## **Running head: LEADER EMOTIONAL UNPREDICTABILITY**

## LEADER EMOTIONAL UNPREDICTABILITY TEARS TEAMS APART: EFFECTS ON POWER STRUGGLES AND TEAM PERFORMANCE

#### LINDRED L. GREER\*

University of Michigan
Stephen M. Ross School of Business
701 Tappan Ave
Ann Arbor, MI 48109
greerll@umich.edu

## GERBEN A. VAN KLEEF

University of Amsterdam Social Psychology P.O. Box 15900 1001 NK Amsterdam The Netherlands g.a.vankleef@uva.nl

#### ANNEBEL H. B. DE HOOGH

University of Amsterdam Amsterdam Business School P.O. Box 15953 Amsterdam The Netherlands a.h.b.dehoogh@uva.nl

#### CARSTEN K. W. DE DREU

Leiden University and University of Amsterdam Social and Organizational Psychology Wassenaarseweg 52 2333AK Leiden The Netherlands c.k.w.dedreu@fsw.leidenuniv.nl

\* To whom correspondence should be addressed. E-mail: lgreer@stanford.edu; Financial support was granted to Lindred Greer by the Netherlands Organisation for Scientific Research (NWO 451-11-034), to Gerben A. van Kleef by the Netherlands Organisation for Scientific Research (NWO 452-09-010), and to Carsten K.W. De Dreu by the Center for Research in Experimental Economics and Political Decision Making (CREED) at the University of Amsterdam. The authors declare no competing interests.

LEADER EMOTIONAL UNPREDICTABILITY 2

**ABSTRACT** 

Emotional displays of leaders convey social information to followers that can help bolster

their motivation and understanding of the situation, thereby facilitating team performance. An

implicit assumption in previous theorizing and research using this social-functional approach

to leader emotions has been that leaders' emotional expressions logically follow from the

situation for followers and thus help followers who observe these expressions to better

understand the situation. However, leader's emotional expressions are not always predictable

to followers. We extend the social-functional approach by investigating what happens when

leader emotional displays are perceived as unpredictable by followers. We propose that

leader emotional unpredictability sparks uncertainty among followers about how the leader

allocates ranks and resources within the team, which triggers intra-team power struggles.

Such power struggles—intra-team conflicts over resources among followers—in turn

undermine team performance. Using a multi-method approach, we find support for our model

in three studies, including two laboratory experiments and a field study of 246 retail teams.

The findings inform our understanding of how leaders' emotional displays influence team

performance, extending the social-functional approach to emotion by illuminating how the

perceived unpredictability of leaders' emotional expressions can be dysfunctional for teams.

Keywords: Teams, Power, Leadership, Emotions, Conflict

# LEADER EMOTIONAL UNPREDICTABILITY TEARS TEAMS APART: EFFECTS ON POWER STRUGGLES AND TEAM PERFORMANCE

In the complex dynamics surrounding teams in modern organizations, team members face the constant challenge of navigating volatile power environments within their teams.

Team members need to gauge others' needs and intentions and weigh those against their own goals and available resources to devise an optimal strategy for dealing with power dynamics within their teams. In mapping out and understanding such power landscapes in teams, team members use others' emotional expressions as sources of information (Van Kleef, 2016).

Emotions arise from people's interpretations of events in light of their own goals and concerns (Frijda, 1986), and as such other people's emotional expressions constitute a rich source of information about themselves (Hareli & Hess, 2010) as well as about the situation (Manstead & Fischer, 2001).

Of particular importance in understanding the power dynamics within teams are the emotional expressions of team leaders (Humphrey, 2002). Leaders are a primary source of information for the sense-making of the members within their team, helping team members reduce their sense of uncertainty about the power landscapes in their teams and enhancing team functioning (Hogg, 2001). Indeed, leaders' emotional displays can help align team members and improve team effectiveness (for a recent review, see Van Knippenberg & Van Kleef, 2016). However, an implicit assumption underlying most of this work is that leaders' emotional expressions logically follow from the situation for followers and thus help followers who observe these expressions to better understand the situation the team is in. But leaders may also display emotions that appear "out of context" and are surprising for their teams. Little is known about what happens to intra-team power dynamics when leaders' emotional expressions are unpredictable to their followers. In particular, it remains unclear what happens when a leader's emotions do not appear to follow logically from the situation

for the followers, bringing difficulty for team members in understanding and predicting the power dynamics in their team. For example, in a budget meeting for the team, if the leader appears to be unpredictably angry, followers may feel uncertain about the source of this anger and worry about the personal implications of it for their personal budget allocations. This can lead them to engage with their teammates in the meeting in a more combative way, propagating intra-group power struggles and harming team performance.

Here we integrate the social-functional approach to emotion with theorizing on leadership and team power dynamics to shed light on the effects of leader emotional unpredictability on intra-team power struggles and performance. We define leader emotional unpredictability as the degree to which a leader expresses emotions that are difficult for others to anticipate. Several aspects of this definition are important to emphasize as they delineate the scope of our investigation. First, leader emotional unpredictability refers specifically to the unpredictability of a leader's emotional expressions, rather than to the leader's general behavior. We focus on emotional unpredictability because emotional expressions provide a rich source of information about the expresser's appraisals, motives, and intentions – information that is highly relevant for the successful navigation of team power relations (Van Kleef, 2016). Second, and for the same reason, we focus on the unpredictability of leaders' emotional expressions (rather than internal feeling states that may remain unknown to observers). These expressions can be positive as well as negative; the critical component is that the expressions of emotionally unpredictable leaders are difficult to predict because they do not appear to follow logically from the situation. This may entail expressing different emotions in otherwise similar situations (e.g., sometimes being angry at low sales performance and sometimes being calm), expressing emotions that are at odds with a current context (e.g., showing anger after a success), or expressing opposite emotions to different targets (e.g., showing happiness for the achievement of one follower, but not for that of another). Third, it is important to note that there are many sources of leader emotional unpredictability, including leaders bringing emotions from other contexts into their team and followers not realizing that the leader's anger, for example, stems from a disappointment outside the team and is not due to their specific interaction between the follower and leaders, leaders who are genuinely more emotionally unusual in their reactions to specific situations due to personality traits or different expectations for that situation than followers, and leaders whom are strategically emotionally unpredictable to keep followers on their toes. We believe that the effects of leader emotional unpredictability are driven by followers' perception of the leader's emotional unpredictability, and as such, the leader's source or cause of the unpredictability is irrelevant and will not change the outcomes of the shown emotional unpredictability.

We draw on literature on team power dynamics (e.g., Berger & Calabrese, 1975; De

Dreu & Van Knippenberg, 2005; Greer, Van Bunderen, & Yu, 2017; Kramer, 2001) to

propose that leader emotional unpredictability particularly increases power struggles in teams

– defined as competitions between members over valued resources (Greer & Van Kleef,
2010). We argue that a primary consequence of a leader's emotional unpredictability is that it
increases uncertainty among team members about their ability to maintain and obtain power
in the team, as the leader's allocation of ranks and resources may feel unpredictable when the
leader's moods and feelings cannot be anticipated. As team members strive to protect and
improve their power positions (Mulder, 1977; Van Bunderen, Greer, & Van Knippenberg,
2017), leader emotional unpredictability thus gives rise to power struggles within the team.

Power struggles distract from task performance and erode the ability of teams to effectively
work together, harming team task performance (for a recent review on the effects of power
struggles on teams, see Greer et al., 2017).

Our contribution is threefold. First, we qualify notions on the functionality of leaders'

emotional expressions for the teams they lead (e.g., Hogg, 2001; Humphrey, 2002; Van Knippenberg & Van Kleef, 2016; Van Kleef, 2016). We propose and show that leaders' emotional expressions become dysfunctional rather than functional for their teams when the emotions expressed by the leader are perceived as unpredictable by their followers. Second, we extend work on emotions in groups and social interactions, which has generally looked at positive or negative affect or discrete emotions by looking at patterns of emotional displays, across valence, showing that the perceived unpredictability of emotional displays can drive interactions, beyond just the average emotion or mood in the group (e.g., Bartel & Saavendra, 2000; Knight, 2013; Menges & Kilduff, 2015; for an exception, see the work on emotional contagion processes as reviewed by Barsade et al., 2018). Third, we contribute to the leadership literature (e.g., DeRue & Ashford, 2010; Van Knippenberg & Sitkin, 2013; Yukl, 2012) by highlighting the importance of leader emotional (un)predictability for team effectiveness. Others have argued and shown that leaders can benefit from leader flexibility (e.g., Yukl, 2012; Zaccaro, 2012), and even unpredictability towards competing out-groups (e.g., Locke, 1689; Machiavelli, 1996; Schelling, 1980; Sinaceur, Adam, Van Kleef, & Galinsky, 2013). Our research builds on emerging work on the downsides of leader unpredictability (e.g., Matta, Scott, Colquitt, Koopman, & Passantino, 2016) to provide a first investigation of what happens within a team when a leader is emotionally unpredictable, that is, how power dynamics among followers may be harmed by the unpredictable emotions of the leader. Our findings thus highlight the importance of displaying emotions that seem logically predictable to team members. Fourth, we reveal when and how leaders create negative power dynamics within their teams, thus contributing to the growing literature on team power and political maneuvering (e.g., Bendersky & Hays, 2012; Greer & Van Kleef, 2010) and extending explanations of how emotions and power dynamics can be intertwined in teams (e.g., Berdahl & Martorana, 2006; Van Kleef, Heerdink, & Homan, 2017).

