Title

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Leadership in the Locker Room: How the Intensity of Leaders'

Unpleasant Affective Displays Shapes Team Performance

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Abstract

Research documents conflicting evidence about the relationship between a leader's unpleasant affective displays and team performance. Drawing on the dual threshold model of anger (Geddes & Callister, 2007), we propose a novel explanation for this paradox such that the positive relationship between leaders' unpleasant affect and team performance turns negative at high levels of intensity. We examine our hypothesis in a multi-level field study of 304 halftime locker room speeches involving 23 high school and college basketball teams, and a follow up experiment. Our results show support for the prediction, and suggest that the curvilinear effect of leaders' unpleasant affective displays may be explained by team members' redirection of attention and approach, which is positively associated with team members' effort at moderate levels of leader unpleasantness, but with lower effort at high and low levels of unpleasantness. We discuss the theoretical contributions for scholarship on leadership, emotions as social information (EASI) theory, as well as practical implications of the results.

Keywords: emotion, affective processes, leadership, teams

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"Y'all see him [the coach] running up and down and getting a tech and all that?" MSU junior center Matt Costello said of (coach) Tom Izzo... "That's how he was at halftime, except spitting at us." (Rexrode, 2015).

Both organizational research and conventional wisdom suggest that few employees are motivated by a leader who displays unpleasant affect; that is, a leader who demonstrates an undesirable affective state like feeling unhappy, disappointed, or angry (Barrett & Russell, 1999; Feldman Barrett & Russell, 1998; Larsen & Diener, 1992; Russell, 1980) via verbal articulations, facial expressions, physical gestures, or other means. Management books abound with tips for how employees can avoid (or at least cope with) such a supervisor (e.g., Sutton, 2007, 2017). Likewise, research has shown that leaders' unpleasant affective displays can sometimes be seen by teams as inappropriate (Koning & van Kleef, 2015), and are associated with low ratings of leader effectiveness (Glomb & Hulin, 1997; Lewis, 2000), employee withdrawal (Fitness, 2000), perceptions of the leader as hostile or rude, as well as lower task performance (Fox & Spector, 1999; Porath & Erez, 2007). We might thus expect leaders' unpleasant affective displays to act as a major hindrance to the functioning of teams.

Despite the potential costs of leaders' unpleasant affective displays, there is also evidence of potential upside. Several well-known work groups, ranging from military units to sports teams, are notable for having achieved

high performance while working under leaders renowned for their unpleasant affect. For example, U.S. Army General George Patton was long known for his unpleasant treatment of subordinates and prowess on the battlefield; NBA basketball coach Gregg Popovich is widely known for his often harsh criticism of players and for being one of the best coaches in professional basketball (Williamson, 2009). Research also supports the notion that leaders' unpleasant affective displays can yield beneficial results, including greater leader effectiveness, competence, and status (Gaddis, Connelly & Mumford, 2004; Tiedens, 2001). This is particularly evident for how leaders' unpleasant affective displays may induce greater effort and enhance team performance (van Kleef et al., 2009; van Kleef, Homan, Beersma & van Knippenberg, 2010; Sy et al., 2005). The EASI (Emotions as Social Information) model (van Kleef, 2009, 2014) provides an explanation of these effects, positing that leaders' unpleasant affective displays serve as informational cues that raise followers' awareness of less-than-optimal performance (Fitness, 2000), signaling that greater effort is required (van Kleef, 2014).

Thus, a paradox exists in both the academic literature and popular discourse. Sometimes leaders' unpleasant affective displays can impair team performance, but at other times may foster it. Drawing on the dual threshold model of anger (Geddes & Callister, 2007) and related research, we provide a resolution of this leadership paradox rooted in the *intensity* of the affective display, i.e., the strength of the affective display (Frijda, Ortony, Sonnemans & Clore, 1992). We theorize that at moderate intensity, leaders' unpleasant

affective displays can redirect teams' attention to problems and resolutions, increasing performance; yet, highly intense displays may divert teams' attention away from the problem and resolutions, decreasing performance. Previous attempts to resolve this paradox have explained it with personality traits among followers. Van Kleef and colleagues (2009), for example, found that teams composed of members with a stronger desire to understand the situation (i.e., higher epistemic motivation) and those who were lower in agreeableness (van Kleef, et.al., 2010) performed better under leaders who displayed unpleasant affect (anger) rather than pleasant affect (happiness). Therefore, we conduct our investigation using designs that control for follower personality traits.

