Task complexity and transformational leadership: The mediating role of leaders' state core self-evaluations

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ARTICLE INFO

ABSTRACT

While substantial scholarly attention has been paid to the beneficial consequences of transformational leadership and the conditions in which this leadership style is most effective, there is a remarkable shortage of research on the contextual antecedents of transformational leadership behavior itself. To address this gap, a laboratory experiment was conducted in which we tested the relationship between task complexity and the emergence of transformational leadership behavior. In this experiment, 111 participants were divided in groups of three (comprising one leader and two subordinates), and were instructed to solve three decision-making tasks with varying levels of task complexity. Results indicated that task complexity was negatively related to transformational leadership behavior, and that this relationship was partially mediated by the leader's state core self-evaluations. In other words, when leaders encounter tasks that are overwhelmingly complex, they act in less transformational ways because they momentarily lack the psychological resources to do so. Limitations and future research directions are discussed.

Introduction

Since the publication of Bass' theory in 1985, the transformational leadership framework has been the subject of sustained research attention and has become the dominant framework in the field of leadership research (Barling, Christie, & Hoption, 2011). Over these two and a half decades, considerable research efforts have been invested in exploring its various positive effects on subordinates and organizations (Barling, Slater, & Kelloway, 2000; Podsakoff, MacKenzie, & Bommer, 1996; Wang & Howell, 2010), on the processes through which these positive outcomes are realized (Korek, Felfe, & Zaepernick-Rothe, 2010; Liu, Siu, & Shi, 2010; Rode, 2010; Walumbwa, Avolio, & Zhu, 2008), and on the circumstances under which this leadership style works best (Avolio, Zhu, Koh, & Bhatia, 2004; Barling et al., 2011; Howell & Hall-Merenda, 1999; Keller, 2006). However, as it has been traditionally treated as stable within a leader, surprisingly little is known about the *conditions* under which leaders are prone to engage in transformational leadership—and the cognitive mechanisms that explain why they are inclined to show transformational behaviors under these conditions.

In the present study, we demonstrate that most leaders can engage in transformational leadership behavior to some extent given the right conditions. We do this by testing how differences in task complexity evoke fluctuations in transformational leadership behavior within a leader. Moreover, we examine the cognitive mechanisms underlying this relationship by testing how the relationship between task complexity and transformational leadership behavior is mediated by self-related cognitions. Inspired by the Conservation of Resources Theory (Hobfoll, 1989), we argue that, as the task becomes exceedingly complex and cognitively challenging, it depletes the leader's psychological resources (i.e., it alters his/her self-related cognitions for the

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worse) and because of that reason, it diminishes the emergence of transformational leadership. We thus believe that characteristics of a situation (e.g. a task with low complexity) activate encodings in the leader's mind (e.g. 'this task is not too difficult'), which activate other cognitive units (e.g. 'I can handle it') that in turn trigger certain behavioral scripts and behaviors (e.g. intellectually stimulating behaviors). Conversely, a task with high complexity may, in the same leader, generate the encoding 'this task is too difficult', which encoding may trigger the cognition 'I cannot handle it', which cognition may in turn activate avoidance behaviors (for a detailed description of this interactionist approach, see the cognitive affective personality system theory by Mischel & Shoda, 1995).

By testing the mediating effect of self-related cognitions on the relationship between task complexity and transformational leadership behavior, we aim to contribute to a better understanding of the contextual and cognitive antecedents of transformational leadership. Specifically, by exploring the external and internal triggers and obstacles of transformational leadership behavior, we want to shed some light on the question why in some situations leaders are inclined to and in others are blocked from performing transformational behaviors. Understanding these contextual influences and the mechanisms by which they exert their influence is important both from a theoretical and a practical point of view. Theoretically, it adds to the existing leadership literature by showing that leadership behavior is not only affected by the leader's dispositions, but also by the situation the leader is in. Practically, this knowledge can feed into suggestions on what circumstances need to be fostered in organizations and what cognitive skills need to be developed (among leaders) in order to promote transformational behaviors.

