

Constructive Feedback: When Leader Agreeableness Stifles Team Reflexivity

Abstract

Though leader agreeableness has been associated with follower ratings of leader effectiveness, the relationship between leader agreeableness and team task performance is more tenuous. We propose that leader agreeableness stifles team leaders' effectiveness by moderating the efficacy of their constructive feedback to their team. We argue that feedback delivered by an agreeable individual will be higher in positive emotional tone, and that positive emotional tone is, itself, informational content from which recipient teams draw inferences about the need to adapt. As a result, we suggest that team leaders' agreeableness influences the effectiveness of the constructive feedback they provide. Using two studies, one panel study of working adults and another of sales teams, we find support for our theory. Specifically, we show that agreeable individuals provide feedback that has linguistic features that convey higher levels of positive emotional tone. We then show that constructive feedback from team leaders encourages team reflexivity, which in turn enhances team performance, but that high agreeableness inhibits the impact of leaders' constructive feedback. Constructive feedback provided by agreeable leaders limits team reflexivity in response to the feedback. These results have important theoretical and practical implications.

Keywords: personality, agreeableness, leadership, feedback, team reflexivity

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Agreeableness—the highest-variance personality characteristic among the Big Five (Graziano, Habashi, Sheese, & Tobin, 2007)—has been shown to be a predictor of effectiveness in leadership positions (Judge, Bono, Ilies, & Gerhardt, 2002; Silverthorne, 2001), particularly when effectiveness is conceptualized as followers' feeling of individualized consideration from the leader (De Vries, 2008; Judge & Bono, 2000). This is not surprising: agreeable individuals are more friendly and approachable; they invoke strong social ties and build high-quality relationships (Nahrgang, Morgeson, & Ilies, 2009). Thus a follower is likely to report that leader as effective when effectiveness is defined on relational or affective dimensions. Yet agreeableness also appears to be unrelated to leadership effectiveness when effectiveness is conceptualized as execution and performance—or task-oriented leadership (De Vries, 2012; DeRue, Nahrgang, Wellman, & Humphrey, 2011). This too makes some intuitive sense: while attending to their subordinates' relational needs, agreeable leaders' social motivations may limit their capabilities to provide sufficient information to help facilitate task performance for those who they lead. Leader agreeableness seems to be a double-edged sword. In this research, we propose a theory for understanding why leader agreeableness may not be associated with team task performance, which is based on the linguistic features of the feedback leaders provide to their team.

In the now common team-based structures found in organizations (Harvey, Bresman, Edmondson, & Pisano, 2022), feedback is presented as an essential tool for leaders to achieve task-oriented leadership effectiveness. Feedback provides role clarity, structure, and goals to the team (Kozlowski & Ilgen, 2006). It can expose discrepancies between desired and actual outcomes, and these exposed discrepancies are thought to push teams to evaluate and alter

their behavior to bring desired and actual performance into alignment (Ilgen, Fisher, & Taylor, 1979; Taylor, Fisher, & Ilgen, 1984).

Feedback offers informational value and cognitive influence—beyond simply inspiring a drive to improve—and the characteristics of the content of the feedback can have a meaningful effect on the degree to which the feedback is understood and acted on. Feedback research provides some insights as to what content characteristics are likely to contribute to post-feedback improvement. For example, feedback is more constructive when it compares performance to a standard (Alvero, Bucklin, & Austin, 2001), focuses on behaviors under the recipient's control (DeNisi & Smith, 2014), and is specific and detailed in the extent to which it focuses on an identifiable action, behavior, instance, or recommendation (Goodman, Wood, & Hendrickx, 2004)—which we will refer to as informational content. At the team level, more constructive feedback can spur team reflexivity, a core team information-processing behavior in which team members review the feasibility of the team's goals, and review either the goals themselves or the methods used to achieve them (DeShon, Kozlowski, Schmidt, Milner, & Wiechmann, 2004; Schippers, Homan, & Van Knippenberg, 2013).

However, the linguistic features through which constructive feedback is communicated is likely to influence its effectiveness (Brutus, 2010). An emerging stream of research has examined feedback-giver characteristics as a factor of the effectiveness of the feedback they provide. For example, empirical research has explored the effect of feedback-givers' implicit person theory and prosociality on feedback-giving behaviors (e.g., Heslin & VandeWalle, 2011), while theoretical work has suggested that individual differences such as personality traits and cognitive ability might influence feedback quality (e.g., Judge, Piccolo, & Kosalka, 2009). We adopt this perspective to highlight the influence that agreeableness can

have on task-oriented leadership effectiveness by considering the linguistic features of the constructive feedback that leaders provide to their team.