## THE SOCIAL-FUNCTIONAL APPROACH TO EMOTION

Social-functional approaches hold that emotions are functional in that they help the individual to adapt to an ever-changing environment – a view that can be traced back to classic work by Darwin (1872). Whereas early theorizing emphasized the intrapersonal functions of emotional experience (e.g., Frijda, 1986; Lazarus, 1991), more recent work highlights the interpersonal functions of emotional expression (e.g., Keltner & Haidt, 1999; Van Kleef, 2016; Van Kleef, De Dreu, & Manstead, 2010). The functionality of emotional expressions resides in large part in the ability of expressed emotions to communicate relevant information to observers that helps them disambiguate social situations (Van Kleef, 2016) and thereby facilitate social coordination (Keltner & Haidt, 1999).

Critically, however, the presumed functionality of emotional expressions is predicated on the assumption that emotional expressions are informative about relevant aspects of the team environment. But what if leader emotional expressions seem to occur randomly for their team members? Rather than contributing to sense-making and disambiguation, such unpredictable emotional expressions might in fact undermine team members' sense of control and understanding of the situation. Given that leaders have considerable sway over organizational processes and outcomes, the unpredictable emotional expressions of leaders may be particularly impactful.

Indeed, a growing body of research attests to the pervasive impact of leaders' emotional expressions (Van Knippenberg & Van Kleef, 2016). For instance, studies have demonstrated favorable effects of positive emotional expressions on team coordination (Sy, Côté, & Saavedra, 2005) and of negative emotional expressions on motivation and performance (Van Kleef, Homan, Beersma, & Van Knippenberg, 2010). However, this research has exclusively relied on the assumption that emotional expressions are understood and seen as predictable by others. How teams respond to leader emotional expressions that appear to not have any

clear connection to relevant events is unclear.

# EFFECTS OF LEADER EMOTIONAL UNPREDICTABILITY ON INTRA-TEAM POWER STRUGGLES

We conjecture that there is a substantial downside of leader emotional unpredictability – namely, for the internal power dynamics and performance of their teams. We argue that leader emotional unpredictability can cause teams to become embroiled in intra-team power struggles when members perceive any form of threat to their resources, such as can stem from attribution errors about the implications of unpredictable leader emotions for their own desired resources, such as promotions or bonuses (Greer et al., 2017; Van Bunderen et al., 2017). We propose that the perceived resource allocation uncertainty created by emotionally unpredictable leaders can drive members of teams that are led by leaders whom are perceived as emotionally unpredictable to engage in intra-team power struggles.

A basic assumption underlying our argument, which we derive from the socialfunctional approach to emotions, is that team members use the emotional responses of their
leader to map out the power landscape in their team and their current and future position
within it (Humphrey, 2002; Van Kleef et al., 2009; Wang, Restubog, Shao, Vinh, & Van
Kleef, 2018). When leader emotional responses are perceived as unpredictable by their
followers, leader emotional displays, rather than creating structure, identity, and certainty for
followers, may actually introduce considerable uncertainty about where members currently
stand in the team and how resources will be allocated across members in the future. This can
lead to concerns about one's resources and standing in the team (Kramer, 2001). Issues of
control, rank, and resources are of considerable importance to individuals (e.g., Anderson,
Srivastava, Beer, Spataro, & Chatman, 2006). Consequently, when leader emotional
unpredictability introduces uncertainty into members' ability to obtain rank and resources in
the team, this can lead to defensive behavior (cf. Kramer, 2001), sabotaging of other team

members (e.g., scapegoating; Rothschild et al., 2012), members seeking to improve their own sense of control and position in the team (Berger & Calbrese, 1975), and engaging in conflict and aggression to secure and protect their resources (Ember & Ember, 1992; also see De Dreu & Van Knippenberg, 2005). Indeed, research has shown that in the face of uncertainty, members are more likely to desire and pursue valued resources (Keefer et al., 2012; Milkman, 2012), and to respond aggressively to others' claiming or derogating their resources (De Dreu & Van Knippenberg, 2005). Together, this suggests that emotionally unpredictable leaders may instigate power struggles within teams – competitive behaviors among team members aimed at improving or maintaining their power positions within the team (Greer & Van Kleef, 2010):

A key driver of the hypothesized effects of leader emotional unpredictability on performance-detracting power struggles among followers is followers' focus on individual resource control in the face of an unpredictable leader. Accordingly, the processes and outcomes hypothesized thus far may be conditional upon the degree to which members are dependent on one another within the team. Specifically, the detrimental effects of leader emotional unpredictability should be particularly likely to emerge when team members have low interdependence and are therefore relatively uninhibited in their pursuit of competitive strategies and self-serving solutions to problems (Beersma et al., 2003; 2013; Kelley & Thibaut, 1959). In contrast, the negative effects of leader emotional unpredictability may be mitigated when team interdependence is high and team members are therefore more likely to pursue collective solutions to uncertainty reduction (Berger & Caprese, 1975). Such team interdependencies create tightly knitted teams in which members cooperate, help each other, and stick together when facing uncertainty (Beersma et al., 2003; De Dreu, 2007; Tjosvold, 1998), such as created by an emotionally unpredictable leader. It follows that leader emotional unpredictability is related to intra-team power struggles particularly when team

interdependence is lower rather than higher.

As noted above, power struggles in turn detract from team performance outcomes (De Dreu & Weingart, 2003; Greer et al., 2017). Power struggles involve attempts by members to bolster their own positions or to damage the positions of others. Engaging in power struggles redirects energy and attention to politics and fights over resources, and away from performance on the task at hand (Eisenhardt & Bourgeouis, 1988; Jehn, 1995). Additionally, power struggles undermine the cooperation, trust, and information sharing needed to perform as a team (e.g., Bendersky & Hayes, 2012; De Dreu, 1995, 2007; De Dreu, Weingart, & Kwon, 2000; Van Bunderen et al., 2018). Consistent with this reasoning, research has shown that team power struggles negatively relate to team performance (e.g., Greer & Van Kleef, 2010; Van Bunderen et al., 2018). Thus, we propose:

**HYPOTHESIS 1:** Leader emotional unpredictability is related to intra-team power struggles, particularly when team interdependence is low rather than high.

**HYPOTHESIS 2**: Power struggles are negatively related to team performance.

**HYPOTHESIS 3**: Power struggles mediate the interactive impact of leader emotional unpredictability and team interdependence on task performance, such that leader emotional unpredictability harms team performance via intra-team power struggles when team interdependence is low rather than high.

## **OVERVIEW OF STUDIES**

Figure 1 depicts our overarching theoretical model. We tested our hypotheses in five studies, three of which we present in the paper and two of which we present in supplementary materials online. In a first set of studies, we set out to test the causal effects of leader emotional unpredictability. To this end, we conducted a series of laboratory studies involving carefully controlled experimental manipulations of leader emotional unpredictability and team interdependence. Study 1 examined the effects of emotionally unpredictable leadership

on power struggles and team performance in a laboratory study involving 178 three-person teams and using a video-taped confederate portraying an emotionally (un)predictable leader. In a second set of studies, we set out to establish the generalizability of our findings to real work teams. In a scale validation pilot of Study 2, we first validated a newly developed survey measure of leader emotional unpredictability. We subsequently used this validated measure in a multi-source field study of 246 retail service teams, in which we examined the impact of branch manager emotional (un)predictability on team power struggles and financial performance as a function of team interdependence. Finally, in a final lab study, we build upon the previous package of studies to test for underlying micro-mediating mechanism. This multi-method approach allows for methodological triangulation, enhancing the external and internal validity of our model.

#### STUDY 1

In Study 1, we test our model of the effects of leader emotional unpredictability on team performance in an experimental study, examining the mediating role of intra-team power struggles and the moderating role of team interdependence.

## Sample

We conducted a laboratory study involving 202 three-person teams (606 participants) working on a start-up task at a west coast university in the United States. Participants were randomly assigned to teams and conditions. The average participant was 23 years old, 60% of the participants were female, and 63% were of an ethnic minority. Participants consisted of undergraduate and graduate (including MBA) students as well as university staff and community affiliates. Given the average age of 23 years in our sample, our sample did skew more towards graduate students and stuff with working experience, rather than towards undergraduates.

## Procedure

Upon arrival in the laboratory, participants were randomly assigned to conditions and shown to the experimental room. Participants were informed that they would be working together as part of a start-up team. The experimental room was decorated to reflect this, drawing on interior decoration ideas common to start-ups in Silicon Valley, including a hoodie sweatshirt on a coat rack, a brightly colored blow-up beach ball, and diagrams of the company's product on the white board. Participants introduced themselves to their fellow team members, and then the experimenter informed them that the CEO of their start-up was out-of-town on a fundraising trip for the company, and would be calling in today for their meeting via Skype. Participants were seated, and then a confederate actor joined them via a video call. The content of the video had been pre-recorded and contained the content of our manipulations (see detailed description of manipulations below).

