Singapore Management University

Institutional Knowledge at Singapore Management University

Research Collection Lee Kong Chian School Of Business

Lee Kong Chian School of Business

2-2018

Contextual leadership: A systematic review of how contextual factors shape leadership and its outcomes

Burak OC Singapore Management University, burakoc@smu.edu.sg

Follow this and additional works at: https://ink.library.smu.edu.sg/lkcsb_research

Part of the Leadership Studies Commons, and the Organizational Behavior and Theory Commons

Citation

OC, Burak. Contextual leadership: A systematic review of how contextual factors shape leadership and its outcomes. (2018). *Leadership Quarterly*. 29, (1), 218-235. **Available at:** https://ink.library.smu.edu.sg/lkcsb_research/7306

This Journal Article is brought to you for free and open access by the Lee Kong Chian School of Business at Institutional Knowledge at Singapore Management University. It has been accepted for inclusion in Research Collection Lee Kong Chian School Of Business by an authorized administrator of Institutional Knowledge at Singapore Management University. For more information, please email cherylds@smu.edu.sg.

Contextual leadership: A systematic review of how contextual factors shape leadership and its outcomes

Burak Oc^a

a Department of Management and Organisations, University of Western Australia, 35 Stirling Highway, Crawley, WA 6009, Australia

Published in Leadership Quarterly (2018) 29, 218-235. DOI: 10.1016/j.leaqua.2017.12.004

Abstract: With roots dating back to Fiedler's (1978) contingency model, contextual leadership has been one of the most trending topics in leadership research over the last decade. However, although roughly 500 studies have examined the impact of context on leadership and its outcomes, there is neither a systematic approach to nor agreement regarding what constitutes the context for leadership. This is surprising, considering the central role that context plays in leadership: Leadership does not occur in a vacuum, but rather exists in a context where leaders function. This review article uses Johns's (2006) categorical framework to fully portray the leadership context and systematically reviews the existing theoretical frameworks and empirical findings for the impact of context. When called for, this review also integrates related streams of research (e.g., institutional theory). Finally, the article summarizes the general trends in the study of contextual leadership and suggests future directions, offering ideas to help meaningfully structure the voluminous and diverse body of research on the leadership context.

Introduction

The very early systematic research on leadership in the early 20th century employed a heavily leader-centric approach and largely focused on searching for specific universal traits and behavioral styles that make some leaders more effective than others (Day, 2014, Lord et al., 2017). However, a failure to find such universal traits or behaviors led leadership researchers to pay more attention to the situation or context in which leaders function. Fiedler (1978) was the first to advocate that leadership does not occur in a vacuum and that to obtain better group performance outcomes, there must be a match between a leader's trait and the situational factors (e.g., task structure). Other contingency theories examining the role of context in leadership followed suit (e.g., House and Mitchell, 1974, Vroom and Yetton, 1973). Although this line of research sparked significant interest for a decade, the focus on contingency theories dropped dramatically as other prominent new-age leadership theories (e.g., transformational and charismatic leadership) began to dominate the field (Day & Antonakis, 2012).

After decades-long, frequently repeated appeals for greater consideration of organizational context in many areas of management research (e.g., Johns, 2006, Rousseau and Fried, 2001), the theoretical and empirical leadership literature is once again devoting considerable attention to how contextual factors might influence leadership and its outcomes (e.g., Ayman and Adams, 2012, Hannah et al., 2009, Osborn et al., 2002, Porter and McLaughlin, 2006). The so-called contextual leadership research, a fairly broad area of leadership research, examines whether situational or contextual factors lessen or enhance the impact of leadership practices and explores how leadership takes place in specific contextual settings (e.g., military, educational; Day and Antonakis, 2012, Liden and Antonakis, 2009).

Presently, contextual leadership is one of the most trending topics in leadership research (Dinh et al., 2014, Gardner et al., 2010). However, there appears to be neither a systematic approach to nor agreement regarding what constitutes the context for leadership (Ayman & Adams, 2012). Such lack of agreement has also been problematic for prominent leadership theories. For instance, transformational leadership theory began without paying much attention to contextual contingencies, and only the most recent formulations of the theory include several contextual factors in an effort to provide a more complete understanding of the relationship between transformational leadership and performance (Avolio, 2007). As Avolio (2007, p. 27) asked, "should this theory [transformation leadership], like others in leadership, have started with a more integrative focus that included a broader array of potential contingencies?" In attempting to answer this and other relevant questions, an underlying premise of this review is that knowledge and insight about the influence of context on leadership and its outcomes will develop in a more systematic and structured manner when that research progresses according to a theorydriven

framework. This review will also integrate relevant work from a diverse cross-section of literature (e.g., institutional theory of leadership, political leadership) to identify empirical and theoretical gaps and suggest future research directions.

To set the stage, I will first introduce and employ the categorical framework that Johns (2006) developed in his seminal work and adapt it to define and fully portray leadership's context, as this framework provides a broad but systematic understanding of how contextual factors that shape human behavior can be categorized and how the effect of such factors can be studied in organizational research. Next, using this framework, I will briefly discuss how context is historically treated in different pockets of leadership research, including most prominent contingency models of leadership, implicit leadership theories, new-age leadership models, and validity generalization in leadership research. I will then review and discuss the theoretical frameworks that have been employed and the variables that are included to explain how contextual factors shape the leadership process and its outcomes or moderate between these. In doing so, I will consider "what context does" to leadership (Johns, 2006, p. 395). Specifically, I will discuss how context impacts leadership in terms of whether context restricts its range, influences base rates, changes the nature of examined relationships, generates curvilinear effects, or threatens the generalizability of findings about leadership. Finally, I will reconcile discrepant findings, identify important gaps in the literature, and discuss how leadership researchers may benefit from considering these and other gaps in the literature to produce a more comprehensive body of research on contextual leadership.

In conducting this review, I used a number of databases (e.g., Business Source Complete, PsycARTICLES) and search engines (e.g., Google Scholar) and in general prioritized top-tier organizational behavior journals in my search (e.g., Academy of Management Journal, Journal of Applied Psychology, Personnel Psychology, The Leadership Quarterly). I also included only those articles that have either explored the relationship of contextual factors to the leadership process (i.e., leader, follower(s), and leader-follower dyad) and its outcomes (i.e., effectiveness, cognition, attitude, and behavior; adopted from Hiller, DeChurch, Murase, & Doty, 2011) or treated contextual factors as a moderating factor of the relationship between the leadership process and leadership outcomes. For the purposes of this review, the relationship between the leadership process and outcomes as well as among contextual factors, and the ways in which leadership influences the context, are considered beyond its scope. The articles reviewed are representative of the research within each domain rather than exhaustive.

Johns's (2006) categorical framework for context

Of course, given the magnitude of the literature on contextual leadership, several review articles and special issues on contextual leadership exist, and they are important as they have discussed which contextual factors should be considered as relevant for the leadership context. For instance, based on a number of relevant sources for leadership research, Porter and McLaughlin (2006) proposed seven components of the organizational context: culture/climate, goals/purposes, people/composition, processes, state/condition, structure, and time. In contrast, Liden and Antonakis (2009) additionally considered social networks to be part of the leadership context, while Ayman and Adams (2012) conceptualized it as the cultural (e.g., visible and invisible indices of culture) and organizational (e.g., physical conditions) contexts of leadership and thus focused on a smaller subset of factors. Perhaps due to the fast pace at which this research has grown (Dinh et al., 2014), our knowledge regarding contextual leadership is still somewhat unformed and, as in other fields of leadership research, there are "no dominant paradigms for studying it, and little agreement about the best strategies for developing and exercising it" (Hackman & Wageman, 2007, p. 43). In attempting to address this, I employ the categorical

framework developed in Johns's (2006) seminal work and adapt it to define and fully portray the leadership context.

Johns (2006) presented a categorical framework for context that can be employed to broadly formulate the effect of contextual factors on organizational behavior. Specifically, he conceptualized context at two different levels: 1) the omnibus context and 2) the discrete context. The omnibus context involves a broad consideration of contextual or environmental influences-it is "an entity that comprises many features or particulars" (Johns, 2006, p. 391)-and answers simple questions about the context of interest (i.e., what, why, who, where, and when). In other words, the omnibus context provides necessary information concerning the elements of a given context. Johns (2006) further assumed that omnibus context effects should operate uniformly and that the findings of a study should therefore change when one switches from one omnibus context to another to examine the same relationship. For example, an omnibus approach to context will include studies that examine the top-down effects of societal trends, economic conditions, national culture, or other macro-level factors.

In contrast, the discrete context, defined as "specific situational variables that influence behavior directly or moderate relationships between variables" (Johns, 2006, p. 393), involves a narrower consideration of specific contextual influences and includes the *task*, *social*, and *physical* context as its salient dimensions. However, consistent with existing research on teams (e.g., Bell & Marentette, 2011; Marks, Mathieu, & Zaccaro, 2001) and previous work on contextual leadership (e.g., Hannah et al., 2009; Porter & McLaughlin, 2006), the temporal context can be also considered as an additional dimension of the discrete leadership context.

Furthermore, one can think of discrete contexts as being in a way nested within omnibus contexts. In parallel, discrete contextual factors are expected to mediate the effects of omnibus contextual factors, or both discrete and omnibus contextual factors will interact to predict the outcome variable of interest (Johns, 2006). For instance, the discrete context is examined when a researcher is interested in whether the nature of a relationship would change if the participants found themselves in one particular physical environment rather than another.

Considering the role assigned to context in earlier leadership research, Johns's (2006) categorical framework could provide the leadership researcher with a much-needed taxonomy of the context in which leadership takes place and explain how contextual factors shape the leadership process and its resultant outcomes, for at least two reasons. First, Johns's (2006) categorical framework for context has already been used in other areas of organizational behavior research. For instance, Dierdorff, Rubin, and Morgeson (2009) employed this categorical model to explore the extent to which managerial roles differ across the different contexts where these roles are actually performed. Other research has adopted elements of Johns's framework to fully describe the contexts of extreme teams (Bell, Fisher, Brown, & Mann, 2016) and social media contexts (McFarland & Ployhart, 2015) and their effects on a wide range of outcomes. Second, Johns's (2006) conceptualization of context coincides with multilevel theorizing and principles. Specifically, conceptualizing context in a nested manner, with the discrete context subsumed within the omnibus context, will help leadership researchers to better identify the ways in which topdown effects occur and to portray leadership as a multilevel system. This is important because one should expect the discrete context to have a greater influence on leadership and its outcomes than the omnibus context, as one would expect the discrete context to have stronger interactions with leadership (Simon & A., 1973). Such a multilevel approach is also consistent with recent streams of leadership research that argue that "leadership is multi-level, processual, contextual and interactive" (Uhl-Bien & Marion, 2009, p. 631). Fig. 1 provides an overview of the contextual framework.

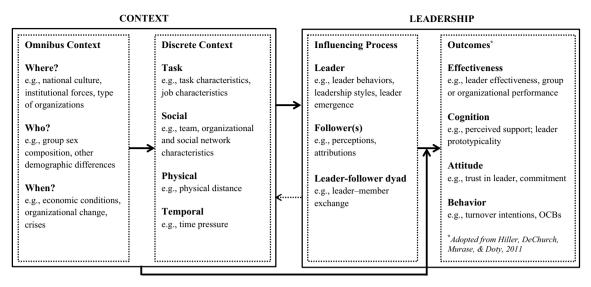


Fig. 1. The integrative framework linking context to leadership.

Historical treatment of context in leadership research

Beginning with the contingency models of leadership, context has been included in almost every definition of leadership. Leadership, defined as an influencing process—along with its resultant outcomes—that takes place between leaders and followers to achieve a common or shared goal (Achua & Lussier, 2007), is frequently explained by the leader's individual-specific characteristics and behaviors, the followers' perceptions and attributions regarding the leader and leadership, and importantly, "the context in which the influencing process occurs" (Day & Antonakis, 2012, p. 5). Hence, context appears to be one of three major components that define leadership (Bass, 2008).

Furthermore, context has been important in leadership research because it can influence the type of leadership that emerges and is effective (Liden & Antonakis, 2009). That is, contextual factors can weaken the explanatory power of dispositional determinants of leader behavior for the emergence of leadership and its effectiveness (Sternberg & Vroom, 2002). In recognition of this, contextual factors have been theorized as either an explanatory or a moderating variable in some pockets of the leadership literature (i.e., contingency models of leadership, substitutes for leadership, implicit leadership theories, and new-age leadership models). Before I review the important theoretical rationale and empirical findings for the effects of omnibus and discrete contexts of leadership using Johns's (2006) framework, I hope that the following sections will make it clear that this theoretical appreciation of the importance of context in leadership research.

Contingency school of leadership

Up until the 1950s, the scientific research on leadership focused heavily on leader characteristics and behaviors to distinguish leaders from nonleaders (Day & Antonakis, 2012). This is perhaps unsurprising, as many have witnessed how exceptional leaders shaped history in the early twentieth century. This somewhat restricted view began to change with contingency models of leader effectiveness that acknowledge that leaders do not exist in a vacuum and that leadership is not an individual phenomenon (Bennis, 2007).

In many of these theories, the so-called situational or contextual factors are explicitly modeled and simultaneously examined in the same models. For instance, in Fiedler's contingency model (Fiedler, 1978; Fiedler & Chemers, 1974) and House's (1971) path–goal theory, the extent to which group tasks are clearly structured (i.e., the task context)

is theorized to be one of several moderators of the relationship between different leadership styles and leader effectiveness. In these two theoretical models, different situational factors jointly create a context that in a way prescribes the appropriate, effective leadership style for that very situation. Specifically, Fiedler (1978) examined the extent to which a leader trait called Leader Preferred Coworker (LPC) interacts with situational favorableness (more recently known as situational control and influence, and conceptualized as the leader's sense of control over the situation). LPC is assessed by the quality of the leader-member relationship, the leader's position power or authority, and how clearly group tasks are structured in order to predict leader effectiveness. In other words, Fiedler's model explored whether the match between the leader's trait and the situation would determine group performance. In contrast, House's (1971) path-goal theory explored how different leadership styles (i.e., directive, supportive, participative, or achievement-oriented) interact with the characteristics of followers (i.e., the locus of control, task ability, preference for structure) and situational factors such as the task structure (i.e., the task dimension of the discrete context), the leader's formal authority, and the work group norms (i.e., the social dimension of the discrete context) to predict, for each of these types of leader behaviors, whether it can enhance followers' motivation, satisfaction, and performance.

In another contingency model, known as cognitive resource theory, Fiedler and Garcia (1987) explored whether situational contingencies moderate the effect of leader intelligence or experience on leader effectiveness, conceptualizing the situation as the amount of interpersonal (e.g., boss-related) or impersonal (e.g., time pressure) stress a leader experiences (i.e., the temporal context). Another contingency model that focuses on a temporal aspect of the situation or context is the normative model of leadership (also known as the leader-participation model; Vroom & Jago, 1988; Vroom & Yetton, 1973). In this model of leader decision making, the decision situation is assumed to shape the extent to which the leader involves others or makes his or her own decisions in that situation. Importantly, the amount of time available to make a decision is one of the four criteria that determine the effectiveness of the manner in which decisions are made.

