

Beyond the Emptiness Machine: New Directions for Leadership Research in Digital and AI-Driven Work Contexts

Fabiola H. Gerpott¹ , Birgit Schyns² 

[1] *WHU – Otto Beisheim School of Management, Düsseldorf, Germany.* [2] *NEOMA Business School, Reims, France.*

Research for People in Organizations, 2025, Vol. 1, Article e16597, <https://doi.org/10.5964/rpio.16597>

Received: 2025-01-08 • **Accepted:** 2025-04-03 • **Published (VoR):** 2025-09-09

Handling Editor: Vera Hagemann, University of Bremen, Bremen, Germany

Corresponding Author: Fabiola H. Gerpott, Chair of Leadership, WHU – Otto Beisheim School of Management Department, Erkrather Strasse 224a, 40233 Düsseldorf, Germany. Email: E-mail: fabiola.gerpott@whu.edu

Abstract

In an era where many individuals have transitioned to hybrid or fully remote work models, often supported or managed by artificial intelligence (AI), and confronted with a seemingly endless stream of tasks, there is a growing fear of being consumed by the “emptiness machine” – a metaphor for the hollow substitute technology creates in place of rich human connections essential for experiencing social influence. These shifts in work design have important implications for leadership: While virtual communication and AI can enhance autonomy and efficiency, they may also weaken relational energy – the “social glue” that supports social influence – potentially contributing to a growing sense of workplace loneliness. Consistently considering contrasting aspects, we examine two key work design shifts that reshape leadership: (1) the structural changes brought by hybrid and remote work models, and (2) the content-related shifts in leadership tasks driven by the transformative impact of AI. By offering concrete research questions in these areas and outlining practical implications, we aim to inspire a more holistic understanding of leadership in a technologically transformed world.

Keywords

leadership, AI, work design, future research agenda



Contribution for People

Background

We offer new directions for leadership research by calling for greater attention to how technological shifts — particularly hybrid work and artificial intelligence (AI) — reshape the way leaders work.

Why was this study done?

In public discourse, concerns have emerged about the hollowing out of meaningful human connection through digital substitutes — an idea vividly captured in the metaphor of the “emptiness machine,” popularized by a song from Linkin Park. Yet, despite this growing awareness outside academia, leadership research has remained focused on how leaders shape others’ work.

What did the researchers do and find?

We shift the lens to a less explored but equally important question: How are these technological changes transforming the structure and content of leaders’ own work design? This question is timely, as leadership roles increasingly face a supply problem with fewer individuals available and willing to assume formal leadership positions. To address this, we argue that scholars must help advance understanding of leaders’ work in two ways. First, structurally — by studying how leaders can be equipped with physical, digital, and psychological resources needed to manage the increased demands of hybrid work. Second, in terms of content — by rethinking what leadership should entail in AI-supported work settings.

What do these findings mean?

A key lesson from the shift to remote work during the COVID-19 pandemic is that reactive, short-term decisions have lasting consequences. Many organizations introduced remote work out of necessity and only later formalized policies, often with insufficient attention to leadership implications. With AI, the pace of change is slower, offering a unique opportunity to proactively design leadership roles for a more human-centered future.

“Every scientific ‘fulfillment’ means new ‘questions’; it asks to be ‘surpassed’ and made obsolete. [...] We cannot work without hoping that others will get further than we do. Such progress is in principle infinite.” — Max Weber, 2004, 272ff.

Throughout human evolution and civilization, leadership — understood as a social influence process in which certain individuals motivate and enable others to work toward collective goals (Antonakis & Day, 2018; Yukl, 2002) — has been universally recognized as essential for the functioning of society. This consensus is reflected in practice, where vast resources are dedicated to leadership training and development (Day et al., 2014), and paralleled in academic research, where leadership scholars continuously strive to develop rigorous frameworks, taxonomies, and methodologies to better understand and enhance leadership effectiveness across contexts (Antonakis & Day, 2018; Banks, 2023).

Despite this progress, the leadership literature, like all scientific fields, is continuously engaged in debate — exploring blind spots, examining potential methodological missteps, and questioning the direction the field should take. As the opening quote by Max Weber illustrates, this ongoing process is part of the natural evolution of science, where new inquiries and perspectives continuously emerge over time. When writing about the future of leadership research, we are joining this never-ending stream of debate. For example, contemporary discussions emphasize the need for greater methodological rigor in leadership research (Antonakis, 2017; Banks, 2023; Fischer & Sitkin, 2023; Wulff et al., 2023), a stronger focus on actual leadership behavior (e.g., Banks et al., 2023; Fischer et al., 2023; Hemshorn de Sanchez et al., 2022), and a more nuanced, less idealized perspective on leadership (Alvesson, 2020; Haslam et al., 2024; McBride et al., 2024).

Departing from these debates, we aim to provide fresh impulses for leadership research and practice by focusing on two areas that we believe hold significant promise for advancing leadership research: (1) the shift toward hybrid and remote work environments, and (2) the transformative impact of Artificial Intelligence (AI).

Understanding what research is needed to advance leadership theory in hybrid and AI-driven contexts is not only crucial for updating existing conceptual frameworks but also directly linked to at least two practical challenges. First, examining how these two shifts reshape work design in leadership is particularly relevant given the widely discussed fear of being consumed by the “emptiness machine”. This metaphor drawn from a song by the band Linkin Park that inspired our paper’s title, captures the hollow substitutes technology creates for rich human interactions, a shift that research has shown can lead individuals to adopt less pro-social and more task-focused thinking (Siampou et al., 2014; Tang et al., 2023; Wang et al., 2021). In line with these public concerns and initial scholarly evidence, we see a critical leadership challenge in these technological shifts: while virtual communication and AI enhance autonomy and efficiency, they may also drain relational energy, increasing the risk of employee (Tang et al., 2023) and leader loneliness (Lam et al., 2024). Second, the diminishing “social glue” that facilitates social influence is emerging alongside shifting demographics, evolving professional aspirations,

and fundamental political as well as societal challenges, making the question of who will step into leadership roles increasingly urgent. As many established leaders approach retirement, organizations face a looming void in leadership positions that is amplified by a shrinking workforce in many Western societies (Eurostat, 2023; McKinsey, 2023). Moreover, expectations of those being led are also changing. Some have described this as an “age of entitlement” (Twenge & Campbell, 2009), while others, less critical, still observe that younger individuals entering the labor market allegedly have heightened expectations of leadership while showing less willingness to embrace the complexity and accountability of formal leadership roles. To illustrate, a representative survey by Boston Consulting Group (2021) found that only 14% of non-leaders across four European countries would consider stepping into formal leadership roles. While survey-based data have inherent limitations (Fischer et al., 2023), these figures underscore the pressing need to explore how organizations might support and motivate the next generation of leaders.

In this paper, we derive ideas on how to enhance the appeal of leadership to a diverse group of individuals, arguing that this requires a work design approach that offers the support needed to navigate contemporary leadership challenges. On the one hand, such support involves structural changes (i.e., how and where leaders perform their roles), which we address in the first part of the manuscript. On the other hand, there is also a need to think about content-related changes (i.e., what leaders do), explored in the subsequent section on the transformative impact of AI on leadership.