Intensity of Leaders' Unpleasant Affective Displays

A potential explanation underlying the leadership paradox is that the effect of leaders' affective displays on performance might depend on its level of intensity. Intensity is the extent to which affect is perceived to be displayed, or the strength of the affective signal (Adam & Brett, 2018; Frijda, et al., 1992; Leger, Thompson, Merritt, & Benz, 1996). For instance, someone who expresses disappointment with an event or outcome is likely to be perceived as displaying less affective intensity than someone who indicates that he or she is very upset (Zhe & Boucouvalas, 2002). While past research has typically held the intensity of unpleasant affective displays constant at a moderate level (van Kleef & De Dreu, 2010; van Kleef et al., 2009, 2010), by varying levels of intensity we may find leaders' displays of unpleasant affect

to have a curvilinear relationship with team performance.

We construct our hypothesis by drawing from the dual threshold model of anger (Geddes & Callister, 2007). This model stipulates that there are two "thresholds" that exist regarding individuals' expression of anger in the workplace, which can influence the favorability of outcomes from the emotional experience. The first threshold is crossed when organizational members go from simply experiencing anger to actually expressing it to others. It is posited that suppressing anger is less favorable than expressing that anger to others, since the observers of anger may be able to address or resolve the issue provoking the emotion. That is, without being aware of the problem, organizational members cannot resolve the provocation or cause. The second threshold is crossed when organizational members express anger with an intensity that is too strong, such that it is perceived as inappropriate or "over the line" by observers. Rather than directing attention to a problem and/or its resolution, the intense expression of anger diverts attention away from the offending issue and toward the offending individual who has so intensely expressed the anger. In a sense, the purveyor of the anger has become the problem. As a result, the dual threshold theory predicts that there is an optimal level of anger expression in terms of garnering favorable outcomes in the workplace, and this optimal level resides between two thresholds-- where it is expressed, but not *too* intensely.

While the dual threshold model is specific to the expression of anger,

we extend the notion to the broader dimension of unpleasant affective displays, because these expressions are likely to portray similar social information to followers. For instance, a leader's display of anger, frustration, unhappiness, and disappointment all convey dissatisfaction with current effort and performance (van Kleef et al., 2010; van Kleef, 2014), and by implication the leader's desire for adjustment, improvement, and greater effort. Both the EASI and dual threshold models predict that, at moderately intense levels, unpleasant affective displays will help direct individuals' attention, encourage greater effort, and promote a higher level of performance directed at achieving a goal (Izard, 1993; Keltner & Gross, 1999; van Kleef, 2009; van Kleef et al., 2010). This occurs because a leader's display of moderately intense unpleasant affect can communicate social information to followers that their performance is not seen as satisfactory (Fitness, 2000; van Kleef, 2009), and therefore signals the need for improvement, adjustment of current behavior (Cacioppo & Gardner, 1999; Fischer & Roseman, 2007), and the need for more effort (van Kleef, 2014). While research in the EASI tradition typically compares moderately intense unpleasant affective displays to moderately intense pleasant affective displays, the logic underlying the dual threshold model of anger supports the comparison of low to moderate intensity of unpleasant affective displays. According to the dual threshold model (Geddes & Callister, 2007), when unpleasant affect is not displayed, or expressed at very low intensity, it will not be detected or interpreted by observers as being serious enough as to

merit attention toward an underlying problem or shortcoming. As a result, compared to moderately intense displays, little to no unpleasant affective display by leaders is likely to leave team members unaware that they need to improve and they will be less likely to redirect their attention to the task or make adjustments to their approach and effort. Therefore, we theorize that at moderate (relative to low) levels, unpleasant affective displays by leaders are likely to be associated with better team performance. Importantly, this is not only when performance is objectively poor; rather, leaders' unpleasant affective displays signal to teams that their performance is not subjectively sufficient, at least in the eyes of the leader.

At high levels of intensity, unpleasant displays by leaders may cross the second threshold, where their behavior may be seen as inappropriate or as displaying too extreme a reaction to the underlying problem (Geddes & Callister, 2007). When this occurs, the unpleasant affective display can divert attention *away* from a problem and its resolution, and instead direct attention towards the individual displaying the emotion (Friedman, et al., 2004; Gibson, Schweitzer, Callister & Gray, 2009). As a result, team members observing leaders' highly intense unpleasant affective displays (relative to observing moderately intense ones) will be less likely to interpret the affective display as a signal warranting improvement. Instead, team members may be more likely to make personality attributions to the leader for the display (Geddes & Callister, 2007). Team members may focus on the overbearing nature of the leader or the inappropriateness of the affective

display rather than on new approaches to the task or the need for more effort. Such displays may therefore also have the unintended consequence of reducing attention to the task (Geddes & Callister, 2007) and improvement (see Kluger & DeNisi, 1996). Thus, highly intense displays of unpleasant affect may actually convey less task relevant information than moderate ones. Moreover, leaders' highly intense unpleasant affective displays, relative to moderate ones, may be more likely to be interpreted as hostile by team members (Tepper, 2000), resulting in withdrawal or reduced motivation rather than task improvement (Tepper, 2007; Farh & Chen, 2014). Thus, we predict that a leader's display of unpleasant affect will have a curvilinear effect on team performance.