Each of these theoretical models makes the role of context clear. Task-related, social, and temporal aspects of the context (along with other situational factors) seem to define the effective leadership style, while the role that physical characteristics of leadership's discrete context play is largely underappreciated. Yet in each of these theoretical approaches, context is still a moderating factor for the relationship between leadership styles and leader effectiveness. Empirical evidence for a direct effect of context on leadership came later, with the appearance of the substitutes for leadership model (e.g., Podsakoff, MacKenzie, & Bommer, 1996b; Podsakoff, Niehoff, MacKenzie, & Williams, 1993) and implicit leadership theories (e.g., House, Javidan, Hanges, & Dorfman, 2002; Lord, Brown, Harvey, & Hall, 2001).

Substitutes for leadership

In their seminal article, Kerr and Jermier (1978) argued that not every leadership style will be effective in every situation. In fact, different characteristics of the follower, task, and organization may very well act as a substitute for different leadership styles or moderate (i.e., neutralize) their effects on subordinate attitudes (e.g., organizational commitment) and effectiveness. Specifically, they found that while unambiguous and routine tasks (i.e., the task context) can act as a substitute for task-oriented leadership that is instrumental and jobcentered (i.e., the task context), intrinsically satisfying tasks can substitute for relationship-oriented leadership that is more supportive and people-centered. Furthermore, closely knit, highly cohesive groups (i.e., the social context) can be another substitute for both task- and relationship-oriented leadership.

This model has been used to test the exploratory power of other, different leadership styles for follower criterion variables. For instance, Podsakoff et al. (1993) revised Kerr and Jermier's (1978) original substitutes for leadership scales and reported that task and organizational characteristics could explain unique variance in or interact with specific leader behaviors to predict subordinate performance (e.g., organizational citizenship behaviors), attitudes (e.g., satisfaction, commitment), and role perceptions (e.g., role conflict, ambiguity). For instance, while the spatial distance between followers and leaders (i.e., the physical context) acted as a neutralizer of the relationship between the leader's contingent reward behavior and job satisfaction and an enhancer of the negative effect of the leader's non-contingent reward behavior on role ambiguity in this study, group cohesiveness (i.e., the social context) acted as a substitute for the relationship between the leader's non-contingent reward behavior and role ambiguity. Podsakoff et al. (1996) later reported similar findings regarding the role that leadership substitutes play in the relationship between transformational leadership behaviors, on the one hand, and follower attitudes and citizenship behaviors, on the other.

Overall, the empirical findings of the leadership substitute model suggest that the task and social contexts of leadership can both explain unique variance in and interact with specific leadership styles to predict important follower outcomes. However, the very same studies found strong support for the importance of leadership and suggested that the significant effects of substitutes may be a statistical artifact (Dionne, Yammarino, Atwater, & James, 2002). I will return to this issue again in Section 3.5, Validity Generalization in Leadership Research. For now, I turn to the role that implicit leadership theories give to contextual factors.

Implicit leadership theories

Implicit leadership theories propose that followers' perceptions of leader behavior are what matter for (effective) leadership (e.g., Epitropaki & Martin, 2004; Lord et al., 2001; Lord & Emrich, 2001). Specifically, followers' implicit beliefs and assumptions regarding the leadership prototype—that is, what constitutes an effective leader in a given situation or context—shape how they assess their leaders. Importantly for our purposes, this line of work draws from leadership categorization theory (Lord, Foti, & De Vader, 1984) and work focusing on culture and leadership (e.g., House et al., 2002; House, Hanges, Javidan, Dorfman, & Gupta, 2004; Javidan, Dorfman, de Luque, & House, 2006) to show that a number of omnibus contextual factors, including the type of organization and national culture (i.e., the *where* dimension of the omnibus context; e.g., Den Hartog et al., 1999; Gerstner & Day, 1994), influence which information followers use to generate appropriate leadership prototypes.

In doing so, implicit theories of leadership, similar to contingency models of leadership, frequently conceptualize contextual factors as moderating the relationship between leadership styles and leadership outcomes (e.g., Cheng, Jiang, Cheng, Riley, & Jen, 2015; Dust, Resick, & Mawritz, 2014). Differently, however, this line of work also considers contextual factors as a macro-level system-based constraint (e.g., institutional forces) that describes where leadership takes place, and it models their direct effect to explain variance in leadership or its outcomes across different contexts (e.g., Bullough, Kroeck, Newburry, Kundu, & Lowe, 2012; Currie, Lockett, & Suhomlinova, 2009). As I will discuss in greater detail in connection with the omnibus context of leadership (in particular, the *where* dimension of the omnibus context). it is this emphasis on the macro-level context of leadership that makes implicit models an interesting area of research for reviewing the effects of context on the leadership process and its outcomes. First, however, it is necessary to review the next step in the evolution of the literature on the effects of contextual factors, the new-age leadership models.

Contextual school of leadership

There is a growing body of empirical work, sparked by several important theoretical articles, that has documented the effects of context on leadership since the late 1990s (Day & Antonakis, 2012). In one of the earliest efforts, Shamir and Howell (1999) theoretically explored the conditions and factors related to the organization and its environment that favor the emergence and effectiveness of charismatic leadership. For instance, they argued that charismatic leaders are likely to emerge and be effective when organizations find themselves in turbulent times or dynamic market conditions, when they are still at early stages of the organizational life cycle, when they aim to reach ambiguous performance goals (i.e., the *when* dimension of the omnibus context), and when they perform very challenging tasks (i.e., the task dimension of the discrete context).

In their seminal conceptual article, Osborn et al. (2002) noted that macro views were one of the most commonly ignored areas of leadership research, and they underscored the importance of considering the leadership context using macro-level variables (e.g., external environment, technological developments) and theoretical perspectives (e.g., complexity theory; Uhl-Bien, Marion, & McKelvey, 2007) and supplementing these with individual and cross-level effects using micro- (e.g., leader-member exchange; Graen & Uhl-Bien, 1995) and meso-level perspectives (e.g., consensual commitment: Rowland & Parry, 2009; celebrity leadership effectiveness: Treadway, Adams, Ranft, & Ferris, 2009). Employing a system perspective, Osborn and colleagues focused on four different contexts (i.e., stable conditions, crises, dynamic equilibriums, and edges of chaos) and discussed how leadership can emerge differently in each of these contexts and how the context can influence organizational performance, the leader's cognition (e.g., attention), and the leader's behavior (e.g., networking).

In a similar fashion, Hannah et al. (2009) explored how the leadership process unfolds in extreme contexts or environments "where one or more extreme events are occurring or are likely to occur that may exceed the organization's capacity to prevent and result in an extensive and intolerable magnitude of physical, psychological, or material consequences to—or in close physical or psycho-social proximity to—organization members" (p. 898). They developed a theoretical model that considers how factors encompassing extreme contexts along with other contextual factors (e.g., available resources, time) can predict the level of extremity organizations face (e.g., forms of threats, magnitude of consequences) and focused on a team's adaptive leadership ability to respond to extreme events in different types of organizations.

Table 1

The Outcomes of Contextual Leadership and How Contextual Leadership Is Typically Studied across Omnibus and Discrete Contextual Factors.

	Leade	rship proce	SS	Leadership outcomes				
	L	F	L-F	Effectiveness (E)	Cognition (C)	Attitude (A)	Behavior (B)	How contextual leadership is typically studied
Omnibus – where National culture	×					*	*	L-F A ├────→ B
Institutional forces	*	?		*				$\begin{array}{c} \text{Con} & L \\ \text{Con} & & \\ \end{array} \\ \begin{array}{c} L \\ L \\ L \\ \end{array} \\ \begin{array}{c} L \\ L \\ L \\ \end{array} \\ \begin{array}{c} L \\ L \\ L \\ \end{array} \\ \begin{array}{c} L \\ L $
Types of organizations	?			*				Con
Omnibus – who Sex composition	*			*				$L \xrightarrow{ \mathbf{V} } E$ $L \xrightarrow{ \mathbf{L} } E$
Demographic differences	*			*			*	$\begin{array}{c} \text{Con} & L \\ L & L \\ \hline & & E \end{array}$
Omnibus – When Org. change, decline				*	?	*	*	$\begin{array}{ccc} Con & B \\ \\ L-F & A \\ \hline & B \end{array}$
Events, phases, crises	*						*	$\begin{array}{ccc} \text{Con} & L \\ \text{Con} & & \\ \end{array}$
Economic conditions Discrete – task	*							$Con \longrightarrow L$
Task characteristics	?			*				$L \xrightarrow{Con} L$
Job characteristics				?			*	$ \begin{array}{c} & E \\ F \\ L \\ \hline \\ - \Psi \end{array} \right) \rightarrow B $
Discrete – social Team climate			?	*		?		F $I \xrightarrow{Con} E$
Org. climate, culture				*			?	$L \xrightarrow{Con} E$
Social networks	*	?						L E Con $ F$
Discrete – physical Physical distance				?	*		*	$ \begin{matrix} L \\ c_{n} \end{matrix} \xrightarrow{B} \\ C \end{matrix} $
Discrete – temporal Time pressure				*				L E

Note. Asterisks indicate more than 35% of the studies; question marks indicate more than 10% of the studies. Con = contextual factors; L = leader-related factors (e.g., leadership styles or leader behaviors); F = follower-related factors (e.g., follower perceptions, attitudes or behaviors); L-F = leader-follower dyads or leadership processes between leaders and followers (e.g., shared leadership).

Validity generalization in leadership research

The evolving study of contextual factors has been neither smooth nor without tensions. Although it has not received much attention lately, leadership research has in fact involved a debate between two camps, arguably triggered by the situational specificity camp or contingency theorists who advocated for the importance of situational factors in manifestations of particular leader behaviors in specific situations (e.g., Zaccaro, Gilbert, Thor, & Mumford, 1991). In contrast, the validity generalization camp radically overadjusted for various statistical artifacts (e.g., sample size, low reliability of criterion and predictor, range restriction) to determine the amount of "the betweensituation variance in the validity coefficients, observed in the metaanalysis, [that] might be attributed to between-situation differences in the artifacts" (James, Demaree, Mulaik, & Ladd, 1992, p. 3).

In an exemplary study of the validity generalization camp, Lord, De Vader, and Alliger (1986) showed that individual differences such as intelligence, masculinity/femininity, and dominance significantly relate to leadership perceptions. Importantly, their meta-analytic findings further showed that methodological artifacts explain most of the between-study variance in this relationship. Hence, they suggested that situational factors may not be needed when studying the effect of individual differences on leader effectiveness. Similar arguments were also made by advocates of implicit leadership theories (e.g., Hollander & Julian, 1969; Lord et al., 1984), who believed that the traits followers use to characterize leaders are an important predictor of leadership perceptions or leadership emergence. Furthermore, Judge, Piccolo, and Ilies (2004) demonstrated that the validities of the two Ohio State measures of leadership behavior, namely, consideration and the initiating structure, were generalized irrespective of the study setting (business, college, military, or public sector) when linked to a number of follower and leader outcomes (e.g., follower satisfaction, leader effectiveness). Thus, along with other researchers in this camp—e.g., Kenny and Zaccaro (1983)—they toned down the significance of situational factors (situational specificity) and placed an inappropriate emphasis on validity generalization across situations.

That being said, in a recent study DeRue, Nahrgang, Wellman, and Humphrey (2011) provided meta-analytic evidence that shows that leader traits and behaviors, when combined, could explain at least 30% of the variance in four different leadership effectiveness criteria (i.e., leader effectiveness, group performance, follower job satisfaction, and satisfaction with the leader) and suggested that "there may be situational factors that moderate the effect of traits and behaviors on the various leadership effectiveness outcomes" (p. 42). In another metaanalysis linking personality to leader emergence and effectiveness, Judge, Bono, Ilies, and Gerhardt (2002) likewise argued that there are probably various situational factors that moderate the validity of personality traits in predicting leadership outcomes. Hence, even researchers in the validity generalization camp appear to recognize the importance of situational or contextual factors for leadership and its outcomes (albeit lesser importance than traits and behaviors). In the following sections, I will present empirical evidence (including metaanalytic findings, where available) that will help me further highlight the important role that context plays in leadership research.

The influence of context on leadership and its outcomes

Despite the conventional wisdom that "many of the new theories of leadership appear context free" (Boal & Hooijberg, 2000, p. 528) and "the context in which leadership is enacted has not received much attention" (Antonakis et al., 2004), the brief but careful examination above shows that many leadership theories and models either explicitly model or implicitly hint at contextual factors. There is no doubt that leadership takes place within a multilayered and multifaceted context. At the omnibus level, where, when, and who is being led, and at the discrete level, the task, social, physical, and temporal aspects of the context capture the context in which leadership is enacted. Furthermore, these omnibus and discrete contextual factors influence the process of leadership (e.g., leadership styles, follower attributions) and its resultant outcomes (e.g., leadership effectiveness, turnover intentions) and also shape the relationship between these. Importantly, however, specific criteria of interest and context effects appear to differ not only across the omnibus and discrete contexts but also across their subdimensions. I begin with a discussion of the theoretical arguments and empirical findings regarding the role omnibus contextual factors play in leadership and summarize what the omnibus context does to leadership. I will then turn to the effects of discrete contextual factors.

The omnibus context of leadership

Where?

One of the dimensions of the omnibus context of leadership is the actual location where the leadership takes place at the macro level. Considering that organizations coexist in a social landscape with other important social entities and actors (e.g., markets, communities) and that they frequently interact with one another (Whetten, Felin, & King, 2009), the *where* dimension is unsurprisingly the most studied omnibus contextual dimension of leadership. The factors studied in this omnibus dimension of the leadership context broadly fall into one of three categories: 1) national culture, 2) institutions or markets, and 3) organizations. However, different theoretical frameworks and methodologies are employed in each of these different categories to explore how leadership is affected by where the leadership occurs.

The subfactors under this dimension were used differently to study contextual leadership. For instance, researchers focusing on the effects of national culture frequently explored either its direct effect or its interactive effects on follower attitudes as well as follower and leader behaviors, drawing from the empirical findings of Hofstede's (1980) GLOBE study. In contrast, work focusing on institutional forces has used institutional theory (DiMaggio & Powell, 1983; Scott, 1987) to explain variance in representation of female leaders and leadership effectiveness in organizations or in the political arena. Finally, the effects of different types of organizations are typically modeled as a moderating factor in explaining the effect of leader-related factors and leader effectiveness (see "Omnibus – Where" in Table 1).