Following the instructions from their leader, the experimenter then handed participants sheets for a three-person negotiation within the start-up team. They were given 20 minutes for their exercise. In this exercise, the team had to reach agreement about five important decisions impacting their start-up, including the equity split among the three employees, the number of clients desired for beta-testing of their product, the number of new hires needed in the short term, the frequency with which they should have team meetings, and the degree to which they should already start to think about diversifying their product offerings. The payoff matrix (provided in the Appendix of this paper) for the different outcomes the group could decide upon was based on similar group negotiation paradigms (e.g., Greer & Van Kleef, 2010; Van Bunderen et al., 2018), in which three issues were integrative with the potential for log-rolling and two issues were distributive. Following the negotiation, participants completed a survey containing measures of our dependent variables and then were thanked and debriefed. Of the total of 202 teams, 24 teams were dropped for incorrectly responding to one or both of the manipulation checks, resulting in a final sample of 178

teams. Results remain directionally consistent if these teams are retained.

## **Manipulations**

Leader emotional unpredictability. Leader emotional unpredictability was manipulated within the pre-recorded skype call between the team leader and the team of participants in the lab. In both the leader emotional unpredictability and leader emotional predictability conditions, the leader exhibited six discrete emotions, counter-balanced between positive and negative. In the leader emotional predictability condition, all displays matched the situation. In the leader emotional unpredictability condition, four of the six displays were not the emotions participants would have expected from their leader in that moment. For example, at one point the confederate actor playing the CEO gave the group feedback on their initial pretask, and in the emotional predictability condition, smiles while saying "This is great! You did better than the investor said most start-ups usually do", and in the emotional unpredictability condition, frowns while saying the same line. The full script for this manipulation can be found in our online materials. Similar pre-recorded video messages showing emotional expressions of leaders have been successfully employed in previous research on the effects of leader emotional expressions on team performance (e.g., Bono & Ilies, 2006; Van Kleef et al., 2009).

Team interdependence. Team interdependence was manipulated by varying whether members were incentivized to focus more on team or individual outcomes. Specifically, using the interdependence manipulation of Beersma et al. (2003), in the low team interdependence condition, participants in our study were informed that the three best performing participants across the whole experiment would each receive a bonus of \$75, while in the high team interdependence condition, participants learned that the best performing team would receive a bonus of \$225 (\$75 per person; the same amount as in the low interdependence condition, to keep the size of the potential bonus per person constant across conditions).

### Measures

Intra-team power struggles. Team power struggles were measured using the three-item scale developed by Greer and Van Kleef (2010) (e.g., "Members compete for control in this team"). These items exhibited good reliability ( $\alpha$  = .90), and also showed sufficient inter-rater reliability to justify aggregation to the team-level (ICC[1] = .43, ICC[2] = .69; LeBreton & Senter, 2008). These aggregation statistics were comparable with past research on leadership and teams (e.g., Kirkman, Chen, Farh, Chen, & Lowe, 2008).

Team performance. We measured team performance based on the joint outcomes achieved by the team in their team negotiation. Joint outcomes are operationalized as the sum of the points, or profits, achieved by the individual negotiators (Tripp & Sondak, 1992). In the present study, this means we summed the scores each person on the team achieved on all five issues (see Appendix) in the negotiation. The minimum level of joint outcomes a team could achieve in this study was 600, and the maximum was 750. Joint outcomes reflect optimal team performance on a negotiation task, as they are achieved only by a team's integration of members' interests and signal the ability of the team to effectively communicate (Neale & Bazerman, 2001; Rubin, Pruitt, & Kim, 1994). As such, joint outcomes are commonly used as the key metric of team performance on team negotiation tasks, which correlates with other metrics of team decision-making performance (e.g., Van Bunderen et al., 2018).

Control variables. To rule out possible alternative explanations for our results, we controlled for team gender diversity, given prior work on gender differences in negotiation (for a meta-analysis, see Mazei et al., 2015). Furthermore, because our data collection ran from the spring academic semester into the summer, during which period shifts occurred in the demographic characteristics of the available participants, we controlled for whether participants took our experiment during the academic year or during the summer. Below we

report analyses including both control variables. Not including these controls does not change the direction or nature of our effects.

#### **Results**

## Manipulation Check

To check the effectiveness of our leader emotional unpredictability manipulation, we administered six items tapping the emotional unpredictability of the leader, which showed sufficient inter-rater reliability to justify aggregation to the team level (e.g., "It is not clear what emotion my leader will show in a certain situation.";  $\alpha = .97$ ; ICC[1] = .48, ICC[2] = .73). (Additional details about this scale are reported in the scale validation pilot study of Study 2 below.) In support of our manipulation of leader emotional unpredictability, participants who had seen the video of the emotionally unpredictable leader viewed their leader as more emotionally unpredictable (M = 5.22, SD = 0.66) than participants who had seen the video of the emotionally predictable leader (M = 3.07, SD = 0.85), F(1, 172) = 352.62, p < .001, partial  $\eta^2 = .67$ ).

To check the effectiveness of our team interdependence manipulation, we asked participants two items about the interdependence in their team, and participants showed sufficient agreement on these items to allow aggregating this measure to the team level (e.g., "We were rewarded on the basis of team performance in this study"; "People will work to pursue the group interests in this team"; r = .48, p < .001; ICC[1] = .43, ICC[2] = .69). In support of our team interdependence manipulation, participants perceived interdependence to be higher in the high interdependence condition (M = 5.55, SD = 0.92) than in the low interdependence condition (M = 3.90, SD = 0.93), F(1, 172) = 137.29, p < .001, partial  $\eta^2 = .44$ ).

## **Power Struggles**

Hypothesis 1 predicted that leader emotional unpredictability triggers power struggles

among followers, particularly when team interdependence is low rather than high. In support of Hypothesis 1, a 2 x 2 ANOVA revealed no main effects of either leader emotional unpredictability or team interdependence on intra-team power struggles, but an interactive effect of leader emotional unpredictability and team interdependence on intra-team power struggles, F(1, 172) = 3.84, p = .052, partial  $\eta^2 = .02$ . When team interdependence was low, emotionally unpredictable leaders elicited more power struggles in their teams (M = 4.37, SD = 1.11) than did emotionally predictable leaders (M = 3.87, SD = 1.39, F(1, 77) = 5.93, p = .017, partial  $\eta^2 = .07$ ), but when team interdependence was high, the level of power struggles in the team did not differ between emotionally unpredictable leaders (M = 3.71, SD = 1.33) and emotionally predictable leaders (M = 3.78, SD = 1.33, F(1, 93) = 0.31, ns, partial  $\eta^2 = .00$ ).

Hypothesis 2 predicted that power struggles would harm team performance. This hypothesis was tested using hierarchical regression analysis and was supported ( $\beta = -.28$ , t = -3.92, p < .001,  $R^2 = .14$ ).

We further predicted in Hypothesis 3 that power struggles would mediate the interactive effect of leader emotional unpredictability and team interdependence on team performance. We found support for mediated moderation (using PROCESS Model 7, 5000 bootstrap iterations) for the entire model (index = .21, SE = 12, 95% CI = .04, .52). The indirect effect of leader emotional unpredictability on team performance via power struggles was significant when teams had low interdependence (indirect effect: B = -.03; bias and accelerated 95% CI: -.07, -.004), but not when teams had high interdependence (indirect effect: B = .01; bias and accelerated 95% CI: -.02, .04).

#### **Discussion**

We obtained causal support for our proposed model in an experimental study, showing that in teams with low interdependence, emotionally unpredictable leaders caused intra-team power struggles among their followers, which impeded team performance. In our next study, we test the generalizability of our findings to existing organizational teams, linking leader emotional unpredictability in retail services locations to the financial performance of retail outlets.

#### STUDY 2

We first conducted a pilot scale validation study to develop a scale for leader emotional unpredictably and test its internal reliability and discriminant validity. We then present a field study of retail groups, in which we use this validated scale to test the effects of leader emotional unpredictability on team power struggles and team performance as a function of team interdependence.

## **Pilot Study**

We developed a 6-item scale to assess leader emotional unpredictability. The full items are given in Table 1. We evaluated the psychometric properties of this new scale in two separate samples. In the first sample, we test the internal reliability of the scale. In the second sample, we test the discriminant validity of leader emotional unpredictability from related constructs in the literature, including leader neuroticism, leader fairness, leader stress, and leader general unpredictability.

First, we propose that leader emotional unpredictability is distinct from leader personality traits, such as leader neuroticism, which reflect a general proneness to negative affect (e.g., McCrae & Costa, 1999). Neurotic leaders show a bias toward experiencing negativity, but they are not unpredictable; in fact, neurotic leaders can be expected to reliably respond to events with negative emotions. Emotionally unpredictable leaders, in contrast, exhibit both positive and negative emotional displays, which are seemingly detached from the surrounding context. For this reason, emotional unpredictability is also distinct from general negative emotional states of leaders, such as leader stress (e.g., Evans, 2001).