> *Hypothesis 1:* The relationship between the intensity of leaders' displayed unpleasantness and team performance will be curvilinear (in an inverted U-shaped fashion).

Study 1

Method

Although leadership has been defined in many ways, most definitions (see Yukl, 1989, for a review) identify it either as a designated role in a group or organization and/or the influence of the person occupying that role over others, especially "when directing the activities of a group toward a shared goal" (Hemphill & Coons, 1957). Such definitions are quite consistent with the role of a sports coach. In fact, it can be argued that the sports context is an ideal setting in which to examine our research questions because it is relatively standardized, exhibits objective performance outcomes highly

proximate to leaders' affective displays, and involves repeated interactions between leaders and teams over time. This approach follows organizational scholars who have examined managerial topics in a sports setting, including leadership (Day, Sin, & Chen, 2004; Pfeffer & Davis-Blake, 1986), sunk costs (Staw & Hoang, 1995), and rivalry Kilduff, Elfenbein, & Staw, 2010).

This study was approved by UC Berkeley Office for Protection of Human Subjects IRB approval #97-1-10 and IRB approval #96-1-60. Data for this study were collected in 1996 by contacting as many basketball coaches as possible at non-NCAA colleges and high schools within reasonable driving distance from UC Berkeley. We contacted 57 athletic directors seeking permission to conduct the study, with direct mailings of materials explaining the research, resulting in an approximate 40% response rate. Our sample included 304 basketball games played during a single season by 23 teams, in which coaches' halftime talks were recorded along with other game-time records. We did not complete analyses until coding of the speeches was finished (approximately one year after data collection), and we did not employ any stopping rules. Male and female teams were roughly equally represented (12 male; 11 female), but coaches were predominantly male (20). Ten teams were high school level, eleven were junior college level, and two were from four-year colleges.

We asked coaches to nominate a research assistant, who was not an active player, to record the talks. We provided each assistant with a tape-recorder, tapes, and instructions. The research assistants also noted the

scores and teams' win-loss records. We compensated assistants with $100 and entry into a $300 lottery based on the number, quality, and timely return of their tapes. The halftime talks averaged six minutes long, with a range of 30 seconds to 14 minutes. We verified and corrected game scores from local newspaper accounts and league records.

Coding Methodology and Reliability. We developed a coding scheme to measure coaches' affective displays from Russell's (1980) affective circumplex (and Feldman Barrett & Russell, 1998), including emotion words (e.g., happy) from all four quadrants (see Table 1 for all items). While scholars often have participants rate their own affective state, there is also support for using emotion words to indicate the perception of *others'* affect (e.g., Averill, 1975; Bush, 1973; Carroll & Russell, 1996; Dittman, 1972; Russell & Mehrabian, 1977; Schlosberg, 1952).

A separate set of research assistants, who were knowledgeable about basketball, operated in two, two-person teams rating coaches' affective displays from 1 (*not at all*) to 5 (*to a great extent*). Coding teams were randomly assigned to coaches, and tapes were randomly ordered within coach. Ratings of each talk were recorded using assessment center methodology (Thornton & Byham, 1982). Inter-rater agreement and reliability scores within the coding teams were suitable, with item-level average R_{wg} = .96, .99, and scale-level estimates for ICC(2, 2) = .98, .97.

Measures

Independent variables. Using all the items from our coding designed

to tap the full affective circumplex, we formed a 22-item unpleasantness scale ($M = 1.88$, $SD = .58$, $\alpha = .95$), and squared this measure to test Hypothesis 1. We also created a 17-item pleasantness scale ($\alpha = .87$) and a composite of all 39 items, reverse-scoring the pleasantness items ($\alpha = .95$).

Control variables. We selected control variables a priori that could pose alternative explanations or suppress relationships between our variables. We controlled for the relative win-loss record of the focal team and its opponent at the outset of the game, since a team's prior performance relative to that of their opponent may be correlated with both teams' actual game-time performance and coaches' affective responses at halftime. We also computed relative first half performance as the difference between the focal and opponent team scores at halftime. We included this as a covariate because team performance in the first half would be predictive of both coaches' affective displays at halftime and final team performance. We report results in the tables both with and without covariates, and in a robustness model with all measured covariates.[1] We also ran all models after excluding two outlier games, and results were consistent with those reported in the paper.