First, with regard to national culture, leadership researchers have frequently drawn from Hofstede's (1980) cultural values framework or the Global Leadership and Organizational Behavior Effectiveness (GLOBE) study (House et al., 2002; House et al., 2004) to better understand the role national culture plays for leadership. Indeed, several meta-analyses have shown that cultural differences moderate or change the nature of the relationship between leadership and its outcomes. For instance, in a meta-analysis, Rockstuhl, Dulebohn, Ang, and Shore (2012) showed that the positive relationships between leader–member exchange (LMX) and organizational citizenship behaviors, justice perceptions, and job satisfaction are stronger in individualistic countries (such as the United States) than in collectivistic countries (such as Turkey). Another meta-analysis showed that the relationship between LMX and work interference with family is reported to be more negative in low-power-distance countries ($r_{corrected} = -0.27$) than in high-power-distance countries ($r_{corrected} = -0.16$; Litano, Major, Landers, Streets, & Bass, 2016).

In addition to these meta-analytic findings documenting a moderating effect of national culture, other studies have shown that cultural differences can also directly influence followers' perceptual processes in identifying prototypical leaders (e.g., Den Hartog et al., 1999; Gerstner & Day, 1994) and leadership effectiveness (e.g., Atwater, Wang, Smither, & Fleenor, 2009; Jung & Avolio, 1999; Spreitzer, Perttula, & Xin, 2005).

Several studies that have also operationalized cultural differences more broadly as country membership have reported interesting effects. For example, individuals from different countries (Western vs. Asian) have been shown to perceive or construe leadership constructs such as leader humility (e.g., Oc, Bashshur, Daniels, Greguras, & Diefendorff, 2015) and leader integrity (Martin et al., 2013) differently. Such country differences have further been shown to shape the emergence of certain leadership behaviors (e.g., Dorfman et al., 1997) and leadership styles (e.g., Peus, Braun, & Knipfer, 2015) rather than others and to influence followers' commitment to their leaders (e.g., Cheng et al., 2015) and to their organizations (e.g., Lee, Scandura, & Sharif, 2014).

A second omnibus factor of the leadership context employed under the where dimension comprises the institutions or markets. This line of work draws heavily on institutional theory, which presumes that organizations conform to the characteristics, rules, requirements, and norms of the external environment in order to gain support and legitimacy (DiMaggio & Powell, 1983; Scott, 1987). For instance, in a study using data on 181 countries from eight secondary sources, Bullough et al. (2012) examined the predictive power of six institutional forces and showed that different elements of the business environment (e.g., customs/trade regulations), societal development (e.g., the gender gap in political empowerment, public spending on education), economics (e.g., the economic viability of the country), technology and physical infrastructure (e.g., access to power and the internet), political freedom, and cultural variables (e.g., performance orientation) influence the base rates of women's participation in political leadership. Specifically, they showed that the number of parliament seats held by women increases in countries with better business governance, higher gender equality, greater economic freedom, elevated usage of technology, more open political competition, and a stronger belief in hard work. Similarly, drawing on social role theory, Chizema, Kamuriwo, and Shinozawa (2015) employed three social institutional forces (i.e., women's representation in politics, economic environment, and religiosity) to explain the prevalence of female directors on corporate boards in a large sample of 45 countries.

Beyond the effects of larger institutional forces, elements of the external environment or market in which organizations and leaders operate are also critical for individual and organizational outcomes. For instance, at the level of the individual, Desmet, Hoogervorst, and Van Dijke (2015) used a mixed-method design to demonstrate that market elements may affect how leaders construe a situation and which decision frame they find more appropriate when they witness an instance of ethical misconduct in their organization. Specifically, their results suggest that increased market competition makes leaders more likely to judge others' unethical behavior from an instrumental (as opposed to ethical) perspective, which in turn reduces the likelihood of taking disciplinary actions against transgressors.

At the level of the organization, different leadership styles have been shown to affect different facets of an organization's financial performance or innovation, depending on different characteristics of the organization's environment. For instance, while charismatic leaders contribute more to their organization's financial performance when the organization's environment is uncertain and volatile rather than certain and steady, such an interaction effect was not found for transactional leaders (Waldman, Ramirez, House, & Puranam, 2001). In fact, transactional leaders have been shown to harm their organization's efforts to gain new knowledge and improve its products or services for different customer groups (i.e., exploratory innovation) in dynamic markets (Jansen, Vera, & Crossan, 2009). In contrast, dynamic markets provide an environment in which transformational leaders can positively influence exploratory innovation.

Finally, the findings regarding the omnibus contextual factors in this domain are not limited to cultural differences or institutional and market forces. Existing empirical evidence also suggests that different types of leadership motives, behaviors, and styles are likely to emerge in different types of organizations. For instance, in their conceptual work integrating McClelland's (1975) general theory of motivation with Miner's (1997) work on organizational sociology, Spangler, Tikhomirov, Sotak, and Palrecha (2014) suggested that the leadership motive pattern should differ depending on the type of the organization (i.e., bureaucratic, entrepreneurial, voluntary, or professional service). Specifically, they proposed that a leaders' need for achievement (as opposed to other needs) would be the strongest in entrepreneurial organizations (e.g., startups), the need for power would dominate other needs in bureaucratic organizations (e.g., production organizations), and the need for achievement would be the weakest driver in voluntary organizations (e.g., NGOs). Lastly, empirical research focusing on different aspects of the organization has suggested that transformational leadership is highly likely to emerge in nonprofit environmentalist organizations as opposed to for-profit environmental organizations (Egri & Herman, 2000), as well as in public organizations as opposed to private organizations (Lowe, Kroeck, & Sivasubramaniam, 1996).

Who?

Another dimension of the omnibus context is the occupational and demographic context in which all of the members of an organization find themselves embedded (Johns, 2006). As mentioned above, an adaption of this *who* dimension for leadership research would involve all the relevant actors in the leadership process who make up the context for leadership as a whole. In other words, this dimension of the omnibus context of leadership should include key contextual factors that refer to characteristics of the whole group or team of individuals and consider who is being actually led.¹ Two examples of such factors that have been somewhat frequently employed by leadership researchers are sex composition and demographics.

Similar to the *where* dimension, each factor under the *who* dimension takes a different approach to studying the effects of contextual factors on leadership and its resultant outcomes. For instance, the vast majority of studies focusing on sex composition mainly explore its interactive effect with leader gender on leader evaluations and leader emergence. In contrast, studies exploring the impact of other demographic differences model a main effect for contextual factors shaping leader and follower outcomes (see "Omnibus – Who" in Table 1).

Although fewer studies exist that explore how leadership and its outcomes are affected by who is being led (in contrast to where the leadership takes place), this research is nevertheless substantially rich in its theoretical and empirical knowledge as well as its practical implications. For instance, sex heterogeneity in groups may also have important implications for female leaders' advancement in

organizations, especially in the presence of stereotype-based threats. In a series of experimental studies, Hoyt, Johnson, Murphy, and Skinnell (2010) initially showed that female leaders rated their own performance on a leadership task higher when they read an article providing evidence on the lack of women in the upper echelons of organizations (stereotype activation condition) than when they read a passage about leadership unrelated to gender stereotypes (control condition). However, exposing female participants to an additional stereotype-based threat moderated this effect. Specifically, female leaders in the stereotype activation condition rated themselves lower and reported greater anxiety when they were made to believe that they would be leading a group of three men (threat condition) than a group of three women (nothreat condition). However, this does not mean that women are less likely to emerge as leaders in groups with more men. Using samples consisting of MBA and undergraduate students working together on a class project, Lemoine, Lemoine, Aggarwal, and Steed (2016) provided empirical evidence to suggest that the sex of emergent leaders did not necessarily interact with group sex composition to predict whether a female or a male student would emerge as the leader of the group; that is, men and women were equally likely to emerge as leaders in predominantly male or female groups.

Findings of two meta-analyses conducted by Eagly and colleagues confirm these findings. Specifically, they demonstrated that minor changes in certain characteristics of those who are led may constitute an important tipping point in terms of how favorably (male vs. female) leaders are evaluated by their followers (Eagly & Karau, 1991; Eagly, Makhijani, & Klonsky, 1992). In fact, their meta-analytic findings suggest that male leaders receive more favorable ratings only in malemajority groups and not in female-majority groups or groups of equal sex composition. Furthermore, in line with salience arguments regarding being a token member of a group; i.e., "a solo representative of a particular social category" (Eagly & Karau, 1991, p. 688), they expected men to be more likely to emerge as leaders in female-majority groups than in equal-sex groups. Interestingly, however, they found that men are more likely to emerge as leaders in groups of equal sex composition than in groups of male or female majority. In an effort to explain these results, they argued that in certain groups, women may benefit from their token-member positions.

Furthermore, two other studies extend these findings and expand our understanding of the effects of group sex composition beyond its interactive effect with the gender of leaders on two other important leadership outcomes. For example, Antonakis, Avolio, and Sivasubramaniam (2003) examined whether psychometric properties of leadership instruments (e.g., the Multifactor Leadership Questionnaire, MLQ) can change as a function of who is being led and reported significant mean differences between male and female samples for four different dimensions of leadership (i.e., individualized consideration, contingent reward, management-by-exception passive, and laissezfaire). Their findings suggest that how leadership is construed and assessed may very well depend on who is being led. In another study, LePine, Hollenbeck, Ilgen, Colquitt, and Ellis (2002) integrated social role theory (Eagly, 1987) with the multilevel theory of team decision making (Hollenbeck et al., 1995) and examined the effect of sex composition on teams' decision quality. Based on experimental data from a sample of 320 undergraduate management students forming 80 fourperson teams, the authors reported that teams tend to make more aggressive decisions with an increasing number of men on the team. Importantly, however, such bias was eliminated when teams were provided with feedback on previous levels of overaggressiveness in their decisions.

Although less well studied in leadership research, the effects of demographic diversity on leadership and its outcomes are no less interesting. In fact, demographic diversity in work teams can be detrimental for group performance and subsequent evaluations of leaders. In one of the rare studies that examined the effect of demographic diversity, Mayo, Pastor, and Meindl (1996) used data from 68 work

¹ It is important to note that omnibus context "refers to an entity that comprises many features or particulars" (Johns, 2006, p. 391). Hence, the *who* dimension of the omnibus context focuses only on where leadership takes place in groups of followers and does not employ a dyadic perspective (e.g., dyad gender composition).

groups from a number of manufacturing and service organizations to show that demographic diversity negatively relates to group performance, which in turn reduces leaders' self-evaluations of charismatic leadership (but not transactional leadership). The authors attributed this differential effect of demographic diversity to the "romance of leadership" notion (Meindl, 1995, p. 329) and suggested that leaders may place a greater emphasis on the charismatic (as opposed to transactional) aspects of leadership when assessing their own leadership behavior. However, the findings regarding the effects of demographic diversity on leadership and its outcomes are not limited to its main effects. In fact, most recently, leadership researchers have demonstrated that demographic diversity can result in greater team creativity, stronger team performance, and lower turnover when leaders demonstrate transformational or participative leadership qualities (e.g., Kearney & Gebert, 2009; Shin & Zhou, 2007; Somech, 2006) and when leaders and followers develop high-quality relationships (e.g., Nishii & Mayer, 2009).

When?

The absolute or relative time at which events of research interest take place constitutes another dimension of the omnibus context of leadership. According to Johns (2006), the *when* dimension is important when examining the role of context in organizational research for at least two reasons. First, the time at which the research is performed can act as an important proxy for the contextual factors related to time effects. Second, events at the macro level have the potential to shape social and economic relationships that are embedded in the leadership context. Accordingly, Johns considered major changes in organizations (e.g., leader succession) and the experience of important societal (e.g., the September 11 terrorism) or organizational events (e.g., crises) as well as economic conditions (e.g., economic downturns) as examples of time-related contextual factors that also appear to be important examples of the *when* dimension of leadership.

These examples are also somewhat connected to the temporal variables that Bluedorn and Jaussi (2008) listed in their excellent work regarding the role that rhythmic patterns in leader and follower behaviors play in leadership (i.e., entrainment, polychronicity, pace/speed, punctuality, and temporal depth). For instance, entrainment, defined as "the adjustment of the pace or cycle of an activity to match or synchronize with that of another activity" (Ancona & Chong, 1996, p. 253), was relevant for explaining the effects of organizational change on leadership outcomes (e.g., Schepker, Kim, Patel, Thatcher, & Campion, 2017). In contrast, the extent to which leaders indicate a temporal depth, defined as the temporal distance to the past or future when reflecting on past, current, or future events (Bluedorn, 2002), is shown to be affected by periods in the economy (Bligh & Hess, 2007).

Unlike the other dimensions of the omnibus context of leadership, research on subfactors of the *when* dimension does not dramatically differ in its approach to studying the effects of contextual factors on leadership and its outcomes. Specifically, this line of work has frequently explored a main effect of organizational change, events, or crises, and economic conditions on leaders and follower attitudes and behaviors (see "Omnibus – When" in Table 1). That being said, they do differ in their choice of theoretical explanations for these relationships.

In a meta-analysis that examines the effects of major changes in organizations on leadership outcomes, Schepker et al. (2017) recently examined the impact of CEO succession and its characteristics on organizational performance. The authors showed that CEO succession is costly for organizations and has a significant negative effect on their short-term performance ($r_{corrected} = -0.07$), while CEO succession does not seem to influence firms' long-term performance. Additionally, the CEO's origin (inside vs. outside the firm) moderates these relationships. Specifically, CEOs promoted internally make fewer strategic changes ($r_{corrected} = -0.09$) and boost long-term performance ($r_{corrected} = 0.03$), while CEOs hired externally engage in more strategic change ($r_{corrected} = 0.09$), which in turn results in poorer long-term

performance ($r_{\text{corrected}} = -0.02$). These findings suggest that the nature of such major organizational changes can directly influence an organization's short- and long-term success.

Of course, there are other instances of organizational change where the characteristics of the change constitute important boundary conditions for the relationship between the leadership process and its outcomes. For example, using field data for a sample of 251 employees and their 78 managers, Carter, Armenakis, Feild, and Mossholder (2013) explored the contextual effect of the frequency of change. They found that the positive relationship between LMX and task performance and organizational citizenship behavior becomes stronger when employees' work routines are frequently interrupted (i.e., high change frequency). In an effort to explain these results, they argued that as the uncertainty employees face increases due to a high frequency of internal changes, employees become more likely to go the extra mile and perform better to maintain their high-quality relationships with their managers. Although leaders may need to spend more time engaging in intervention activities (e.g., sense making) in such cases (Morgeson & DeRue, 2006), teams become more satisfied with their external leaders as events become more disruptive for them (Morgeson, 2005).

