#### **ORIGINAL PAPER**



# Keeping Teams Together: How Ethical Leadership Moderates the Effects of Performance on Team Efficacy and Social Integration

Sean R. Martin<sup>1</sup> · Kyle J. Emich<sup>2</sup> · Elizabeth J. McClean<sup>3</sup> · Col. Todd Woodruff<sup>4</sup>

Received: 18 November 2019 / Accepted: 21 November 2020 / Published online: 1 January 2021 © Springer Nature B.V. 2021

#### Abstract

Prior research has demonstrated a strong relationship between team performance and team members' team efficacy beliefs and perceptions of social integration. Performing well increases the feelings of collective ability that comprise team efficacy and the feelings of psychological connectedness that make up social integration, while performing poorly erodes them. In this article, we draw from the social cognitive base of ethical leadership theory to argue that ethical leadership moderates the relationship between team performance and team efficacy beliefs, and between team performance and social integration, such that these important team attitudes are buffered against the negative effects of poor performance when leaders act ethically. Alternatively, when leaders act less ethically, team efficacy and social integration break down following poor performance. We test our hypotheses in a field study of U.S. military teams actively engaged in competition. The data support our arguments. We find that ethical leadership weakens the relationships among team performance and team efficacy and social integration, respectively, such that ethical leaders preserve team efficacy and social integration when their teams do not perform well.

**Keywords** Ethical leadership · Team efficacy · Social integration

## Introduction

The 2008 Detroit Lions of the National Football League did not win a single game. They finished the season with zero wins and 16 losses. During their run, linebacker Paris Lenon remarked, "When you're in a situation like that, you have a certain amount of guys that pack it in... I can't give you good information on the percentage. I know that there are a good amount of guys who do. How do you avoid that?" This quote underscores an important problem for team leaders and scholars alike. Scholars have robustly shown a positive linear relationship between a team's past performance and

team members' confidence in their team's abilities or team efficacy beliefs (Bandura 1997, 2000; Gully et al. 2002), and their feeling of being cognitively and socially linked to their team or social integration (Beal et al. 2003; Harrison et al. 2002; Luthans et al. 2007). High performance increases individuals' confidence in their team's ability and makes team membership more desirable, while poor performance lowers expectancies for the future and decreases the desire to associate with the team (Bandura 1997; Lindsley et al. 1995; Meyer et al. 2002; Tajfel and Turner 2004). Because of this, an important theoretical and practical question is: How can team leaders enjoy the benefits of positive performance, while limiting the erosion of team efficacy beliefs and social integration that occurs when teams perform poorly?

Maintaining team efficacy and social integration is important because teams with higher team efficacy set higher goals, are better at sustaining motivation toward those goals, and adapt better following negative feedback (Bandura 1997). Likewise, teams with higher social integration are more engaged and have a greater desire to stay together (Meyer et al. 2002). Because of this, initial failure often sets teams up for future failure, and threatens their ultimate ability to remain intact (Bandura 1997). These general



 <sup>⊠</sup> Kyle J. Emich kemich@udel.edu

Darden School of Business, University of Virginia, FOB 138, Charlottesville, VA 22903, USA

Lerner College of Business, University of Delaware, 319 Lerner Hall, Newark, DE 19716, USA

<sup>&</sup>lt;sup>3</sup> Eller College of Management, University of Arizona, 405NN McClelland Hall, Tucson, AZ 85721, USA

<sup>&</sup>lt;sup>4</sup> United States Military Academy at West Point, 606 Thayer Road, West Point, NY 10996, USA

tendencies make addressing how leaders can preserve team efficacy beliefs and integration despite poor performance a meaningful question, albeit one that is rarely explored.

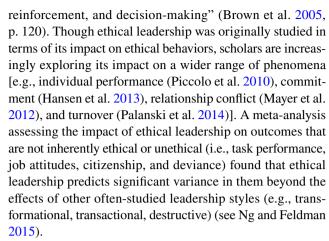
Here, we argue that research on ethical leadership has identified a number of behaviors ethical leaders perform that should be influential in maintaining team attitudes following performance episodes. Specifically, prior research has established that ethical leaders act as role models, develop healthy communication patterns based on fairness and caring, and consider more than just objective performance as their prime directive (Brown and Treviño 2006; Brown et al. 2005). We build upon this work by integrating ethical leadership research with theories of team efficacy and social integration to hypothesize that these ethical leadership behaviors weaken the normally positive relationships among perceptions of team efficacy, feelings of social integration, and team performance.

Addressing this question has theoretical and practical implications. Theoretically, it contributes to a broader understanding of team dynamics, especially concerning what happens between performance episodes. It also suggests the value of ethical leadership in creating teams that stay confident and together through hardship. The dearth of research analyzing the team dynamics that occur following performance episodes (Waller et al. 2016) means we know very little about how leadership broadly, much less ethical leadership specifically, relates to the way that team performance affects team dynamics.

Further, a preponderance of ethical leadership research addresses its relationship to followers' ethical behaviors (Mayer et al. 2012, 2009). However, scholars are increasingly exploring how ethical leadership relates to outcomes beyond ethics, particularly those concerning performance along various dimensions (e.g., Lemoine et al. 2019; Ng and Feldman 2015). We further expand this work by developing and testing hypotheses concerning the moderating role of ethical leadership in whether teams stay confident and together despite performance effects. Practically, this research emphasizes the value of placing ethical leaders in positions of authority. We suggest that organizations that desire teams whose members persist and remain confident after suffering a setback may foment these attitudes by leveraging ethical leaders to foster resilience in their team efficacy and social integration beliefs.

## **Theoretical Background**

Based in social cognitive theory (Bandura 1986, 1997), ethical leadership is defined as the "demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication,



Ethical leadership is argued and shown to influence followers by setting a positive behavioral example, encouraging two-way communication, defining success not only by end results but also by how results were obtained, and encouraging trust and positive reciprocity norms within a team (Brown et al. 2005; Lemoine et al. 2019; Mayer et al. 2009). Followers observe their leaders' behavior and use it as a guide for their own actions. As such, ethical leadership "trickles down" to followers (Mayer et al. 2009). We argue that the behaviors described above lead team members to consider future team expectations such that their evaluations are not as dependent upon objective measures of performance, and this allow teams to better maintain team efficacy beliefs and social integration even when performance is low.

