

GREY ZONES IN LEADERSHIP AND SAFETY

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Katz-Navon, Kark, and Delegach (in press) find a curvilinear relationship between leadership and occupational safety outcomes, deviating from the linear view that has dominated past research on the topic. As the pre-title of their article suggests (“Trapped in the Middle”), the assumption about the benefits of leadership is that more-is-better as well as pointing out the marginal returns of being average and the ambiguous signals that being average sends. There are several notable strengths of this paper. First, the fact that the authors replicated their findings across four different studies (i.e., a field study, one online survey and two experimental scenario studies) speaks highly to the rigor of their approach and the generalizability of the model. Second, the fact that they focused on what happens in ‘the middle ground’ of transformational and transactional leadership perceptions (vs. ‘high levels’, which is the common focus) is intriguing. Perhaps more intriguing is that the pattern of results is in the opposite direction of what other studies on curvilinear relationships between leadership and other employee-centred outcomes have demonstrated. The purpose of this commentary is to raise several issues related to these leadership and safety grey zones.

The idea of examining curvilinear effects of leadership behaviors is not as novel as the authors claim, but is valuable as we have seen recently an increasing number of studies testing curvilinear relationships. Prior studies have, for example, examined curvilinear effects of benevolent leadership on team performance (Li, Rubenstein, Lin, Wang & Chen, 2018), participative leadership on employee performance (Lam, Huang & Chan, 2015), charisma on leader effectiveness (Vergauwe et al., 2018), ethical leadership on unethical behavior (Miao, Newman, Yu & Xu, 2013), and destructive leadership on workplace behaviors (Mackey et al., 2019). The majority of these studies argued for a ‘too-much-of-a-good-thing’ effect and an inverted U-shape. That is, when constructive leadership behaviors are drastically below or

above an optimal level, the outcomes worsen. Instead, Katz-Navon et al. (in press) find a U-shape effect for safety motivation and safety behaviors, and an inverted U-shape for accident rate, generally showing that safety outcomes worsen when leadership behaviors are moderate. This raises a series of related questions:

Are safety outcomes fundamentally different from other performance outcomes?

Since its inception, research on occupational safety research has used measures of work accidents as indicators of safety (or absence of safety). Relatively recently (e.g., Burke, Sarpy, Tesluk, & Smith-Crowe, 2002; Griffin & Neal, 2000), consideration of safety behaviors from a job performance theory (Borman & Motowidlo, 1993; Campbell, McCloy, Oppler, & Sager, 1993) perspective separates safety-related performance from work accidents, with safety-related behaviors considering both the presence of safety (e.g., safety compliance, safety participation) and the absence of safety (e.g., unsafe work behaviors). In job performance theory terms, safety compliance (following safety rules and regulations) is equivalent to task performance, and safety participation (voluntary behaviors that improve safety) is equivalent to contextual performance. Most recently, the safety performance literature has integrated proactivity into its model (e.g., Curcuruto, Parker, & Griffin, 2019), along with within-person considerations of safety performance (e.g., Beus & Taylor, 2018). Two sizeable determinants of safety performance are safety knowledge and safety motivation (Christian, Wallace, Bradley, & Burke, 2009). Given the above conceptualization of safety performance under the same general umbrella of job performance theory as other forms of employee performance, Katz-Navon et al.'s results are surprising and thought provoking. Several questions worth asking, then, are to what extent is safety performance and its notable determinants different from other facets of job performance (e.g., innovation, ethics) or multidimensional conceptualizations of job performance more generally (e.g., Griffin, Neal, & Parker, 2007)? That is, would Katz-Navon et al. have hypothesized different linear and

curvilinear relationships had their focus been, say, creativity or organizational deviance, or even adaptive safety performance? What is unique about safety that would make theorizing about its relationship with leadership different from existing research on leadership and job performance?

What does the ‘middle point’ exactly capture?