Dependent variable. Our dependent variable was the difference in points scored between the focal and opponent teams during the second half of the game ($M = 1.79$, $SD = 11.71$). We reasoned that using "win versus

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[1] We collected one additional measure: the coach's estimate of how difficult each game would be. We reasoned that the more objective control measures would be a better indicator of the relative performance of the teams, and including this item did not alter the results. We did not collect data on teams' performance in other seasons/years. We also coded for leadership style and behavior in case requested during the review process, but we did not conduct analyses with these data.

loss" or total final scores would be less sensitive to halftime speeches. Final game scores were highly correlated with the second-half score differential (r = .82, p < .001). Results were consistent using any of these measures as the dependent variable.

Analyses and Results

Given the multilevel data, consisting of games nested within teams, as well as the theoretical importance of holding follower personality traits constant, we used HLM (Bryk & Raudenbush, 1992). We specified game-level variables at level 1 and group-mean centered them. Team level variables were specified at level 2 and grand mean centered. Below, we use common HLM notation to indicate the unstandardized game-level estimates using beta (β) coefficients.

Descriptive statistics and correlations are in Table 2 and results are displayed in Table 3. Correlations showed that coach unpleasantness was significantly and positively related to team performance, while coach pleasantness was significantly and negatively associated with performance. These results are in accord with prior EASI literature and research showing that positive feedback can reduce effort and performance (e.g., Vancouver et al., 2002). We examined Hypothesis 1, which predicted an inverted-U shaped relationship between unpleasantness intensity and team performance. Results (Model 2) indicated a significant negative quadratic effect above and beyond covariates, which, when compared to a positive main effect, indicates an inverted-U shape in support of the hypothesis (β = -4.39, *SE* =

2.11, $p = .038$). This reflects the hypothesized rise followed by a decline in performance as intensity of unpleasantness increases (Cohen, Cohen, West and Aiken, 2003). We also examined the separate composite and pleasantness scales. These analyses showed a significant, negative quadratic term for the composite ($\beta = -7.19$, $SE = 3.39$, $p = .035$), but not for the pleasantness scale ($p = .419$).

We plotted the curve for our main unpleasantness scale in HLM (Figure 1), showing that the positive effect of unpleasant affective displays on team performance rises and then turns downward at high levels of intensity. The results of simple slope calculations for quadratic equations according to Cohen, et al. (2003) and Aiken, West and Reno (1991) were opposite in sign, but not significant at +/- 1SD from the mean ($slope = -3.85$, $t = -.16$, ns, and $slope = 6.93$, $t = .29$, ns, respectively)[2]. The maximum point calculation (Cohen et al., 2003) was at 4.11 on the 5-point scale. Finally, we conducted a two-lines analysis (version .52, Simonsohn, 2018), which calculates average slopes across a break point. This analysis showed a significant and positive relationship between unpleasantness and team performance at lower levels of unpleasantness ($B = 7.27$, $z = 2.26$, $p = .024$), and a significant negative relationship at higher levels of unpleasantness ($B = -24.45$, $z = -2.30$, $p = .022$).

Discussion

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[2] The slope calculations for the full composite showed the same pattern, indicating an inverted U shape across increasing values of unpleasantness, but were not significant (+1SD $slope = -6.40$, $t = .08$, ns; -1SD $slope = 12.32$, $t = .16$, ns). A two-lines analysis showed two lines of opposite signs, but neither was significant.

Our investigation examined whether coaches' unpleasantness had a curvilinear relationship with performance. We found support for an inverted U-shaped relationship, but the results suggested that this pattern might only hold among "extremely" low and high intensity of unpleasant affective displays. Some strengths of the field study included the use of objective, real life affective displays and performance outcomes. However, there were also some limitations, including the absence of measures that might explain psychologically *how* coaches' unpleasant affective displays influenced players, difficulties in inferring causality, and limitations in the measurement of the predictor variable. We therefore designed a follow-up experiment. We noted our experimental design, predictions, sample size, and exclusion rules before collecting data on October 27-29, 2017 in our open science folder for this project: https://osf.io/46qce/?view_only=9c5eef64c1f94a2d87ed64d844bfe345.

Study 2

Method

We selected speeches from the field study to use as experimental materials. We identified a coach who delivered separate halftime speeches that were coded as containing low, moderate, and high levels of unpleasant affective display (approximately -1SD, M, and +1SD) to which participants were randomly assigned. While these values were not significant in the field data slope t-tests, we reasoned that in a controlled experiment without much social context people would be more responsive to affective cues, and that

using very strong affective displays risked offending participants as well as possible demand effects. We used the first 75 seconds of these three tapes in a 3-condition between-subjects experiment. Participants listened to a clip, taking the perspective of a player on the team. We used a scenario design, but with real stimuli to enhance external validity. Each participant had high school or collegiate sports experience to enhance the realism and relevance of the scenario, aiding their ability to take a player's perspective in the experiment. We planned (a priori) to recruit 100 participants per cell, and successfully recruited a panel of 283 people after planned exclusions. This study was approved the University of Toronto Ethics Review board, Protocol ID 35141.