# **Ethical Leadership and Team Efficacy**

Team efficacy reflects team members' beliefs about their collective ability to execute a given course of action (Bandura 1997; Mischel and Northcraft 1997). Meta-analyses across a variety of team types have supported the premise that team efficacy positively relates to team performance (Gully et al. 2002; Stajkovic et al. 2009). It is important to team performance because teams with high team efficacy set higher performance goals and are more likely to persist in the face of failure (Bandura 1997). Importantly, efficacy beliefs are primarily built on past experiences (Bandura 1997; Tierney and Farmer 2011; Tolli and Schmidt 2008), such that individuals interpret their teams' performance as meeting, exceeding, or failing to meet expectations, and those judgments influence their ongoing team efficacy beliefs (Bandura 1991; Emich 2012; Eden 2001; Eden et al. 2010; Hertel et al. 2000; Kerr et al. 2005). In general, triumphs increase team efficacy, while defeats decrease it (Bandura 1986, 1997; Gibson and Earley 2007; Gully et al. 2002; Katz-Navon and Erez 2005; Tasa et al. 2007). However, in his theorizing, Bandura left open the possibility that failure may not always result in decreased team efficacy. In discussing how performance influences efficacy perceptions, Bandura (1991,



p. 253) noted, "Failure can be dispiriting, [but] it can have beneficial effects if it identifies possible causes and suggests corrective changes." Further, if teams adapt to correct causes of their past failures, team efficacy can be maintained.

Here we suggest that ethical leadership moderates the relationship between team performance and team efficacy beliefs, and is particularly consequential when team performance is poor. We expect this for several reasons. First, ethical leadership emphasizes means as well as ends. Ethical leaders do not portray success solely in terms of winning or making money, but also emphasize the value of acting ethically in pursuit of a goal (Brown et al. 2005). This suggests that team members are likely to consider more than just objective performance when evaluating their team, such that even if a team does not win or otherwise fails to achieve high objective performance, if it has acted ethically in the eyes of an ethical leader, it has still accomplished a great deal. Thus, when faced with setbacks, ethical leaders are more prone to focus on other elements of team performance that might have gone well, are less likely to lose confidence in the team, and are more likely to model this focus to followers (Mayer et al. 2009).

Second, ethical leadership fosters two-way communication between leaders and followers (Brown et al. 2005). This creates a climate conducive to raising issues and suggesting solutions (Avey et al. 2012), while also encouraging people to speak up about things that are going well (Burris 2012). Willingness to provide ideas to improve work processes is a critical step in developing new skills and creating continual improvement (Garvin et al. 2008). Opportunities to learn and develop can lessen the impact of negative stimuli (Masten and Reed 2002), and teams are more likely to remain confident if they believe they can address causes of poor performance (Bandura 1991). Thus, by encouraging team members to speak up, ethical leaders make it more likely that their teams identify causes of poor performance. Further, the possibility for future growth and improvement is made salient.

Third, ethical leaders have the best interests of their teams in mind and engage in relationship building within their teams (Brown et al. 2005; DeRue et al. 2011; Mahsud et al. 2010). Taken together with their encouragement of communication and concern for more than just winning, their tendency to engage in relationship building suggests that ethical leaders are likely to praise the positive aspects of team performance and reassure team members that they can perform better in the future. While these behaviors are likely still important even when performance is good, they are likely particularly valuable when performance is worse-than-expected because they may help buffer negative affective responses to poor performance (e.g., Bandura 1991; Gao et al. 2014; Greenberg et al. 1992). Given the arguments above, we expect that:

*Hypothesis 1:* Ethical leadership moderates the relationship between team performance and team efficacy such that the relationship becomes weaker as ethical leadership increases.

## **Ethical Leadership and Social Integration**

While team efficacy reflects team members' assessment of their collective ability to accomplish future tasks, social integration reflects an interpersonal and affective component of team functioning. Social integration is a multifaceted construct capturing cohesion, satisfaction with team members, positive social interactions, and enjoyment of team experiences, and it is positively related to team performance (Beal et al. 2003; Guillaume et al. 2012; Gully et al. 1995; Harrison et al. 2002; Smith et al. 1994). As it has for past performance and team efficacy beliefs, research has demonstrated a clear link between past performance and affect toward one's team. Performing well engenders positive feelings, while performing poorly is a dissatisfying experience people want to avoid (Bandura 1997). Additionally, while high performance generally results in positive feelings toward oneself and one's teammates (Tafiel and Turner 1979), poor performance frequently results in casting blame outside the self (Ross 1977). By extension, people by and large want to remain on high-performing teams, and when teams experience poor performance it can manifest as members blaming one another and deriving less satisfaction from team membership, which in turn relates to withdrawal cognitions and intentions to quit (Meyer et al. 2002).

Theoretically, the ethical leadership behaviors of encouraging communication, valuing processes in addition to outcomes, and establishing positive reciprocity in teams should weaken the relationship between performance and social integration, such that the enjoyment of social interactions and team activities is less directly tied to objective performance. Because performing well is likely to inherently lead to positive feelings toward one's teammates, this is particularly consequential for teams that perform poorly.

First, by enabling effective team communication, ethical leaders enhance followers' feelings of satisfaction and ownership in a team (Avey et al. 2012). When a team is struggling, ethical leaders are more likely to encourage discussion about what is going wrong and what is going right, and to help sustain members' sense of ownership. By encouraging communication and identifying opportunities to improve, ethical leadership also enables learning within teams. Both leader communication and learning enhance feelings of commitment among followers (Ng et al. 2006; Vandewalle et al. 1995). Further, encouraging communication and identifying opportunities to improve is related to satisfaction within teams (Edmondson 1999). Thus, ethical leaders' tendency to encourage communication should weaken the link between team performance



and social integration because it enables ownership of and commitment to a team and its members. This is particularly likely to affect instances when teams are performing poorly, making the experience more enjoyable than it would be for a team where learning and a sense of ownership are not encouraged.

Second, ethical leaders' displays of empathy and trust encourage team members to follow suit and extend empathy to one another (Kalshoven et al. 2013). For example, team members with ethical leaders display more concern for each other and engage in more helping behaviors (Mo and Shi 2017; Shin 2012). Further, ethical leadership decreases perceptions of political behaviors like scapegoating (Kacmar et al. 2013), and can lessen emotional exhaustion when tensions are high (Zheng et al. 2015). When a team is performing well, there is little reason to scapegoat. Because of this, ethical leaders' abilities to encourage trust and decrease political behaviors are particularly important when teams are performing poorly. Thus, we expect that ethical leadership weakens the relationship between team performance and social integration because it builds trust and positive dynamics that matter beyond any particular performance event. Again, this is acutely important when teams are not performing well because ethical leadership will lessen the tendency of team members to blame each other and will preserve perceptions of positive team interactions, thereby maintaining team social integration.