One particular type of event that has generated a considerable amount of research interest in both organizational and political leadership is the crisis, defined as "a serious threat to the basic structures or the fundamental values and norms of a system, which under time pressure and highly uncertain circumstances necessitates making critical decisions" (Rosenthal, Charles, & t' Hart, P., 1989, p. 10). Perhaps the most notable finding in this line of work providing empirical support for the seminal work of Shamir and Howell (1999) is how leaders choose to communicate in times of crisis and the subsequent reactions they elicit after their communication. Organizational leaders appear to be more likely to use charismatic rhetoric in crisis situations than in noncrisis situations and thus appear more charismatic in the eyes of their followers (e.g., Davis & Gardner, 2012; Halverson, Holladay, Kazama, & Quinones, 2004; Williams, Pillai, Deptula, & Lowe, 2012; Williams, Pillai, Lowe, Jung, & Herst, 2009). In the political arena, attributions of charisma are perhaps even more important, as they strongly and positively relate to voting behavior (Williams, Pillai, Deptula, et al., 2012; Williams, Pillai, Lowe, et al., 2009). The more charismatic followers perceive a political candidate to be, the more likely they are to vote for that candidate.

Studies on changes in the financial performance of an organization or nation, another contextual factor of the *when* dimension, similarly focus on how leaders react and communicate themselves to others after such changes. For instance, an organization's financial performance in the previous year can predict the extent to which CEOs subsequently engage in directive behaviors or use punishments directed towards their subordinates in the top management teams (Scully, Sims Jr., Olian, Schnell, & Smith, 1994). Using data collected from the direct reports of 56 high-tech firms, the authors showed that CEOs were more likely to exploit their authority, treat others unpleasantly, and create fear in subordinates when their organizations performed rather poorly.

In contrast, political leaders may choose to react differently under conditions of economic downturn, as they need to ensure the necessary social support from their followers and thus face different consequences in crises. For instance, Bligh and Hess (2007) showed that Alan Greenspan (who served as Chairman of the U.S. Federal Reserve from 1987 to 2006) used language that was less certain and more pessimistic, included more jargon, appealed more to people's everyday lives, and mentioned fewer changes or ideas to implement in the statements and speeches he gave during economic bad times compared to economic good times. In addition, U.S. presidents who expressed more positive affect, highlighted ideals, and emphasized economic growth and achievement (i.e., promotion-focused communication) during periods of high inflation and low economic growth received higher presidential performance ratings and were more likely to be reelected than those who expressed more negative affect, highlighted responsibilities, and

Table 2

What does context do to leadership?

	Restricts its range	Influences base rates	Changes the nature of examined relationships	Generates curvilinear effects	Tips precarious relationships	Threatens generalizability
OMNIBUS CONTEXT						
Where						
National culture	*	?	?			*
Institutional forces	*	:	?		*	*
Types of organizations	*	2	?			?
Who			÷			•
Sex composition	?	?	?	?	*	
Other demographic	: *	•	*	•	?	*
differences						
When						
Organizational change,	*		*			
decline						
Events, phases, crises	*	?	*			
Economic conditions	*	?	?			
DISCRETE CONTEXT		·	•			
Task						
Task characteristics	*	?	*			
Job characteristics	*	*	*			
Social						
Team climate	*		*			?
Organizational climate,	*		*	?		
culture						
Social network	*	*	*			?
characteristics						
Physical						
Physical distance	*	?	*			?
Temporal						
Time pressure	*		*	?		

Note: Asterisks represent frequent cases (greater than 75% of the studies); question marks represent only rare cases.

emphasized safety and vigilance (i.e., prevention-focused communication; Stam, van Knippenberg, Wisse, & Pieterse, 2016).

What does omnibus context do to leadership and how it is studied?

Omnibus contextual factors have been proven to affect the leadership process and its outcomes as well as to moderate the relationship between them. Both similarities and differences in observed contextual effects, examined criterion variables, and employed methodologies between the dimensions became apparent as I examined the role that omnibus context plays in leadership. Regarding similarities, most articles on the where, who, and when dimensions of the omnibus context of leadership provide empirical support for either null findings or findings that apply in one sample but not in another regarding how the omnibus context may influence the observed range of leadership variables under consideration (see Omnibus Context in Table 2). For instance, as Hofstede (1993) stated, "In a Global perspective, US management theories contain a number of idiosyncrasies not necessarily shared by management elsewhere" (p. 81). Indeed, there are aspects of certain leadership styles that are not universally endorsed across all societies (e.g., charismatic leadership; Den Hartog et al., 1999), and different cultures may define, value, and react to certain leader behaviors differently (e.g., leader humility; Oc et al., 2015). Furthermore, a good portion of the research on the omnibus context examines how context changes the nature of examined relationships, in particular, the relationships between different leadership styles and leadership effectiveness (e.g., Carter et al., 2013; Spreitzer et al., 2005; Waldman et al., 2001).

Turning to differences, while the research examining the *where* and *who* dimensions showed that the omnibus context may actually threaten the generalizability of findings, the research examining the *when* dimension was able to provide empirical support for the robustness of the findings. Additionally, different than the *where* and *who* dimensions of the omnibus context of leadership, studies focusing on *when* leadership occurs placed more emphasis on leadership outcomes and particularly how leaders react and communicate themselves to others after crises

(e.g., Nohe & Michaelis, 2016; Williams, Pillai, Deptula, et al., 2012; Williams, Pillai, Lowe, et al., 2009). In contrast, studies focusing on *who* is being led and *where* leadership takes place examined whether context influences base rates and explored conditions that shape the leadership process and leader effectiveness (e.g., Bullough et al., 2012; Chizema et al., 2015; Lemoine et al., 2016; Parker & Welch, 2013). Furthermore, this line of work gathered and analyzed secondary data (e.g., World Bank indicators), unlike the majority of the research on omnibus contextual factors, which used data obtained in surveys or experiments. Similarly, research examining the impact of economic conditions and crises used archival data or employed historiometric methods to clarify the aspects of leader behaviors and leadership styles that are critical in specific contexts (e.g., Bligh & Hess, 2007; Davis & Gardner, 2012; DeChurch et al., 2011; Stam et al., 2016).

All in all, the existing research on the effect of omnibus contextual factors is theoretically rich and empirically interesting. It employs a wide range of methodologies and uses different samples of CEOs, members of top management teams, political leaders, military recruits, working adults, and undergraduate, graduate, and MBA students to show that the omnibus context matters greatly for leadership. However, some of the findings are still limited to single-study evidence, and others show that the context actually threatens generalizability. Hence, the findings should be interpreted with caution, and future research is needed to replicate prior and original findings regarding the omnibus context in the leadership literature, using a multistudy approach. I will return to other theoretical and methodological issues in the general discussion section. First, however, I turn to the effect of discrete contextual factors on leadership.

The discrete context of leadership

Task context

The research examining the effect of the task-related factors of the discrete context on leadership is exceptionally rich. This is not surprising, given that situational theories of leadership (i.e., contingency

models) have long recognized the potential effects of task characteristics on the effectiveness of leader behaviors and have identified when certain types of leader behaviors are more optimal than others. For instance, seminal contingency theories of leadership (e.g., contingency theory, Fiedler, 1978; path–goal theory, House & Mitchell, 1974; normative leadership theory, Vroom & Yetton, 1973) have asserted that leader effectiveness will be a function of their leadership style and contextual factors, and in each of these theoretical models, the role of the task context is made clear.

Different characteristics of the task or job itself (along with other situational factors) are theorized to influence which type of leader behavior or leadership style can be most effective. Task complexity, task interdependence, and task masculinity, as well as job autonomy and job demands, appear to be the most commonly studied factors of the task context where leadership occurs. Interestingly, however, studies focusing on task and job characteristics have employed very similar approaches in studying the effects of contextual factors but differ in their choice of criterion variables. Specifically, both task and job characteristics are modeled as a moderating factor in the relationships between leadership processes (e.g., shared leadership, leader–member exchange) and leadership outcomes. However, research on the former typically focuses on leader outcomes (e.g., leader effectiveness), while the latter is used to predict follower outcomes (e.g., follower proactive work behavior; see "Discrete – Task" in Table 1).

A number of meta-analyses have investigated the moderating role that task-related contextual factors play in the relationship between leadership and its outcomes. First, two meta-analyses explored the extent to which task complexity moderates the relationship between shared leadership and team effectiveness. In these studies, task complexity is conceptualized as a function of component complexity (i.e., the number of unique pieces of information and acts needed to perform the task), coordinative complexity (i.e., the form and strength of relationships between task inputs and task outputs), and dynamic complexity (i.e., the frequency of changes in task requirements over time; Wood, 1986). Their meta-analytic findings revealed that the positive relationship between shared leadership and team effectiveness $(r_{\text{corrected}} = 0.34)$ becomes stronger when the task performed by a team is more rather than less complex (D'Innocenzo, Mathieu, & Kukenberger, 2016; Wang, Waldman, & Zhang, 2014). These findings confirm the theoretical arguments rooted in the substitutes for leadership model (Kerr & Jermier, 1978), suggesting that as task complexity increases, the likelihood of one team member being able to perform different components of the task decreases, and thus the need for leadership surges.

In another meta-analysis, Burke et al. (2006) focused on another task characteristic and categorically examined whether task interdependence (i.e., the extent to which members of a team depend upon one another to perform their share of the work) moderates the effects of task-focused and person-focused leadership behaviors on team effectiveness. Although the small sample size for the low interdependence category made it harder to reach a definite conclusion regarding the moderating effect of task interdependence, there was still evidence to suggest that the positive relationship between task-focused leadership behaviors and perceived team effectiveness is stronger for teams with high task interdependence than for teams with low task interdependence. Similar to the arguments above regarding the effects of task complexity, the authors suggested that increasing task interdependence requires stronger connection and coordination among team members, which again creates a need for leadership.

The relationship between the leadership process and its outcomes also depends on other types of interdependence within teams. One such example is reward interdependence, or the conditions under which team members are rewarded for the team performance rather than their individual performance. For example, Nevicka, De Hoogh, Van Vianen, Beersma, and McIlwain (2011) drew on trait activation theory (Tett & Burnett, 2003) and argued that in conditions of high reward interdependence, those leaders who score highly on narcissism will be more activated because they will find themselves on a social stage where they are motivated to perform at a higher level in order to flaunt their superiority to others. Using a dynamic and networked computer simulation, the authors showed that even though narcissists were likely to emerge as leaders in their groups regardless of their individual performance or the level of reward interdependence, they individually performed much better when joint group performance, rather than individual performance, was rewarded (Nevicka et al., 2011). Additionally, the type of task (masculine- vs. feminine-type tasks) performed by the group appears to be important for predicting the emergence of male and female leaders. In fact, men emerged more frequently than women as leaders in their groups when the task they performed required stereotypically masculine actions or decisions (e.g., initiating structure; Hall, Workman, & Marchioro, 1998). However, the likelihood of men or women emerging as leaders was statistically not different when the task they performed was more of a feminine type (e.g., showing consideration).

Furthermore, the effect of task-related contextual factors on leadership is not limited to different task characteristics. Job characteristics and their effects on leadership provide another, related construct that has attracted a significant amount of research attention. In their meta-analysis, Litano et al. (2016) theoretically suggested that in highly structured occupations, employees have less control over critical aspects of their job (e.g., working hours), and thus these employees are less able to perform their family role and work-family conflict occurs. However, in high LMX relationships, leaders can provide their followers with greater job autonomy, which in turn can buffer negative work--family experiences. Their meta-analytic estimates confirm these arguments and reveal that job autonomy moderates the effect of LMX on work interference with family such that a high-quality LMX relationship is more likely to alleviate work interference with family for jobs that offer less autonomy ($r_{\text{corrected}} = -0.28$) rather than more autonomy $(r_{\text{corrected}} = -0.17)$. In contrast, the relationship between LMX and family interference with work did not meaningfully differ between $(r_{\text{corrected}} = -0.14)$ and low-autonomy jobs high-autonomy $(r_{\rm corrected} = -0.14).$

In addition to these meta-analytic findings, Den Hartog and Belschak (2012) argued that the effect of job autonomy on proactive work behaviors can be driven by individual differences (Grant & Ashford, 2008) and explored the interactive effects of followers' job autonomy, their self-efficacy, and leaders' transformational behaviors on followers' proactive behavior. Specifically, the authors demonstrated that in conditions of high job autonomy, transformational leadership positively relates to proactive behavior for those followers who possess high (rather than low) self-efficacy. In contrast, in conditions of low job autonomy, transformational leadership positively relates to proactive behavior for those who possess low (rather than high) self-efficacy.

In another study, Ng, Ang, and Chan (2008) extended these findings regarding the effect of job autonomy on leadership outcomes. They used data from almost 400 military leaders and their supervisors to show that the degree to which a job demands one's constant cognitive or emotional effort and the degree to which it offers autonomy in making job-related decisions constitute important contextual factors when linking a leader's personality to leadership effectiveness, a relationship explained by leadership self-efficacy. Specifically, the authors demonstrated that the indirect effects of leader neuroticism, extraversion, and conscientiousness on leadership effectiveness are significant when the job demands are low (but not when job demands are high) and when job autonomy is high (but not when job autonomy is low).

Social context

The characteristics associated with teams that make up the social environment in which leadership occurs are related to the social factors of the discrete context. The social characteristics of teams and organizations (e.g., climate, culture) as well as social network structures (e.g., centrality in a network, network density) are of particular interest in this line of research. While research focusing on team and organizational climate as well as organizational culture typically models these as factors moderating the relation between leader-related factors and leadership effectiveness, leadership research on social networks explore their main effect on leader and follower outcomes (see "Discrete – Social" in Table 1).

With regard to team climate, this research employs an array of methodological approaches and draws from an even wider array of theoretical frames. Generally speaking, social contextual factors are expected to shape the relationship between leadership styles and teamlevel outcomes (e.g., performance, creativity). For instance, integrating the relational model of authority (Tyler & Blader, 2000; Tyler & Lind, 1992) with work on power distance values (e.g., Cole, Carter, & Zhang, 2013), Schaubroeck, Shen, and Chong (2017) demonstrated that the effect of authoritarian leadership on followers' job performance, intention to stay, and affective organizational commitment is moderated by the power distance climate (operationalized at the team level) and mediated by the perceived insider status of followers. Specifically, using data from 202 employees and their 50 managers working in a technology company in China, the authors demonstrated that the negative indirect effect of authoritarian leadership through the follower status was only significant in organizational units with lower levels of power distance and not in those with higher levels. In other words, the level of followers' job performance, their likelihood of remaining in the organization, and their affective commitment to their organization were not negatively affected by authoritarian leaders in relatively high-powerdistance teams (where followers are willing to take cues from their leaders for directions and group boundaries; Cole et al., 2013).

However, the nature of the moderating effect of power distance appears to be different when examining the effects of a different leadership style. Specifically, a team's power distance was shown to interact with transformational leadership to predict team potency, which in turn positively related to team performance (Schaubroeck, Lam, & Cha, 2007). This time, transformational leadership had a stronger positive impact on team potency and team performance in high-powerdistance teams than in low-power-distance teams. These findings suggest that the impact of different leadership styles on team performance depends not only on the type of leadership but also on the perceptions that team members come to share.