Second, we propose that leader emotional unpredictability is also separate from other leader behaviors, such as leader unfairness (e.g., Colquitt, 2001), in that leader emotional unpredictability may be confusing for followers but in and of themselves do not have an immediate tie to downstream consequences for followers in terms of interpersonal treatment. Similarly, for this reason, we also suggest emotional unpredictability is separate from general unpredictability, in that it focuses on emotional displays, and not broader behavioral choices in social interaction. We show empirical support for the proposed discriminant and incremental predictive validity of leader emotional unpredictability beyond these potentially related constructs below.

## **Sample 1: Factor Structure and Reliability**

The six items of the leader emotional unpredictability scale (see Table 1) were administered online to 177 adults from an online national sample maintained by a US West Coast University. Respondents indicated how strongly they agreed that their current leader showed unpredictable emotions by rating each item on a scale from 1 (*strongly disagree*) to 7 (*strongly agree*). We used exploratory factor analysis to examine the underlying structure of the leader emotional unpredictability items. One clear factor emerged (eigenvalue > 1) that included all six items. The factor explained 72.91% of the variance. Factor loadings ranged between .92 and .62 and Cronbach's alpha was .92. The measure had a mean of 3.14 and a standard deviation of 1.43.

## Sample 2: Discriminant Validity

We administered the leader emotional unpredictability scale to a separate and non-overlapping sample of 181 workers from an online nationally representative panel. We asked participants to write a few sentences about their current leader and team at work, and then to answer questions about this particular leader and team. A confirmatory factor analysis of the six items yielded a good fit for a one-factor model,  $\chi^2(9, N=181) = 17.295$ , p = .044, CFI =

.993, TLI = .988, RMSEA = .071, SRMR = .012). Factor loadings ranged from .964 to .590. The scale showed excellent internal reliability ( $\alpha$  = .94). The measure had a mean of 2.82 and a standard deviation of 1.55 on a 7-point Likert scale.

A key objective of this study was to show the distinctness of leader emotional unpredictability from other potentially related constructs. To this end, we measured leader neuroticism (4 items from Donnellan, Oswald, Baird, & Lucas, 2006;  $\alpha$  = .80), leader interpersonal fairness (4 items adapted from Colquitt, 2001;  $\alpha$  = .94), leader stress (7 items from Evans, 2000;  $\alpha$  = .91), and leader general unpredictability (6 items, self-written, e.g., "My leader surprises me", "My leader says unexpected things", "My leader behaves in unusual ways";  $\alpha$  = .86).

To examine the discriminant validity of leader emotional unpredictability, we performed a confirmatory factor analysis (CFA) on a model containing the items for leader emotional unpredictability, leader neuroticism, leader fairness, leader stress, and leader general unpredictability. The five-factor model met standard fit criteria  $\chi^2$  (314, N= 181) = 729.47, p < .001, CFI = .92, TLI = .907, RMSEA = .085, SRMR = .069. We also conducted comparative factor analyses, as seen in Table 2. We found that a five-factor model fit the data better than a four-factor model in which the items measuring leader emotional unpredictability are subsumed under the factors measuring the other constructs. Together, these results indicate that leader emotional unpredictability is an internally reliable construct that is distinct from related

#### **Main Study**

In Study 2, we set out to establish the generalizability of the findings of Study 1 in a field study of bank branch office teams.

#### Sample

We conducted a field study among 246 retail outlets of a multinational services

corporation in the Netherlands. Each retail outlet employed three to ten employees, all of whom worked together closely, had a common goal, and identified themselves as a team, so each retail outlet was treated as a unique team (Hackman, 1987). The average team size (outlet size) was 3.6 employees (excluding the leader), the average member was 38.7 years old, 64% of the participants were female, and 11% were of an ethnic minority.

Importantly for the context of our study, in these retail outlets, each outlet has a formal leader who works in the outlet and guides day-to-day operations, leading a team of generally three to ten followers. As such, differences in leader emotional unpredictability across teams could be used to predict variation in performance between the retail offices.

#### Method

#### **Procedure**

To assess the variables of our theoretical model (see Figure 1), we had access to multi-source data, including responses from employee surveys and archival data. We distributed surveys to employees via an online survey hosted on the university website. We had an excellent response rate of 89%, due to the fact that our survey was coupled with a company-mandated employee engagement survey. In addition to this survey data, we also had access to the financial performance data (sales/visitors) of the retail outlets.

#### Measures

Our survey items utilized a 1-7 Likert scale, with 1 indicating low agreement and 7 indicating high agreement.

Leader emotional unpredictability. Leader emotional unpredictability was measured with the six-item scale that was validated in the Pilot Study, which again exhibited good

 $<sup>^{1}</sup>$  While being part of a mandated company survey helped us obtain a high response rate, one may wonder whether this affected the responses on the survey. To examine this, we compared the means of the most sensitive item on our survey (power struggles) to other published work that measured power struggles in a setting where participation was entirely voluntary. There was no noticeable difference (reported power struggles in the current study: M = 1.97, SD = 0.85; reported power struggles in Van Bunderen, Greer, & Van Knippenberg, 2017: M = 1.94, SD = 0.38).

reliability ( $\alpha$  = .93). Because the effects of leader emotional unpredictability may be more pronounced when emotions are displayed with greater intensity, we also investigated whether perceived emotional intensity of the leader moderated our effects. We did not find leader emotional intensity to significantly interact with leader emotional unpredictability, suggesting that our effects are robust to differing levels of intensity in unpredictable emotional displays. Details of these analyses are available from the authors upon request.

*Intra-team power struggles*. Team power struggles were measured with the three-item scale developed by Greer and Van Kleef (2010) (e.g., "Members compete for control in this team"). These items exhibited good reliability ( $\alpha = .90$ ).

*Team interdependence.* Team interdependence was measured with two items, due to limited space on the survey. The two items were "To do our work, we are very dependent on each other in this team" and "The tasks of one team member in this team impact on the tasks of other team members and the other way around as well". These items had sufficient reliability (r = .58, p < .001).

*Team financial performance.* We measured team financial performance based on the fiscal amount of sales made in the office divided by the average number of customers walking into the retail outlet per day for the month following the due-date of our survey. For six offices, no financial data were available, bringing our total final sample to 240 retail offices.

We also had access to financial data for the month before we launched the survey.

Controlling for prior financial performance did not alter our findings. Additionally, analyses predicting prior performance as our dependent variable produced no effects (indeed we observed no correlation between prior financial performance and leader emotional unpredictability or power struggles), alleviating potential concerns about reverse causality and/or leader emotional unpredictability being driven by prior team performance. Details of

these analyses are available from the authors upon request.

Control variables. To rule out possible alternative explanations for our results, we controlled for team size, team diversity, leader emotional intensity, and emotional focus. Including versus excluding these control variables did not change the nature of our results, as seen in Table 4. We included team size as a control variable given its negative impact on team processes (Mueller, 2012), especially power struggles (e.g., Amason & Sapienza, 1987; Edmondson, 1999) and performance (Mueller, 2012), and wanted to preclude the possibility that the relationship between power struggles and team performance reflects a team size effect. We also controlled for several dimensions of team diversity (gender and functional diversity measured using Blau's formula; age and tenure diversity using the coefficient of variation; Harrison & Klein, 2007). Similar to team size, team diversity can negatively impact team processes, such as power struggles, and thereby influence team performance (Greer & Bendersky, 2013) – hence our interest in establishing that our results hold regardless of whether we control for this. Finally, we controlled for leader emotional intensity (2 items: "My leader strongly shows emotions", "My leader is extreme in the expression of his/her emotions", r = .62, p < .001) and emotional focus (2 items: "When my leader expresses emotions, it's usually because something happened to him/her personally;" "When my leader expresses emotions, it's usually because something happened to the team (reverse-coded)", r = .34, p < .001). Both the strength and target of leader emotions can impact followers' reactions, dynamics, and performance (e.g., Cheshin, Amit, & Van Kleef, 2018; Wang et al., 2018), and could therefore potentially provide an alternative explanation for our effects. Analysis

To test the appropriateness of conducting our analyses at the team level of analysis (Klein & Kozlowski, 2000), we calculated intra-class correlations (ICCs) and inter-rater

agreement  $(r_{\text{wgs}})$  (LeBreton & Senter, 2008). In our sample, all F-tests were significant, and

all ICCs and  $r_{\rm wgs}$  were sufficient to aggregate our data to the team level (leader emotional unpredictability: ICC[1] = .14, ICC[2] = .37,  $r_{\rm wg}$  = .65; team interdependence: ICC[1] = .05, ICC[2] = .16,  $r_{\rm wg}$  = .72; power struggles: ICC[1] = .17, ICC[2] = .43,  $r_{\rm wg}$  = .80) (LeBreton & Senter, 2008). The aggregation statistics were comparable with past research on leadership and teams (e.g., Kirkman, Chen, Farh, Chen, & Lowe, 2008).

## **Results**

Means, standard deviations, and correlations are presented in Table 3. To test our hypotheses, we used hierarchical regression analysis (see Table 4).