A high degree of agreeableness comes with a tendency toward empathy and restraint (Rothbart, Ellis, Rueda, & Posner, 2003), and prosocial care for others (Carlo, Okun, Knight, & de Guzman, 2005). This, we argue, meaningfully affects the positive emotional tone used during leader-team interaction. *Positive emotional tone* is a linguistic form of emotional expression consisting of language patterns and words socially construed as suggestive of the giver experiencing a positive emotional state (Keltner & Haidt, 1999; Van Kleef, 2009, 2010). Emotional expressions, such as positive emotional tone, are signals interpreted by communication partners, of the communicator's internal emotional state. These emotional expressions are encoded as important information about the message the sender is trying to convey. In this paper, we aim to identify if the positive emotional tone in agreeable team leaders' feedback directs the receiving team's attention and limits the influence of constructive feedback on team reflexivity and team outcomes.

We develop and test our theory through two studies. First, in a correlational study of a panel of working professionals in the United States, we show that agreeableness is associated with heightened positive emotional tone in the feedback one provides. Second, we conducted a time-lagged, survey-based field study to better understand the effects of constructive feedback from the leader on team reflexivity and performance. In this study, we show that leader agreeableness negatively influences the impact of constructive feedback on team performance, and that this effect is mediated by reduced team reflexivity. Below, we describe our hypotheses before detailing the setting of our studies, our methods and results, which we then discuss in relation to theory and the workplace.

THEORY AND HYPOTHESES

Agreeableness is one of the five empirically derived personality dimensions identified in the Big Five hierarchical model of personality (Goldberg, 1990; Gosling, Rentfrow, & Swann, 2003). Of the five dimensions, agreeableness is generally thought of as particularly important in that it is the “largest single dimension in terms of total variance explained” (Graziano et al., 2007: 584). And, in fact, a feedback giver’s level of agreeableness is likely to affect the nature of the feedback they provide, especially when we consider that this personality trait is, at its core, a measure of social motivation. Agreeableness reflects not merely empirical behavioral differences, but also the “underlying motivation for maintaining positive relationships with others” (Graziano et al., 2007: 584). Consequently, it is of primary interest in explaining an individual’s other-directed behavior, such as giving feedback.

Scholars have argued that the behavioral manifestations of agreeableness are best conceptualized as a form of *effortful control* (Ahadi & Rothbart, 1994). That is, a person’s social motivations (e.g. their inherent need to bolster and sustain communal relationships) may, for example, manifest as a behavioral tendency to subordinate various self-centered emotions such as frustration or exasperation in favor of other-oriented, empathic expressions of support or prosocial behavior (Rothbart et al., 2003). Consistent with this logic, agreeableness has been widely associated with prosocial behavior (behavior oriented toward the benefit of others) (Carlo et al., 2005). Relatedly, agreeable individuals are more likely to forgive an offender in the face of mistakes, errors, failures, or transgressions (McCullough, 2001).

This tendency for agreeable individuals to focus on communal concerns, and to suppress their personal dissatisfaction or frustration in the service of signaling prosocial care or support for the relational other will, we suggest, influence the intrinsic qualities of the feedback they

provide. We have conceptualized feedback as the provisioning of developmental resources. We might naturally assume that agreeable individuals would have heightened social motivation to act to the benefit of others, thus increasing the effectiveness of the feedback exchange. But because those who are agreeable are more inclined towards empathic concern and emotional support, and more inclined to forgive grievances, they will also be, we propose, more likely to provide feedback that is higher in positive emotional tone.

Hypothesis 1: A feedback giver's agreeableness is positively associated with the positive emotional tone of the feedback they provide.

Constructive Feedback, Team Reflexivity, and Team Performance

Emotional tone is only one facet of the feedback an individual provides. In fact, much of the extant academic research examining feedback has focused on other attributes of effective feedback which, taken together, we conceptualize as constructive feedback. Goal-setting research has shown that individuals learn and perform better when they pursue goals in a task environment in which they receive *constructive* feedback (Ilgen et al., 1979; Kluger & DeNisi, 1996). Constructive feedback is conceptualized as feedback that is actionable, and highlights a discrepancy between performance and a desired goal (Taylor et al., 1984). Such feedback stimulates information-processing behavior, in large part because it motivates recipients, and causes them to focus on key aspects of the task that require attention (Taylor et al., 1984). This perspective emphasizes cognitive and affective elements: individuals may process the information concerning their goals (cognitive), and they may feel the desire to address the discrepancy (affective) through goal choice or behavioral change (Klein, 1989).

Researchers have also studied the effects of feedback in teams, showing that the mere presence of feedback influences goal choice and positively affects behavioral change (Nadler, 1979). The view of teams-as-information-processors has served as an anchor for developing

theory on how team feedback can focus individual team members' attention on the team's processes and outcomes (Hinsz et al., 1997). Just as constructive feedback is thought to prompt individual-level introspection and guide an individual recipient's focus, constructive feedback is also likely to cause teams to be reflexive—that is, to review the feasibility of the team's goals, to discuss the methods the team uses to accomplish the task, and to modify the goals and/or the methods to improve performance (DeShon et al., 2004; Schippers et al., 2013).

