

COMMENTARY

The salutary role of collective and individual mindfulness in Lean management

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Balzer, Brodke, Kluse, and Zickar (2019) aptly observed the longstanding gap between industrial and organizational (I-O) psychology and Lean management, pointing out the need for "a deeper understanding of the human aspect of Lean" (p. 222). To extend the discourse, I draw on growing research and practice related to mindfulness at work and propose that collective and individual mindfulness differentially facilitate Lean practices in creating value for stakeholders. Specifically, collective mindfulness enables teams to fulfill the Lean objectives of continuous improvement and respect for people, whereas individual mindfulness helps employees manage job demands arising from Lean practices and sustains their job performance and well-being.

Collective mindfulness benefits Lean practices

Why collective mindfulness?

Lean practices are long thought to benefit organizational performance and, as Balzer et al. (2019) noted, case studies have lent credence to this proposition. Nonetheless, quantitative evidence based on a number of organizations and rigorous designs has been equivocal. For example, Birdi et al. (2008) examined 308 UK manufacturing organizations over 22 years and found that Lean practices showed no lagged impact on objectively assessed organizational productivity. In contrast, Dobrzykowski, McFadden, and Vonderembse (2016) examined 211 U.S. hospitals and revealed positive effects of Lean practices on organizational financial performance. It is conceivable that how Lean practices fare largely hinges on the effective functioning of teams, which are the building blocks of organizations. Given the documented performance benefits of collective mindfulness (e.g., Sutcliffe, Vogus, & Dane, 2016), I posit that collective mindfulness contributes to Lean practices' ultimate goal of creating value for customers and organizations.

What is collective mindfulness?

Rooted in Western philosophy (Langer, 1989), collective mindfulness refers to a group's "collective capability to discern discriminatory detail about emerging issues and to act swiftly in response to these details" (Sutcliffe et al., 2016, p. 56). Collective mindfulness, by its very nature, is a group's joint capacity to notice emerging, nuanced information and to react as situations unfold (Weick, Sutcliffe, & Obstfeld, 1999).

Teams with high collective mindfulness have five intertwined features (e.g., Sutcliffe et al., 2016): They constantly pay attention to risks and hidden flaws at work (i.e., preoccupation with failure), actively challenge the status quo for better alternatives (i.e., reluctance to simplify interpretations), thoroughly understand work processes in real time (i.e., sensitivity to operations),

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adeptly cope with and learn from mistakes (i.e., commitment to resilience), and comfortably draw on all members' expertise to make decisions (i.e., deference to expertise).

Collective mindfulness is of growing interest in high-reliability organizations (HROs), in which tasks are dynamic and complex, and errors are costly and even catastrophic (e.g., health care, aircraft cockpit, and military; Sutcliffe et al., 2016), and has been linked to greater work quality (e.g., Vogus & Sutcliffe, 2007) and customer satisfaction (e.g., Ndubisi, 2012). Yet, recent scholarly attention on collective mindfulness has shifted from its role in minimizing risks and failures to promoting efficiency and success in various work settings. As Sutcliffe et al. (2016) noted, "More needs to be done to expand [collective mindfulness's] reach beyond HROs to organizational psychology and organizational behavior more broadly" (p. 72). I propose that collective mindfulness fosters continuous improvement and respect for people—the fundamental principles of Lean practices.

Collective mindfulness promotes continuous improvement

Most organizations rely on routines, or a set of standardized procedures and repetitive actions, to render products and services. On one hand, routines are functional, ensuring efficient processes and reliable outcomes. On the other hand, routines may not be optimal, leaving room for refinement to achieve greater efficiency and productivity (e.g., Zellmer-Bruhn, 2003). Continuous improvement, in essence, is ongoing adjustments to routines to eliminate waste and to improve the quality and quantity of work. Although Lean practices are often top-down initiatives driven by upper management, recent research suggests that frontline teams are key drivers for positive changes in routines (Wee & Taylor, 2018), as they have firsthand knowledge of work processes and exert direct impact on the deliverables. Research suggests that team members' attention-based search—in which they choose what work-related information to attend to and how much effort to exert to gather information—is a key mechanism behind routine changes (Wee & Taylor, 2018).

Collective mindfulness promotes continuous improvement because it enhances the *scope* and *persistence* of team members' attention-based search to fine-tune routines. Specifically, collective mindfulness not only enables team members to visualize the big picture of the workflow and inspect in detail areas prone to delay or error, but also allows members to continuously deploy attention to emerging issues (e.g., imperfections in the workflow and customers' rising expectations) and devise solutions for improvement. Thus, rather than being satisfied with the status quo, collectively mindful teams are responsive to internal and external demands for Lean and are able to act swiftly and continuously for ongoing improvement (Levinthal & Rerup, 2006). For example, research shows that waste collection workers who are collectively mindful modify routines (e.g., truck routes and coordination) to eliminate wasteful processes for efficient work (Turner & Rindova, 2012). Recent evidence (Gardner, Boyer, & Ward, 2017) further reveals that collective mindfulness in using technologies leads to greater healthcare performance in hospitals aspiring to continuous improvement.