Finally, valuing processes over outcomes enables team members to recognize each other's contributions. In short, by modeling desirable behaviors, ethical leaders create climates that encourage benevolence among team members (Mayer et al. 2009, 2010; Newman et al. 2014; Victor and Cullen 1988). Prior work suggests that people are generally more committed to these types of teams (Brown et al. 2005), and that supportive social relationships are an effective buffer against negative events (Masten and Reed 2002). This suggests that by engendering these dynamics ethical leaders weaken the connection between team performance and social integration by providing additional impetus for members to remain with their team that are particularly important when performance is poor. As such, we expect that while good performance is likely to inherently develop feelings of social integration (Beal et al. 2003; Harrison et al. 2002; Luthans et al. 2007), by promoting healthy team dynamics, ethical leaders are able to sustain high levels of social integration in the face of setbacks like poor performance or failure (Palanski et al. 2014). Specifically, we predict that:

*Hypothesis 2:* Ethical leadership moderates the relationship between team performance and team social integration such that the relationship becomes weaker as ethical leadership increases.



#### Methods

To test our hypotheses, we collected data from the Sandhurst Military Skills Competition at the United States Military Academy at West Point (USMA). This is a highly competitive annual contest involving teams of cadets engaged in 12 simulated war game events that are scored much like a track meet. Events include grenade courses, vehicle extraction exercises, land navigation, low light marksmanship, wall scaling, and weapons assembly, among others. It is a major event, and participants train for months prior to the competition. Performing well is a mark of distinction, and the winning team is recognized in front of the other cadets during a formal awards ceremony.

Teams are formed from cadet companies that live and train together, including for other competitions, throughout their time at USMA. Team leaders are cadets of higher rank who have performed well during prior competitions. This setting has several advantages. First, it allowed us to measure post-competition attitudes in a setting where team members were motivated to perform well and would be highly likely to work together in the future. Second, much like in professional organizations, team members are familiar with their team leaders but do not necessarily have much say in who their leader is. Finally, the performance of each team is objective.

Our data collection strategy involved a time-lagged survey design. This design enabled us to collect data on teammember attitudes both before and after a performance episode, while assessing perceptions of ethical leadership prior to a performance episode.

## **Participants and Procedure**

Our sample consisted of 360 cadets at the USMA. The cadets were divided into 36 teams of ten. Teams are formed from companies—collections of cadets who live and participate in formal activities together both before and after the competition. USMA teams train for approximately 16 weeks leading up to Sandhurst. The event takes place over two days and is similar in scoring and execution to a track meet. Each of the 12 events is timed and evaluated for accuracy. Teams lose points for mistakes or slow performance. Team leaders are senior cadets who are charged with coordinating training, structuring roles, and directing efforts during training and the competition. Team leaders' (N=36) responses were omitted from our analyses, leaving 324 eligible participants. Average participant age was 20.78 years old, and 86% of the sample were male. Additionally, 77% of our sample were Caucasian, 10% were Black, 5% were Hispanic, and 4% were

**Table 1** Confirmatory factor analysis (CFA)

	χ	df	SRMR	RMSEA	CFI	TLI
Full model	568.99	296	0.06	0.08	0.93	0.92
Collapsing post-competition variables	980.44	298	0.08	0.12	0.83	0.81
Collapsing pre- and post-competition variables	1602.35	299	0.17	0.17	0.64	0.61

Asian. Ninety-eight percent were U.S. citizens. Variables of interest were gathered in a lagged survey design. Cadets were sent a link to an online survey two weeks prior to the competition (Time 1), then they performed with their teams in the competition and were objectively scored for performance, and then they were sent a second survey immediately after the competition (Time 2). Of the 324 cadets eligible to participate in the study, 252 (78%) provided usable data at both time points.

#### Measures

All measures except team performance were assessed using a 1 (Strongly Disagree) to 5 (Strongly Agree) Likert scale. Ethical leadership was assessed at Time 1. Participants assessed their team leader's ethical leadership ( $\alpha = 0.93$ ) using Brown et al. (2005) 10-item measure. Participants rated their leader on a number of dimensions. Sample items include "Makes fair and balanced decisions," and "Sets an example of how to do things the right way in terms of ethics." Team performance was scored by competition officials during the competition between our Time 1 and Time 2 surveys. The overall score is made up of a combination of performance assessments across the 12 events, and the time it took to complete the competition. Scores ranged from 4400 to 10,570 (out of a maximum of 15,000), but were divided by 1000 to aid interpretability in the analysis. Post-competition team efficacy was measured at Time 2, immediately after the competition. Participants were asked to consider their expectations for their team's future performance, and were presented with an adapted version of the 8-item General Self-Efficacy Scale ( $\alpha = 0.95$ ) (Chen et al. 2001). Sample items included "This team will would be able to achieve most of the goals we have set for ourselves," and "In general, I believe this team will would obtain outcomes that are most important to us." Post-competition social integration was measured at Time 2 using eight items ( $\alpha = 0.94$ ) from Harrison et al. (2002). Participants rated their agreement with statements like "I look forward to being with other members of my team," and "All in all, I enjoy working on this team."

#### **Controls**

Team's post-competition team efficacy beliefs and social integration are likely determined to a great extent by participants' pre-competition evaluations of team efficacy and social integration. We therefore assessed pre-competition team efficacy and social integration at Time 1, before the competition, using the same measures described above  $(\alpha = 0.96 \text{ and } \alpha = 0.93, \text{ respectively})$ , and include them as controls in our analyses. Finally, to control for other potentially related leadership behaviors that could influence our results, we control for participants' assessments of leader prototypicality. We assessed leader prototypicality at Time 1. Prototypicality assesses the extent to which a leader is seen as representative of the larger group—in this case the U.S. Army—and it is an important predictor of effectiveness (van Knippenberg and van Knippenberg 2005). It also is important in this context, as representative leaders may act as role models and lead their team members to focus on behaving according to Army expectations and norms, which often correlates highly with ethical leadership (Kalshoven and Den Hartog 2009) and other important leadership attributes like charisma (van Knippenberg and van Knippenberg 2005).

#### Results

## **Confirmatory Factor Analysis**

We began with a confirmatory factor analysis of our variables of interest. In our initial model, we included ethical leadership, post-competition social integration, and post-competition team efficacy. We then tested a model collapsing the two post-competition team assessment variables, and a final model collapsing all variables into a single construct. The results of these tests are presented in Table 1.

<sup>&</sup>lt;sup>1</sup> We chose to take this approach instead of using a difference score as a dependent variable because: standard deviations were similar between time points; the difference between Time 2 and Time 1 variables correlated negatively with Time 1 variables, indicative of regression to the mean; and variables were highly correlated between time points (Jennings and Cribbie 2016).