(Re-)Designing Work in Digital Contexts to Support Leadership

Supportive work design for leadership involves structuring roles, tasks, and the work environment in a way that allows leaders to focus on leadership rather than being consumed by operational tasks. This approach not only motivates individuals to take on leadership roles but also supports their retention, enhances their effectiveness, and promotes their well-being – all while aligning with organizational goals. Although the importance of well-designed work to facilitate effective social influence has been recognized (Humphrey et al., 2007), its role in directly supporting leaders remains under-explored. For example, in their review of 100 years of work design research, Parker and colleagues (2017) considered work design as an outcome of top-down forces such as leadership, but not as an input shaping leadership itself. This gap persists in contemporary work design literature, which increasingly focuses on bottom-up approaches – where individuals actively reshape their roles, tasks, and work environments to suit their needs – yet rarely addresses how such activities influence leaders or leadership. Bottom-up work design includes activities such as job crafting (i.e., “the physical and cognitive changes individuals make in the task or relational boundaries of their work”, Wrzesniewski & Dutton, 2001, p. 39) or negotiating idiosyncratic deals (so-called i-deals,

i.e., personalized work arrangements created for mutual benefit between individuals and employers; Rousseau et al., 2006). Paralleling the top-down perspective, most research has focused on how leaders impact employees’ bottom-up work design, while largely neglecting its potential impact on leaders themselves.

Going forward, the evolving nature of work models – particularly the rise of hybrid (combining remote and office work) and fully virtual arrangements – highlights the need for fresh insights into how work design can be adapted to support effective social influence (Schwarzmueller et al., 2018; Tigre et al., 2023). Table 1 presents exemplary research questions structured around three areas: the effects of others’ work design on leader work demands, characteristics of remote work, and mechanisms with related interventions. In the following three sections, we elaborate on each of these areas in greater detail.

Table 1

Exemplary Future Research Suggestions to Better Understand How Work Design Needs to Be Updated to Support Leadership in Changing Work Environments

Theme	Exemplary Questions
Others’ Work Design	
The impact of employers’ top-down changes in work characteristics (e.g., hybrid/remote work policies) on leader work demands.	<ul style="list-style-type: none"> • How do configurations/profiles of work characteristics change for leaders when switching to remote/hybrid work? • How do mandatory return-to-office policies (compared to hybrid or fully remote policies) affect leaders’ role strain, both in terms of the demands of communicating and implementing these changes – particularly when faced with employee resistance – and the challenges of leading effectively within these evolving work structures?
The impact of employees’ bottom-down work design (e.g., job crafting, i-deals) on leader work demands.	<ul style="list-style-type: none"> • How do leaders manage the balance between fostering autonomy and ensuring alignment with organizational goals in response to employees’ job crafting? • What strategies can leaders use to provide team members with diverse i-deals while maintaining fairness and team identity?
Characteristics of Remote Work	
Designing the physical characteristics of remote work to support leadership.	<ul style="list-style-type: none"> • Which design features in a leader’s remote work set-up are essential to be perceived favorably and maximize social influence? • How do environment-based cues influence leadership effectiveness in repeated virtual interactions over time?
Designing the digital characteristics of remote work to support leadership.	<ul style="list-style-type: none"> • What are key design features of digital work environments that support leaders in maintaining team cohesion and identification? • How do leaders interpret and respond to backchannel communication during video calls, and what strategies enhance their ability to manage these parallel conversations effectively?

Theme	Exemplary Questions
Mechanisms and Interventions	<ul style="list-style-type: none"> • Which alternative mechanisms (e.g., team coordination processes; loneliness) become relevant for explaining the link between changing work characteristics and leader effectiveness?? • How can interventions (e.g., different forms of leader-facilitated shared experiences such as virtual vs. face-to-face team-building activities) shape relational mechanisms that link employees' remote work characteristics with performance outcomes?

Others' Work Design: Effects of Employers' Top-Down and Employees' Bottom-Up Changes on Leader Work Demands

First, in terms of advancing our understanding of the *relationship between changes in the work environment and leader outcomes*, we call for more research on both top-down and bottom-up work design.

Top-down changes include aspects such as a company-wide introduction of return-to-office policies (e.g., Amazon, cf. Jassy, 2024) or, conversely, the adoption of virtual-first strategies (e.g., Dropbox, cf. Bersin, 2024). Such organizational shifts pose a dual challenge for leaders: First, leaders — unless they are at the very top — often bear the responsibility of communicating these changes and managing subordinates' potential dissatisfaction. They must “make them work” in practice, which includes reconciling organizational mandates with employee expectations. Second, the work design itself creates new demands for leaders. For instance, hybrid work environments have introduced novel coordination challenges, requiring leaders to balance fairness, performance, and engagement across in-person, remote, and hybrid teams. These shifts heighten the importance of seamless communication (Bartsch et al., 2021) and necessitate additional technological competencies (Tigre et al., 2023). To address this two-fold challenge, future studies could investigate how hybrid or remote work policies influence both the demands placed on leaders to communicate and implement these changes — often facing resistance or dissatisfaction from employees (van der Velde & Gerpott, 2023) — and the specific challenges leaders encounter as they navigate and lead effectively within these evolving structures, particularly in comparison to how such policies affect the work demands of employees (cf. Lamovšek et al., 2025).

Beyond top-down changes, the dynamics of bottom-up work design also merit further exploration (Parker et al., 2025). Remote and hybrid work arrangements have amplified bottom-up work design dynamics by increasing employees' autonomy to proactively shape when, where, and how they do their jobs (Wessels et al., 2019). Yet, the frequency and type of employees' job crafting behaviors could inadvertently reshape the leader's own work design. For example, employees who frequently craft their tasks to maximize flexibility might create ripple effects, reducing the leader's autonomy by requiring ad-

ditional coordination efforts or adjusting their own task focus. Conversely, employees who craft their roles in ways that reduce their dependency on the leader might afford leaders greater autonomy or free them to concentrate on more strategic responsibilities. Moreover, a pivotal yet underexplored issue relates to how leaders navigate the balance between fostering autonomy through employees' bottom-up work design (e.g., job crafting) and ensuring alignment with their organizational goals remains a pivotal yet underexplored issue. Similarly, understanding the strategies leaders employ to provide diverse i-deals to team members while ensuring fairness and fostering a shared team identity could provide valuable insights into the increasing complexity of leadership roles.

Characteristics of Remote Work: Understanding How Physical and Digital Attributes Support Leader Effectiveness

Second, we notice that in discussions about leadership in remote work settings, the *design of physical and digital characteristics of leaders' work environment* has so far been underexplored in its importance for leaders' ability to influence others effectively.

Regarding the physical aspect, this oversight is surprising, given the substantial body of research demonstrating the impact of physical cues on leadership perceptions, particularly in shaping charismatic signals (for an overview, see Reh et al., 2017). Rooted in the concept of leader embodiment, this research highlights how physical cues, whether stemming from the leader's bodily cues or their immediate surroundings, can enhance or undermine others' perceptions of leadership effectiveness. Adding nuance to the debate, recent research additionally showed that physical environments that evoke awe in followers (e.g., grand lecture halls, stunning natural landscapes, or office spaces with expansive views) can amplify charisma attributions particularly for leaders who are not already known to be charismatic (McGuire et al., 2025).