Like the previously cited research that examines the influence of social factors on leadership at the team level, research claiming that these effects should replicate at the organizational level employs similar social factors. For example, three articles exploring how different types of organizational climate and culture interact with different leadership styles to predict firm performance report interesting findings. First, Jung, Wu, and Chow (2008) looked at the direct and indirect effects of CEOs' transformational leadership on firm innovation while considering the moderating effect of the organizational climate for innovation. They not only reported a significant and positive relationship between CEOs' transformational leadership and firm innovation but also found that this positive relationship was stronger in organizations with a strong climate for innovation than in organizations with a weak climate for innovation.

In a second study focusing on another leadership style in different organizational cultures (characterized by empowerment, external orientation, interdepartmental cooperation, and human-resource orientation), Wilderom, van den Berg, and Wiersma (2012) used timelagged data for over 1200 employees working in 46 different branches of a large Dutch bank to explore the combined influence of charismatic leadership and organizational culture on firm performance. While the culture and charisma were positively related to the subsequent perceived performance of the organization, only CEOs' charisma was significantly related to the organization's objective financial performance (i.e., return on capital) after controlling for the organization's previous performance. In an effort to explain the null effect of organizational culture on financial performance, the authors argued that it is likely that a longer time interval is needed (e.g., longer than two years; Crook, Todd, Combs, Woehr, & Ketchen Jr., 2011) in order to detect the effects of culture on financial performance.

Finally, in a more recent comprehensive study, Hartnell, Kinicki, Lambert, Fugate, and Corner (2016) used field data from a sample of 114 CEOs and 324 top management team members to explore competing hypotheses about whether similarities or differences between CEO (task- versus relationship-based) leadership and an organization's (task versus relationship) culture would have a more positive impact on firm performance. The findings supported the dissimilarity hypothesis. Specifically, they found that organizations perform better when there is a misalignment between the CEO leadership and the organizational culture and thus suggested that culture can be seen a substitute for leadership, and vice versa.

While still in its infancy, theoretical and empirical work focusing on the patterns of social relationships in leadership research is emerging. In particular, there is a growing interest in employing social network approaches to study leadership and its outcomes (e.g., Balkundi & Kilduff, 2005; Carter, DeChurch, Braun, & Contractor, 2015; Cullen-Lester, Maupin, & Carter, 2017). Importantly, what these studies aim to show is that both the patterns of social networks (e.g., density) and the location of an individual (e.g., centrality) within those networks can interact with characteristics of that individual to predict important leadership outcomes such as leader emergence or leadership perceptions. For instance, Serban et al. (2015) found that individuals with higher levels of extraversion, cognitive ability, or self-efficacy are more likely to emerge as leaders in high-density teams where the team members have more ties to one another and thus are more likely to share critical information and collaborate with each other than in lowdensity teams.

Furthermore, a social network's pattern of perceived competence and warmth among members of the group can also influence the amount of leadership exhibited and how leadership is structured within self-managing teams (DeRue, Nahrgang, & Ashford, 2015). For instance, being perceived as competent by other group members can help an individual engage in leader-prototypical roles and emerge as a leader in the group, which in turn can shape the leadership structure within that social network. Finally, where a manager is located within the advice network of followers has been proven to be critical for leaders (Chiu, Balkundi, & Weinberg, 2017). Specifically, managers who are located more centrally (i.e., those who are more likely to be approached by followers for advice) are not only perceived to be socially more powerful but also perceived to be more of a leader.

Physical context

The discrete context of leadership also encompasses the design or structure of the material or built environment where leaders and followers interact with each other, perform their work-related tasks, and direct their efforts towards their objectives. The physical context includes environmental conditions, such as noise, lighting, temperature, and hazardous work conditions as well as the actual physical or structural distance between leaders and followers (Johns, 2006; Kerr & Jermier, 1978; Pfeffer, 1997). However, the physical context of leadership (along with the temporal context, which I will discuss next) is largely concentrated on the physical distance between leaders and followers (see "Discrete – Physical" in Table 1), in light of several notable theoretical works (e.g., Antonakis & Atwater, 2002; Napier & Ferris, 1993).

The physical context—in particular, physical or spatial distance—can create conditions where "effective leadership may be impossible" or neutralize any possible positive effect of leadership behaviors on leadership outcomes (Kerr & Jermier, 1978, p. 396). In a metaanalysis that examined 435 relationships gathered from 36 independent samples with over 4000 observations, Podsakoff et al. (1996) confirmed these arguments. Specifically, the authors found a general negative effect of the spatial distance between leaders and followers on leadership outcomes, as it is negatively correlated to followers' in-role performance ($r_{corrected} = -0.09$), group altruism ($r_{corrected} = -0.14$), group conscientiousness ($r_{corrected} = -0.07$), and group civic virtue ($r_{corrected} = -0.07$) and positively correlated to group role conflict ($r_{corrected} = 0.19$). In contrast, spatial distance had no significant effect on followers' general satisfaction ($r_{corrected} = 0.00$), organizational commitment ($r_{corrected} = -0.02$), group sportsmanship ($r_{corrected} = 0.04$), or group courtesy ($r_{corrected} = -0.05$). Additionally, their meta-analytic findings suggested that spatial distance predicted incremental variance in these criterion variables beyond the effects of leader behaviors (e.g., transactional leadership).

In contrast, spatial distance seems to play a negative moderating role for the effect of leadership style and behaviors on follower performance. Specifically, the findings of empirical studies suggest that the relationship of the leader's contingent reward behavior, LMX, and transformational, transactional, hierarchical, empowering, and shared team leadership to subordinate performance is weaker for subordinates who are spatially located at a distance from their supervisors than those who are spatially close to their supervisor (e.g., Hill & Bartol, 2016; Hoch & Kozlowski, 2014; Howell & Hall-Merenda, 1999; Howell, Neufeld, & Avolio, 2005; Podsakoff, Todor, Grover, & Huber, 1984). These results suggest that physical distance potentially neutralizes the positive effects of a leader's behavior.

While these studies explore the role that physical distance between leaders and their followers plays for leadership, it is reasonable to expect that the distance between different stakeholders of an organization should also matter and should similarly shape the leadership outcomes. To date, only one study of which I am aware has examined the potential role of customer proximity (i.e., employees' distance from customers based on their functional roles) in leadership. In a comprehensive study of how customer proximity affects leaders and followers, Liao and Subramony (2008) used data from a sample of over 4000 employees and their 403 senior leaders at 42 facilities of a global manufacturer operating in 16 countries to show that customer proximity moderates the relationship between the senior leadership team's and the employee's customer orientations. Specifically, they found that the positive relationship between the customer orientation of the senior leadership team and that of the employees is stronger for employees occupying customer-contact roles (i.e., higher levels of customer proximity) than for employees occupying production roles (i.e., lower levels of customer proximity). Again, the physical distance acts as a neutralizer of the positive effects of the senior leadership team.

Temporal context

Although temporal context was not considered as part of the discrete context in Johns's (2006) original formulation of his categorical framework, I decided to include temporal factors as part of the discrete context of leadership in order to be consistent with previous research on teams and contextual leadership (e.g., Bell et al., 2016; Bell & Marentette, 2011; Porter & McLaughlin, 2006). Some examples of what appear to be salient temporal variables for the discrete context of leadership are time pressure (or situational stress caused by time pressure). temporal conflict, duration of the task, and the timing of shifts. One important distinction between how the when dimension of the omnibus context and the temporal dimension of the discrete context are conceptualized is that research on the former focuses on events while research on the latter explores the role of time in the leadership process. Interestingly, however, leadership researchers have largely focused on the effects of time pressure on leadership effectiveness and have to some extent overlooked other possible temporal factors of the discrete context (see "Discrete - Temporal" in Table 1).

In one of the unique studies exploring the impact of time pressure on leadership, Barrett, Vessey, and Mumford (2011) performed a threehour experimental study of leader problem solving and showed that time pressure has a negative effect on a leader's abilities to creatively solve problems, effectively plan, and articulate a vision. The authors explained these findings drawing on the meta-analytic findings of Judge, Colbert, and Ilies (2004).

In their meta-analysis, Judge et al. (2004) explored the role that time pressure plays in the context of leadership and examined the moderating effect of the leader's stress level on the relationship between leader intelligence and leader performance. Aggregating results from 40 empirical studies, the authors found that at lower levels of stress, leader intelligence significantly and positively relates to leader performance ($r_{\text{corrected}} = 0.33$). However, the positive effect of leader intelligence on leader performance vanishes when the stress level is high $(r_{\text{corrected}} = -0.04)$. The researchers used the theoretical approach of cognitive resource theory (Fiedler & Garcia, 1987) to explain these findings. Under conditions of high demand for cognitive resources that are likely to be triggered by stress, individuals frequently depend on prior strategies they have used in solving problems (Kaizer & Shore, 1995). Hence, in cases where they are introduced to different strategies that may help them tackle a problem, intelligent leaders who are under stress are likely to worry about possible failures or crises and fail to devote their attentional, cognitive resources to areas that could help them effectively solve those problems.

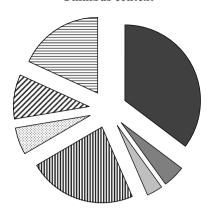
However, there seems to be an important boundary condition affecting the nature of the relationship between time pressure and performance. Maruping, Venkatesh, Thatcher, and Patel (2015) used timelagged field data from a sample of over 1000 employees embedded in 111 project teams working for a software company in India to demonstrate a curvilinear relationship between time pressure and team performance. Specifically, they found that while the team performance-operationalized as the extent to which the project team's output met the expectations of the client-was not affected by lower levels of time pressure, team performance (increasingly) decreased from moderate to higher levels of time pressure. This is akin to recent findings suggesting a negative relationship between temporal conflict (i.e., the extent to which team members disagree about the amount of time they should spend on each task) and team performance (Santos, Passos, Uitdewilligen, & Nubold, 2016). The authors also showed that this relationship is mediated by team processes and moderated by the team's temporal leadership such that the indirect effect of time pressure is not significant at lower levels but significant and positive (negative) at moderate and higher levels of time pressure when leaders frequently (rarely) engage in behaviors that help the project team better structure, coordinate, and manage the pacing of task completion.

What does discrete context do to leadership and how it is studied?

Similar to the effects of the omnibus context, discrete contextual factors play an important role in the leadership process and relate to important leadership outcomes. Most of the studies on the effects of the task, social, physical, and temporal contexts showed the context to restrict the range or change the nature of the examined relationships between components of the leadership process and outcomes (see Discrete Context in Table 2). While there is a wealth of empirical research studying a range of determinants of the task and social contexts of leadership, the number of studies focusing on the physical and temporal contexts is rather limited, addressing the effects of only a few factors. This is perhaps unsurprising, as the task context was conceptualized earlier in the contingency model of leadership (e.g., Fiedler's contingency model), and the social context has been extensively studied in research on teams and their organizational context (e.g., climate, culture). Hence, research on both the task and social contexts has been able to examine a wider range of criteria beyond leadership effectiveness (e.g., leader emergence or followers' turnover intentions) and to demonstrate how context influences base rates in leadership research. In contrast, the physical context started attracting research interest only recently, as geographically dispersed teams have become more and more commonplace in organizations during the last decade

B. Oc



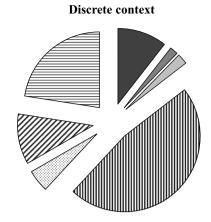


■Leadership process - Leader

□Leadership outcomes - Cognition

⊟Leadership outcomes - Behavior

□Leadership process - Leader-follower dyad



■Leadership process - Follower(s) ■Leadership outcomes - Effectiveness ☑Leadership outcomes - Attitude

(Joshi, Lazarova, & Liao, 2009; O'Leary & Mortensen, 2010), while research examining the effect of the temporal context on leadership has largely focused on time pressure and has only recently started to examine additional factors such as temporal leadership (Mohammed & Nadkarni, 2011). Overall, this body of work focuses mostly on leadership effectiveness or performance outcomes and fails to examine other contextual effects.

Another important difference across dimensions of the discrete context is the focus on factors at different levels. For instance, research on both the task and temporal contexts examines factors that are associated with the nature of the task or job. However, research on the social and physical contexts explores the roles that higher-level constructs (e.g., characteristics of teams or organizations) play. This difference in focus may be the reason why these two areas—social and physical context—have generated research that shows that context may pose a threat to external validity.

Overall, the existing body of research on discrete contextual factors has well-developed theories and empirical evidence to establish the role that the task, social, physical, and temporal contexts play in leadership. However, the research relies heavily on survey data and often builds upon lab settings. Experience-sampling methods (e.g., Nielsen & Cleal, 2011) and simulations (Serban et al., 2015) are rare in this area. Such methodological monism has resulted in empirical findings that are few and far between, in particular for the physical and temporal contexts of leadership.

Summary and a recommendation

For the most part, the empirical research provides evidence for the effects of contextual factors on leadership. Context makes a difference. It has frequently been shown to influence the observed range or base rates of the leadership variables of interest, to change the nature of examined relationships, and to threaten the generalizability of findings. At the omnibus level, contextual factors such as national culture, institutional forces, the sex composition of groups, the economic conditions of countries and organizations, and crises affect the leadership process and leadership outcomes (please see Omnibus Context in Fig. 2).

At the discrete level, characteristics of the task, team, organization, and social network as well as physical distance and time pressure play an important role in shaping the leadership outcomes, more so than the leadership process itself (please see Discrete Context in Fig. 2). Interestingly, leader emergence or the universality of specific leader behaviors and leadership styles as well as leadership effectiveness appear to be the most important criterion variables when examining the influence of omnibus contextual factors. While the rest of the leadership process and leadership outcome variables have received more or less the same amount of research interest, the direct or moderating effect of the omnibus context on leader–follower interactions is the least studied.

In contrast, in research examining the effects of discrete contextual factors, leadership effectiveness takes the largest slice of the pie, followed by behavioral and attitudinal outcomes. In contrast to the omnibus context, follower perceptions and attributions along with cognitive outcomes such as leader prototypicality or construal of leadership constructs (i.e., "Leadership process – Follower(s)") have received the least attention in research examining the effect of the discrete context on leadership.

Additionally, the existing body of work exploring the influence of contextual factors on leadership is concentrated and not systematic. For instance, research has extensively explored the influence of national culture, group sex composition, CEO succession, task and job characteristics, physical distance, and time pressure, as evidenced by the meta-analytic findings. In contrast, much less research has been devoted to understanding the effects of institutional forces, economic conditions, and social network characteristics on leadership.

Furthermore, our understanding of the physical and temporal contexts is largely limited to physical (or spatial) distance and time pressure. There are several reasons for this situation. First, much of the empirical work in some areas (e.g., social networks) is still emerging, following recent theoretical developments, while other areas (e.g., task characteristics) have been the focus of a great deal of empirical research during the last four decades. Second, conducting research can be more challenging in some pockets of the literature (e.g., economic conditions, institutional forces), as archival data or historiometric analyses using secondary sources are considered important and are needed to improve the generalizability of findings and to reveal the characteristics of leadership that are critical in specific contexts. A final reason is that context has been long a "neglected side of leadership" (Osborn et al., 2002, p. 797), and the field has lacked a categorical framework that could generate a more cohesive and integrative body of work (Antonakis, 2017a).