By virtue of their position in the hierarchy, team leaders are a key source of influence over team members (Kozlowski & Ilgen 2006), playing a central role in constituting socially shared cognition and information-processing systems (Harvey, Leblanc, & Cronin, 2019). They are therefore a key source of feedback for teams (Couture & Harvey, 2021; Hackman, 2002). Constructive feedback from the leader is likely to illuminate a gap between desired and actual results for the team, which can activate introspective processes focused on understanding the behavioral nature of the gap and evaluating options for change. Therefore, we propose:

Hypothesis 2: *Constructive leader feedback is positively associated with team reflexivity.*

Constructive Feedback, Reflexivity, and Performance in Teams

At the heart of the view of teams-as-information-processors are the skills and knowledge that the team develops by processing the information it receives through constructive feedback (Hinsz et al., 1997). Team reflexivity allows team members to exchange task experiences, knowledge, and perspectives. Consequently, the team is likely to uncover additional task-relevant information that was previously held by individual team members, even though it may not have formed part of the team's shared understanding of task requirements, tactics, and strategies likely to lead to, or detract from, team performance (Konradt, Otte, Schippers,

& Steenfatt, 2016). The team can discover who has relevant knowledge, and more effectively leverage each member's unique viewpoints to attend to the team task (De Dreu, 2007). Armed with this greater understanding about each team member's knowledge and skills, team members can clarify and alter individual role commitments, and the team can better fulfill the necessary task-relevant activities (Kozlowski & Ilgen, 2006). In short, reflexivity helps a team build mutual understanding, align collective actions, and update strategies to fit evolving circumstances. A team that is reflexive is more likely to identify ways of changing and improving to adapt to new situations (Konradt et al., 2016).

The process of uncovering previously hidden information—about the task, procedures, or team members—and the consequent shared understanding that results from this reflexive process, is likely to improve team performance. The more refined shared mental model resulting from team reflexivity has been associated with behavioral processes such as increased planning efforts, and focus on coordination and cooperation, all of which together is likely to lead to enhanced team performance (Kozlowski & Ilgen, 2006; Schippers et al., 2013). Consequently, we propose that constructive feedback will positively influence team performance, through the mediating pathway of team reflexivity:

Hypothesis 3: Team reflexivity mediates the relationship between constructive leader feedback and team performance, such that teams that receive more constructive feedback from their leader will engage in more reflexive behavior that will enhance team performance.

The Moderating Role of Leader Agreeableness

Constructive feedback can still be ineffective at times (Brutus, 2010; Kluger & DeNisi, 1996). The meaning of the feedback can be ambiguous (Leathers, 1979) and the feedback-giver's intentions can be hard to decipher (Fedor, Eder, & Buckley, 1989). The language of feedback intended as constructive may vary, affecting the degree to which it is experienced as threatening

by the recipient, and in turn shaping the recipient's response to the feedback (Taylor et al., 1984).

In line with this, we propose that the leader's degree of agreeableness influences the effect of constructive feedback on team reflexivity, because of key characteristics that are inherent to the feedback provided by agreeable individuals. As we argued earlier, agreeableness is associated with heightened levels of positive emotional tone in the feedback one provides. That heightened positive emotional tone is an emotional expression that becomes a source of information guiding observers or communication-recipients' interpretation of the other's views, beliefs, or communication intentions (Van Kleef, 2009). Indeed, inferences about another's affective state or emotional reaction trigger inferential processes, becoming information that the recipient uses to determine an optimal course of action (Keltner & Haidt, 1999; Van Kleef, 2009, 2010).

Because of its positive emotional tone, feedback from agreeable leaders is likely to be perceived as supportive. The interpretation of feedback intended to be constructive—messages sent with the explicit intention of illuminating tensions between desired and actual outcomes—is likely to be polluted by informational inferences the recipient team draws from the affective tone inherent in an agreeable leader's feedback. Positive emotions in a leader's feedback may thwart the focus of the team's attention, becoming information into the relative importance that the team infers the leader places on the content of the feedback. Attention dictates how the information is used to enhance the team's skills and knowledge regarding achieving its goals. If it draws team members' attention to suboptimal outcomes and/or areas of potential improvement, constructive feedback from the leader can activate reflexivity, leading to better performance. If it is too positive in tone and high emotional content, even feedback that is rich in its constructiveness is likely to miss its mark. We therefore propose that a leader's agreeableness will negatively

moderate the degree to which constructive feedback influences team reflexivity.