While these insights have traditionally focused on physical co-presence, initial studies have begun to extend these ideas into virtual contexts but much remains to be explored. Offering a starting point, recent work on environment-based social class signals investigated how physical environments, as conveyed through videoconferencing, influence perceptions of a leader's status and competence (Loignon et al., 2024). This research found that virtual backgrounds – ranging from authentic home settings to carefully curated or even fake ones – affect judgments of leadership competence and authority. While participants' perceptions were influenced even when they knew the backgrounds were artificial, other scholars (Hardin et al., 2025) found that employees were more motivated to invest in their relationship with a coworker when they perceived the disclosure of the coworker's private environment in a digital work setting as unintentional rather than intentional. This raises an interesting question: Could similar dynamics apply to leaders, and how might these two mechanisms together shape leader effectiveness? Curated status cues might increase employees' perceptions of their leader's competence and authority, while unintentional glimpses into private settings may

enhance perceived authenticity and trust, potentially jointly influencing key leadership outcomes. Accordingly, future research should explore whether leaders benefit from such disclosures in ways similar to coworkers, or if these glimpses must be complemented by competence signals to meet the unique expectations of leadership roles (cf. implicit leadership theories, Eden & Leviatan, 1975; Schyns et al., 2011). Based on the findings, scholars could then derive valuable practical implications such as how leaders can strategically design their remote work setups to be perceived favorably and maximize social influence.

Such research could be complemented by studies that focus on the broader implications of digital characteristics of remote work environments for leadership tasks. To begin with, a critical area for investigation is identifying design features of digital work environments that help leaders maintain team cohesion and identification – two challenges that have consistently been identified as central in increasingly virtual work settings (Krug et al., 2021; Maurer et al., 2022). For example, in virtual meetings, team members may be more likely than in face-to-face settings to engage in backchannel communication – a form of multi-communication where additional interaction streams run parallel to the primary discussion. This can include using instant messaging services like WhatsApp during a Zoom meeting to exchange messages with selected colleagues, which can have different purposes (e.g., supporting each other and fostering a sense of connection or task-focused reasons; Mu et al., 2024; Stephens, 2012). As research (Sarkar et al., 2021) with Microsoft employees during the COVID-19 pandemic showed, on the one hand, such parallel chats can facilitate coordination around shared resources and enhance a sense of belonging for those who are a part of them. However, they can also be distracting, overwhelming, and create information asymmetries, potentially excluding those not involved in these side conversations. Understanding how to effectively manage these parallel interactions could offer valuable insights into how leaders can foster inclusive digital communication environments while ensuring that informal exchanges enhance rather than hinder team cohesion and collaboration.

Mechanisms and Interventions

Third, we also see opportunities to update or extend existing leadership theories by *considering alternative mechanisms and leader-facilitated shared experiences* that may gain relevance in digital or hybrid work design contexts. To illustrate what we mean, consider the realm of gig work, where scholars have critically discussed and then affirmed that the construct of “organizational citizenship behavior” persists despite the absence of direct colleagues and ongoing employment relationships (Moorman et al., 2024). Yet, the conceptual mechanisms underpinning this behavior in gig work contexts likely differ from those in more traditional work environments (Moorman et al., 2024). Similarly, structural changes in a leader’s work design may influence leader effectiveness by amplifying the importance of task-related and social dynamics.

Research found that changes in work characteristics toward more virtuality can influence task-related shifts in team coordination processes (Bartsch et al., 2021; Maurer et al., 2022). As teams increasingly operate outside of co-located work, traditional coordination mechanisms (e.g., spontaneous in-person discussions or informal check-ins) are replaced by more structured, technology-mediated processes such as real-time collaboration tools to maintain workflow synchronization (Maurer et al., 2022). In that regard, Bartsch et al. (2021) reported that virtuality amplifies the need for explicit task structuring to ensure smooth coordination. On the other hand, these structural changes may also create space for shared task-oriented leadership. That is, if leaders actively encourage team members to take on leadership in coordinating task execution, this can positively influence employees' perceived productivity and satisfaction with their leader (Mayer et al., 2023), who in turn may share even more leadership with team members (Klasmeier et al., 2025).

In terms of social dynamics, research on remote work highlights perceived isolation as a central challenge (Gajendran et al., 2024), which may increase leaders' job demands if they take a more active role in counteracting employees' loneliness. In this regard, it would be interesting to study interventions such as leader-facilitated shared experiences (e.g., virtual vs. face-to-face team-building activities) that could influence relational mechanisms such as strengthening trust and reducing loneliness, which are essential for bridging employees' remote work characteristics with performance outcomes (Golden et al., 2023; Wang et al., 2021). At the same time, leaders themselves may also be at risk of loneliness through two ways: first, leaders lose spontaneous peer support, making it harder to share challenges and seek advice; second, digital communication can make leadership feel more transactional, limiting the depth of relationships with employees (Lam et al., 2024). As such, research should explore how to mitigate leader loneliness in remote work settings, including interventions that foster peer connection among leaders, facilitate informal networking opportunities, or integrate relational support structures into leadership development programs. In sum, initial evidence indicates that both employee and leader loneliness may act as crucial mediator in the relationship between remote work design characteristics and leadership effectiveness. Yet, while these examples for mediators are largely empirically driven, we encourage scholars to also think broadly about overlooked theoretical perspectives to pursue research that examines a wider range of alternative mechanisms in hybrid or remote work contexts.

Investigating How AI-Driven Changes Will Redefine Leadership

Next, we shift our focus to AI as a key element of work design, given its profound impact on structuring work for leaders and shaping how leadership is performed and experienced within organizations. Right now, AI is already capable of performing traditional management tasks such as monitoring (Parent-Rocheleau & Parker, 2021). Yet,

although examples abound – such as Uber drivers being managed by algorithms in the gig economy (Rahman, 2024) – human managers in most organizations remain responsible for “real” task-, relations-, and change-oriented leadership functions, even as the shift to remote work increasingly requires these functions to be enacted through digital channels (bringing with it the work design implications discussed in the previous section).

AI Complementing Leadership Functions

While not yet the case, the human prerogative over three key leadership functions – task-, relations-, and change-oriented roles – is likely to diminish (Van Quaquebeke & Gerpott, 2023). In the new workplace reality, AI will first steadily *complement* an increasing number of leadership functions. Since communication lies at the core of organizational coordination, one task that remains for human leaders will then be navigating the challenges introduced by AI copiloting (Van Quaquebeke & Gerpott, 2024), which particularly involves the augmentation of workplace interactions through generative AI tools that combine Large Language Models with conversational interfaces. While AI offers significant potential to enhance communication quality at work, it also risks undermining trust and respect if not managed responsibly. Imagine writing a well-crafted email sharing personal issues with your leader, only to receive an obviously AI-generated response in return – how would that make you feel? Probably not too great; you might feel objectified and not seen (cf. Granulo et al., 2024). With these risks in mind, we suggest that the increasing adoption of AI copiloting means that leaders will soon play a crucial role in guiding employees to use it effectively, ensuring that human agency remains central.