As my review makes clear, a substantial amount of research is still needed to expand our knowledge about the impact of context on leadership. Although researchers may still be tempted to continue

Fig. 2. Distribution of research articles examining the impact of omnibus and discrete context on leadership process and outcomes. exploring the influence of context in overresearched areas and "produce lots of trite, fragmented, and disjointed work" (Antonakis, 2017b, p. 2), I hope this review will encourage researchers to devote their efforts to heading towards uncharted territories of contextual leadership and produce research that is novel from both a theoretical and an empirical perspective.

Future directions for research on the effects of contextual factors

Important gaps in the literature

In this review article, with the help of Johns's (2006) categorical framework. I have identified several categories of the leadership context and examined the degree to which different factors relating to each category have been found to influence the leadership process and leadership outcomes and shape the relationship between them. This also helped me identify particular categories of the context where our understanding of critical factors or underlying processes is still lacking. For instance, as mentioned earlier, research exploring the effects of the physical and temporal context has intensively studied physical or spatial distance and time pressure. However, there are many other possible factors that can relate to the physical and temporal contexts of leadership. For example, Bell et al. (2016) have listed restricted working space, physical distance from home/family, harsh environmental circumstances, and physical threats as part of the physical context and inconsistency in the scheduling of shifts, length of team missions, the life-cycle stage of teams or organizations, and communication delays as part of the temporal context of the extreme-team performance environment. Similarly, although existing research seems to have already included entrainment and temporal depth in theoretical models when examining the effects of contextual factors, Bluedorn and Jaussi (2008) additionally suggested three other temporal variables that may matter for leadership, namely, polychronicity, pace/speed, and punctuality. Considering that we are currently experiencing another social revolution as we are exposed to social media platforms (McFarland & Ployhart, 2015), it will be important to see how these different types of physical and temporal stimuli function in digital and nondigital contexts of leadership.

Similarly, less is known about the factors influencing cognitive outcomes at the omnibus level, cognitive and follower outcomes at the discrete level, and the quality of LMX at the omnibus and discrete levels. It is empirically unclear, for instance, whether generational changes can predict the extent to which followers value engaging in high-quality LMX (Anderson, Baur, Griffith, & Buckley, 2017). Echoing Antonakis (2017a), "LMX is clearly an endogenous variable that shares many common causes with outcomes that it is meant to predict; if these causes are omitted, the effect of LMX on outcomes will be plagued by endogeneity and thus confounded" (p. 10). Hence, examination of the direct and moderating effects of contextual factors on LMX will be an important step towards addressing this issue.

Recall that followers are one of the three components (the others being leaders and context) that drive the effects of leadership. Research exploring whether and how followers and the way they follow (i.e., followership) influence leaders and shape the leadership process is currently one of the areas with great potential to grow in parallel with leadership research (Uhl-Bien, Riggio, Lowe, & Carsten, 2014). However, with the exception of research exploring the effects of national culture (the where dimension of the omnibus context), organizational change (the when dimension of the omnibus context), and task and job characteristics of the discrete context, the role that followers play is generally overlooked. Yet opportunities for followership-related questions abound. For example, work on followership prototypes (or antiprototypes) has been developed in a Western context (Sy, 2010) without considering how definitions or prototypicality might change depending on national culture, industry, and characteristics of organizations (i.e., the where dimension of the omnibus context).

Furthermore, as previously mentioned, contexts are dynamic, and time-related factors could be important when examining the role of context in organizational research. For example, major changes in organizations (e.g., CEO succession), in countries (e.g., economic crises, terrorist attacks) or even in geographic regions (e.g., the Arab Spring) can shape leadership processes differently or elicit different types of reactions from leaders and followers. For instance, future research might explore whether economic crises or terrorist attacks can constitute a threat to a leader's power, which in turn can possibly generate reactance in leaders and shape their subsequent affective, attitudinal, and behavioral reactions. Psychological reactance theory (Brehm, 1972) may be particularly useful to explain how threats to power generate reactance in leaders and followers. Of course, it is clear that once we begin considering reactions to threat, the next interesting question is: Will reactions change, and how, as a function of theoretically relevant individual differences? For instance, will narcissistic leaders react more or less strongly to such power threats? Similarly, can such highly threatening events create a context in which conservative attitudes towards women would increase and thus male leaders would be preferred over female leaders? Existing research on political ideology (liberalism vs. conservatism; e.g., Jost, Nosek, & Gosling, 2008) can shed light on this question. The possibilities are obvious, and many of the theoretical frameworks already exist to answer these or similar questions.

Combination of discrete contextual factors

Although this review classifies the leadership context into the dimensions defined by the categorical framework of Johns (2006), the boundaries between different contextual factors are not always clearcut. In fact, exploring the effects of one factor may sometimes require including elements embedded in another factor of the discrete context. Instead of drawing stronger distinctions between the different discrete contextual factors. I believe research on contextual leadership can benefit from modeling the interactions among the different factors. For instance, House's (1971) path-goal theory theoretically explored both the task and social dimension of the discrete context to better explore relationships between different types of leader behaviors and follower outcomes. While the great majority of studies in leadership research have examined the effects of discrete contextual factors in isolation of each other, it is my hope that future empirical research will consider how different discrete contextual factors might interact with each other in an effort to fully represent the context in which leadership occurs.

The interaction between the omnibus and discrete contexts

Another area of low-hanging fruit is the interaction between omnibus and discrete contextual factors in shaping the leadership process and its subsequent outcomes. Although Johns (2006) positioned the discrete contextual factors in his theoretical model to mediate the effect of contextual factors on leadership, to my knowledge there is no empirical research that examines this. In fact, changes in the omnibus context may very well shape the discrete context of leadership, which in turn affects the leadership process or its outcomes. For instance, sources of institutional forces can exert pressure on organizations that will force them to revisit their planning activities (e.g., task structures), hoping to better fit their institutional environment and subsequently increase their survival and profitability (e.g., Honig & Karlsson, 2004). Similarly, the mediating effect of the temporal context in the relationship between economic conditions and leadership can also be explored. For instance, in a series of studies, DeVoe and Pfeffer (2011) demonstrated that individuals with greater income or wealth feel greater time pressure and subsequently behave less patiently during the tasks they perform. Adopting a similar approach in different areas of leadership context would enrich our knowledge of mechanisms that translate the effects of contextual factors on leadership.

Additionally, research can examine the simultaneous effects of omnibus and discrete contextual factors on leadership. In one of the rare examples of such a study design, Serban and Roberts (2016) modeled the effects of task cohesion and task ambiguity (i.e., the task context) as well as the internal team environment (i.e., the social context) separately to predict shared leadership, which in turn determines team satisfaction, task satisfaction, and team performance. They found that the internal team environment and task cohesion positively relate to shared leadership (but not task ambiguity), which in turn predicts only task satisfaction (and not task satisfaction or team performance). More research is needed to further examine such simultaneous effects of different contextual factors.

It would be also interesting to examine the interactive effects of omnibus and discrete contextual factors. Similar to a configural analysis (Meyer, Tsui, & Hinings, 1993), such an approach would more fully describe the context in which leadership occurs. For instance, previous research on employee voice behavior employing the exit/voice/loyalty/ neglect framework (Farrell, 1983) showed that the quality of job alternatives (a proxy for economic conditions) interacts with cultural differences to predict job satisfaction and intentions of turnover (Thomas & Au, 2002). Existing research on contextual leadership would be richer if researchers expanded their lens to specify such interrelationships in their theoretical models and capture the full predictive power of different categories of the leadership context.

The reciprocal effect of leadership on context

In this review, I have not considered empirical research examining how leaders or leadership may in turn shape the context, reversing the lens of the review. However, similar to the ways in which context influences leadership, leadership influences context. For instance, work by Zhang and Peterson (2011) and Zohar and Tenne-Gazit (2008) has demonstrated how transformational leadership may shape different characteristics of social networks. While it would be challenging to include such a feedback loop and well beyond the scope of this review, I believe it is still important to recognize the reciprocal effect of leadership on context and the possibility of its feedback effects.

Contextualization of leadership research

While this review focused on existing empirical findings regarding the effects of contextual factors on leadership and its outcomes using Johns's (2006) categorical framework, one way to increase the generalizability of findings and to study the outcome variables and relationships of interest in greater detail would be contextualization (Bamberger, 2008). Rousseau and Fried (2001) defined contextualization as the "linking of observations to a set of relevant facts, events or point of view that make possible research and theory that form part of a larger whole" (p. 1) and listed six important issues related to selecting the right research setting and assessment tools: 1) construct comparability (e.g., are constructs perceived differently across different contexts?), 2) points of view (e.g., whose points of view are considered in the study?), 3) representativeness (e.g., are the samples employed representative of those employed in earlier studies?), 4) range restriction (e.g., do the selection of a specific sample or situational factors affect the variance observed in the criteria?), 5) time (e.g., when were the data collected and are there any possible roles that institutional factors play in influencing the criteria?), and 6) levels (what characteristics of individuals, groups/teams, or organizations are considered?). A systematic review or meta-analysis exploring these issues taken together as a whole is an interesting possibility to pursue in future research.

Conclusion

Leadership researchers have long recognized the importance of context for the leadership process and its outcomes. Context can act as a salient situational moderating factor of leadership effects, produce cross-level effects on leadership, be a configuration of stimuli for leadership processes, influence the base rates of leader emergence, and represent the time or place in which leadership takes place. Because of its wide range of impact, context has been the focus of a substantial amount of research within the leadership literature. However, this voluminous and diverse body of research is far from being cohesive.

To introduce some structure to this research, I have divided the contextual factors at the omnibus level into three main categories (i.e., *where, who,* and *when*) and at the discrete level into four categories (i.e., *task, social, physical,* and *temporal*), and I have used these to structure my review of the existing literature on leadership context. I have further suggested a number of areas in which existing work in different categories of the leadership context might benefit from borrowing theories and methodologies used in other fields to generate a more theoretically grounded and cohesive body of work. I hope that the ideas and views I have offered will help meaningfully structure the existing work on the leadership context and trigger conversations across different areas of interest.

References

- Achua, C. F., & Lussier, R. N. (2007). *Effective leadership* (3rd ed.). Canada: Thomson South Western.
- Lemoine, G. J., Aggarwal, I., & Steed, L. B. (2016). When women emerge as leaders: Effects of extraversion and gender composition in groups. *The Leadership Quarterly*, 27(3), 470–486.
- Ancona, D., & Chong, C. L. (1996). Entrainment: Pace, cycle, and rhythm in organizational behavior. Research in Organizational Behavior, 18, 251–284.
- Anderson, H., Baur, J., Griffith, J., & Buckley, M. (2017). What works for you may not work for (Gen)Me: Limitations of present leadership theories for the new generation. *The Leadership Quarterly*, 28, 245–260.
- Antonakis, J. (2017a). On doing better science: From thrill of discovery to policy implications. The Leadership Quarterly, 28, 5–21.
- Antonakis, J. (2017b). Editorial: The future of the leadership quarterly. The Leadership Quarterly, 28(1), 1–4.
- Antonakis, J., & Atwater, L. (2002). Leader distance: A review and a proposed theory. The Leadership Quarterly, 13, 673–704.
- Antonakis, J., Avolio, B. J., & Sivasubramaniam, N. (2003). Context and leadership: An examination of the nine-factor full-range leadership theory using the Multifactor Leadership Questionnaire. *The Leadership Quarterly*, 14, 261–295.
- Antonakis, J., Schriesheim, C. A., Donovan, J. A., Gopalakrishna-Pillai, K., Pellegrini, E. K., & Rossomme, J. L. (2004). Methods for studying leadership. In J. Antonakis, A. R. Cianciolo, & R. J. Sternberg (Eds.). *The nature of leadership* (pp. 48–70). Thousand Oaks, CA: Sage.
- Atwater, L. E., Wang, M., Smither, J. W., & Fleenor, J. W. (2009). Are cultural characteristics associated with the relationship between self and others' ratings of leadership? *Journal of Applied Psychology*, 94, 876–886.
- Avolio, B. J. (2007). Promoting more integrative strategies for leadership theory-building. *American Psychologist*, 62, 25–33.
- Ayman, R., & Adams, S. (2012). Contingencies, context, situations, and leadership. In D. V. Day, & J. Antonakis (Eds.). *The nature of leadership* (pp. 218–256). Thousand Oaks, CA: Sage.
- Balkundi, P., & Kilduff, M. (2005). The ties that lead: A social network approach to leadership. The Leadership Quarterly, 17, 419–439.
- Bamberger, P. (2008). Beyond contextualization: Using context theories to narrow the micro-macro gap in management research. Academy of Management Journal, 51, 839–846.
- Barrett, J. D., Vessey, W. B., & Mumford, M. D. (2011). Getting leaders to think: Effects of training, threat, and pressure on performance. *The Leadership Quarterly*, 22, 729–750.
- Bass, B. M. (2008). The Bass handbook of leadership: Theory, research, and managerial applications (4th ed.). New York: Free Press.
- Bell, S. T., Fisher, D. M., Brown, S. G., & Mann, K. E. (2016). An approach for conducting actionable research with extreme teams. *Journal of Management*. http://dx.doi.org/ 10.1177/0149206316653805.
- Bell, S. T., & Marentette, B. J. (2011). Team viability for long-term and ongoing organizational teams. Organizational Psychology Review, 1, 275–292.
- Bennis, W. (2007). The challenges of leadership in the modern world. American Psychologist, 62, 2–5.
- Bligh, M. C., & Hess, G. D. (2007). The power of leading subtly: Alan Greenspan, rhetorical leadership, and monetary policy. *The Leadership Quarterly*, 18, 87–104.
- Bluedorn, A. C. (2002). The human organization of time: Temporal realities and experience. Stanford, CA: Stanford University Press.
- Bluedorn, A. C., & Jaussi, K. S. (2008). Leaders, followers, and time. The Leadership Quarterly, 19, 654–668.
- Boal, K. B., & Hooijberg, R. (2000). Strategic leadership research: Moving on. The Leadership Quarterly, 11, 515–549.
- Brehm, J. (1972). Responses to loss of freedom: A theory of psychological reactance. New York, NY: General Learning Press.