Collective mindfulness promotes respect for people

Collective mindfulness aligns with the Lean principle of respect for people, or "the engagement and empowerment of employees" (Balzer et al., 2019, p. 216) and facilitates two crucial aspects of team functioning: team reflection and conflict handling. From the social cognitive perspective, team reflection is a set of collective, metacognitive activities in which team members "constantly, overtly, and critically observe and question the team's objectives, strategies, and processes in a constructive manner" (Rauter, Weiss, & Hoegl, 2018, p. 785). Team reflection has been shown to help teams learn from setbacks (e.g., Rauter et al., 2018) and to foster ongoing improvement of work procedures (e.g., Edmondson, Bohmer, & Pisano, 2001). Collective mindfulness is an important impetus to team reflection, as it enables team members to review past performance,

pinpoint areas for improvement, and set up performance objectives and action plans. Importantly, team reflection empowers members to draw on their expertise in collective decision making.

Moreover, collective mindfulness fosters constructive handling of conflicts within teams. Although task conflict (i.e., differences in opinions of work contents and processes) is beneficial for process improvement, relationship conflict such as emotional tension and personality clashes likely coexists in teams, compromising social relationships and limiting teams' performance potential (Shaw et al., 2011). Collective mindfulness allows team members to view debates about how to optimize work processes and outcomes as professional norms rather than signs of interpersonal conflict (Yu & Zellmer-Bruhn, 2018). Collective mindfulness therefore builds up a safe and respectful context for knowledge sharing, allowing members to capitalize on collective expertise to improve team functioning.

Individual mindfulness benefits Lean practices

Why individual mindfulness?

Despite creating value for stakeholders, Lean practices, as Balzer et al. (2019) note, arguably put production pressure on employees and take a toll on their well-being. For example, employees in a garment manufacturing company adopting Lean practices reported increased job demands in terms of problem solving, skill utilization, and performance monitoring (Jackson & Mullarkey, 2000). Similarly, employees participating in Lean practices in a vehicle manufacturing company experienced higher job-related depression (Parker, 2003). I focus on individual mindfulness rooted in Eastern philosophy because it helps employees cope with job demands arising from Lean practices, thereby protecting their performance and well-being (for a review, see Eby et al., 2019).

What is individual mindfulness?

Though Western philosophy (Langer, 1989) views individual mindfulness as the person-level analogue of collective mindfulness, Eastern tradition has conceptualized individual mindfulness differently as a state of consciousness characterized by awareness of and attention to present-moment experiences without judgment (Brown & Ryan, 2003). Mindfulness is marked by present moment awareness of internal (e.g., thoughts, emotions) and external experiences, as well as an open, receptive, and nonjudgmental stance.

Although mindfulness originally aimed to help patients combat mental and physical challenges (Kabat-Zinn, 1990), it has recently gained surging interest in work settings and has been linked to employees' performance and well-being (e.g., Good et al., 2016).

Individual mindfulness facilitates coping with job demands

In the ongoing pursuit of efficiency and productivity, Lean practices likely raise job demands for employees. Employees may be required to work faster, work on more tasks, and coordinate with more people.

Mindfulness helps employees manage rising job demands in several key ways. First, mindful employees tend to deploy attention to the present moment rather than thinking about the past or the future (e.g., Good et al., 2016). They focus on the tasks at hand instead of ruminating on whether they had correctly performed the previous work or how much work they will need to finish by the end of day. By directing attention to immediate job demands and reducing off-task thoughts, mindfulness has been shown to foster employees' job engagement (e.g., Leroy, Anseel, Dimitrova, & Sels, 2013) and performance (e.g., Dane & Brummel, 2014) and to alleviate stress (e.g., Eby et al., 2019). Further, mindfulness fosters decoupling of the self, allowing employees to view thoughts and emotions as fleeting mental events rather than making judgments or assigning

meanings to them (e.g., Glomb, Duffy, Bono, & Yang, 2011). For example, employees may notice they are feeling anxious at a particular moment, but they would not judge themselves as "I am anxious because I have lots of work to do." The decoupling and nonjudgmental stance enables employees to manage stress arising from job demands and protects their performance and well-being. Research, indeed, has shown that mindfulness alleviates employees' stress in response to job demands (e.g., Grover, Teo, Pick, & Roche, 2017).

Conclusion

I draw on the diverse literature of mindfulness and discuss the role of collective and individual mindfulness in facilitating Lean practices. On one hand, collective mindfulness aligns with the fundamental principles of Lean practices—continuous improvement and respect for people—and promotes effective team functioning. On the other hand, individual mindfulness fosters effective functioning of employees and protects their job performance and well-being.

Practically, organizations may develop collective mindfulness using team interventions (Hales, Kroes, Chen, & Kang, 2012) and leadership training, and individual mindfulness may be cultivated by brief meditative practices (e.g., mindful breathing, sitting meditation) customized to organizational contexts. Organizations may further integrate collective and individual mindfulness into Lean practices to promote continuous improvement. For example, leaders may remind team members of the essence of collective mindfulness—that details matter and different opinions are valued—during a kaizen event. Employees may meditate briefly to bring awareness to the present moment during Lean huddle meetings and breaks at work. In summary, mindfulness at the collective and individual levels has great potential to benefit Lean practices.

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