To shape this emerging future, we call for both descriptive and explanatory research. First, we encourage leadership scholars to conduct field studies that explore how AI copiloting is already deployed in contemporary organizations and which leader experiences exist in using such systems. For example, just as Dell’Acqua et al. (2025) have shown how generative AI as a “cybernetic teammate” reshapes team collaboration by influencing expertise integration, emotional engagement, and performance, we see a need to explore the implications for those who lead such human-AI constellations. That is, which new challenges and opportunities arise for leaders who must coordinate and legitimize AI-supported work? For example, do leaders actively signal their involvement in AI-supported processes to ensure that employees perceive AI as a tool guided by human judgment rather than as an autonomous agent? Are they transparently communicating the rationale behind AI-generated decisions or embedding themselves in interactions that AI initiates? Assuming not all leaders are equally motivated or equipped to engage in this new orchestration role, future research could even ask how important the human leader’s presence really is (i.e., would the outcome differ if the human leader had not been involved at all?).

Second, we also encourage experimental studies to better understand how AI copilotting can be designed and utilized in ways that help leaders and employees preserve the relational and respectful aspects of workplace communication. Such research could explore, for instance, the impact of customization tools in generative AI — such as pre-prompt settings that allow leaders to adjust the tone, formality, or complexity of AI-generated messages — on employees' perceptions of their leaders. Moreover, experimental designs could manipulate the frequency and circumstances of human interactions with leaders to determine how much “real” contact is necessary to mitigate the AI objectification effect and sustain trust in leader-follower relationships (Granulo et al., 2024).

AI Taking Over Leadership Functions

In the distant future, we anticipate that AI will take over core leadership functions (i.e., not only task-related guidance but also relation- and change-oriented leadership) as it becomes increasingly adept at addressing employees' fundamental psychological needs for autonomy, competence, and relatedness (Van Quaquebeke & Gerpott, 2023). Broadly speaking, the ongoing debate among scholars and practitioners responds to this anticipated shift from two distinct perspectives: an optimistic view and a pessimistic one.

To put it bluntly, the pessimistic perspective foresees a descent into the “emptiness machine,” where AI-driven technological advancements fail to improve working conditions. Instead, the advent of AI drives higher expectations for productivity without necessarily enhancing employee well-being (e.g., Lindebaum & Langer, 2024). This aligns with the productivity paradox (Brynjolfsson et al., 2019), where technological improvements do not yield proportional gains in productivity, as well as rebound effects, where efficiency gains lead to increased usage or demands, ultimately negating the intended benefits (Ertel & Bonenberger, 2025). While this latter perspective may be relatively new to leadership scholars — who have predominantly understood rebound effects in terms of how leaders rebound in their careers after forced breaks or significant life events (e.g., Dotlich et al., 2011; Sonnenfeld, 2007) — we see this as suggesting promising avenues for future research. Specifically, scholars could explore how rebound effects manifest when AI copilotting amplifies certain leadership tasks, thereby potentially fostering over-reliance on AI (Buçinca et al., 2021; Klingbeil et al., 2024) or challenging leaders to prevent a decline in the average creativity of their teams (Doshi & Hauser, 2024). Another promising area pertains to exploring the unintended consequences of AI-driven efficiency on leader-employee dynamics. For example, does the support through AI raise performance expectations for leaders themselves and, in turn, for their employees (i.e., exacerbating collective experiences of burnout)? Or are there also positive aspects (e.g., leaders have more time to engage in strategic vision-related activities, thus allowing them to experience more sensemaking)? This leads us to the contrasting positive per-

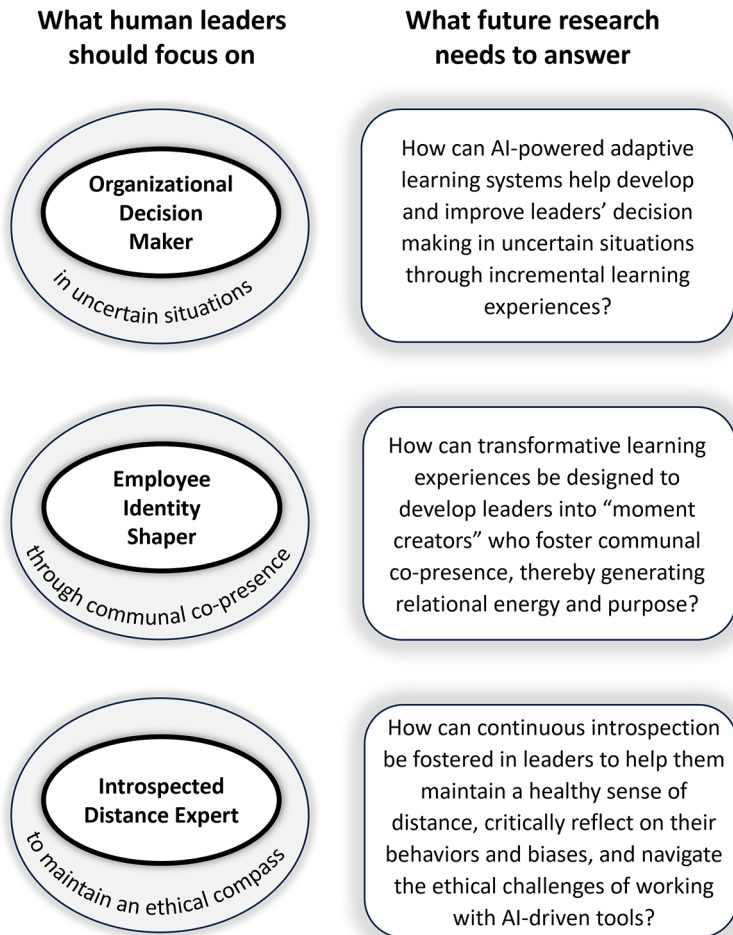
spective, which offers a more hopeful outlook on the implications of AI increasingly taking over leadership functions.

The optimistic view suggests that AI's integration into leadership could, from a pragmatic perspective, help address current challenges, such as the previously discussed shortage of suitable and willing individuals to assume leadership roles, as well as the reality that many human leaders fail to act as change-driving forces and instead exhibit poor leadership (Breevaart et al., 2024). Studies indeed repeatedly show that individuals react more positively toward AI as compared to human leadership — as long as they are not aware that it is an AI (Stock-Homburg, 2025; Yin et al., 2024). While it may seem tempting to withhold this information, doing so is not advisable, as trust takes time to build but can be lost instantly. However, similar to previous technological advancements, initial AI aversion will likely diminish as employees gradually become accustomed to interacting with AI (Van Quaquebeke & Gerpott, 2024).

Beyond these functional considerations, by taking over routine tasks, the integration of AI into leadership may indirectly prompt human leaders to rethink their roles. Traditionally, as leaders climb the career ladder, they tend to lean heavily toward operational execution rather than “real” leadership tasks that focus on employee engagement (DDI, 2016). Against this backdrop, the anticipated shift driven by AI could be interpreted as an opportunity to rediscover the original essence of leadership, such that AI, by automating routine and execution tasks, could free leaders to embrace this original understanding of leadership. We propose, as depicted on the left side of Figure 1, that this freedom challenges human leaders to concentrate on three areas (cf. Gerpott & Jansen, 2025): 1. Acting as decision-makers in situations of uncertainty (i.e., organizational level), 2. shaping employees' identity through communal co-presence (i.e., interpersonal level), and 3. mastering the art of maintaining appropriate distance toward themselves and AI (i.e., intrapersonal level).