Although low and high levels of behavior are perhaps easier to observe, the same does not apply to moderate levels. It is more difficult to decipher what exactly the perceiver sees in or as the ‘middle point’. Katz-Navon et al. (in press) offer two explanations: “it can reflect a leader who behaves in a certain way to a medium extent, but it may also mean that the leader displays a specific behavior sometimes to a high extent, and sometimes to a low extent” (p. 25). They adopt the second explanation and argue that the mid-point shows ambivalence and inconsistency. Ambivalence is definitely a plausible explanation with support for this explanation offered in other strands of leadership research. For example, research on leader-member exchange ambivalence (conceptualized as co-existence of positive and negative thoughts about the relationship) has shown that such inconsistency has a negative effect on performance and leads to more negative affect (Lee, Thomas, Martin & Guillaume, 2017). In their fourth study (online experimental scenario), Katz-Navon et al. test their interpretation of the ‘middle’ and explicitly manipulate inconsistency to ‘narrow the range of plausible explanations’ (p. 17). The fact that they found a similar effect to their other three studies gives us confidence that their interpretation is reasonable.

However, we still do not know what the perceiver in organizational settings sees when ‘trapped in the middle’. There are at least two alternative plausible explanations. First, we cannot rule out neutrality or indifference (e.g., Nadler, Weston & Voyles, 2015). Perceivers may just not care enough about a leader’s behavior to observe it with effort and with accuracy. Second, when the perceiver views their environment as deficient of leadership

behavioral information, overreliance on cognitive structures is possible. In such situations, instead of recalling actual leader behaviors, the perceiver may retrieve prior classifications from memory such as implicit leadership theories (ILTs). Scales that measure leadership behaviors (e.g., transformational or transactional leadership behaviors) are based on frequency estimates (“How frequently does your leader...”) inadvertently promoting reliance on ILTs (Hansbrough, Lord & Schyns, 2015; Lord, Epitropaki, Foti, & Hansbrough, in press). In assessing behavioral frequency, raters are asked to aggregate mentally observed leader behaviors over an unspecified period time, often comprising multiple events. If raters are unable to recall (many) specific events (positive or negative) based on episodic memory, they may resort to heuristics and gap-filling processes associated with semantic memory. It is therefore possible that different memory processes operate in ‘high-low’ (episodic) versus ‘middle’ (semantic) leadership perceptions. This could also explain why Katz-Navon et al. (in press) find the same effects for both transformational and passive behaviors: perceivers may simply rely on heuristics for any leadership perceptions in the ‘middle’.

What about possible moderators and mediators?

Katz-Navon et al. (in press) test affective commitment as a moderator in their first study and show that the rate of accidents increases in moderate levels of transformational leadership only for those participants who are low in affective commitment. When affective commitment was high, the authors observe a linear pattern. The importance of taking into account moderators when testing curvilinear relationships has been previously acknowledged. For example, Li et al. (2018) showed that the curvilinear relationship between benevolent leadership and team performance disappeared when team commitment was high. On the other hand, Lam et al. (2015) found a J-shaped relationship between participative leadership and employee performance, but only when information sharing was high. Indeed, in the context of patient safety, Katz-Navon and her other colleagues (Katz-Navon, Naveh, &

Stern, 2005) showed a curvilinear relationship between the levels of the perceived detailing of safety procedures and medical treatment errors, with perceived priority of safety moderating this relationship as well as the way employees made sense of their leaders' safety practices. It is therefore surprising that the authors do not explore additional moderators in their subsequent three studies and only focus on main effects.

Finally, non-linear mediation or discontinuous change models in these relationships could also be of interest in the safety context. Research detailing the relationship between leadership and accidents often considers safety climate as a mediator (Zohar, 2010), but the non-linear manifestation of safety climate characteristics (e.g., safety climate strength) or catastrophe models that consider non-linear dynamics (e.g., Guastello, 2017) may be helpful next steps. By examining possible moderators and mediators of the leadership-safety curvilinear relationship, the authors could have offered more nuanced insights about the conditions under which or processes through which moderate levels of leadership relate to worse safety outcomes.

CONCLUDING REMARKS

By challenging traditional linear views, Katz-Navon et al. (in press) offer intriguing new insights about the relationship between leadership and safety outcomes. Their 'trapped in the middle' findings, which consistently emerge from their four studies, raise a series of additional questions regarding how leadership is perceived and the potentially unique nature of safety-specific performance. Future research can delve deeper into this relationship and start to solve these grey zone conundrums.

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