Hypothesis 1 proposed that team interdependence moderates the effects of leader emotional unpredictability on intra-team power struggles and team performance, such that leader emotional unpredictability is positively related to power-struggles and thereby harms team performance when team interdependence is low, but not when it is high. In support of Hypothesis 1, and as seen in Table 4, we found a significant interaction effect of leader emotional unpredictability and team interdependence on intra-team power struggles ( $\beta$  = -.15, t = -2.57, p = .011,  $R^2$  = .17), such that leader emotional unpredictability was more strongly positively related to team power struggles when team interdependence was low (-1 SD;  $\beta$  = .53, t = 6.39, p < .001,  $R^2$  = .17) rather than high (+1 SD;  $\beta$  = .26, t = 3.46, p = .001,  $R^2$  = .17).

Hypothesis 2, which stated that power struggles negatively relate to team performance, was supported as well ( $\beta = -.16$ , t = -2.51, p = .013,  $R^2 = .02$ ).

Finally, to examine Hypothesis 3, regarding the role of power struggles in mediating the interactive effect of leader emotional unpredictability and team interdependence on team performance, we tested for moderated mediation using the PROCESS macro (Model 7, 5000 bootstrap iterations) by Preacher and Hayes (2004). In support of Hypothesis 3, we found a significant moderated mediation effect (index = .21, SE = .13, 95% CI = .03, .51), such that leader emotional unpredictability had a strong negative effect on team performance through

intra-team power struggles when team interdependence was low (indirect effect: B = -.52, 95% CI = -.88, -.26) and this effect was lessened when team interdependence was high (indirect effect: B = -.27, 95% CI = -.53, -.07).

#### Study 3

Study 3 was designed to replicate our previous studies and to investigate the mechanism underlying the relationship between leader emotional unpredictability and power struggles – resource allocation uncertainty.

#### Method

In total, 238 undergraduate participants at a US West Coast university participated. Twenty-five participants were removed for missing attention checks, leaving a final sample of 214 participants. Including or excluding these participants did not change the pattern of results. Participants provided informed consent and were randomly assigned to the four conditions of a 2 (leader emotional predictability vs. unpredictability) x 2 (low vs. high team interdependence) between-subjects factorial design, with intra-team resource allocation uncertainty and power struggles as the main dependent variables.

#### **Procedure**

Participants were welcomed to the experiment and informed that they would be working online in a virtual team with three other students to accomplish a series of tasks. Following some initial intake questions, they would have the chance to interact with these students in an online chat room to accomplish these tasks.

Participants were informed that today they would be simulating the tasks of a bank branch office. One member would be the leader (bank branch office manager) during the task, and the other members would be employees within the office. The leader would guide the team through the tasks necessary for the office, including deciding on a new sales strategy and brainstorming potential resolutions to customer complaints.

Participants then filled in their names, and were virtually introduced to their (fictitious) other team members. We then asked participants to complete questions about their personalities and backgrounds to ostensibly assign the leadership role – this allowed us to legitimize the leadership role in the study, similar to other studies on leadership and hierarchy (e.g., Van Bunderen et al., 2017). In reality, all participants were assigned to the employee role.

After a brief pause to increase realism, participants were informed that one of the other participants, Alex, had been assigned to be their leader during the experiment. They were then informed about Alex's personality (where we embedded our manipulation of emotional unpredictability, see below), and learned that there would be bonuses for the best performing individuals or teams in the experiment (our reward manipulation).

Participants then answered questions about their expectations for their team's task interactions, based on the information they had been given. After these questions were completed, participants were informed they would not have to do tasks with the team today, were thanked, debriefed, and paid.

## **Manipulations**

Leader emotional unpredictability. Leader emotional unpredictability was manipulated with the following information, which was supposedly derived from the personality questionnaire:

Your leader, Alex, is very emotionally [un]predictable - you will be [un]able to reliably anticipate how Alex will emotionally react in any given situation. You will [not] know when Alex will be happy with what you've done, and when Alex will be angry. These emotional reactions will be very easy [hard] for you to predict.

As such, we were able to vary the degree to which leader emotional reactions could be predicted by followers, following our definition of leader emotional unpredictability.

*Team Interdependence*. Team interdependence was again manipulated following Beersma et al. (2003). In the low interdependence condition, participants were informed the

three best-performing individual team members from across the whole experiment would receive \$100 each. In the high team interdependence condition, participants were informed that the best-performing team in the experiment would receive \$300 (i.e. \$100 per person – the same as in the low interdependence condition, to keep the magnitude of the rewards parallel).

#### Measures

All measures were answered on a scale of 1 to 7, with 1 indicating low agreement and 7 indicating strong agreement with the item.

Uncertainty about resource allocation. Participants responded to a 3-item scale about their perceptions of perceived resource allocation uncertainty in the team. These items ("In this team, it's often unclear how resources will be allocated to members", "When valuable resources (e.g., promotions, bonuses, etc.) become available in this team, it's difficult to predict to whom they will go", "In this team, resource allocation is an uncertain process") formed an acceptably reliable scale ( $\alpha = .92$ ), and were averaged together.

**Power struggles.** Participants responded to the same 3-item power struggle scale from Greer and Van Kleef (2010), as used in our prior studies. These items formed a reliable scale ( $\alpha = .79$ ), and ratings were aggregated into one index.

**Team performance.** Team performance was assessed with three items from Greer et al. (2011; e.g., "I think this team will perform well"), which formed a reliable scale ( $\alpha = .91$ ).

*Manipulation checks*. At the end of the experimental session, participants completed manipulation checks. The adequacy of the leader emotional unpredictability manipulation was checked with our scale from the pilot study ( $\alpha = .97$ ). The effectiveness of the reward structure manipulation in creating an individualistic or team-oriented atmosphere was checked using the item "People will work to pursue the team interests in this team".

## Results

Means, standard deviations, and correlations among the measured variables are seen in Table 8.

#### Manipulation Check

We found that participants assigned to emotionally unpredictable leaders viewed them as more emotionally unpredictable (M = 6.06, SD = 1.19) than did participants assigned to emotionally predictable leaders (M = 2.49, SD = 1.47), F(1, 210) = 366.72, p = .000,  $\eta^2 = .64$ , Cohen's d = 2.67. Furthermore, participants in the high team interdependence condition reported being significantly more likely to pursue team interests (M = 4.83, SD = 1.36) than did those in the low team interdependence condition (M = 4.60, SD = 1.52), F(1, 210) = 6.17, p = .014,  $\eta^2 = .02$ , Cohen's d = .16. Thus, the manipulations were successful.

## **Dependent Variables**

We predicted that leader emotional unpredictability triggers greater resource uncertainty among followers, particularly when team interdependence is low rather than high. A 2 x 2 ANOVA revealed a main effect for leader emotional unpredictability, F(1, 210) = 43.19, p < .001,  $\eta^2 = .17$ , Cohen's d = .94, showing that emotionally unpredictable leaders (M = 4.97, SD = 1.43) caused more uncertainty about resource allocation among team members than emotionally predictable leaders (M = 3.47, SD = 1.74). Additionally, a 2 X 2 ANOVA showed an interactive effect of leader emotional unpredictability and team interdependence on resource allocation uncertainty (F(1, 210) = 5.02, p = .026,  $\eta^2 = .02$ ), such that when teams had low interdependence, emotionally unpredictable leaders generated more resource allocation uncertainty (M = 5.17, SD = 1.45) than emotionally predictable leaders (M = 3.24, SD = 1.78, F(1,114) = 38.33 p < .001,  $\eta^2 = .26$ , Cohen's d = 1.19), and when teams had high team interdependence, there was less difference in resource allocation uncertainty between emotionally unpredictable leaders (M = 4.79, SD = 1.40) and emotionally predictable leaders (M = 3.84, SD = 1.64, F(1,100) = 9.74 p = .002,  $\eta^2 = .09$ , Cohen's d = .62).

We also found that uncertainty about resource allocation was positively related to power struggles (b = .48, SE = .05, t = 5.47, p < .001,  $R^2$  = .12). And, finally, we tested for mediation using the PROCESS macro (Model 4, 5000 bootstrap iterations) by Preacher and Hayes (2004). We found that uncertainty about resource allocation mediated the effect of leader emotional unpredictability on power struggles (indirect effect: b = .19; bias and accelerated 95% CI: .10, .30).

Hypothesis 2 predicted that power struggles would harm team performance. This hypothesis was tested using hierarchical regression analysis and was supported (b = -.38, SE = .06, t = -6.20, p < .001,  $R^2 = .15$ ).

Hypothesis 3 predicted that power struggles would mediate the effects of leader emotional unpredictability on team performance, especially when team interdependence is low rather than high. In support of this, using PROCES model 4 with 5000 iterations, we found significant three-step mediation, such that power struggles mediated the effects of leader emotional unpredictability on team performance (indirect effect: b = -.10; bias and accelerated 95% CI: -.19, -.04). We also found support for four-step mediation using PROCES model 6 with 5000 iterations, such that leader emotional unpredictability was positively related to resource allocation uncertainty, and thereby to power struggles, and ultimately to team performance (indirect effect: b = -.25; bias and accelerated 95% CI: -.38, -.15).

We also found support for mediated moderation (using PROCESS Model 7, 5000 iterations), such that the indirect effect of leader emotional unpredictability on power struggles via resource allocation uncertainty was more significant when there was low team interdependence (b = .24; bias and accelerated 95% CI: .12, .40) than when there was high team interdependence (b = .12; bias and accelerated 95% CI: .05, .23).