Figure 1

Three Leadership Challenges in the Age of AI and Directions for Future Research



Each of these areas implies, in our view, the need for research on future leadership development (see the right-hand side of [Figure 1](#)). Assuming that everything capable of optimization will be optimized, we anticipate that leadership development programs will increasingly leverage AI to personalize learning experiences. While some express concerns that such a reliance on AI could lead to deskilling (Lindebaum & Ramirez, 2024), we contend that a critical differentiation of two qualitatively different forms of learning can bring greater nuance to the debate. Particularly, leadership development encompasses varying depths of learning, which can be broadly categorized as incremen-

tal learning and transformative learning. *Incremental learning* focuses on refining or adjusting specific leadership skills and techniques, enabling leaders to improve within established modes of work and thinking. In contrast, *transformative learning* represents a deeper process, requiring leaders to fundamentally redefine their sense of self and approach to leadership by critically reflecting on ingrained habits of mind through the view and emotional resonance of others (Kim et al., 2023). While AI has significant potential to enhance incremental learning, it is less suited for fostering transformative learning processes (Kerschreiter & Gerpott, 2024).

Developing Leaders Into Organizational Decision Makers

Considering the increasingly important role of leaders as decision makers in situations of uncertainty, one challenge for future research is understanding how AI can effectively support learning in this domain. Decision-making in uncertain situations often relies on pattern recognition, risk assessment, and iterative improvements based on feedback – hallmarks of incremental learning. AI-based adaptive learning systems could play a pivotal role in this regard by providing real-time feedback on simulated organizational decision-making tasks that are tailored to the specific challenges faced by each leader (Buçinca et al., 2024). It would be valuable to conduct intervention studies that empirically assess how such AI-driven incremental learning experiences impact leaders' effectiveness – do they truly enhance decision-making, or do they inadvertently lead to overreliance on AI (Ahmad et al., 2023)?

Developing Leaders Into Employee Identity Shapers

When AI takes over more operational leadership tasks, this shift could encourage leaders to view their role as a context-sensitive craft, in which they help employees refine their work-related identity through communal co-presence – a concept centered on “valuing and prioritizing social relationships and interconnectedness by being deliberate and intentional about the value and importance of physically embedded (co-located), high-quality human interactions” (Gonzalez et al., 2024, p. 593). This entails intentionally designing meaningful social interactions in a physical space, which contrasts with the increasing technologization. For example, leaders might incorporate informal rituals such as weekly team lunches on office days or schedule unscripted, face-to-face coffee meetings. Importantly, unlike mere co-location, communal co-presence requires genuine engagement, where leaders are fully present, responsive, and attuned to their employees' needs. Understanding how leaders can effectively cultivate communal co-presence presents a valuable avenue for future research, particularly in contexts where leaders are increasingly supported by AI (Mäkelä & Stephany, 2025).

We anticipate that this is an area where transformative learning will be particularly crucial. Considering that a core task of future leaders will be to help employees refine their work-related identity by fostering experiences of communal co-presence that

generate relational energy and purpose, they may profit from learning through new interdisciplinary formats such as working with artists or event planners to find out how they manage the emotional journeys of their audiences. Moreover, future research on how leaders can more effectively co-create a shared sense of identity in AI-driven work environments could build on and expand the rich literature on leadership training that focuses on identity-related processes. For example, the 5R Identity Leadership Training (Haslam et al., 2017) provides a structured framework to develop identity leadership skills, guiding leaders through five phases: Readyng, Reflecting, Representing, Realizing, and Reporting. This approach moves beyond traditional leader-centric development and instead emphasizes team-level identity building. While research has shown that leaders who complete a multi-module online training — which incorporates interactive activities with their team throughout the modules — foster greater team engagement and a sense of “teamfulness” (Haslam et al., 2023), it remains an open question how these activities will unfold when one or more team members are AI colleagues.

Developing Leaders Into Introspected Distance Experts

As indicated at the bottom of Figure 1, we expect that in a constantly connected world, leaders more than ever need to develop the skills of an “introspective distance expert.” By this, we mean that leaders must cultivate the ability to maintain a healthy sense of distance, particularly in workplaces increasingly shaped by interactions with AI. This self-awareness is crucial for leaders to truly engage with their employees rather than relying on standardized approaches or preconceived biases. That is, introspection (also referred to as meta-cognitive reflection) allows leaders to critically reflect on their behaviors, stereotypes, and tendencies, ensuring that their actions align with the relational depth and ethical grounding needed to address employees’ needs effectively (Wölk et al., 2025). We anticipate that the development of such meta-cognitive skills is closely linked to transformative learning experiences and encourage future research to examine how such meta-cognitive “pause” moments can be effectively cultivated in leaders operating in an ever faster and digitally driven work environment.

Practical Implications

First, as a straightforward implication of our paper, addressing the challenge that fewer people are available and may want to take on leadership requires making leadership roles more attractive through a work design approach that provides the necessary support to navigate contemporary leadership challenges. Here, we emphasize two particularly pressing challenges: the structural changes driven by remote work and the anticipated content-related shifts resulting from AI. Regarding remote work, organizations are well advised to recognize that increased employee autonomy can place additional burdens on leaders. To mitigate this, leaders should be supported with additional resources, includ-

ing the design of both physical and digital aspects of their remote work environments, as well as access to psychological support.

Regarding AI, the rapid expansion of remote work during the COVID-19 pandemic demonstrated how external shocks can accelerate workplace transformations and force leaders to act, often before organizations have the necessary policies or strategies in place. Initially, many firms embraced remote work out of necessity, only to later introduce structured remote work policies. The fact that an increasing number of organizations have more recently once again adjusted their policies to push for a return to office work (*Business Insider*, 2025) — despite the potential detrimental consequences for leaders facing employee backlash — suggests that these policies were not always designed with long-term implications in mind (*Chamorro-Premuzic*, 2025). A concrete implication for organizations is thus to apply this lesson to AI adoption by proactively considering potential leadership consequences before integrating AI into work design, ensuring they are better positioned to prevent unintended negative outcomes. Unlike remote work, where external pressures drove rapid adoption, AI-driven changes in work design are emerging more gradually, offering organizations an opportunity to develop proactive rather than reactive strategies. As we have outlined in this paper, a key challenge is that premature or excessive reliance on AI in daily work tasks and leadership may erode relational aspects of work (*Siampou et al.*, 2014; *Tang et al.*, 2023; *Van Quaquebeke & Gerpott*, 2024). If organizations fail to consider these implications in advance, they may later struggle to rebuild human-centered leadership practices, just as many leaders now face difficulties in re-establishing in-person collaboration after a considerable period of remote work.

Conclusion

In an era increasingly shaped by digital transformation and AI, the metaphor of the “emptiness machine” serves as a cautionary reminder of the risks posed by hollow technological substitutes. By proposing future research directions focused on structural changes in work design and the transformative impact of AI, we aim to combat this emptiness, advocating for a leadership research agenda that embraces complexity and contextual richness. As Max Weber reminds us, every scientific discovery raises new questions and invites future inquiry. In this spirit, we view the research directions proposed in this article not as definitive avenues but as stepping stones for others to refine and surpass, contributing to the infinite progress of leadership research.

Funding: The authors have no funding to report.

Acknowledgments: The authors have no additional (i.e., non-financial) support to report.