Measures

Given our scenario design, we could not measure actual team performance. Instead, we asked participants to rate the extent to which their team would make an effort to improve its performance in the game's second half after listening to the halftime speech. We used this measure in order to tap the motivational effect of leaders' unpleasantness on participants, given that effort is a primary component of motivation (Locke & Latham, 1990), rather than capturing participants' expectations of winning the game, which would be less proximal to the motivational process. Additionally, while the experiment was run at the individual level of analysis, we used referent shift phrasing (Chan, 1998), asking participants about their team's effort to improve performance (e.g., Hackman, 1982) rather than about their own

effort, to be as theoretically consistent as possible with Study 1 under the

constraints of the design.

Participants also completed a measure of redirection on a 7-point

scale. We define redirection as a psychological response to social information

or feedback that indicates knowledge about the need for improvement, and

adjustment of one's attention and approach toward the task (van Kleef 2009,

2014; Geddes & Callister, 2007). We created a scale to capture the

construct, asking participants to what extent they agreed with statements

beginning with "during the second half of the game, players on this team"

and ending with (1) "need to change their approach," (2) "need to redirect

their attention," and (3) "know what they need to do." These three items

formed a reliable scale ($\alpha = .73$).

Results and Discussion

Correlation matrices, descriptive statistics, and scale reliabilities are

reported in Table 4. Means by condition, results for ANOVAs, and planned

contrasts are included in Table 5.

Using ANOVA, we confirmed that the manipulation worked as intended,

such that participants recognized higher coach unpleasantness across

conditions (overall $F = 69.25$, $p < .001$, $\eta_p^2 = .33$; all contrast p's $< .001$). We

then tested Hypothesis 1, which predicts a curvilinear effect of leader

unpleasantness. We found a significant overall effect on effort ($F = 7.09$, p

$= .001$, $\eta_p^2 = .05$), and the shape of the means across conditions resembled

an inverse U shape (see Figure 2). We also examined an ANOVA with a

quadratic contrast, which showed a significant quadratic term (F = 8.44, p = .004; η_p^2 = .03) and a significant quadratic contrast (t = 10.82, p < .001), lending support for Hypothesis 1. Paired contrasts showed that, although participants reported greater effort in the moderate versus low unpleasantness condition, this contrast was not significant (t = 1.21, p = .23). There was a significant contrast between the moderate and high unpleasantness conditions in the expected direction (t = 3.70, p < .001).

ANOVAs revealed that the conditions also significantly differed from one another in redirection (F = 3.75, p = .025; η_p^2 = .03; Table 5). An ANOVA showed that the quadratic term was significant (F = 7.22, p = .008; η_p^2 = .03) as was the quadratic contrast (t = 24.11, p < .001). Paired contrasts revealed significantly greater redirection in the moderate versus the low unpleasant condition (t = 2.56, p = .011) and the high unpleasant condition (t = 2.11, p = .036).

We then examined mediating models using the PROCESS macro (Model 4; Hayes, 2013, Bootstrap N = 10,000), using multicategorical contrast coding for a U-shaped test (i.e., with low and high unpleasantness = 0 and moderate = 1). This showed a significant indirect effect of condition on effort through redirection (*effect* = .19, *SE* = .08, 95% CI [.04, .35]). Redirection was a significant mediator when controlling for alternative mediators including emotional contagion, attention, and confidence, as well as perceived leadership effectiveness, leader goals (Ames & Flynn, 2007), and perceived workload (van Kleef, 2010).

It could be argued that the first two items of the redirection scale have greater content validity than the third. Therefore, we conducted an ANOVA using only the first two items. Results showed that the overall ANOVA, quadratic term, and quadratic contrast were significant ($F = 4.78$, $p = .009$; $F = 4.65$, $p = .032$; $t = 14.06$, $p < .001$, respectively). Paired contrasts showed a significant difference between moderate versus low conditions ($t = 3.00$, $p = .003$), and a non-significant difference between the moderate and high conditions ($t = 3.09$, $p = .404$). This pattern differs from the effort dependent variable contrasts, which might be explained by varying competing mechanisms or measurement error. The PROCESS mediation test with this measure showed a significant indirect effect via redirection, $effect = .13$, $SE = .06$, 95% CI [.03, .26].