132 S. R. Ma	artin et al.
--------------	--------------

Table 2 Descriptive statistics, aggregation statistics, and correlations among study variables

		Team mean	Team s.d	ICC1	ICC2	rwg	1	2	3	4	5	6	7
1	Performance	7.20	1.71					0.09	0.47**	0.30**	0.11	0.36**	0.18**
2	Ethical leadership	4.01	0.34	0.15	0.59	0.80	0.26		0.38**	0.40**	0.61**	0.45**	0.54**
3	Team efficacy (T2)	4.15	0.43	0.27	0.73	0.79	0.74**	0.51**		0.76**	0.29**	0.64**	0.55**
4	Social integration (T2)	4.15	0.31	0.11	0.47	0.78	0.62**	0.52**	0.84**		0.30**	0.53**	0.61**
5	Leader prototypical	4.05	0.35	0.10	0.48	0.75	0.28	0.81**	0.46**	0.46**		0.34**	0.44**
6	Team efficacy (T1)	4.12	0.39	0.27	0.74	0.83	0.61**	0.57**	0.75**	0.61**	0.55**		0.68**
7	Social integration (T1)	4.21	0.28	0.11	0.50	0.82	0.46**	0.69**	0.71**	0.64**	0.53**	0.81**	

Correlations above the diagonal are at the individual level. Correlations below the diagonal are at the team level. n = 252 cadets on 36 teams

A model treating each of these variables as a separate factor fit our data adequately,  $\chi(296) = 941.88$ , SRMR = 0.06, RMSEA = 0.08, CFI = 0.93, TLI = 0.92, and fit our data significantly better than a model collapsing post-team outcome measures,  $\Delta \chi(3) = 103.36$ , p < 0.01.

## **Level of Analysis**

Our level of analysis is the team. As such, we use multiple indices to assess the appropriateness of aggregating variables to the team level (Klein and Kozlowski 2000). Specifically, we assessed Interrater Reliability (IRR) and Interrater Agreement (IRA) using  $r_{wg}$ , ICC1, and ICC2 (LeBreton and Senter 2008). These statistics indicated sufficient justification for aggregation and are presented in Table 2.

Descriptive statistics are also shown in Table 2. Correlations below the diagonal are at the individual level, while correlations above the diagonal are at the team level.

As expected, there were high correlations among our Time 1 and Time 2 assessments of team efficacy and social integration. The correlations between these factors and our other variables of interest—ethical leadership and performance—are not as high. Given that high correlation concerns are largely between the control variables and outcome variables, we conduct our analyses both including and

excluding controls<sup>2</sup> and found no significant differences between the models, F(3, 32) = 1.42, p = 0.22. We chose to present our models including controls because they are theoretically relevant. We also assessed variance inflation factors (VIF), which were all less than 2.50 except for the Time 1 measure of team efficacy (VIF=2.52).<sup>3</sup>

## **Hypothesis Tests**

We test our hypotheses using Multivariate Multiple Regression, allowing us to compare variable effects across models and account for the correlations between coefficient estimates. The results from our analyses appear in Table 3. Models 1 and 2 present a multivariate regression including controls and main effect independent variables. Models 3 and 4 present a multivariate regression on each dependent variable including the interaction effect. The Pillai test statistic, demonstrating coefficient significance across dependent variables, appears after each pair of models. The interactions are visually presented in Fig. 1.

As expected, team performance significantly relates to post-competition team efficacy and social integration. Supporting Hypotheses 1 and 2, the interaction of team performance and ethical leadership was significantly and negatively related to post-competition team efficacy ( $\beta = -0.23$ , s.e. = 0.07; t = -3.17, p < 0.01) and related to post-competition social integration ( $\beta = -0.14$ , s.e. = 0.07; t = -2.02, p = 0.05), indicating that as ethical leadership increases, the relationship between performance and the dependent variables weakens. The Pillai test statistic indicates that the interaction term is a significant predictor of both dependent



<sup>\*\*</sup>p < 0.01

<sup>\*</sup>p < 0.05

 $<sup>^{\</sup>dagger}p < 0.10$ 

 $<sup>^2</sup>$  The results were robust to the inclusion or exclusion of controls. The only difference when omitting controls is that the interaction term of team performance and ethical leadership predicting social integration becomes significant at p < 0.05, further supporting Hypothesis 2.

 $<sup>^3</sup>$  All variables included in our models were normally distributed. W(36) = 0.95 - 0.97, p = 0.14 - 0.74. Additionally, multicollinearity in all models was appropriate. VIF values ranged from 1.52 to 2.52 for all predictors. Durbin–Watson scores for our four models ranged from 1.64 to 1.83, indicating no autocorrelation issues. Goldfeld–Quandt tests indicated no heteroscedasticity issues in Models 2 and 4. Heteroscedasticity issues arose in Models 1 and 3 caused by teams H2

Footnote 3 (continued)

and C4. Removing these teams from these models did not change the results significantly.

 Table 3
 Multivariate multiple regression results

	Model 1 Team efficacy		Model 2 Social integration			Model 3 Team efficacy		Model 4 Social Integration		
	В	SE	В	SE	Pillai	В	SE	В	SE	Pillai
(Intercept) (	0.23	99:0	1.42*	0.59	1.00**	-6.03**	2.06	-2.47	2.01	1.00**
Team performance	0.12**	0.03	**80.0	0.03	**L9.0	1.05**	0.29	0.65*	0.29	0.73**
Ethical leadership	0.10	0.25	0.13	0.22	0.32**	1.83**	0.59	1.20*	0.57	0.38**
Team performance×Ethical leadership						-0.23**	0.07	$-0.14^{\dagger}$	0.07	0.26*
Controls										
Leader prototypicality (	0.02	0.21	90.0	0.19	0.00	-0.05	0.19	0.01	0.18	0.00
Pre-competition efficacy	0.17	0.21	- 0.06	0.18	$0.18^{\dagger}$	-0.01	0.19	-0.17	0.18	0.03*
Pre-competition integration	0.45	0.29	0.39	0.26	0.09	0.54	0.25	$0.45^{\dagger}$	0.25	0.11
$\mathrm{Adj.}R^2$	99.0		0	0.50			0.76			0.55
F	16.13**		8	8.08**			19.19**			**60.8

n=36 teams. Model titles refer to the dependent variable of the model

\*\*p < 0.01

p < 0.05



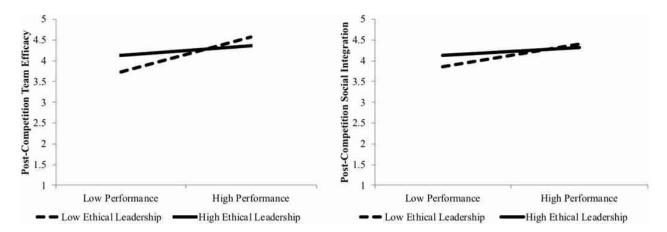


Fig. 1 Interactions of ethical leadership and performance on team members' post-competition team efficacy beliefs and social integration