- Bullough, A., Kroeck, K. G., Newburry, W., Kundu, S. K., & Lowe, K. B. (2012). Women's political leadership participation around the world: An institutional analysis. *The Leadership Quarterly*, 23, 398–411.
- Burke, C. S., Stagl, K. C., Klein, C., Goodwin, G. F., Salas, E., & Halpin, S. M. (2006). What type of leadership behaviors are functional in teams? A meta-analysis. *The Leadership Quarterly*, 17, 288–307.
- Carter, M. Z., Armenakis, A. A., Feild, H. S., & Mossholder, K. W. (2013). Transformational leadership, relationship quality and employee performance during continuous incremental organizational change. *Journal of Organizational Behavior, 34*, 942–958.
- Carter, D. R., DeChurch, L. A., Braun, M. T., & Contractor, N. (2015). Social network approaches to leadership: An integrative conceptual review. *Journal of Applied Psychology*, 100, 597–622.
- Cheng, C., Jiang, D., Cheng, B., Riley, J. H., & Jen, C. K. (2015). When do subordinates commit to their supervisors? Different effects of perceived supervisor integrity and support on Chinese and American employees. *The Leadership Quarterly*, 26, 81–97.
- Chiu, C. Y. C., Balkundi, P., & Weinberg, F. (2017). When managers become leaders: The role of manager network centralities, social power, and followers' perception of leadership. *The Leadership Quarterly*, 28, 334–348.
- Chizema, A., Kamuriwo, D. S., & Shinozawa, Y. (2015). Women on corporate boards around the world: Triggers and barriers. *The Leadership Quarterly*, 26(6), 1051–1065.
- Cole, M. S., Carter, M. Z., & Zhang, Z. (2013). Leader-team congruence in power distance values and team effectiveness: The mediating role of procedural justice climate. *Journal of Applied Psychology*, 98, 962–973.
- Crook, T. R., Todd, S. Y., Combs, J. G., Woehr, D. J., & Ketchen, D. J., Jr. (2011). Does human capital matter? A meta-analysis of the relationship between human capital and firm performance. *Journal of Applied Psychology*, 96, 443–456.
- Cullen-Lester, K. L., Maupin, C. K., & Carter, D. R. (2017). Incorporating social networks into leadership development: A conceptual model and evaluation of research and practice. *The Leadership Quarterly*, 28(1), 130–152.
- Currie, G., Lockett, A., & Suhomlinova, O. (2009). Leadership and institutional change in the public sector: The case of secondary schools in England. *The Leadership Quarterly*, 20, 604–616.
- Davis, K., & Gardner, W. L. (2012). Charisma under crisis revisited: Presidential leadership, perceived leader effectiveness, and contextual influences. *The Leadership Quarterly*, 23, 918–933.
- Day, D. V. (Ed.). (2014). The Oxford handbook of leadership and organisations(1st ed.). New York, NY: Oxford University Press.
- Day, D. V., & Antonakis, J. (2012). Leadership: Past, present, and future. In D. V. Day, & J. Antonakis (Eds.). The nature of leadership (pp. 3–25). Los Angeles, CA: Sage. DeChurch, L. A., Burke, C. S., Shuffler, M. L., Lyons, R., Doty, D., & Salas, E. (2011). A
- DeChurch, L. A., Burke, C. S., Shuffler, M. L., Lyons, R., Doty, D., & Salas, E. (2011). A historiometric analysis of leadership in mission critical multi-team environments. *The Leadership Quarterly*, 22, 152–169.
- Den Hartog, D. N., & Belschak, F. D. (2012). Work engagement and Machiavellianism in the ethical leadership process. *Journal of Business Ethics*, 107, 35–47.
- Den Hartog, D. N., House, R. J., Hanges, P. J., Ruiz-Quintanilla, S. A., Dorfman, P. W., et al. (1999). Culturally specific and cross-culturally generalizable implicit leadership theories: Are attributes of charismatic/transformational leadership universally endorsed? *The Leadership Quarterly*, 10, 219–256.
- DeRue, D. S., Nahrgang, J. D., & Ashford, S. J. (2015). Interpersonal perceptions and the emergence of leadership structures in groups: A network perspective. *Organization Science*, 26, 1192–1209.
- DeRue, D. S., Nahrgang, J. D., Wellman, N., & Humphrey, S. E. (2011). Trait and behavioral theories of leadership: An integration and meta-analytic test of their relative validity. *Personnel Psychology*, 64, 7–52.
- Desmet, P. T. M., Hoogervorst, N., & Van Dijke, M. (2015). Prophets vs. profits: How market competition influences leaders' disciplining behavior towards ethical transgressions. *The Leadership Quarterly*, 26(6), 1034–1050.
- DeVoe, S. E., & Pfeffer, J. (2011). Time is tight: How higher economic value of time increases feelings of time pressure. *Journal of Applied Psychology*, 96(4), 665–676.
- Dierdorff, E. C., Rubin, R. S., & Morgeson, F. P. (2009). The milieu of managerial work: An integrative framework linking work context to role requirements. *Journal of Applied Psychology*, 94, 972–988.
- DiMaggio, P., & Powell, W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48, 147–160.
- Dinh, J. E., Lord, R. G., Gardner, W. L., Meuser, J. D., Liden, R. C., & Hu, J. (2014). Leadership theory and research in the new millennium: Current theoretical trends and changing perspectives. *The Leadership Quarterly*, 15, 36–62.
- D'Innocenzo, L., Mathieu, J. E., & Kukenberger, M. R. (2016). A meta-analysis of different forms of shared leadership-team performance relations. *Journal of Management*, 42(7), 1964–1991.
- Dionne, S. D., Yammarino, F. J., Atwater, L. E., & James, L. R. (2002). Neutralizing substitutes for leadership theory: Leadership effects and common-source bias. *Journal* of Applied Psychology, 87, 454–464.
- Dorfman, P. W., Howell, J. P., Hibino, S., Lee, J. K., Tate, U., & Bautista, A. (1997). Leadership in Western and Asian countries: Commonalities and differences in effective leadership processes across cultures. *The Leadership Quarterly*, 8, 233–274.
- Dust, S. B., Resick, C. J., & Mawritz, M. B. (2014). Transformational leadership, psychological empowerment, and the moderating role of mechanistic–organic contexts. *Journal of Organizational Behavior*, 35(3), 413–433.
- Eagly, A. H. (1987). Sex differences in social behavior: A social-role interpretation. Hillsdale, NJ: Erlbaum.
- Eagly, A. H., & Karau, S. J. (1991). Gender and the emergence of leaders: A meta-analysis. Journal of Personality and Social Psychology, 60, 685–710.
- Eagly, A. H., Makhijani, M. G., & Klonsky, B. G. (1992). Gender and the evaluation of

leaders: A meta-analysis. Psychological Bulletin, 111, 3-22.

- Egri, C. P., & Herman, S. (2000). Leadership in the North American environmental sector: Values, leadership styles, and contexts of environmental leaders and their organizations. Academy of Management Journal, 43, 571–604.
- Epitropaki, O., & Martin, R. (2004). Implicit leadership theories in applied settings: Factor structure, generalizability, and stability over time. *Journal of Applied Psychology*, 89, 293–310.
- Farrell, D. (1983). Exit, voice, loyalty, and neglect as responses to job dissatisfaction: A multidimensional scaling study. Academy of Management Journal, 26, 596–607.
- Fiedler, F. E. (1978). The contingency model and the dynamics of the leadership process In L. Berkowitz (Vol. Ed.), Advances in experimental social psychology. Vol. 11. Advances in experimental social psychology (pp. 59–96). New York, NY: Academic Press.
- Fiedler, F. E., & Chemers, M. M. (1974). Leadership and effective management. Glenview, IL: Scott Foresman.
- Fiedler, F., & Garcia, J. (1987). New approaches to effective leadership: Cognitive resources and organizational performance. Oxford, England: John Wiley & Sons.
- Gardner, W. L., Lowe, K. B., Moss, T. W., Mahoney, K. T., & Cogliser, C. C. (2010). Scholarly leadership of the study of leadership: A review of *The Leadership Quarterly's* second decade, 2000–2009. *The Leadership Quarterly*, 21, 922–958.
- Gerstner, C. R., & Day, D. V. (1994). Cross-cultural comparison of leadership prototypes. The Leadership Quarterly, 5(2), 121–134.
- Graen, B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The Leadership Quarterly*, 6, 219–247.
- Grant, A. M., & Ashford, S. J. (2008). The dynamics of proactivity at work. Research in Organizational Behavior, 28, 3–34.
- Hackman, J. R., & Wageman, R. (2007). Asking the right questions about leadership. American Psychologist, 62, 43–47.
- Hall, R. J., Workman, J. W., & Marchioro, C. A. (1998). Sex, task, and behavioral flexibility effects on leadership perceptions. Organizational Behavior and Human Decision Processes, 74, 1–32.
- Halverson, S. K., Holladay, C. L., Kazama, S. M., & Quinones, M. A. (2004). Self-sacrificial behavior in crisis situations: The competing roles of behavioral and situational factors. *The Leadership Quarterly*, 15, 263–275.
- Hannah, S. T., Uhl-Bien, M., Avolio, B. J., & Cavaretta, F. (2009). A framework for examining leadership in extreme contexts. *The Leadership Quarterly*, 20, 897–919.
- Hartnell, C. A., Kinicki, A. J., Lambert, L. S., Fugate, M., & Corner, P. D. (2016). Do similarities or differences between CEO leadership and organizational culture have a more positive effect on firm performance? A test of competing predictions. *Journal of Applied Psychology*, 101, 846–861.
- Hill, N. S., & Bartol, K. M. (2016). Empowering leadership and effective collaboration in geographically dispersed teams. *Personnel Psychology*, 69, 159–198.
- Hiller, N. J., DeChurch, L. A., Murase, T., & Doty, D. (2011). Searching for outcomes of leadership: A 25-year review. Journal of Management, 37, 1137–1177.
- Hoch, J. E., & Kozlowski, S. W. (2014). Leading virtual teams: Hierarchical leadership, structural supports, and shared team leadership. *Journal of Applied Psychology*, 99, 390–403.
- Hofstede, G. (1980). Motivation, leadership and organization: Do American theories apply abroad? Organizational Dynamics, 9, 42–63.
- Hofstede, G. (1993). Cultural constraints in management theories. *The Executive*, 7(1), 81–94.
- Hollander, E. P., & Julian, J. W. (1969). Contemporary trends in the analysis of leadership processes. *Psychological Bulletin*, 71, 387–397.
- Hollenbeck, J. R., Ilgen, D. R., Sego, D., Hedlund, J., Major, D. A., & Phillips, J. (1995). The multilevel theory of team decision-making: Decision performance in teams incorporating distributed expertise. *Journal of Applied Psychology*, 80, 292–316.
- Honig, B., & Karlsson, T. (2004). Institutional forces and the written business plan. Journal of Management, 30, 29–48.
- House, R. J. (1971). A path–goal theory of leadership effectiveness. Administrative Science Quarterly, 16, 321–328.
- House, R., Hanges, P., Javidan, M., Dorfman, P., & Gupta, V. (2004). Culture, leadership and organizations: The globe study of 62 societies. Thousand Oaks, CA: Sage.
- House, R., Javidan, M., Hanges, P., & Dorfman, P. (2002). Understanding cultures and implicit leadership theories across the globe: An introduction to project GLOBE. *Journal of World Business*, 37(1), 3–10.
- House, R., & Mitchell, T. (1974). Path–goal theory of leadership. Journal of Contemporary Business, 3, 81–98.
- Howell, J. M., & Hall-Merenda, K. (1999). The ties that bind: The impact of leader-member exchange, transformational and transactional leadership, and distance on predicting follower performance. *Journal of Applied Psychology*, 84, 680–694.
- Howell, J. M., Neufeld, D. J., & Avolio, B. J. (2005). Examining the relationship of leadership and physical distance with business unit performance. *The Leadership Quarterly*, 16, 273–285.
- Hoyt, C., Johnson, S., Murphy, S., & Skinnell, K. (2010). The impact of blatant stereotype activation and group sex-composition on female leaders. *The Leadership Quarterly*, 21, 716–732.
- James, L. R., Demaree, R. G., Mulaik, S. A., & Ladd, R. T. (1992). Validity generalization in the context of situational models. *Journal of Applied Psychology*, 77, 3–14.
- Jansen, J. J. P., Vera, D., & Crossan, M. (2009). Strategic leadership for exploration and exploitation: The moderating role of environmental dynamism. *The Leadership Quarterly*, 20, 5–18.
- Javidan, M., Dorfman, P. W., De Luque, M. S., & House, R. J. (2006). In the eye of the beholder: Cross cultural lessons in leadership from project GLOBE. Academy of Management Perspectives, 20(1), 67–90.

Joshi, A., Lazarova, M. B., & Liao, H. (2009). Getting everyone on board: The role of inspirational leadership in geographically dispersed teams. Organization Science, 20, 240–252.

Jost, J. T., Nosek, B. A., & Gosling, S. D. (2008). Ideology: Its resurgence in social, personality, and political psychology. *Perspectives on Psychological Science*, 3, 126–136.

Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and leadership: A qualitative and quantitative review. *Journal of Applied Psychology*, 87, 765–780.

Judge, T. A., Colbert, A. E., & Ilies, R. (2004). Intelligence and leadership: A quantitative review and test of theoretical propositions. *Journal of Applied Psychology*, 89, 542–552.

Judge, T. A., Piccolo, R., & Ilies, R. (2004). The forgotten ones?: The validity of consideration and initiating structure in leadership research. *Journal of Applied Psychology*, 89, 36–51.

- Jung, D. I., & Avolio, B. J. (1999). Effects of leadership style and followers' cultural orientation on performance in group and individual task conditions. Academy of Management Journal, 42, 208–219.
- Jung, D., Wu, A., & Chow, C. (2008). Towards understanding the direct and indirect effects of CEO's transformational leadership on firm innovation. *The Leadership Quarterly*, 19, 582–594.
- Kaizer, C., & Shore, B. M. (1995). Strategy flexibility in more and less competent students on mathematical word problems. *Creativity Research Journal*, 8, 77–82.

Kearney, E., & Gebert, D. (2009). Managing diversity and enhancing team outcomes: The promise of transformational leadership. *Journal of Applied Psychology*, 94, 77–89. Kenny, D., & Zaccaro, S. (1983). An estimate of variance due to traits in leadership.

Journal of Applied Psychology, 68, 678–685. Kerr, S., & Jermier, J. M. (1978). Substitutes for leadership: Their meaning and mea-

surement. Organizational Behavior and Human Performance, 22, 375–403. Lee, K., Scandura, T. A., & Sharif, M. M. (2014). Cultures have consequences: A configural

approach to leadership across two cultures. *The Leadership Quarterly, 25*, 692–710. LePine, J., Hollenbeck, J., Ilgen, D., Colquitt, J. A., & Ellis, A. (2002). Gender composi-

tion, situational strength, and team decision-making accuracy: A criterion decomposition approach. Organizational Behavior and Human Decision Processes, 88, 445–475.

Liao, H., & Subramony, M. (2008). Employee customer orientation in manufacturing organizations: Joint influences of customer proximity and the senior leadership team. *Journal of Applied Psychology*, 93, 317–328.

Liden, R. C., & Antonakis, J. (2009). Considering context in psychological leadership research. Human Relations; Studies Towards the Integration of the Social Sciences, 62(11), 1587–1605.