Competing Interests: The authors have declared that no competing interests exist.

Author Contributions: *Fabiola H. Gerpott:* Writing - original draft. *Birgit Schyns:* Writing - review & editing.

References

- Ahmad, S. F., Han, H., Alam, M. M., Rehmat, M., Irshad, M., Arraño-Muñoz, M., & Ariza-Montes, A. (2023). Impact of artificial intelligence on human loss in decision making, laziness and safety in education. *Humanities & Social Sciences Communications*, *10*, Article 311. <https://doi.org/10.1057/s41599-023-01787-8>
- Alvesson, M. (2020). Upbeat leadership: A recipe for – or against – “successful” leadership studies. *Leadership Quarterly*, *31*(6), Article 101439. <https://doi.org/10.1016/j.leafqua.2020.101439>
- Antonakis, J. (2017). On doing better science: From thrill of discovery to policy implications. *Leadership Quarterly*, *28*(1), 5–21. <https://doi.org/10.1016/j.leafqua.2017.01.006>
- Antonakis, J., & Day, D. V. (2018). Leadership: Past, present, and future. In J. Antonakis & D. V. Day (Eds.), *The nature of leadership* (3rd ed., pp. 3–26). SAGE Publications. <https://doi.org/10.4135/9781506395029.n1>
- Banks, G. C. (2023). Eight puzzles of leadership science. *Leadership Quarterly*, *34*(4), Article 101710. <https://doi.org/10.1016/j.leafqua.2023.101710>
- Banks, G. C., Woznyj, H. M., & Mansfield, C. A. (2023). Where is “behavior” in organizational behavior? A call for a revolution in leadership research and beyond. *Leadership Quarterly*, *34*(6), Article 101581. <https://doi.org/10.1016/j.leafqua.2021.101581>
- Bartsch, S., Weber, E., Büttgen, M., & Huber, A. (2021). Leadership matters in crisis-induced digital transformation: How to lead service employees effectively during the COVID-19 pandemic. *Journal of Service Management*, *32*(1), 71–85. <https://doi.org/10.1108/JOSM-05-2020-0160>
- Bersin, J. (2024, August 28). *With thoughtful design and culture, Dropbox proves remote work is a winner.* <https://joshbersin.com/2024/08/despite-your-fears-dropbox-proves-that-remote-work-is-a-winner/>
- Boston Consulting Group. (2021). *Human-centered leaders are the future of leadership*. BCG. <https://web-assets.bcg.com/b4/67/551c4d9340a78a15ad08db02cf15/bcg-humancenteredleadersarethefutureofleadership-20210204-vf.pdf>
- Breevaart, K., Schyns, B., & Neves, P. (2024). Destructive leadership: State of the art and future directions. In B. Schyns, P. Neves & K. Breevaart (Eds.), *Research handbook on destructive leadership: Forms, context, and boundary* (pp. 1–8). Edward Elgar Publishing.

- Brynjolfsson, E., Rock, D., & Syverson, C. (2019). Artificial intelligence and the modern productivity paradox. In A. Agrawal, J. Gans & A. Goldfarb (Eds.), *The economics of artificial intelligence: An agenda* (pp. 23–57). University of Chicago Press.
<https://doi.org/10.7208/chicago/9780226613475.003.0001>
- Buçinca, Z., Malaya, M. B., & Gajos, K. Z. (2021). To trust or to think: Cognitive forcing functions can reduce overreliance on AI in AI-assisted decision-making. *Proceedings of the ACM on Human-Computer Interaction*, 5(CSCW1), Article 188. <https://doi.org/10.1145/3449287>
- Buçinca, Z., Swaroop, S., Paluch, A. E., Doshi-Velez, F., & Gajos, K. Z. (2024). *Contrastive explanations that anticipate human misconceptions can improve human decision-making skills* (arXiv:2410.04253). arXiv Preprints. <https://arxiv.org/abs/2410.04253>
- Business Insider. (2025, February 20). *The list of major companies requiring employees to return to the office, from JPMorgan and TikTok to Amazon*.
<https://www.businessinsider.com/companies-requiring-return-to-office-rto-mandate>
- Chamorro-Premuzic, T. (2025). *The real reasons companies are forcing you back to the office*. Forbes.
<https://www.forbes.com/sites/tomaspremuzic/2025/02/28/the-real-reasons-companies-are-forcing-you-back-to-the-office/>
- Day, D. V., Fleenor, J. W., Atwater, L. E., Sturm, R. E., & McKee, R. A. (2014). Advances in leader and leadership development: A review of 25 years of research and theory. *Leadership Quarterly*, 25(1), 63–82. <https://doi.org/10.1016/j.leaqua.2013.11.004>
- DDI. (2016). *High-resolution leadership: A synthesis of 15,000 assessments into how leaders shape the business landscape*. Development Dimensions International.
<http://www.sheffield.co.nz/Portals/0/High%20Resolution%20Leadership%20DDI.pdf>
- Dell’Acqua, F., Ayoubi, C., Lifshitz-Assaf, H., Sadun, R., Mollick, E. R., Mollick, L., Han, Y., Goldman, J., Nair, H., Taub, S., & Lakhani, K. R. (2025). *The cybernetic teammate: A field experiment on generative AI reshaping teamwork and expertise* (Harvard Business Working Paper No. 25-043). Harvard Business School. <https://doi.org/10.2139/ssrn.5188231>
- Doshi, A. R., & Hauser, O. P. (2024). Generative AI enhances individual creativity but reduces the collective diversity of novel content. *Science Advances*, 10(28), Article eadn5290.
<https://doi.org/10.1126/sciadv.adn5290>
- Dotlich, D. L., Noel, J. L., & Walker, N. (2011). *Leadership passages: The personal and professional transitions that make or break a leader*. John Wiley & Sons.
- Eden, D., & Leviatan, U. (1975). Implicit leadership theory as a determinant of the factor structure underlying supervisory behavior scales. *Journal of Applied Psychology*, 60(6), 736–741.
<https://doi.org/10.1037/0021-9010.60.6.736>
- Ertel, W., & Bonenberger, C. (2025). Rebound effects caused by Artificial Intelligence and automation in private life and industry. *Sustainability*, 17(5), Article 1988.
<https://doi.org/10.3390/su17051988>
- Eurostat. (2023). *Population projections in the EU*. European Commission.
https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Population_projections_in_the_EU