variables (Pillai = 0.26, F(2, 28) = 4.90, p = 0.01), accounting for the correlation between estimates. Simple slope analyses probing the interactions indicate that at low levels of ethical leadership, performance is significantly and positively related to post-competition team efficacy ( $\beta = 0.20$ , s.e. = 0.04; t = 5.43, p < 0.01), but at high levels of ethical leadership, performance has no significant effect ( $\beta = 0.04$ , s.e. = 0.04; t = 1.27, p = 0.22). Similarly, at low levels of ethical leadership, performance is significantly and positively related to social integration ( $\beta = 0.13$ , s.e. = 0.04; t=3.61, p<0.01), but at high levels of ethical leadership, performance has no significant effect ( $\beta = 0.03$ , s.e. = 0.03; t=0.98, p=0.34). Our results indicate that, in line with previous work, when teams perform well it positively affects their team efficacy beliefs and social integration. However, novel to our investigation, we find that ethical leadership moderates the relationship between performance and our outcomes of interest such that higher levels of ethical leadership weaken these relationships. Observing the shape of the interaction in Fig. 1 further suggests that this buffering effect is particularly important when performance is low such that teams with more ethical leaders are not as adversely affected by poor performance as those with less ethical leaders.

## **Discussion**

Our study aimed to address an important question: How can leaders maintain positive team attitudes after failure? Our results suggest that one answer is to have leaders who act ethically. Evidence tracking teams leading up to and immediately following a competition indicates that ethical leadership significantly weakens the relationship among performance, and team efficacy beliefs and social integration, such that teams that did not perform well did not see downward changes in their team efficacy beliefs or social integration.

Indeed, when a poor-performing team also had an ethical leader, the team members' team efficacy beliefs and levels of social integration did not differ significantly from those in teams that performed well. Alternatively, team members who did not perceive their leader was ethical experienced diminished team efficacy and social integration following poor performance.

## **Theoretical Implications**

This project integrates and extends research in social cognitive theory related to ethical leadership and the relationship between performance and team-member attitudes. Prior work has focused on the role of ethical leadership in generating positive job attitudes and ethical behaviors (Brown et al. 2005; Mayer et al. 2012; Schaubroeck et al. 2012) or extrarole behaviors and performance (Mayer et al. 2009). However, our results indicate that ethical leadership has a role to play beyond immediate performance. Mainly, one-time performance is part of an ongoing process that also involves assessment, adaptation, and subsequent performance (e.g., Gersick 1988; Ilgen et al. 2005; McGrath et al. 2000). Therefore, while the extent to which ethical leadership influences performance is important, we should also try to understand its impact on the team developmental process as a whole. In doing so, we also address recent and consistent calls for more work addressing team dynamics (e.g., Cronin et al. 2011; Waller et al. 2016). This study highlights the importance of ethical leadership in shaping followers' responses to performance, specifically underperformance.

This work also extends our understanding of how performance affects team attitudes, yielding insights that have both theoretical and practical utility. Luthans et al. (2007) noted the importance of exploring how leaders influence followers' efficacy, suggesting that "employees who are more... efficacious... may be more likely to 'weather the storm' of



the type of dynamic, global environment context confronting most organizations today" (p. 568). However, few studies have examined the moderating impact of leadership on post-performance attitudes. Importantly, while most work assumes that poor performance results in decreased team efficacy, we find that ethical leaders can help teams maintain positive team efficacy beliefs in the face of failure. Previous work indicates that this is likely due to an ethical leader's ability to focus on team process and facilitate adaptive solutions to problems that may have caused past failure (Avey et al. 2012; Brown et al. 2005).

Our theory and results similarly further scholarly understanding of social integration. Prior studies have largely focused on how diversity affects social integration (e.g., Harrison et al. 2002; O'Reilly et al. 1989; Smith et al. 1994). We examine two other important factors: team performance and leadership. In this way, the present work adds a new dimension to social integration research by exploring how social integration is affected by performance, and how that effect is moderated by leadership such that ethical leadership can preserve social integration despite setbacks. Our work also has implications for the study of social integration over time and the future study of factors that lead to social integration resilience. Specifically, our findings concerning ethical leadership indicate that teams with ethical leaders are able to overcome the usually negative effects of poor performance on social integration and instead allow members to maintain their engagement with the team.

Finally, many studies focus on individual differences in how people respond to setbacks [factors such as grit (e.g., Duckworth et al. 2007) or dispositional resilience (e.g., Bartone et al. 2008; Masten and Reed 2002)], but the role of other people in preserving team-focused attitudes represents an important area for future exploration. Indeed, earlier work suggests that the ability to bounce back is influenced by factors like social support, learning, and adaptation (Avey et al. 2012; Masten and Reed 2002). We find evidence that ethical leadership can likewise buffer followers against the effects of poor performance.

## **Practical Implications**

This work also has notable implications for practice. Primary among them is the demonstrated value of putting ethical leaders into positions of authority and ensuring that organizations' leadership development programs emphasize the importance of the ethical leadership style. Having resilient teams that are undaunted by setbacks and committed to one another is an aspirational goal for any organization. While prior research has focused on individual team-member differences in traits like grit or robustness, the present work suggests that leadership styles and behaviors play an important role in creating stalwart teams. Specifically, ethical

leaders' tendencies to build relationships, model upstanding behaviors, prioritize process and not just results, and encourage two-way communication create team norms that people are committed to and believe in, and that endure through setbacks, failures, and poor performance. Accordingly, these results suggest that when people are forming teams, deciding whom to promote, or considering what sorts of leadership development would be useful, they should prioritize ethical leadership if they desire teams that remain confident in the face of adversity and do not fracture when the going gets tough.

### **Limitations and Future Directions**

While our longitudinal field sample provided several advantages in studying how ethical leadership moderates the relationship among team performance and team efficacy and social integration, it also had several limitations that provide opportunities for future research. First, we surveyed the complete set of 36 teams competing in the Sandhurst competition. While our sample size may be a limitation, the fact that we found support for our hypotheses given this sample speaks to the strength of the effects we observed.