Litano, M. L., Major, D. A., Landers, R. L., Streets, V. N., & Bass, B. L. (2016). A metaanalytic investigation of the relationship between leader-member exchange and work-family experiences. *The Leadership Quarterly*, 27(5), 802–817.

Lord, R. G., Brown, D. J., Harvey, J. L., & Hall, R. J. (2001). Contextual constraints on prototype generation and their multilevel consequences for leadership perceptions. *The Leadership Quarterly*, 12, 311–338.

Lord, R. G., Day, D. V., Zaccaro, S. J., Avolio, B. J., & Eagly, A. H. (2017). Leadership in applied psychology: Three waves of theory and research. *Journal of Applied Psychology*, 102(3), 434–451.

Lord, R. G., de Vader, C. L., & Alliger, G. M. (1986). A meta-analysis of the relation between personality traits and leadership perceptions: An application of validity generalization procedures. *Journal of Applied Psychology*, 71, 402–410.

Lord, R. G., & Emrich, C. G. (2001). Thinking outside the box by looking inside the box: Extending the cognitive revolution in leadership research. *The Leadership Quarterly*, 11, 551–579.

Lord, R. G., Foti, R. J., & De Vader, C. (1984). A test of leadership categorization theory: Internal structure, information processing, and leadership perceptions. Organizational Behavior and Human Performance, 34(3), 343–378.

Lowe, K. B., Kroeck, K. G., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformation and transactional leadership: A meta-analytic review of the MLQ literature. The Leadership Quarterly, 7, 385–425.

Marks, M. A., Mathieu, J. E., & Zaccaro, S. J. (2001). A temporally based framework and taxonomy of team processes. Academy of Management Review, 26, 356–376.

Martin, G. S., Keating, M. A., Resick, C. J., Szabo, E., Kwong Kwan, H., & Peng, C. (2013). The meaning of leader integrity: A comparative study across Anglo, Asian, and Germanic cultures. *The Leadership Quarterly*, 24, 445–461.

Maruping, L. M., Venkatesh, V., Thatcher, S. M. B., & Patel, P. C. (2015). Folding under pressure or rising to the occasion? Perceived time pressure and the moderating role of team temporal leadership. Academy of Management Journal, 58, 1313–1333.

Mayo, M., Pastor, J. C., & Meindl, J. R. (1996). The effects of group heterogeneity on the self-perceived efficacy of group leaders. *The Leadership Quarterly*, 7, 265–284. McClelland, D. C. (1975). *Power: The inner experience*. New York, NY: Irvington.

McFarland, L. A., & Ployhart, R. E. (2015). Social media: A contextual framework to guide research and practice. *Journal of Applied Psychology, 100,* 1653–1677.

Meindl, J. R. (1995). The romance of leadership as a follower-centric theory: A social constructionist approach. *The Leadership Quarterly*, *6*, 329–341.

Meyer, A. D., Tsui, A. S., & Hinings, C. R. (1993). Configural approaches to organizational analysis. Academy of Management Journal, 36(6), 1175–1195.

Miner, J. B. (1997). A psychological typology of successful entrepreneurs. Westport, CT: Quorom.

Mohammed, S., & Nadkarni, S. (2011). Temporal diversity and team performance: The moderating role of team temporal leadership. Academy of Management Journal, 54, 489–508.

Morgeson, F. P. (2005). The external leadership of self-managing teams: Intervening in the context of novel and disruptive events. *Journal of Applied Psychology*, 90, 497-508.

- Morgeson, F. P., & DeRue, D. S. (2006). Event criticality, urgency, and duration: Understanding how events disrupt teams and influence team leader intervention. *The Leadership Quarterly*, 17, 271–287.
- Napier, B. J., & Ferris, G. R. (1993). Distance in organizations. Human Resource Management Review, 3(4), 321–357.
- Nevicka, B., De Hoogh, A. H. B., Van Vianen, A. E. M., Beersma, B., & McIlwain, D. (2011). All I need is a stage to shine: Narcissists' leader emergence and performance. *The Leadership Quarterly*, 22, 910–925.
- Ng, K. Y., Ang, S., & Chan, K. (2008). Personality and leader effectiveness: A moderated mediation model of leadership self-efficacy, jobs demands, and job autonomy. *Journal* of Applied Psychology, 93, 733–743.

Nielsen, K., & Cleal, B. (2011). Under which conditions do middle managers exhibit transformational leadership behaviors? An experience sampling method study on the predictors of transformational leadership behaviors. *The Leadership Quarterly, 22*, 344–352.

Nishii, L., & Mayer, D. (2009). Do inclusive leaders help to reduce turnover in diverse groups?: The moderating role of leader-member exchange in the diversity to turnover relationship. *Journal of Applied Psychology*, 94, 1412–1426.

Nohe, C., & Michaelis, B. (2016). Team OCB, leader charisma, and organizational change: A multilevel study. The Leadership Quarterly, 27, 883–895.

O'Leary, M. B., & Mortensen, M. (2010). Go (con)figure: Subgroups, imbalance, and isolates in geographically dispersed teams. Organization Science, 21, 115–131.

Oc, B., Bashshur, M. R., Daniels, M. A., Greguras, G. J., & Diefendorff, J. M. (2015). Leader humility in Singapore. *The Leadership Quarterly*, 26(1), 68–80.

Osborn, R. N., Hunt, J. G., & Jauch, L. R. (2002). Toward a contextual theory of leadership. The Leadership Quarterly, 13, 797–837.

Parker, M., & Welch, E. W. (2013). Professional networks, science ability, and gender determinants of three types of leadership in academic science and engineering. *The Leadership Quarterly*, 24, 332–348.

Peus, C., Braun, S., & Knipfer, K. (2015). On becoming a leader in Asia and America: Empirical evidence from women managers. *The Leadership Quarterly*, 26, 55–67.

Pfeffer, J. (1997). New directions for organization theory. New York, NY: Oxford University Press.

- Podsakoff, P. M., MacKenzie, S. B., & Bommer, W. H. (1996). Meta-analysis of the relationships between Kerr and Jermier's substitutes for leadership and employee job attitudes, role perceptions, and performance. *Journal of Applied Psychology*, 81(4), 380–399.
- Podsakoff, P. M., Niehoff, B. P., MacKenzie, S. B., & Williams, M. L. (1993). Do substitutes for leadership really substitute for leadership? An empirical examination of Kerr and Jermier's situational leadership model. Organizational Behavior and Human Decision Processes, 54, 1–44.

Podsakoff, P. M., Todor, W. D., Grover, R. A., & Huber, V. L. (1984). Situational moderators of leader reward and punishment behavior: Fact or fiction? *Organizational Behavior and Human Performance*, 34, 21–63.

Porter, L. W., & McLaughlin, G. B. (2006). Leadership and the organizational context: Like the weather? *The Leadership Quarterly*, *17*, 559–576.

Rockstuhl, T., Dulebohn, J. H., Ang, S., & Shore, L. M. (2012). Leader-member exchange (LMX) and culture: A meta-analysis of correlates of LMX across 23 countries. *Journal* of Applied Psychology, 97, 1097–1130.

Rosenthal, U., Charles, M. T., & t' Hart, P. (Eds.). (1989). Coping with crises: The management of disasters, riots and terrorism. Springfield, IL: Charles C. Thomas.

Rousseau, D. M., & Fried, Y. (2001). Location, location, location: Contextualizing organizational research. Journal of Organizational Behavior, 22, 1–13.

Rowland, P., & Parry, K. W. (2009). Consensual commitment: A grounded theory of the meso-level influence of organizational design on leadership and decision making. *The Leadership Quarterly*, 20(4), 535–553.

Santos, C. M., Passos, A. M., Uitdewilligen, S., & Nubold, A. (2016). Shared temporal cognitions as substitute for temporal leadership: An analysis of their effects on temporal conflict and team performance. *The Leadership Quarterly*, 27, 574–587.

Schaubroeck, J., Lam, S. S. K., & Cha, S. E. (2007). Embracing transformational leadership: Group values and the impact of leader behavior on group performance. *Journal* of Applied Psychology, 92, 1020–1030.

Schaubroeck, J., Shen, Y., & Chong, S. (2017). A dual-stage moderated mediation model linking authoritarian leadership to follower outcomes. *Journal of Applied Psychology*, 102(2), 203–214.

Schepker, D. J., Kim, Y., Patel, P. C., Thatcher, S. M. B., & Campion, M. C. (2017). CEO succession, strategic change, and post-succession performance: A meta-analysis. *The Leadership Quarterly*, 28, 701–720.

Scott, W. R. (1987). The adolescence of institutional theory. Administrative Science Quarterly, 32, 493–511.

Scully, J. A., Sims, H. P., Jr., Olian, J. D., Schnell, E. R., & Smith, K. A. (1994). Tough times make tough bosses: A meso analysis of CEO leader behavior. *The Leadership Quarterly*, 5, 59–83.

Serban, A., & Roberts, A. J. B. (2016). Exploring antecedents and outcomes of shared leadership in a creative context: A mixed-methods approach. *The Leadership Quarterly*, 27(2), 181–199.

Serban, A., Yammarino, F. J., Dionne, S. D., Kahai, S. S., Hao, C., McHugh, K. A., ... Peterson, D. R. (2015). Leadership emergence in face-to-face and virtual teams: A multi-level model with agent-based simulations, quasi-experimental and experimental tests. *The Leadership Quarterly*, 26, 402–418.

Shamir, B., & Howell, J. M. (1999). Organizational and contextual influences on the emergence and effectiveness of charismatic leadership. *The Leadership Quarterly*, 10, 257–283.

Shin, S. J., & Zhou, J. (2007). When is educational specialization heterogeneity related to creativity in research and development teams?: Transformational leadership as a

moderator. Journal of Applied Psychology, 92, 1709-1721.

- Simon, H., & A. (1973). The organization of complex systems. In H. H. Pattee (Ed.). *Hierarchy theory* (pp. 1–27). New York, NY: Braziller.
- Somech, A. (2006). The effects of leadership style and team process on performance and innovation in functionally heterogeneous teams. *Journal of Management*, 32, 132–157.
- Spangler, W. D., Tikhomirov, A., Sotak, K. L., & Palrecha, R. (2014). Leader motive profiles in eight types of organizations. *The Leadership Quarterly*, 25, 1080–1094.
- Spreitzer, G. M., Perttula, K. H., & Xin, K. (2005). Traditionality matters: An examination of the effectiveness of transformational leadership in the United States and Taiwan. *Journal of Organizational Behavior, 26*, 205–227.
- Stam, D., Van Knippenberg, D., Wisse, B., & Pieterse, A. N. (2016). Motivation in words promotion-and prevention-oriented leader communication in times of crisis. *Journal* of Management. http://dx.doi.org/10.1177/0149206316654543 (Advance online publication).
- Sternberg, R. J., & Vroom, V. (2002). The person versus the situation in leadership. The Leadership Quarterly, 13, 301–323.
- Sy, T. (2010). What do you think of followers?: Examining the content, structure, and consequences of implicit followership theories. Organizational Behavior and Human Decision Processes, 113, 73–84.
- Tett, R. P., & Burnett, D. D. (2003). A personality trait-based interactionist model of job performance. *Journal of Applied Psychology*, 88, 500–517.
- Thomas, D. C., & Au, K. (2002). The effect of cultural differences on behavioral responses to low job satisfaction. *Journal of International Business Studies*, 33(2), 309–326.
- Treadway, D. C., Adams, G. L., Ranft, A. L., & Ferris, G. R. (2009). A meso-level conceptualization of CEO celebrity effectiveness. *The Leadership Quarterly*, 20, 554–570.
- Tyler, T. R., & Blader, S. L. (2000). Cooperation in groups: Procedural justice, social identity and behavioral engagement. Philadelphia, PA: Psychology Press.
- Tyler, T. R., & Lind, E. A. (1992). A relational model of authority in groups. In M. P. Zanna (Vol. Ed.), Advances in experimental social psychology. Vol. 25. Advances in experimental social psychology (pp. 115–191). San Diego, CA: Academic Press.
- Uhl-Bien, M., & Marion, R. (2009). Complexity leadership in bureaucratic forms of organizing: A meso model. *The Leadership Quarterly*, 20, 631–650.
- Uhl-Bien, M., Marion, R., & McKelvey, B. (2007). Complexity leadership ttheory: Shifting leadership from the industrial age to the knowledge era. *The Leadership Quarterly*, 18, 298–318.

- Uhl-Bien, M., Riggio, R. E., Lowe, K. B., & Carsten, M. K. (2014). Followership theory: A review and research agenda. *The Leadership Quarterly*, 25, 83–104.
- Vroom, V. H., & Jago, A. G. (1988). The new leadership: Managing participation in organizations. Englewood Cliffs, NJ: Prentice Hall.Vroom, V. H., & Yetton, P. W. (1973). Leadership and decision-making. New York, NY:
- Wiley. Waldman, D. A., Ramirez, G. G., House, R. J., & Puranam, P. (2001). Does leadership
- matter? CEO leadership attributes and profitability under conditions of perceived environmental uncertainty. Academy of Management Journal, 44, 134–143.
- Wang, D., Waldman, D. A., & Zhang, Z. (2014). A meta-analysis of shared leadership and team effectiveness. Journal of Applied Psychology, 99(2), 181–198.
- Whetten, D. A., Felin, T., & King, B. G. (2009). The practice of theory borrowing in organizational studies: Current issues and future directions. *Journal of Management*, 35, 537–563.
- Wilderom, C. P. M., van den Berg, P. T., & Wiersma, U. J. (2012). A longitudinal study of the effects of charismatic leadership and organizational culture on objective and perceived corporate performance. *The Leadership Quarterly*, 23, 835–848.
- Williams, E. A., Pillai, R., Deptula, B., & Lowe, K. B. (2012). The effects of crisis, cynicism about change, and value congruence on perceptions of authentic leadership and attributed charisma in the 2008 presidential election. *The Leadership Quarterly, 23*, 324–341.
- Williams, E. A., Pillai, R., Lowe, K. B., Jung, D., & Herst, D. (2009). Crisis, charisma, values, and voting behavior in the 2004 presidential election. *The Leadership Quarterly*, 20, 70–86.
- Wood, R. E. (1986). Task complexity: Definition of the construct. Organizational Behavior and Human Decision Processes, 37, 60–82.
- Zaccaro, S. J., Gilbert, J. A., Thor, K. K., & Mumford, M. D. (1991). Leadership and social intelligence: Linking social perspectiveness and behavioral flexibility to leader effectiveness. *The Leadership Quarterly, 2*, 317–342.
- Zhang, Z., & Peterson, S. J. (2011). Advice networks in teams: The role of transformational leadership and members' core self-evaluations. *Journal of Applied Psychology*, 96, 1004–1017.
- Zohar, D., & Tenne-Gazit, O. (2008). Transformational leadership and group interaction as climate antecedents: A social network analysis. *Journal of Applied Psychology*, 93, 744–757.