- Fischer, T., Hambrick, D. C., Sajons, G. B., & Van Quaquebeke, N. (2023). Leadership science beyond questionnaires. *Leadership Quarterly*, 34(6), Article 101752. <https://doi.org/10.1016/j.leaqua.2023.101752>
- 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>
- Gajendran, R. S., Ponnappalli, A. R., Wang, C., & Javalagi, A. A. (2024). A dual pathway model of remote work intensity: A meta-analysis of its simultaneous positive and negative effects. *Personnel Psychology*, 77(4), 1351–1386. <https://doi.org/10.1111/peps.12641>
- Gerpott, F. H., & Jansen, S. A. (2025). *Die Arbeit [The work]*. brand eins books.
- Golden, T., Ford, M. T., & Cocco, J. J. (2023). To trust or not to trust? Toward understanding remote work and its implications for managers. *Academy of Management Proceedings*, 2023(1). <https://doi.org/10.5465/AMPROC.2023.17427abstract>
- Gonzalez, K., Kanitz, R., & Briker, R. (2024). “AI can’t steal my soul”: In the age of AI, the human touch is paramount for the craft of managing change. *Journal of Applied Behavioral Science*, 60(4), 589–602. <https://doi.org/10.1177/00218863241279916>
- Granulo, A., Caprioli, S., Fuchs, C., & Puntoni, S. (2024). Deployment of algorithms in management tasks reduces prosocial motivation. *Computers in Human Behavior*, 152, Article 108094. <https://doi.org/10.1016/j.chb.2023.108094>
- Hardin, A. E., Schinoff, B. S., Byron, K., & Balven, R. M. (2025). A window into coworkers’ worlds: The relational outcomes of learning vivid, unintentional, and nonwork-related information about coworkers. *Academy of Management Journal*, 68(2). <https://doi.org/10.5465/amj.2022.0683>
- Haslam, S. A., Alvesson, M., & Reicher, S. D. (2024). Zombie leadership: Dead ideas that still walk among us. *Leadership Quarterly*, 35(3), Article 101770. <https://doi.org/10.1016/j.leaqua.2023.101770>
- Haslam, S. A., Reutas, J., Bentley, S. V., McMillan, B., Lindfield, M., Luong, M., Peters, K., & Steffens, N. K. (2023). Developing engaged and ‘teamful’ leaders: A randomized controlled trial of the 5R identity leadership program. *PLoS One*, 18(5), Article e0286263. <https://doi.org/10.1371/journal.pone.0286263>
- Haslam, S. A., Steffens, N. K., Peters, K., Boyce, R. A., Mallett, C. J., & Fransen, K. (2017). A social identity approach to leadership development: The 5R program. *Journal of Personnel Psychology*, 16(3), 113–124. <https://doi.org/10.1027/1866-5888/a000176>
- Hemshorn de Sanchez, C. S., Gerpott, F. H., & Lehmann-Willenbrock, N. (2022). A review and future agenda for behavioral research on leader–follower interactions at different temporal scopes. *Journal of Organizational Behavior*, 43(2), 342–368. <https://doi.org/10.1002/job.2583>
- Humphrey, S. E., Nahrgang, J. D., & Morgeson, F. P. (2007). Integrating motivational, social, and contextual work design features: A meta-analytic summary and theoretical extension of the work design literature. *Journal of Applied Psychology*, 92(5), 1332–1356. <https://doi.org/10.1037/0021-9010.92.5.1332>
- Jassy, A. (2024, September 16). *Message from CEO Andy Jassy: Strengthening our culture and teams*. Amazon.

<https://www.aboutamazon.com/news/company-news/ceo-andy-jassy-latest-update-on-amazon-return-to-office-manager-team-ratio>

- Kerschreiter, R., & Gerpott, F. H. (2024, May 01–04). Artificial hype or intelligent evolution? A conceptual account outlining what can (not) be learned through AI-powered adaptive learning systems in leadership development programs. *7th Interdisciplinary Perspectives on Leadership Symposium (IPLS)*, Thessaloniki (Greece).
- Kim, N., Kang, S. W., Kim, S. J., & Park, H. J. (2023). Questioning unquestioned habits of mind: How executives learn new approaches to familiar situations through transformative learning. *Academy of Management Learning & Education*, *22*(3), 481–506.
<https://doi.org/10.5465/amle.2021.0035>
- Klasmeier, K. N., Güntner, A. V., & Schleu, J. E. (2025). Leadership dynamics in teams: The reciprocity of shared and empowering leadership. *Journal of Business and Psychology*, *40*, 1171–1187. <https://doi.org/10.1007/s10869-025-10008-9>
- Klingbeil, A., Grütznert, C., & Schreck, P. (2024). Trust and reliance on AI – An experimental study on the extent and costs of overreliance on AI. *Computers in Human Behavior*, *160*, Article 108352. <https://doi.org/10.1016/j.chb.2024.108352>
- Krug, H., Haslam, S. A., Otto, K., & Steffens, N. K. (2021). Identity leadership, social identity continuity, and well-being at work during COVID-19. *Frontiers in Psychology*, *12*, Article 684475. <https://doi.org/10.3389/fpsyg.2021.684475>
- Lam, H., Giessner, S. R., Shemla, M., & Werner, M. D. (2024). Leader and leadership loneliness: A review-based critique and path to future research. *Leadership Quarterly*, *35*(3), Article 101780. <https://doi.org/10.1016/j.leaqua.2024.101780>
- Lamovšek, A., Radevič, I., Mohammed, S. S., & Černe, M. (2025). Beyond the office walls: Work design configurations for task performance across on-site, hybrid and remote forms of work. *Information Systems Journal*, *35*(1), 279–321. <https://doi.org/10.1111/isj.12542>
- Lindebaum, D., & Langer, S. (2024). On the psycho-emotional deficitisation of workers in the age of cognitive enhancement. *Organization*, *31*(4), 703–719. <https://doi.org/10.1177/13505084221145617>
- Lindebaum, D., & Ramirez, M. F. (2024). “Negative” resource review: On the essay-writing algorithm Essay Genius at <https://essaygenius.ai/>. *Academy of Management Learning & Education*, *23*(2), 343–345. <https://doi.org/10.5465/amle.2022.0474>
- Loignon, A. C., Johnson, M. A., & Veestraeten, M. (2024). A window into your status: Environment-based social class’s effect on virtual leadership. *Leadership Quarterly*, *35*(2), Article 101735. <https://doi.org/10.1016/j.leaqua.2023.101735>
- Mäkelä, E., & Stephany, F. (2025). *Complement or substitute? How AI increases the demand for human skills* (arXiv:2412.19754). arXiv Preprints. <https://doi.org/10.48550/arXiv.2412.19754>
- Maurer, M., Bach, N., & Oertel, S. (2022). Forced to go virtual. Working-from-home arrangements and their effect on team communication during COVID-19 lockdown. *German Journal of Human Resource Management: Zeitschrift für Personalforschung*, *36*(3), 238–269. <https://doi.org/10.1177/23970022221083698>