Additionally, while we draw upon extant research on the effects of ethical leadership on team attitudes and processes to identify four primary mechanisms that theoretically justify our hypotheses, we do not directly test the role of these mechanisms in the relationships we observed. Our theory assumes the concurrent engagement of setting a positive behavioral example, encouraging two-way communication, defining success by processes as well as end results, and encouraging trust and positive reciprocity norms within a team, all of which are definitional attributes of ethical leadership (Brown et al. 2005; Lemoine et al. 2019; Mayer et al. 2009), maintains positive attitudes in teams. However, future work taking a more nuanced approach, perhaps in a laboratory setting as opposed to our field sample, could assess the relative influence of these components. For example, it is possible that emphasizing means over ends accounts for a large portion of our identified attenuating effect of ethical leadership on team efficacy, whereas fostering two-way communication plays a lesser role. Still, we do not expect team efficacy to be maintained in the absence of two-way communication, as we do not expect our effects to replicate in the absence of any of these ethical behaviors.

In this investigation, we controlled the effects of another potentially influential leadership construct—prototypical leadership—but we did not control for other leadership styles that are also potentially similar to ethical leadership. For instance, ethical leadership is positively related to (albeit distinct from) the idealized influence component of transformational leadership and showing consideration

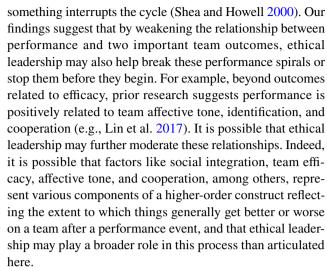


(Brown et al. 2005; Stogdill 1950). These constructs capture leaders' tendencies to role model positive behaviors and make the group a pleasant place to be, respectively. Since we theoretically argue role modeling and showing care and concern for followers are mechanisms by which ethical leadership moderates the relationship between performance and our dependent variables of interest, it is possible that these and potentially other related leadership styles may exert a similar effect or explain some portion of the effects we have observed in this work.

Another limitation of this work was that it was carried out in one organizational context, particularly one with strong values and norms guiding behaviors, clear organizational hierarchies, and frequent ongoing interactions between leaders and followers. Scholars have argued that strong contexts of this type can facilitate theory building because relationships between constructs of interest may be more noticeable than they would be in other contexts (Pratt et al. 2006). However, it is also possible that in other organizations where leaders and followers do not interact as frequently, or in contexts where ethics and values are less salient, ethical leadership would not be as significant a factor in preserving team efficacy and social integration. For instance, in contexts where social integration is chronically low (e.g., remote or distributed work teams) ethical leadership may not exert as strongly positive effects as we observed in intact teams that interact frequently. This possibility suggests interesting avenues for future research, particularly that there may be contextual factors that influence ethical leadership's ability to moderate the relationships among performance, team efficacy, and social integration. That said, we expect, and prior work supports, the effects of ethical leadership to be meaningfully positive across contexts.

Related to the contextual factors described above, the teams in this competition were highly interdependent. Future work could look to extend our findings by examining teams across settings that vary in interdependence. It is possible that on less interdependent teams, people are also less personally affected by team performance because they are better able to identify the quality of their own contributions. In such teams, perhaps the social bonds connecting members are not as strong as in our context, so team performance unduly influences efficacy beliefs and desire to integrate. If true, ethical leadership would likely exert a weaker moderating effect on the relationships among performance, team efficacy, and social integration in such contexts.

Related to exploring contextual effects of the dynamics we observed, we additionally believe that there is value is exploring how ethical leadership may moderate the relationship between performance and other outcomes. For instance, prior scholars have noted that teams can experience performance spirals such that poor performance begets subsequent poor performance and vice versa (Lindsley et al. 1995) until



Finally, in this vein, we do not directly test the influence of ethical leadership on team performance over time. As such, we cannot determine, in this study, how teams' team efficacy and social integration levels after the Sandhurst competitions or events. Instead, we rely on the vast literature indicating that team efficacy and social integration improve future performance (e.g., Guillaume et al. 2012; Stajkovic et al. 2009). Despite these limitations, our longitudinal design was able to show, importantly, that ethical leadership preserves team efficacy and social integration after poor performance in light of initial team efficacy and social integration. We expect that this is a fruitful area for future research.

### **Conclusion**

Our research positions ethical leadership as an important factor influencing how team members respond to their team's performance. It finds that the negative effects of poor performance are greatly reduced to the extent that followers perceive their leader as ethical. Given the likelihood of poor performance at some point in a team's tenure, how leaders can lessen its negative effects is a critical question for the future. There is still much work to be done in this area, and we encourage scholars to explore other ways the negative byproducts of poor performance can be minimized.

### **Compliance with Ethical Standards**

**Conflict of interest** This project was not funded by any external agency. As such, no author on this paper has any potential conflict of interest.

Ethical Approval This research was conducted in accordance with the ethical treatment of human subjects. The study described was confirmed as exempt by the United States Military Academy at West Point



according to 32CFR219 and met the requirements of exempt status under 2CFR219.101(b)(2). Our project IRB protocol number is 14-08 Woodriff-Martin-McLean-Emich.

### References

- Avey, J. B., Wernsing, T. S., & Palanski, M. E. (2012). Exploring the process of ethical leadership: The mediating role of employee voice and psychological ownership. *Journal of Business Ethics*, 107(1), 21–34.
- Bandura, A. (1986). Social foundations of thought and action. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, 50(2), 248–287.
- Bandura, A. (1997). Self-efficacy: The exercise of control. New York: Freeman.
- Bandura, A. (2000). Exercise of human agency through collective efficacy. *Current Directions in Psychological Science*, 9(3), 75–78.
- Bartone, P. T., Roland, R. R., Picano, J. J., & Williams, T. J. (2008). Psychological hardiness predicts success in US Army Special Forces candidates. *International Journal of Selection and Assessment*, 16(1), 78–81.
- Beal, D. J., Cohen, R. R., Burke, M. J., & McLendon, C. L. (2003). Cohesion and performance in groups: A meta-analytic clarification of construct relations. *Journal of Applied Psychology*, 88(6), 989–1004.
- Brown, M. E., & Treviño, L. K. (2006). Ethical leadership: A review and future directions. *The Leadership Quarterly*, 17(6), 595–616.
- Brown, M. E., Treviño, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes*, 97(2), 117–134.
- Burris, E. R. (2012). The risks and rewards of speaking up: Managerial responses to employee voice. *Academy of Management Journal*, 55(4), 851–875.
- Chen, G., Gully, S. M., & Eden, D. (2001). Validation of a new general self-efficacy scale. *Organizational Research Methods*, 4(1), 62–83.
- Cronin, M. A., Weingart, L. R., & Todorova, G. (2011). Dynamics in groups: Are we there yet? *Academy of Management Annals*, 5(1), 571–612.
- DeRue, D. S., Nahrgang, J. D., Wellman, N. E. D., & Humphrey, S. E. (2011). Trait and behavioral theories of leadership: An integration and meta-analytic test of their relative validity. *Per-sonnel Psychology*, 64(1), 7–52.
- Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: Perseverance and passion for long-term goals. *Journal of Personality and Social Psychology*, 92(6), 1087–1101.
- Eden, D. (2001). Means efficacy: External sources of general and specific subjective efficacy. In M. Erez, U. Kleinbeck, & H. Thierry (Eds.), Work motivation in the context of a globalizing economy (pp. 73–85). Mahwah, NJ: Lawrence Erlbaum Associates.
- Eden, D., Ganzach, Y., Flumin-Granat, R., & Zigman, T. (2010). Augmenting means efficacy to boost performance: Two field experiments. *Journal of Management*, *36*, 687–713.
- Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2), 350–383.
- Emich, K. J. (2012). How expectancy motivation influences information exchange in small groups. *Small Group Research*, 43, 275–294.