General Discussion

The current literature and popular discourse present a paradox: there is evidence that team performance can be both hampered and improved by leaders' unpleasant affective displays. Past research has focused on one explanation underlying this tension: follower characteristics (van Kleef et al., 2009, 2010). Using designs which control for personality characteristics, we proposed and tested a novel hypothesis to help further our understanding of the leadership paradox, integrating and extending the EASI model (van Kleef, 2009, 2014) with the dual threshold model of anger (Geddes & Callister, 2007). Specifically, we theorized and found evidence of a curvilinear effect for leaders' displays of unpleasantness, suggesting that team performance

and effort may be improved by moderately unpleasant displays, but become impaired when unpleasantness reaches a high level of intensity. Our slope calculation results from the field study also suggest that this might only be true among "extremely" low and high intensity of affective displays. While past work using the EASI model shows there can be positive effects of leaders' unpleasant displays, scholars had not yet reconciled these findings with theorizing about how more intense unpleasant affective displays may cause adverse consequences. Our research integrates these perspectives, using both naturally occurring affective displays and an experimental design using affect-laden scenarios.

We highlight the importance of the "threshold" perspective for the social effects of leaders' affective displays on their followers and for EASI more generally. Previous research on the team performance effects of leaders' affective displays has tended to use experimental paradigms to compare anger to happiness, without varying the intensity of those affective displays. Unfortunately, this approach overlooks how leaders vary in how intensely they display affect to followers, ranging from mild expressions of unpleasant emotional states to belligerent rage, and from slight pleasantness to exuberant joy. The threshold perspective offered here suggests that affective displays at the extremes likely contain different social information for followers, which can shape team performance in opposite ways. Our research demonstrates that, indeed, the relationship between leaders' unpleasant affective displays and team performance varies

depending on how intensely leaders display their displeasure. However, we did not find that a threshold existed for pleasant affective displays, which showed a negative, linear relationship with team performance. This raises an interesting question for EASI scholars to examine in future work: when does the intensity of an affective display change the social information associated with an emotion, and when does it not?

The leadership literature has often posited linear effects for various leadership behaviors (e.g., initiating structure, emotional support), with the caveat that specific behaviors may only take effect in certain circumstances. Such contingency models rarely take a threshold perspective, examining the potential for a particular leadership behavior to be "too much of a good thing" (see Ames & Flynn, 2007 for an exception). As our research suggests, more scholarly attention towards potential curvilinear effects of leadership behaviors, affective constructs, and follower reactions could be generative. For example, leaders' emotional support might improve follower attitudes, but only up to a point where complacency sets in. Our research offers an account for why such curvilinear effects might occur across levels of a leadership construct: leaders may convey different social information across intensity levels of a behavior, and as a result, followers may change their task focus, strategies, effort, and attention.

More broadly, leaders' affect (moods and emotions) is believed to play a central role in the leadership process (George, 2000). Leaders use affect to try to motivate followers towards goals and objectives, as well as to instill

confidence and optimism. Yet, the intensity of leaders' affective displays and the competing mechanisms they evoke have yet to be incorporated into scholarship on leadership. Importantly, leaders' affective displays might involve the presence of multiple, conflicting processes on followers depending on their intensity. While moderately intense unpleasant affective displays might redirect followers' attention and effort to improve performance, they might also reduce follower confidence and optimism and increase negative emotion, reducing performance. And when too intense, such displays may promote uniformly negative follower responses. Thus, using unpleasant affective displays in an effective way likely requires leaders to be nuanced and emotionally intelligent. Future research that is able to flesh out potential competing effects of leaders' affective displays across different levels of intensity will therefore be valuable in attaining a more complete understanding of leadership and affect. This is particularly important for transformational leadership, which generally involves the use of emotion (especially positive affect) to motivate and persuade followers towards a vision (Ashkanasy & Tse, 2000; Bass & Avolio, 1994). While we did not study transformational leadership, our results suggest that although leaders' pleasant affective displays might indeed increase optimism and positive emotions among followers, they may also reduce follower effort and performance. By better understanding such potentially conflicting effects of leaders' affective displays on followers, we may find that transformational leaders' emotions have a more complicated relationship with follower

motivation than previously recognized.

Limitations and practical implications

From a practical standpoint, our findings place a critical boundary condition on the potential benefits of leaders' unpleasant affective displays shown by past research. The inverted U-shape of the influence of unpleasant affect on team performance indicates that unpleasantness can go too far, reducing effort and performance. These results imply that leaders should be sensitive to how intensely they use unpleasant affective displays in attempting to motivate team performance. Our results also show a negative, linear relationship between pleasant affective displays and subsequent team performance, implying that leaders should be mindful of sending social information signals that can inadvertently reinforce current unsatisfactory performance and effort. Importantly, we do not mean to imply that leaders should not encourage their teams to improve and to work harder; rather, leaders should try to send clear signals of a need for improvement by limiting their pleasant affective displays when providing task feedback and direction, which might inadvertently reinforce current levels of effort and performance.