## **Discussion**

Study 3 replicated the key findings from Studies 1 and 2, showing again that emotionally unpredictable leaders have a particularly detrimental impact on power struggles and performance when team interdependence was low rather than high. Moreover, the data support our theoretical argument that leader emotional unpredictability causes intra-team power struggles because it creates resource allocation uncertainty. This study adds further support to the causal effects of leadership emotional unpredictability on team dynamics and individual and team performance outcomes.

#### **GENERAL DISCUSSION**

Whereas unpredictability has been theorized to be a key source of leader power (Locke, 1689; Machiavelli, 1996; Schelling, 1980; Sinaceur et al., 2013; for an exception see Matta et al., 2016), and leader emotions have been found to be an important source of information and inspiration in teams (Humphrey, 2002; Van Kleef, 2016), the effects of this combination – of specifically leader emotional unpredictability – are less positive for teams. We find in a series of multi-method studies that leaders whom appear emotionally unpredictable to their followers cause intra-team power struggles and lowered team performance. Moreover, we demonstrated that this effect can be mitigated by promoting higher levels of team interdependence, because team interdependence leads team members to focus more on collaborative relationships with one another rather than ruminating on their individual ramifications of the leader's emotions.

## **Theoretical Implications**

Our findings offer contributions to research on the social-functional approach to emotion (e.g., Keltner & Haidt, 1999; Van Kleef, Homan, & Cheshin, 2012) as well as on leadership, power, and emotional expression (for a review see, Van Knippenberg & Van Kleef, 2016). Specifically, we qualify research on the social-functional approach to emotion by identifying a pattern of emotional expression that may have dysfunctional rather than

functional consequences. Work in the social-functional approach to emotion has largely rested on the presumption that emotions provide informative value to others, thus helping them to make sense of the situation (e.g., Van Kleef et al., 2012). We show here that the converse is also possible – that certain forms of emotional displays can actually be dysfunctional. Namely, by showing that leader emotional unpredictability can create uncertainty around resource allocations, which elicits performance-detracting power struggles, we illustrate a boundary condition to social-functional approaches to emotions – when displayed emotions do not follow a predictable pattern, they do not serve a functional purpose in social interaction, at least when it comes to team functioning.

Additionally, we challenge and extend past work on leader emotional expressions on two counts. First, we challenge past work by showing that *patterns* of emotional displays may be more important than the *valence* of the emotion, as traditionally examined in much work on leader emotions (e.g., Lewis, 2000; Sy et al., 2005; Van Kleef et al., 2009) and social interactions in groups more generally (e.g., Bartel & Saavendra, 2000; Knight, 2013; Menges & Kilduff, 2015; for an exception see the work on contagion processes as reviewed by Barsade et al., 2018). Indeed, we show in a field study of bank branch offices that patterns of emotional unpredictability explain more variance in team outcomes than just, for example, the leader's focus or target of emotions (the leader or the team). Indeed, our findings resonate with work by Duffy, Gangster, and Pago (2002) who showed that unpredictable abuse from leaders is worse than abuse alone, suggesting that regardless of valence, leader predictability in follower treatment is critical for the well-being and performance of teams being led.

Second, past work on the effects of leader emotions has traditionally examined how leader emotions impact the leader's relations with followers, and not how a leader's emotions can impact how followers treat one another (Van Knippenberg & Van Kleef, 2016). Our work therefore extends work in this tradition to the study of how leader emotions affect intra-

team dynamics, and opens up the door for comparisons of emotions and emotional display patterns that are functional for certain levels of outcomes (i.e., leader-follower outcomes or leader-outgroup/public outcomes) and not for others (i.e., intra-team outcomes). For example, future research could explore whether our effects hold when leaders are speaking to external stake-holders, as classic research and theory suggest that leader unpredictability can be useful when building leader power (Locke, 1689; Machiavelli, 1996; Schelling, 1980; Sinaceur et al., 2013). In such situations, leader emotional unpredictability may be more functional than in the team setting examined here, where followers are dependent on the leader's whims.

We also offer contributions to the literatures on team hierarchies and conflict and power dynamics (e.g., Bendersky & Hays, 2012; De Dreu & Weingart, 2003; Greer & Van Kleef, 2010; Halevy, Chou, & Galinsky, 2011) by identifying a situation that may lead members to engage in power struggles. We found that when the team environment is uncertain (i.e., leader emotional unpredictability) and individuals are incentivized to prioritize their own interests above team interests (i.e., individual bonuses), team members engage in contests about rank and resources within the team. Future research could investigate how other forms of uncertainty could impact power dynamics, and whether such power struggles might under particular circumstances exert a positive effect on performance.

#### **Limitations and Future Directions**

Our studies provide a first demonstration, in both laboratory and field settings, of the effects of leader emotional unpredictability on team dynamics and performance. Several issues, however, require attention and new research. For example, whereas we focused on the general impact of leader emotional unpredictability on teams, there may be boundary conditions that remain to be uncovered. For example, although we did not find moderation by emotional intensity (see Study 2), recent work indicates that emotional displays can have quite different effects in organizational settings depending on the intensity with which they

are shown (Cheshin et al., 2018). Perhaps detecting such effects in the context of leader-follower relations requires larger differences in intensity, such that at very low levels of intensity, leader emotional unpredictability does not affect teams, and at very high levels of intensity, the effects are even worse than we show here. Additionally, there is room to explore the moderating effects of follower personality (e.g., need for structure) on the relationship between leader emotional unpredictability and power struggles. Teams composed of individuals with, for example, a high preference for clarity and structure might be even more adversely affected by leader emotional unpredictability than what was shown in the teams we examine here.

Additionally, there is room to further unpack the notion of leader emotional unpredictability itself. Further examining what drives leader emotional unpredictability, and how its underlying drivers may affect its impact on teams (i.e., whether it stems from leader personality or team environmental stress, or whether the leader does it intentionally or unintentionally) will be an important direction for future research. Relatedly, understanding whether certain types of unpredictable emotions have different effects than others (e.g., positive or negative, work-related or not) could also be important for future work.

## **Practical Implications**

Leaders operate across a variety of environments and often face opportunities and difficulties of which their followers are not aware. Given how closely followers pay attention to the emotions of leaders, our research suggests that an important leader skill is the ability to reduce the perceived unpredictability of their emotions to their followers, in order to prevent toxic team dynamics from emerging in their team. To do this, leaders can work to provide context for their emotions to their followers. For example, when a professor meets with a team of graduate students, and had a paper rejected that morning, the professor might mention "If I appear a little down or disappointed today, it's not about you all – I had a paper

rejected this morning. Just wanted to make sure you knew the context. How are you all today?". If the professor didn't mention that, and the students had to make attributions of the emotions on their face, students instead might take it personally and worry the professor was unhappy with them, and fight harder to prove themselves in the meeting, such as trying to claim higher authorship positions over one another, all of which would detract from the quality of the team's meeting.

Another means to manage dynamics around leader emotions and power in the team is to accentuate perceived team interdependence. This could be useful if the leader is going through say a particularly emotional life period and doesn't want to share it with the team. When team members perceive themselves to be tightly bound to one another, the leader's emotions have less impact. The leader could provide team outings to celebrate team achievements, or emphasize the use of 'we' in team visioning and meetings. While this could have downsides in terms of reducing the leader's control over the team, it could provide a buffer between the leader and the team in difficult periods.

#### Conclusion

We showed that emotionally unpredictable leadership increases team power struggles because it creates uncertainty about the leader's allocation of ranks and resources in teams, particularly in teams with low interdependence. These power struggles in turn harmed team performance. In sum, while leader emotional displays can provide an important source of information for followers, here we find that when leader emotional displays are perceived as unpredictable by followers, this negatively impacts team power dynamics and performance.

## **REFERENCES**

- Amason, A. C., & Sapienza, H. J. 1997. The effects of top management team size and interaction norms on cognitive and affective conflict. *Journal of Management*, 23(4): 495-516.
- Anderson, C., Srivastava, S., Beer, J. S., Spataro, S. E., & Chatman, J. A. 2006. Knowing your place: Self-perceptions of status in face-to-face groups. *Journal of Personality and Social Psychology*, 91: 1094–1110.
- Baas, M., De Dreu, C. K. W., & Nijstad, B. A. 2011. When prevention promotes creativity:

  The role of mood, regulatory focus and regulatory closure. *Journal of Personality and Social Psychology*, 100: 794-809.
- Barsade, S. G., Coutifaris, C. G., & Pillemer, J. 2018. Emotional contagion in organizational life. *Research in Organizational Behavior*, in press.
- Bartel, C., & Saavendra. 2000. The collective construction of work group mood.