- Gao, H., Zhang, Y., Wang, F., Xu, Y., Hong, Y.-Y., & Jiang, J. (2014). Regret causes ego-depletion and finding benefits in the regrettable events alleviates ego-depletion. *The Journal of General Psychology*, 141(3), 169–206.
- Garvin, D. A., Edmondson, A. C., & Gino, F. (2008). Is yours a learning organization? *Harvard Business Review*, 86(3), 109.
- Gersick, C. J. (1988). Time and transition in work teams: Toward a new model of group development. *Academy of Management Journal*, 31(1), 9–41.
- Gibson, C. B., & Earley, P. C. (2007). Collective cognition in action: Accumulation, interaction, examination, and accommodation in the development and operation of group efficacy beliefs in the workplace. Academy of Management Review, 32(2), 438–458.
- Greenberg, J., Solomon, S., Pyszczynski, T., Rosenblatt, A., Burling, J., Lyon, D., et al. (1992). Why do people need self-esteem? Converging evidence that self-esteem serves an anxiety-buffering function. *Journal of Personality and Social Psychology*, 63(6), 913–922.
- Guillaume, Y. R., Brodbeck, F. C., & Riketta, M. (2012). Surface-and deep-level dissimilarity effects on social integration and individual effectiveness related outcomes in work groups: A metaanalytic integration. *Journal of Occupational and Organizational Psychology*, 85(1), 80–115.
- Gully, S. M., Devine, D. J., & Whitney, D. J. (1995). A meta-analysis of cohesion and performance: Effects of level of analysis and task interdependence. Small Group Research, 26(4), 497–520.
- Gully, S. M., Incalcaterra, K. A., Joshi, A., & Beaubien, J. M. (2002).
  A meta-analysis of team-efficacy, potency, and performance:
  Interdependence and level of analysis as moderators of observed relationships. *Journal of Applied Psychology*, 87(5), 819–832.
- Hansen, S. D., Alge, B. J., Brown, M. E., Jackson, C. L., & Dunford, B. B. (2013). Ethical leadership: Assessing the value of a multifoci social exchange perspective. *Journal of Business Ethics*, 115(3), 435–449.
- Harrison, D. A., Price, K. H., Gavin, J. H., & Florey, A. T. (2002). Time, teams, and task performance: Changing effects of surfaceand deep-level diversity on group functioning. *Academy of Man*agement Journal, 45(5), 1029–1045.
- Hertel, G., Kerr, N. L., & Messé, L. A. (2000). Motivation gains in performance groups: Paradigmatic and theoretical developments on the Köhler effect. *Journal of Personality and Social Psychol*ogy, 79(4), 580–601.
- Ilgen, D. R., Hollenbeck, J. R., Johnson, M., & Jundt, D. (2005). Teams in organizations: From input-process-output models to IMOI models. *Annual Review of Psychology*, 56(1), 517–543.
- Jennings, M., & Cribbie, R. A. (2016). Comparing pre-post change across groups: Guidelines for choosing between difference scores, ANCOVA, and residual change scores. Toronto, ON: York University.
- Kacmar, K. M., Andrews, M. C., Harris, K. J., & Tepper, B. J. (2013). Ethical leadership and subordinate outcomes: The mediating role of organizational politics and the moderating role of political skill. *Journal of Business Ethics*, 115(1), 33–44.
- Kalshoven, K., & Den Hartog, D. N. (2009). Ethical leader behavior and leader effectiveness: The role of prototypicality and trust. *International Journal of Leadership Studies*, 5(2), 102–120.
- Kalshoven, K., Den Hartog, D. N., & de Hoogh, A. H. (2013). Ethical leadership and followers' helping and initiative: The role of demonstrated responsibility and job autonomy. European Journal of Work and Organizational Psychology, 22(2), 165–181.
- Katz-Navon, T. Y., & Erez, M. (2005). When collective-and self-efficacy affect team performance the role of task interdependence. Small Group Research, 36(4), 437–465.
- Kerr, N. L., Messé, L. A., Park, E. S., & Sambolec, E. J. (2005). Identifiability, performance feedback and the Köhler effect. *Group Processes & Intergroup Relations*, 8(4), 375–390.



Klein, K. J., & Kozlowski, S. W. (2000). From micro to meso: Critical steps in conceptualizing and conducting multilevel research. Organizational Research Methods, 3(3), 211–236.

