & Schweiger, D. M. (1997). Cognitive and motivational frameworks in US research on participation: A meta-analysis of primary effects. *Journal of Organizational Behavior*, 18(1), 49–65. [https://doi.org/10.1002/\(SICI\)1099-1379\(199701\)18:1%3C49::AID-JOB789%3E3.0.CO;2-P](https://doi.org/10.1002/(SICI)1099-1379(199701)18:1%3C49::AID-JOB789%3E3.0.CO;2-P)
- Wall, T. D., Michie, J., Patterson, M., Wood, S. J., Sheehan, M., Clegg, C. W., & West, M. (2004). On the validity of subjective measures of company performance. *Personnel Psychology*, 57(1), 95–118.
- Walter, F., & Bruch, H. (2010). Structural impacts on the occurrence and effectiveness of transformational leadership: An empirical study at the organizational level of analysis. *The Leadership Quarterly*, 21(5), 765–782. <https://doi.org/10.1016/j.leaqua.2010.07.006>
- Wellman, N. (2017). Authority or community? A relational models theory of group-level leadership emergence. *Academy of Management Review*, 42(4), 596–617. <https://doi.org/10.5465/amr.2015.0375>
- Wellman, N., Newton, D. W., Wang, D., Wei, W., Waldman, D. A., & Lepine, J. A. (2019). Meeting the need or falling in line? The effect of laissez-faire formal leaders on informal leadership. *Personnel Psychology*, 72(3), 337–359. <https://doi.org/10.1111/peps.12308>
- Wong, E. M., Ormiston, M. E., & Tetlock, P. E. (2011). The effects of top management team integrative complexity and decentralized decision making on corporate social performance. *Academy of Management Journal*, 54(6), 1207–1228. <https://doi.org/10.5465/amj.2008.0762>
- Zhang, X., & Bartol, K. M. (2010). Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement. *Academy of Management Journal*, 53(1), 107–128. <https://doi.org/10.5465/amj.2010.48037118>
- Zhang, Z., Waldman, D. A., & Wang, Z. (2012). A multilevel investigation of leader-member exchange, informal leader emergence, and individual and team performance. *Personnel Psychology*, 65(1), 49–78. <https://doi.org/10.1111/j.1744-6570.2011.01238.x>

AUTHOR BIOGRAPHIES

Hendrik Huettermann is a professor of Leadership and Organizational Behavior at the Bundeswehr University Munich. His research focuses on diversity and inclusion, employee well-being and engagement, as well as new forms of organization and collaboration.

Stefan Berger is an assistant professor of Organizational Behavior at the University of Groningen. His research focuses on collaboration and leadership in modern team and organizational settings. He usually studies these phenomena using multilevel and/or dynamic theory and methods.

Max Reinwald is an assistant professor at the LMU Munich School of Management, Ludwig-Maximilians-Universität München, where he studies diversity, leadership, and new forms of collaboration.

Heike Bruch is a professor of Leadership and Director of the Institute for Leadership and Human Resource Management at the University of St. Gallen. Her research interests include leadership, organizational energy, emotions in organizations, diversity, as well as new forms of working.

How to cite this article: Huettermann, H., Berger, S., Reinwald, M., & Bruch, H. (2024). Power to the people—And then? A multilevel leadership perspective on organizational decentralization. *Human Resource Management*, 63(2), 333–353. <https://doi.org/10.1002/hrm.22203>

APPENDIX A

RANDOM ASSIGNMENT TO SURVEY VERSIONS

To test if random assignment to questionnaire versions worked as intended, we specified regression models with participants' age, gender, and tenure as dependent variables and the questionnaire versions as dummy predictor variables. Specifically, we used ordinary least squares models for age ($F = 1.06, p = 0.35$) and tenure ($F = 0.24, p = 0.79$), and a logit model for gender ($\chi_{22} = 3.24, p = 0.20$). Non-significant overall model fit for all three models indicates that survey version does not predict core demographic characteristics of participating employees; we thus conclude that random assignment worked as expected.