Transformational leadership

Transformational leadership is defined as a leadership style that enhances subordinates' motivation, morale, and performance through a variety of mechanisms, such as showing an example, providing a sense of mission and vision, and challenging subordinates' beliefs and assumptions. Transformational leadership manifests itself in four distinct behaviors. *Individual consideration* is shown when the leader attends to each subordinate's needs individually, cares about their well-being, gives them emotional support, and helps them to develop their skills and potentials. *Intellectual stimulation* is shown when the leader challenges the widely held, habitual assumptions and beliefs that subordinates rely on and encourages them to think for themselves. *Inspirational motivation* is shown when the leader articulates a vision that is appealing and inspiring for the subordinates and provides them with high but achievable challenges. *Idealized influence* is shown when the leader is driven by values and a concern for what is best for the subordinates, the organization and society, acts with integrity and beyond self-interest (Barling et al., 2011; Bass, 1999).

As opposed to transformational leadership, transactional leadership style implies the assumption that the relation between the leader and follower is fundamentally an exchange relationship to meet self-interests. Three kinds of transactional leadership have been identified: *active management by exception*, meaning that the leader focuses on subordinates' mistakes and takes corrective actions, *passive management by exception*, meaning that the leader only acts when there is a problem, and contingent reward, meaning that the leader clarifies expectations and makes rewards contingent on meeting such expectations. Laissez-faire leadership, meaning that the leader avoids tasks and responsibilities, belongs to a third category, namely non-leadership (Bass, 1999).

Up to this day, research on transformational leadership has mostly focused on its beneficial consequences as regards employees, as exemplified by improved well-being (Arnold, Turner, Barling, Kelloway, & McKee, 2007; Densten, 2005; Liu, Siu, & Shi, 2010), self-efficacy (Fitzgerald & Schutte, 2010; Gong, Huang, & Farh, 2009; Liu et al., 2010), creativity (Gong et al., 2009), job satisfaction (Yang, 2009), and reduced burnout, emotional exhaustion (Densten, 2005), and stress (Liu et al., 2010; Sosik & Godshalk, 2000). In addition to its beneficial effects on individual employees, research has shown that transformational leadership also generates competitive advantages for the organization as a whole as it boosts job performance and organizational success (Tsai, Chen, & Cheng, 2009; Waldman, Javidan, & Varella, 2004; Walumbwa et al., 2008) and improves branch-level financial performance and sales results (Barling, Weber, & Kelloway, 1996). In summary, transformational leadership is widely considered to be an effective strategy for managing the changing environment faced by modern organizations (Bass, 1999; Turner, Barling, & Zaharatos, 2002).

Despite its widely recognized strengths, it has been acknowledged that transformational leadership is not equally useful under all circumstances, and much attention has been paid to the conditions under which transformational leadership behaviors improve work outcomes (for a review, see Barling et al., 2011). Examples of such circumstances are a higher relative position of the leader in the organizational hierarchy (Fuller, Patterson, Hester, & Stringer, 1996), structural distance between leaders and subordinates (Avolio et al., 2004), close physical proximity (Howell & Hall-Merenda, 1999), conditions of low stress (Seltzer, Numerof & Bass) and research projects (Keller, 2006). Leadership scholars also scrutinized the role of subordinates and leader–subordinate relations in the effectiveness of transformational leadership. For example, research has shown that collectivist subordinates perform better under transformational leadership than individualists do (Jung & Avolio, 1999); and that the better the exchange quality between leader and subordinate (Piccolo & Colquitt, 2006) or the stronger their sense of common identity is (Ellemers, De Gilder, & Haslam, 2004) the more effective transformational leadership becomes.

Whereas it has been recognized that the effectiveness of transformational leadership behavior depends on the context, the behavior itself has traditionally been conceptualized as a stable, innate characteristic of the leader. This way, differences in leadership style have often been attributed to differences between leaders regarding their trait or "default" level of transformational leadership. Supportive of this notion are the relationships between personality and transformational leadership behavior (Bono & Judge, 2004). For instance, the leader's emotional intelligence (Barling et al., 2000), core self-evaluations (Resick, Whitman, Weingarden, & Hiller, 2009), positive psychological traits such as hope, optimism, or resilience (Peterson, Walumbwa, Byron, & Myrowitz, 2009), internal locus of control, and extraversion (Judge & Bono, 2000a, 2000b) have all been shown to relate positively to transformational leadership ratings. However, for neuroticism, conscientiousness, openness to