- LeBreton, J. M., & Senter, J. L. (2008). Answers to 20 questions about interrater reliability and interrater agreement. *Organizational Research Methods*, 11(4), 815–852.
- Lemoine, G. J., Hartnell, C. A., & Leroy, H. (2019). Taking stock of moral approaches to leadership: An integrative review of ethical, authentic, and servant leadership. *Academy of Management Annals*, 13(1), 148–187.
- Lin, C. P., He, H., Baruch, Y., & Ashforth, B. E. (2017). The effect of team affective tone on team performance: The roles of team identification and team cooperation. *Human Resource Management*, 56(6), 931–952.
- Lindsley, D. H., Brass, D. J., & Thomas, J. B. (1995). Efficacy-performing spirals: A multilevel perspective. *Academy of Management Review*, 20(3), 645–678.
- Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Positive psychological capital: Measurement and relationship with performance and satisfaction. *Personnel Psychology*, 60(3), 541–572.
- Mahsud, R., Yukl, G., & Prussia, G. (2010). Leader empathy, ethical leadership, and relations-oriented behaviors as antecedents of leader-member exchange quality. *Journal of Managerial Psychol*ogy, 25(6), 561–577.
- Masten, A. S., & Reed, M. G. J. (2002). Resilience in development. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 74–88). London: Oxford University Press.
- Mayer, D. M., Aquino, K., Greenbaum, R. L., & Kuenzi, M. (2012). Who displays ethical leadership, and why does it matter? An examination of antecedents and consequences of ethical leadership. Academy of Management Journal, 55(1), 151–171.
- Mayer, D. M., Kuenzi, M., & Greenbaum, R. L. (2010). Examining the link between ethical leadership and employee misconduct: The mediating role of ethical climate. *Journal of Business Ethics*, 95(1), 7–16.
- Mayer, D. M., Kuenzi, M., Greenbaum, R., Bardes, M., & Salvador, R. B. (2009). How low does ethical leadership flow? Test of a trickle-down model. *Organizational Behavior and Human Deci*sion Processes, 108(1), 1–13.
- McGrath, J. E., Arrow, H., & Berdahl, J. L. (2000). The study of groups: Past, present, and future. *Personality and Social Psychology Review*, 4(1), 95–105.
- Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior*, 61(1), 20–52.
- Mischel, L. J., & Northcraft, G. B. (1997). "I think we can, I think we can...": The role of efficacy beliefs in group and team effectiveness. In B. Markovsky, M. J. Lovaglia, & L. Troyer (Eds.), *Advances in group processes Vol 14* (pp. 177–197). Bingley: Emerald Publishing.
- Mo, S., & Shi, J. (2017). Linking ethical leadership to employee burnout, workplace deviance and performance: Testing the mediating roles of trust in leader and surface acting. *Journal of Business Ethics*, 144(2), 293–303.
- Newman, A., Kiazad, K., Miao, Q., & Cooper, B. (2014). Examining the cognitive and affective trust-based mechanisms underlying the relationship between ethical leadership and organisational citizenship: A case of the head leading the heart? *Journal of Business Ethics*, 123, 113–123.
- Ng, T. W., Butts, M. M., Vandenberg, R. J., DeJoy, D. M., & Wilson, M. G. (2006). Effects of management communication, opportunity for learning, and work schedule flexibility on organizational commitment. *Journal of Vocational Behavior*, 68(3), 474–489.

Ng, T. W., & Feldman, D. C. (2015). Ethical leadership: Meta-analytic evidence of criterion-related and incremental validity. *Journal of Applied Psychology*, 100(3), 948.

- O'Reilly, C. A., Caldwell, D. F., & Barnett, W. P. (1989). Work group demography, social integration, and turnover. *Administrative Science Ouarterly*, 34(1), 21–37.
- Palanski, M., Avey, J. B., & Jiraporn, N. (2014). The effects of ethical leadership and abusive supervision on job search behaviors in the turnover process. *Journal of Business Ethics*, 121(1), 135–146.
- Piccolo, R. F., Greenbaum, R., den Hartog, D. N., & Folger, R. (2010). The relationship between ethical leadership and core job characteristics. *Journal of Organizational Behavior*, 31, 259–278.
- Pratt, M. G., Rockmann, K. W., & Kaufmann, J. B. (2006). Constructing professional identity: The role of work and identity learning cycles in the customization of identity among medical residents. *Academy of management journal*, 49(2), 235–262.
- Ross, L. (1977). The intuitive psychologist and his shortcomings: Distortions in the attribution process? In L. Berkowitz (Ed.), Advances in experimental social psychology. New York: Academic Press.
- Schaubroeck, J., Hannah, S., Avolio, B., Kozlowski, S., Lord, R., Trevino, L., et al. (2012). Embedding ethical leadership within and across organization levels. *Academy of Management Journal*, 55(5), 1053–1078.
- Shea, C. M., & Howell, J. M. (2000). Efficacy-performance spirals: An empirical test. *Journal of Management*, 26(4), 791–812.
- Shin, Y. (2012). CEO ethical leadership, ethical climate, climate strength, and collective organizational citizenship behavior. *Journal of Business Ethics*, 108(3), 299–312.
- Smith, K. G., Smith, K. A., Olian, J. D., Sims, H. P., Jr., O'Bannon, D. P., & Scully, J. A. (1994). Top management team demography and process: The role of social integration and communication. *Administrative Science Quarterly*, 39(3), 412–438.
- Stajkovic, A. D., Lee, D., & Nyberg, A. J. (2009). Collective efficacy, group potency, and group performance: Meta-analyses of their relationships, and test of a mediation model. *Journal of Applied Psychology*, 94(3), 814–828.
- Stogdill, R. M. (1950). Leadership, membership and organization. *Psychological Bulletin*, 47, 1–14.
- Tajfel, H. & Turner, J.C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds), *The social psychology of intergroup relations*. (pp. 33–47). Monterey, CA: Brooks Cole. Also revised as, The social identity theory of intergroup behaviour. In S. Worchel & W. G. Austin (Eds), (1986). *Psychology of intergroup relations*. (pp. 7–24). Chicago: Nelson Hall.
- Tajfel, H., & Turner, J. C. (2004). The social identity theory of intergroup behavior. In J. T. Jost & J. Sidanius (Eds.), *Political psychology: Key readings. Key readings in social psychology* (pp. 276–293). New York: Psychology Press.
- Tasa, K., Taggar, S., & Seijts, G. H. (2007). The development of collective efficacy in teams: A multilevel and longitudinal perspective. *Journal of Applied Psychology*, 92(1), 17–27.
- Tierney, P., & Farmer, S. M. (2011). Creative self-efficacy development and creative performance over time. *Journal of Applied Psychology*, 96(2), 277–293.
- Tolli, A. P., & Schmidt, A. M. (2008). The role of feedback, causal attributions, and self-efficacy in goal revision. *Journal of Applied Psychology*, 93(3), 692–701.
- Van Knippenberg, B., & Van Knippenberg, D. (2005). Leader self-sacrifice and leadership effectiveness: the moderating role of leader prototypicality. *Journal of Applied Psychology*, 90(1), 25–37.
- Vandewalle, D., Van Dyne, L., & Kostova, T. (1995). Psychological ownership: An empirical examination of its consequences. *Group* & Organization Management, 20(2), 210–226.
- Victor, B., & Cullen, J. B. (1988). The organizational bases of ethical work climates. Administrative Science Quarterly, 33(1), 101–125.



Waller, M. J., Okhuysen, G. A., & Saghafian, M. (2016). Conceptualizing emergent states: A strategy to advance the study of group dynamics. The Academy of Management Annals, 10(1), 561–598.

Zheng, D., Witt, L. A., Waite, E., David, E. M., van Driel, M., McDonald, D. P., et al. (2015). Effects of ethical leadership on emotional exhaustion in high moral intensity situations. *The Leadership Quarterly*, 26(5), 732–748.

**Publisher's Note** Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