  \*\*Administrative Science Quarterly, 4(2): 197-231.
- Beersma, B., Hollenbeck, J. R., Humphrey, S. E., Moon, H., Conlon, D. E., & Ilgen, D. R. 2003. Cooperation, competition, and team performance: Towards a contingency approach. *Academy of Management Journal*, 46: 572-590.
- Beersma, B., Homan, A. C., Van Kleef, G. A., & De Dreu, C. K. W. 2013. Outcome interdependence shapes the effects of prevention focus on team processes and performance. *Organizational Behavior and Human Decision Processes*, 121: 194-203.
- Bendersky, C., & Hays, N. A. 2012. Status conflict in groups. *Organization Science*, 23: 323-340.
- Berdahl, J. L., & Martorana, P. 2006. Effects of power on emotion and expression during a controversial group discussion. *European Journal of Social Psychology*, 36(4): 497-509.

- Berger, C. R., & Calabrese, R. J. 1975. Some exploration in initial interaction and beyond:

  Toward a developmental theory of communication. *Human Communication Research*,

  1: 99–112.
- Bono, J. E., & Ilies, R. 2006. Charisma, positive emotions and mood contagion. *Leadership Quarterly*, 17: 317-334.
- Chen, G. 2005. Newcomer adaptation in teams: Multilevel antecedents and outcomes. *Academy of Management Journal*, 48(1): 101-116.
- Cheshin, A., Amit, A., & Van Kleef, G. A. 2018. The interpersonal effects of emotion intensity in customer service: Perceived appropriateness and authenticity of attendants' emotional displays shape customer trust and satisfaction. *Organizational Behavior and Human Decision Processes*, 144: 97-111.
- Colquitt, J. A. 2001. On the dimensionality of organizational justice: a construct validation of a measure. *Journal of Applied Psychology*, 86(3): 386-400.
- De Dreu, C. K. W. 1995. Coercive power and concession making in bilateral negotiation. *Journal of Conflict Resolution*, 39; 646-670.
- De Dreu, C.K.W. 2007. Cooperative outcome interdependence, task reflexivity and team effectiveness: A motivated information processing approach. *Journal of Applied Psychology*, 92: 628-638.
- De Dreu, C. K. W., & Van Knippenberg, D. 2005. The possessive self as a barrier to constructive conflict management: Effects of mere ownership, process accountability, and self-concept clarity on competitive cognitions and behavior. *Journal of Personality and Social Psychology*, 89: 345-357.
- De Dreu, C.K.W., & Weingart, L.R. 2003. Task Versus Relationship Conflict, Team

  Perfomance and Team Member Satisfaction: A Meta-analysis. *Journal of Applied Psychology*, 88: 741-749.

- De Dreu, C.K.W., Weingart, L.R., & Kwon, S. 2000. Influence of social motives on integrative negotiation: A meta-analytical review and test of two theories. *Journal of Personality and Social Psychology*, 78: 889–905.
- Darwin, C. 1872. *The expression of the emotions in man and animals* (3rd ed.). London: HarperCollins.
- DeRue, D. S., & Ashford, S. J. 2010. Who will lead and who will follow? A social process of leadership identity construction in organizations. *Academy of Management Review*, 35: 627-647.
- Donnellan, M. B., Oswald, F. L., Baird, B. M., & Lucas, R. E. 2006. The Mini-IPIP scales: Tiny-yet-effective measures of the Big Five factors of personality. *Psychological Assessment*, 18: 192–203.
- Duffy, M. K., Ganster, D. C., & Pagon, M. 2002. Social undermining in the workplace.

  \*\*Academy of Management Journal\*, 45(2): 331-351.
- Edmondson, A. 1999. Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2): 350-383.
- Ember, C. R., & Ember, M. 1992. Resource unpredictability, mistrust, and war. *Journal of Conflict Resolution*, 36: 242–262.
- Evans, Gary W. 2000. Stress and open-office noise. *Journal of Applied Psychology*, 85: 779-783.
- Frankel, A., & Snyder, M. L. 1978. Poor performance following unsolvable problems:

  Learned helplessness or egotism? *Journal of Personality and Social Psychology*, 36: 1415-23.
- Frijda, N. H. 1986. *The emotions*. Cambridge, UK: Cambridge University Press.

- Greer, L. L., & Bendersky, C. 2013. Power and status in conflict and negotiation research:

  Introduction to the special issue. *Negotiation and Conflict Management Research*,

  6(4): 239-252.
- Greer, L. L., Van Bunderen, L., & Yu, S. 2017. The dysfunctions of power in teams: An emergent account. *Research in Organizational Behavior*, *37*, 103-124.
- Greer, L. L., & Van Kleef, G. A. 2010. Equality versus differentiation: The effects of power dispersion on group interaction. *Journal of Applied Psychology*, 95: 1032–1044.
- Halevy, N., Chou, E. Y., & Galinsky, A. D. 2011. A functional model of hierarchy: Why, how, and when vertical differentiation enhances group performance. *Organizational Psychology Review*, 1: 32-52.
- Hareli, S., & Hess, U. 2010. What emotional reactions can tell us about the nature of others:

  An appraisal perspective on person perception. *Cognition & Emotion*, 24: 128-140.
- Hogg, M. A. 2001. A social identity theory of leadership. *Personality and Social Psychology Review*, 5, 184-200.
- Humphrey, R. H. 2002. The many faces of emotional leadership. *The Leadership Quarterly*, 13: 493-504.
- Keefer, L. A., Landau, M. J., Rothschild, Z. K., & Sullivan, D. 2012. Attachment to objects as compensation for close others' perceived unreliability. *Journal of Experimental Social Psychology*, 48: 912-917.
- Kelley, H. H., & Thibaut, J. W. 1959. *The social psychology of groups*. New York: Wiley.
- Keltner, D., & Haidt, J. 1999. Social functions of emotions at four levels of analysis. *Cognition & Emotion*, 13: 505-521.
- Kirkman, B. L., Chen, G., Farh, J., Chen, Z. X., & Lowe, K. B. 2009. Individual power distance orientation and follower reactions to transformational leaders: A cross-level, cross-cultural examination. *Academy of Management Journal*, 52: 744–764.

- Knight, A. P. 2013. Mood at the midpoint: Affect and change in exploratory search over time in teams that face a deadline. *Organization Science*, 26(1): 99-118.
- Kramer, R. M. 2001. Organizational paranoia: origins and dynamics. *Research in Organizational Behavior*, 23: 1-42.
- Lazarus, R. S. 1991. *Emotion and adaptation*. New York: Oxford University Press.
- Lewis, K. M. 2000. When leaders display emotion: How followers respond to negative emotional expression of male and female leaders. *Journal of Organizational Behavior*, 21: 221-234.
- Machiavelli, N. 1996. *Discourses on Livy* (H. C. Mansfield & N. Tarcov, Trans.). Chicago, IL: University of Chicago Press (Original work published 1512-1517).
- Manstead, A. S. R., & Fischer, A. H. 2001. Social appraisal: The social world as object of and influence on appraisal processes. In K. R. Scherer, A. Schorr, & T. Johnstone (Eds.), *Appraisal processes in emotion: Theory, research, application* (pp. 221-232).
  New York: Oxford University Press.
- Matta, F. K., Scott, B. A., Colquitt, J. A., Koopman, J., & Passantino, L. G. 2017. Is consistently unfair better than sporadically fair? An investigation of justice variability and stress. *Academy of Management Journal*, 60(2): 743-770.
- Mazei, J., Hüffmeier, J., Freund, P. A., Stuhlmacher, A. F., Bilke, L., & Hertel, G. 2015. A meta-analysis on gender differences in negotiation outcomes and their moderators. *Psychological Bulletin*, 141(1): 85.
- McCrae, R. R., & Costa Jr, P. T. 1999. A five-factor theory of personality. *Handbook of Personality: Theory and Research*, 2: 139-153.
- Menges, J. I., & Kilduff, M. 2015. Group emotions: Cutting the Gordian knots concerning terms, levels of analysis, and processes. *Academy of Management Annals*, 9(1): 845-928.

- Milkman, K. L. 2012. Unsure what the future will bring? You may overindulge: Uncertainty increases the appeal of wants over shoulds. *Organizational Behavior and Human Decision Processes*, 119: 163-176.
- Mueller, J. S. 2012. Why individuals in larger teams perform worse. *Organizational Behavior and Human Decision Processes*, 117(1): 111-124.
- Nijstad, B. A., De Dreu, C. K. W., Rietzschel, E. F., & Baas, M. 2010. The dual pathway to creativity model: Creative ideation as a function of flexibility and persistence. *European Review of Social Psychology*, 21: 34-77.
- Rothschild, Z. K., Landau, M. J., Sullivan, D., & Keefer, L. A. 2012. A dual-motive model of scapegoating: Displacing blame to reduce guilt or increase control. *Journal of Personality and Social Psychology*, 102: 1148-1163.
- Schelling, T.C. 1980. *The strategy of conflict* (2<sup>nd</sup> Ed). Cambridge, MA: Harvard University Press.
- Sinaceur, M., Adam, H., Van Kleef, G. A., & Galinsky, A. D. 2013. The advantages of being unpredictable: How emotional inconsistency extracts concessions in negotiation. *Journal of Experimental Social Psychology*, 49: 498-508.
- Sy, T., Côté, S., & Saavedra, R. 2005. The contagious leader: Impact of the leader's mood on the mood of group members, group affective tone, and group processes. *Journal of Applied Psychology*, 90: 295-305.
- Tjosvold, D. 1998. Cooperative and competitive goal approach to conflict: Accomplishments and challenges. *Applied Psychology*, 47: 285-313.
- Van Bunderen, L., Greer, L.L., & Van Knippenberg, D. 2018. When inter-team conflict spirals into intra-team power struggles: The pivotal role of team power structures. *Academy of Management Journal*, in press.
- Van Kleef, G. A. 2016. The interpersonal dynamics of emotion: Toward an integrative