This investigation was not without limitations which can inform future research. First, our main results from the field study are not causal. Our experiment was limited by not measuring objective team-level performance or using a team task, as well as the use of a single item to measure effort and an (as yet) unvalidated instrument for redirection. We also note that

both studies examined only short-term effects. Finally, while we intend our theory to be applicable across contexts, the sports setting of our study might place a boundary condition on our findings. Though past research has found positive effects of moderately unpleasant leader displays in non-sports settings (van Kleef et al., 2009, 2010; Sy et al., 2005), the intensity of display was not varied in those studies. Thus, future research is needed to examine whether the turning point of leaders' unpleasant affective display will be similar across varying contexts, or whether particular industry or organizational norms shape whether and how the intensity of affective display passes from appropriate and motivating, to unacceptable and demotivating.

Although this research represents one of the few studies of leadership and performance "behind the scenes" in a high-stakes, emotion-laden environment, there is certainly a need for further research on how leaders' affective dynamics impact team performance-- perhaps in ways that are more complex than previously recognized by the academic literature.

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Table 1

Unpleasant and Pleasant Affect Scale Items

Unpleasantness Items	Pleasantness Items
disgusted	glad
nervous	satisfied
angry	pleased
unhappy	happy
irritated	warm
anxious	excited
afraid	enthusiastic
sluggish	aroused
upset	active
annoyed	intense
scared	relaxed
frustrated	calm
gloomy	inspired
quiet	interested
dissatisfied	peppy
tired	attentive
jittery	alert
passive	
distressed	
disappointed	
worried	
hostile	

Note. Items were measured on a 5-point Likert scale.

Table 2

Means, Standard Deviations, and Bivariate Correlations among Study Variables (Study 1)

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Second half team performance	1.79	11.71	--												
2. First half team performance	2.56	12.43	.41***												
3. Relative win-loss record	-.15	12.31	.51***	.61***											
4. Unpleasantness	1.88	.58	.14*	-.19**	.06										
5. Pleasantness	2.41	.40	-.26***	.13*	-.18**	-.63***									
6. Unpleasantness (full bipolar composite)	2.62	.46	.20***	-.19***	.11ŧ	.96***	-.83***								
7. Pre-season (=1) dummy	.18	.38	-.02	-.01	-.06	.02	-.07	.04							
8. Playoffs (=1) dummy	.11	.31	.07	.04	.10ŧ	-.06	.09	-.07	-.16**						
9. Home game (=1) dummy	.55	.50	-.02	.14*	-.02	-.08	.05	-.07	-.01	-.07					
10. Pregame unpleasantness	1.28	.31	.05	.06	-.02	.23***	-.17	.23***	.07	-.15*	-.05				
11. Prior game score difference	4.80	20.78	.26***	.21***	.28***	.13*	-.07	.11ŧ	.00	.12*	-.01	-.10ŧ			
12. Team gender (1=male, 2=female)	1.52	.50	.05	.06	-.04	-.05	.19**	-.11ŧ	-.05	.00	-.03	-.16**	.11*		
13. Coach gender (1=male, 2=female)	1.12	.33	-.07	-.10ŧ	-.06	.05	.17***	-.03	-.07	-.10ŧ	.02	-.01	-.05	.36***	
14. High school (=1) v. college dummy	.43	.49	.06	.14*	.08	-.03	.01	-.03	.08	.17***	.02	-.17*	.17**	-.05	-.32***

Note. Variables are reported at level 1 (game level) except for variables 12-14, which are reassigned to level 1. *N* = 275-304 due to missing data.

*** *p* ≤ .001 ** *p* ≤ .01 * *p* ≤ .05 ŧ *p* ≤ .10

Table 3

Results of Hierarchical Linear Modeling Predicting Team Performance (Study 1)

	Model 1	Model 2	Model 3
Intercept	2.09 ŧ (1.14)	2.12 ŧ (1.09)	2.20 (1.46)
Level 1			
Unpleasantness	1.38 (1.30)	2.24 ŧ (1.37)	2.63 ŧ (1.40)
Unpleasantness^2	-4.26* (2.11)	-4.39* (2.11)	-5.08* (2.28)
First half score difference		.12 ŧ (.07)	.11 (.08)
Relative win loss record		.44*** (.06)	.46*** (.08)
Pre-season dummy			-1.79 (1.67)
Playoffs dummy			-2.80 (4.99)
Home v. away dummy			-.27 (1.29)
Pregame unpleasantness			1.35 (2.89)
Prior game score difference			.00 (.03)
Level 2			
Team gender (1=male, 2=female)			.82 (2.95)
Coach gender (1=male, 2=female)			-1.55 (4.58)
High school (=1) v. college dummy			.97 (2.92)
Pseudo R^2	.02	.19	.12
Df (team)	279 (22)	272 (22)	218 (19)