- Mayer, C., Sivatheerthan, T., Mütze-Niewöhner, S., & Nitsch, V. (2023). Sharing leadership behaviors in virtual teams: Effects of shared leadership behaviors on team member satisfaction and productivity. *Team Performance Management*, 29(1/2), 90–112. <https://doi.org/10.1108/TPM-07-2022-0054>
- McBride, A., Howe, L. C., Gooty, J., & Banks, G. C. (2024). Seeing with counterfactual lenses: Alternative assumptions at the intersection of leadership and identity. *Leadership Quarterly*, 35(2), Article 101769. <https://doi.org/10.1016/j.leaqua.2023.101769>
- McGuire, J., Bastardoz, N., Hentrup, L. J., De Cremer, D., & Menges, J. I. (2025). The backdrop of leadership: How environmental awe influences charisma attributions. *Journal of Organizational Behavior*, 46(4), 580–602. <https://doi.org/10.1002/job.2849>
- McKinsey. (2023). *Leadership trends in the US: Preparing for the next generation*. McKinsey & Company. <https://www.mckinsey.com/business-functions/organization/our-insights/leadership-trends-us-2023>
- Moorman, R. H., Lyons, B. D., Mercado, B. K., & Klotz, A. C. (2024). Driving the extra mile in the gig economy: The motivational foundations of gig worker citizenship. *Annual Review of Organizational Psychology and Organizational Behavior*, 11(1), 363–391. <https://doi.org/10.1146/annurev-orgpsych-111821-033012>
- Mu, Q., Borowski, M., Grønabæk, J. E. S., Bødker, S., & Hoggan, E. (2024, May). Whispering through walls: Towards inclusive backchannel communication in hybrid meetings. *Proceedings of the 2024 CHI Conference on Human Factors in Computing System* (pp. 1–16).
- Parent-Rocheleau, X., & Parker, S. K. (2021). Algorithms as work designers: How algorithmic management influences the design of jobs. *Human Resource Management Review*, 32(3), Article 100838. <https://doi.org/10.1016/j.hrmr.2021.100838>
- Parker, S. K., Morgeson, F. P., & Johns, G. (2017). One hundred years of work design research: Looking back and looking forward. *Journal of Applied Psychology*, 102(3), 403–420. <https://doi.org/10.1037/apl0000106>
- Parker, S. K., Tims, M., & Sonnentag, S. (2025). Top-down and bottom-up work design: A multilevel perspective on how job crafting and work characteristics interrelate. *Journal of Business and Psychology*. Advance online publication. <https://doi.org/10.1007/s10869-025-10010-1>
- Rahman, H. (2024). *Inside the invisible cage: How algorithms control workers*. University of California Press.
- Reh, S., Van Quaquebeke, N., & Giessner, S. R. (2017). The aura of charisma: A review on the embodiment perspective as signaling. *Leadership Quarterly*, 28(4), 486–507. <https://doi.org/10.1016/j.leaqua.2017.01.001>
- Rousseau, D. M., Ho, V. T., & Greenberg, J. (2006). I-deals: Idiosyncratic terms in employment relationships. *Academy of Management Review*, 31(4), 977–994. <https://doi.org/10.5465/amr.2006.22527470>
- Sarkar, A., Rintel, S., Borowiec, D., Bergmann, R., Gillett, S., Bragg, D., Baym, N., & Sellen, A. (2021, May 8–13). The promise and peril of parallel chat in video meetings for work (pp. 1–8). *CHI*

- Conference on Human Factors in Computing Systems Extended Abstracts (CHI '21 Extended Abstracts)*, Yokohama, Japan. <https://doi.org/10.1145/3411763.3451793>
- Schwarz Müller, T., Brosi, P., Duman, D., & Welpe, I. M. (2018). How does the digital transformation affect organizations? Key themes of change in work design and leadership. *Management Review*, 29(2), 114–138. <https://doi.org/10.5771/0935-9915-2018-2-114>
- Schyns, B., Kiefer, T., Kerschreiter, R., & Tymon, A. (2011). Teaching implicit leadership theories to develop leaders and leadership: How and why it can make a difference. *Academy of Management Learning & Education*, 10(3), 397–408. <https://doi.org/10.5465/amle.2010.0015>
- Siampou, F., Komis, V., & Tselios, N. (2014). Online versus face-to-face collaboration in the context of a computer-supported modeling task. *Computers in Human Behavior*, 37, 369–376. <https://doi.org/10.1016/j.chb.2014.04.032>
- Sonnenfeld, J. A. (2007). Firing back: How great leaders rebound after career disasters. *Harvard Business Review*. <https://hbr.org/2007/01/firing-back-how-great-leaders-rebound-after-career-disasters>
- Stephens, K. K. (2012). Multiple conversations during organizational meetings: Development of the multicommuting scale. *Management Communication Quarterly*, 26(2), 195–223. <https://doi.org/10.1177/0893318911431802>
- Stock-Homburg, R. (2025). Unlocking the potential of AI in leadership: Can generative AI outperform human leaders? *Proceedings of the 58th Hawaii International Conference on System Sciences* (pp. 1742–1751). <https://hdl.handle.net/10125/109054>
- Tang, P. M., Koopman, J., Mai, K. M., De Cremer, D., Zhang, J. H., Reynders, P., Ng, C. T., & Chen, I.-H. (2023). No person is an island: Unpacking the work and after-work consequences of interacting with artificial intelligence. *Journal of Applied Psychology*, 108(11), 1766–1789. <https://doi.org/10.1037/apl0001103>
- Tigre, F. B., Curado, C., & Henriques, P. L. (2023). Digital leadership: A bibliometric analysis. *Journal of Leadership & Organizational Studies*, 30(1), 40–70. <https://doi.org/10.1177/15480518221123132>
- Twenge, J. M., & Campbell, W. K. (2009). *The narcissism epidemic: Living in the age of entitlement*. Free Press.
- van der Velde, A., & Gerpott, F. H. (2023). When subordinates do not follow: A typology of subordinate resistance as perceived by leaders. *Leadership Quarterly*, 34(5), Article 101687. <https://doi.org/10.1016/j.leaqua.2023.101687>
- Van Quaquebeke, N., & Gerpott, F. H. (2023). The now, new, and next of digital leadership: How Artificial Intelligence (AI) will take over and change leadership as we know it. *Journal of Leadership & Organizational Studies*, 30(3), 265–275. <https://doi.org/10.1177/15480518231181731>
- Van Quaquebeke, N., & Gerpott, F. H. (2024). Artificial Intelligence (AI) and workplace communication: Promises, perils, and recommended policy. *Journal of Leadership & Organizational Studies*, 31(4), 375–381. <https://doi.org/10.1177/15480518241289644>

- Wang, B., Liu, Y., Qian, J., & Parker, S. K. (2021). Achieving effective remote working during the COVID-19 pandemic: A work design perspective. *Applied Psychology, 70*(1), 16–59. <https://doi.org/10.1111/apps.12290>
- Weber, M. (2004). The vocation of science. In S. Whimster (Ed.), *The essential Weber* (pp. 270–287). Routledge.
- Wessels, C., Schippers, M. C., Stegmann, S., Bakker, A. B., Van Baalen, P. J., & Proper, K. I. (2019). Fostering flexibility in the new world of work: A model of time-spatial job crafting. *Frontiers in Psychology, 10*, Article 505. <https://doi.org/10.3389/fpsyg.2019.00505>
- Wölk, J., Gerpott, F. H., & Kerschreiter, R. (2025). Three levels, two needs, one goal: Fostering an integrated sense of inclusion through inclusive leadership. *Journal of Occupational and Organizational Psychology, 98*(3), Article e70037. <https://doi.org/10.1111/joop.70037>
- Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review, 26*(2), 179–201. <https://doi.org/10.2307/259118>
- Wulff, J. N., Sajons, G. B., Pogrebna, G., Lonati, S., Bastardo, N., Banks, G. C., & Antonakis, J. (2023). Common methodological mistakes. *Leadership Quarterly, 34*(1), Article 101677. <https://doi.org/10.1016/j.leaqua.2023.101677>
- Yin, Y., Jia, N., & Wakslak, C. J. (2024). AI can help people feel heard, but an AI label diminishes this impact. *Proceedings of the National Academy of Sciences of the United States of America, 121*(14), Article e2319112121. <https://doi.org/10.1073/pnas.2319112121>
- Yukl, G. (2002). *Leadership in organizations* (5th ed.). Prentice Hall.