- *theory of emotions as social information*. Cambridge, UK: Cambridge University Press.
- Van Kleef, G. A., De Dreu, C. K., & Manstead, A. S. 2010. An interpersonal approach to emotion in social decision making: The emotions as social information model. *Advances in Experimental Social Psychology*, 42: 45-96.
- Van Kleef, G. A., Heerdink, M. W., & Homan, A. C. 2017. Emotional influence in groups:

  The dynamic nexus of affect, cognition, and behavior. *Current Opinion in Psychology*, 17: 156-161.
- Van Kleef, G. A., Homan, A. C., Beersma, B., & Van Knippenberg, D. 2010. On angry leaders and agreeable followers: How leaders' emotions and followers' personalities shape motivation and team performance. *Psychological Science*, 21: 1827-1834.
- Van Kleef, G. A., Homan, A. C., Beersma, B., Van Knippenberg, D., Van Knippenberg, B.,
  & Damen, F. 2009. Searing sentiment or cold calculation? The effects of leader emotional displays on team performance depend on follower epistemic motivation.
  Academy of Management Journal, 52: 562-580.
- Van Kleef, G. A., Homan, A. C., & Cheshin, A. 2012. Emotional influence at work: Take it EASI. *Organizational Psychology Review*, 2: 311-339.
- Van Knippenberg, D., & Sitkin, S. B. 2013. A critical assessment of charismatic—

  Transformational leadership research: Back to the drawing board? *Academy of Management Annals*, 7: 1-60.
- Van Knippenberg, D., & Van Kleef, G. A. 2016. Leadership and affect: Moving the hearts and minds of followers. *Academy of Management Annals*, 10: 799-840.
- Wang, L., Restubog, S., Shao, B., Vinh, L., & Van Kleef, G. A. 2018. Does anger help or harm leader effectiveness? The role of competence-based versus integrity-based violations and abusive supervision. *Academy of Management Journal*, 61: 1050-1072.

## LEADER EMOTIONAL UNPREDICTABILITY 41

Yukl, G. 2012. Effective leadership behavior: What we know and what questions need more attention. *Academy of Management Perspectives*, 26: 66-85. doi:10.5465/amp.2012.0088

Zaccaro, S. J. 2012. Individual differences and leadership: Contributions to a third tipping point. *The Leadership Quarterly*, 23: 718-728.

## TABLE 1.

## **Leader Emotional Unpredictability Scale**

- 1. My leader expresses different emotions in different moments, even when situations are similar.
- 2. It is difficult to know in advance with which emotions my leader will react.
- 3. It is not clear what emotion my leader will show in a certain situation.
- 4. I don't know what emotions I can expect from my leader.
- 5. I don't know what type of positive emotions to expect from my leader.
- 6. I don't know what type of negative emotions to expect from my leader.

TABLE 2. Study 2 Pilot Study: Confirmatory Factor Analysis: Sequential  $\chi^2$  Difference Tests <sup>a</sup>

Model	X <sup>2</sup>	df	р	CFI	TLI	RMSEA	SRMR
Unconstrained five-factor model	729.47	314	< 0.001	.92	.91	.085	.06
Four-factor model (with LEU <sup>b</sup> and General Unpredictability)	951.53	318	< 0.001	.87	.86	.11	.08
Four-factor model (with LEU and Neuroticism)	1032.16	318	< 0.001	.86	.84	.11	.10
Four-factor model (with LEU and Fairness)	1374.72	318	< 0.001	.79	.77	.14	.11
Four-factor model (with LEU and Stress)	1287.65	318	< 0.001	.81	.79	.13	.08

a N = 181 individuals

b LEU = Leader Emotional Unpredictability

TABLE 3. Study 2 Pilot Study – Sample 1: Means, Standard Deviations, and Correlations among Variables (N = 246 teams)

	Mean	SD	1	2	3	4	5	6	7	8	9
1. Team size	3.82	1.87									
2. Gender diversity	.34	0.20	04								
3. Functional diversity	.28	0.22	.01	.28**							
4. Tenure diversity	.82	0.42	.04	.41**	.37**						
5. Leader emotional intensity	3.10	0.91	.06	02	01	03					
6. Leader emotional focus	3.72	0.58	.05	03	03	04	.05				
7. Leader emotional unpredictability	2.90	0.85	.10	07	03	08	.63***	.24***			
8. Team interdependence	5.58	0.69	04	.06	01	00	.10	16*	.01		
9. Intra-team power struggles	1.97	0.85	02	04	.03	.00	.19**	.00	.38***	09	
10. Team performance <sup>a</sup>	13.39	3.88	.08	.02	03	.06	.13	.04	.10	06	16*

<sup>\*\*\*</sup>p<.001; \*\*p<.01; \*p<.05.

a N=240 teams

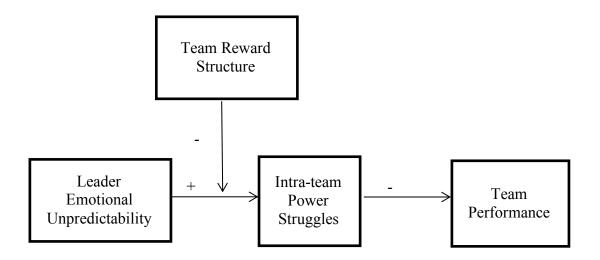
TABLE 4. Study 2 – Results of Hierarchical Regression Analyses (N = 240 teams)

		Intra-team Power Struggles			Team Financial Performance				
Step 1.	Team Size		03		.07		.07		
	Gender Diversity		05		.01		.01		
	Functional Diversity		.04		07		07		
	Tenure Diversity		.01		.08		.08		
	Leader Emotional				.12		.12		
	Intensity		.19**		0.4		0.4		
	Leader Emotional Valence		00		.04		.04		
	v alence		00						
	F		1.62		1.19		1.19		
	$R^2/\text{Adj.} R^2$				.03/.01		.03/.01		
			.04/.02						
Step 2a.	Intra-team Power					16**	19**		
	Struggles <i>F</i>					6.30*	2.23*		
	$R^2/\text{Adj.} R^2$					.03/.02	.06/.04		
	$^{\Delta}R^{2}$					.02	.03		
Step 2b.	Leader	.40***	.51***	.10	.01	.19**	.12		
	Unpredictability Team Interdependence	12*	11	07	07	09	10		
	F	21.91***	6.81***	1.59	1.03	5.14**	2.16*		
	$R^2/\mathrm{Adj}$ . $R^2$	.15/.15	.19/.16	.01/.01	.04/.00	.06/.05	.08/.04		
	$^{\Delta}R^{2}$		.14	.01	.00	.03	.00		
Step 3.	Leader Unpredictability X Team Interdependence	15**	12*	.06	.05	.02	.02		
	F	17.13**	6.61***	1.34	0.98	3.88**	1.95*		
	$R^2/\text{Adj.} R^2$	.18/.17	.20/.17	.02/.00	.04/.00	.06/.05	.08/.04		
	$^{\Delta}R^{2}$	.02	.01	01	.00	.00	.00		
	***n< 001 · **n< 01 · *n	< 0.5							

\*\*\*p<.001; \*\*p<.01; \*p<.05.
Standardized beta coefficients are presented.

FIGURE 1.

## **Theoretical Model**



## APPENDIX. Study 1 Payoff Matrix.

Issues	Options	Employee 1	Employee 2	Employee 3	Total
Issue 1:	Employee 1 = 5%, Employees 2 and 3 = 3.5% each	25	25	25	75
<b>Equity Split</b>	Employee 2 = 5%, Employees 1 and 3 = 3.5% each	25	50	0	75
	Employee 3 = 5%, Employees 1 and 2 = 3.5% each	0	25	50	75
	Equally split (4% each)	50	0	25	75
Issue 2:	4 clients	100	0	50	150
Clients	5 clients	75	50	37.5	162.5
Needed for	6 clients	50	100	25	175
<b>Beta-Testing</b>	7 clients	25	150	12.5	187.5
8	8 clients	0	200	0	200
	1 1 .	50	100	0	1.50
Issue 3:	1 new hire	50	100	0	150
Amount of	2 new hires	37.5	75	50	162.5
New Hires	3 new hires	25	50	100	175
Needed	4 new hires	12.5	25	150	187.5
	5 new hires	0	0	200	200
Issue 4:	1 x week	0	25	50	75
Frequency of Team	2 x week	25	25	25	75
Meetings	3 x week	50	0	25	75
	5 x week	25	50	0	75
Issue 5:	1 product	0	50	100	150
# of Products	2 products	50	37.5	75	162.5
	3 products	100	25	50	175
	4 products	150	12.5	25	187.5
	5 products	200	0	0	200
Min payoff		0	0	0	600
Max payoff		450	450	450	750