Note. Unstandardized parameter estimates are included with standard errors in parentheses. Results reported from robust standard errors for models 1-2 but we did not have sufficient level 2 *N* in model 3 for robust standard errors. Pseudo R^2 are calculated with Snijders and Bosker (1999)'s formula. *** $p \leq .001$ ** $p \leq .01$ *$p \leq .05$ ŧ $p \leq .10$

Table 4

Descriptive Statistics and Correlations for Study 2

	M	SD	N	1	2	3	4
1. Effort	4.11	1.70	283	--			
2. Low coach unpleasantness (=1, 0=moderate)	.54	.50	206	-.09	--		
3. High coach unpleasantness (=1, 0=moderate)	.45	.50	171	-.26**	--	--	
4. Redirection	5.30	1.12	283	.32***	-.18**	-.16*	(.73)

Note:
* *p* < .05
** *p* ≤ .01
*** *p* < .001

Table 5

Means and Standard Error by Condition and ANOVA with Contrast Results

(Study 2)

Condition	Effort	Redirection
1. Low unpleasant speech	4.20 (.14)	5.16 (.11)
2. Moderate unpleasant speech	4.48 (.18)	5.56 (.11)
3. High unpleasant speech	3.53 (.21)	5.20 (.13)
Main effects and contrasts		
F	7.09	3.75
p-value	.001	.025
Significant main effect contrasts	1 v. 3 (p = .007) 2 v. 3 (p < .001)	1 v. 2 (p = .011) 2 v. 3 (p = .036)
Quadratic effect and contrast		
Linear term F	7.26	.06
p-value	.007	.814
Quadratic term F	8.44	7.22
p-value	.004	.008
Quadratic contrast (1 and 3 v. 2)	p < .001	p < .001

Note. N=283; Low=112, Moderate=94; High=77

Figure 1

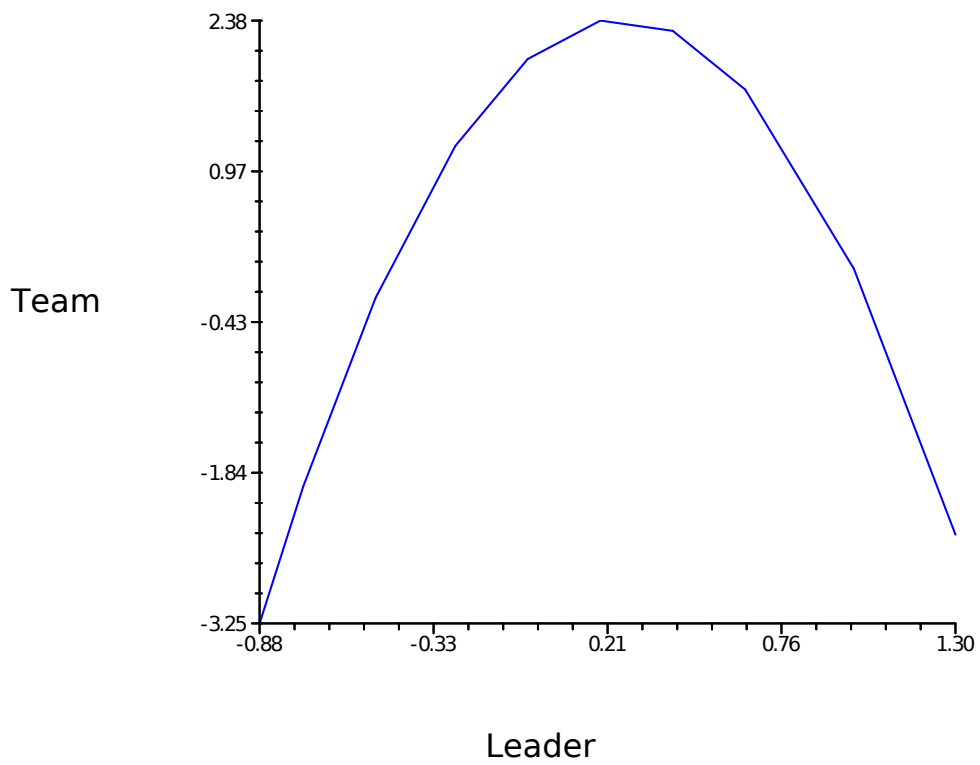*Relationship between Intensity of Leaders' Unpleasantness and Team Performance (Study 1)*

Figure 2

Means and Standard Error by Condition (Study 2)