APPENDIX B

SUBJECTIVE ORGANIZATIONAL PERFORMANCE RATINGS

As recommended by Richard et al. (2009), we re-ran our test of Hypothesis 2 (i.e., the bottom-up effect of emergent leadership on organizational performance) with an alternative performance measurement. Specifically, given that objective performance information was available for only 109 of the 144 firms in our sample, we additionally obtained top-management team (TMT) ratings (Richard et al., 2009) to mitigate potential concerns over missing data (Schafer & Graham, 2002). In line with Combs et al. (2005), we asked TMT members to rate four items pertaining to the firm's organizational performance (i.e., financial situation, return on investment) and operational performance (i.e., employee productivity, efficiency of business procedures). Following Rogers and Wright (1998; see also Wall et al., 2004), we benchmarked the

TABLE B1 Results based on subjective organizational performance ratings.

Variable	TMT-rated organizational performance	
	Model 1	Model 2
Intercept	5.60*** (0.07)	5.55*** (0.08)
Organizational decentralization	0.18* (0.09)	0.16 (0.11)
Emergent leadership	0.61* (0.24)	0.70* (0.30)
Service industry dummy		0.28 (0.21)
Finance and insurance industry dummy		0.16 (0.25)
Trade industry dummy		0.17 (0.22)
Firm age		0.00 (0.00)
Firm size		-0.08 (0.28)
Organizational formalization		0.11 (0.10)
Participatory HR practices		-0.00 (0.00)
R ²	0.09	0.11
F-statistic	6.02**	1.05

Note: Organizational-level values for emergent leadership were estimated using the procedures by Croon and van Veldhoven (2007).

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

executives' ratings by asking them to assess organizational performance relative to the performance of their direct industry rivals on a 7-point response scale (1 = "much worse"; 7 = "much better"). In total, we received TMT ratings for 124 firms in our sample, increasing available performance information by 14%. As shown in Table B1, emergent leadership significantly predicted TMT-rated organizational performance in models excluding ($B = 0.61, SE = 0.24, p < 0.05$) and including control variables ($B = 0.70, SE = 0.30, p < 0.05$), thus lending robust support to our findings and conclusions.

APPENDIX C

TEST OF HYPOTHESIS 1 USING CLUSTER-ROBUST SEs

We conducted an alternative test of Hypothesis 1 and examined the interaction between organizational decentralization and supervisor empowering leadership on employee emergent leadership in an individual-level regression model. For organizational decentralization, firm scores were assigned to each individual employee. To account for employees' nesting in firms, we computed cluster-robust SEs following the procedures outlined by McNeish et al. (2017). These analyses were run in R using the "lm_robust" function within the "estimatr" package (Blair et al., 2018). As shown in Table C1, we found a significant interaction term in models excluding ($\gamma = 0.09; SE = 0.04; p < 0.05$) and including control variables ($\gamma = 0.12; SE = 0.06; p < 0.05$), and coefficient estimates were virtually identical to our multilevel procedures (see Table 2 in the main manuscript). Together, these results provide robust support to Hypothesis 1.

TABLE C1 Results for the cross-level interaction (based on cluster-robust SEs).

Variable	Emergent leadership	
	Model 1	Model 2
Intercept	2.99*** (0.02)	2.99*** (0.03)
Organizational decentralization (DEC)	0.11** (0.03)	0.09* (0.04)
Empowering leadership (EMP)	0.38*** (0.02)	0.40*** (0.03)
DEC × EMP	0.09** (0.03)	0.15** (0.05)
Gender (male = 1, female = 0)		0.32*** (0.04)
Age		-0.01*** (0.00)
Tenure		0.01* (0.00)
Extraversion		0.30*** (0.04)
R ²	0.09	0.13
F-statistic	118.97***	58.93***

Note: $N = 5807$ employees from 144 organizations. Cluster-robust SEs are shown in parentheses. For organizational decentralization, firm scores were assigned to each individual employee. Due to missing data for control variables, the sample size for the model including controls was reduced to 2765 employees from 143 organizations.

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.