Hypothesis 4: Leader agreeableness negatively moderates the relationship between constructive leader feedback and team reflexivity, such that constructive leader feedback has a strong positive effect on team reflexivity when leader agreeableness is low, but not when it is high.

Integrated Model

We argue that the chain of effects between constructive leader feedback and team behavior and outcomes is likely to be derailed by an agreeable leader. Teams will fail to reflect on, and leverage, performance shortages highlighted by the leader via constructive feedback, and therefore fail to develop more efficient working methods and strategies that would help improve performance. In summary, we predict that high levels of agreeableness of leaders can be detrimental to team performance, because it thwarts the *informational content* of feedback, which can cancel out team information-processing benefits. We specifically hypothesize:

Hypothesis 5: Leader agreeableness negatively moderates the indirect relationship between constructive leader feedback and team performance via team reflexivity, such that constructive leader feedback has a strong positive effect on team performance via increased team reflexivity when leader agreeableness is low, but not when it is high.

Data and Methods

Study 1 Data and Methods

We predicted with our Hypothesis 1 that an individual's level of agreeableness is positively related to the positive emotional tone of the feedback that they provide. To test this hypothesis, we conducted a correlational study with working professionals recruited from Amazon's Mechanical Turk platform, using CloudResearch's panel recruitment utility. We conducted a power analysis, powered at 80% power, prior to recruitment, assuming an effect size of .20. The required sample to detect an effect at $p < .05$ was 199, and so we recruited 200 adults living in the United States, who were confirmed using CloudResearch's recruitment panel as having outside employment. Eighteen participants left the study prior to providing feedback, leaving a

total of 182 participants. The average age of the participants who participated in our study, provided by the panel provider in aggregate form, was 39.6 years ($SD = 10.26$). The panel provider also provided race statistics in aggregate form: 94% of our participants were White/Caucasian; 2% Black/African-American; and 4% Asian. Participants self-reported gender (59% male) and education level, with an average of 4.28 years ($SD = 1.28$ years) of post-high school education.

In the first step of the study, we explained to participants that job applicants often needed to write a cover letter as part of their application packet. In a subsequent screen, we informed them that they would be presented with such a cover letter, and would be given an opportunity to provide actionable feedback to the letter writer that could improve the quality and appeal of the cover letter. Upon continuing, participants saw the cover letter and an open form in which they were invited to provide constructive feedback to the writer of the letter. After the participant completed providing feedback, on the subsequent screen, they were presented with Big Five survey items.

Measures

Agreeableness. Participants completed the 44-item Big Five Inventory (BFI) designed to measure each of the Big Five Traits (John & Srivastava, 1999), including *agreeableness*. Items in this measure include statements such as, “I am helpful and unselfish with others,” “I am considerate and kind to almost everyone,” and “I tend to find fault with others” (reverse coded). Items were rated using a 5-point Likert scale, and formed a single scale ($\alpha = .86$).

Positive Emotional Tone. To quantify the positive emotional tone of the feedback, we used the Linguistic Inquiry Word Count (LIWC) text analysis software (Pennebaker, Boyd, Jordan, & Blackburn, 2015) to identify the proportion of words in the feedback submissions that

were associated with positive emotions in the LIWC2015 library, as well as the proportion associated with negative emotions. We used the “Tone” linguistic category, consistent with Cohn, Mehl, and Pennebaker (2004), which operationalizes the positive emotional tone of language by subtracting the proportion of text that is negatively valenced from the proportion that is positively valenced, effectively indexing the emotional tone of the specific language such that higher numbers are associated with language that is, on net, proportionally more positive than negative, and lower numbers are associated with language that is, on net, proportionally more negative than positive.

Control Variables. We include three control variables in our study. First, we might expect that agreeable individuals have a more generally positive assessment of others’ work output, and their relatively positive tone is merely a consequence of that relatively more positive assessment (Bernardin, Cooke, & Villanova, 2000). To account for this possibility, we included in the self-report measures of our study, a two-item *letter quality* measure including “This letter is well-written” and “The letter writer is likely to get the job they applied for”, rated on a 1-7 Likert agreement scale. Additionally, agreeableness is correlated with gender, as women tend to have higher levels of agreeableness than men (Costa Jr & McCrae, 1992). Thus we also controlled for *gender* (0 = male; 1 = female). We also asked participants to indicate their highest level of education (1-7, where 1 = “Less than a high school degree” and 7 = “Doctorate”, as education level might be associated with overall linguistic patterns, as well as diagnosticity in evaluating the written quality of the cover letter. Finally, we also measured the other four dimensions of the Big Five—*neuroticism* ($\alpha = .88$), *extraversion* ($\alpha = .83$), *conscientiousness* ($\alpha = .69$), or *openness to experience* ($\alpha = .64$)—using each of the scales from John & Srivastava (1999).

Analytic Methods & Results

We tested our hypothesis using ordinary least squares (OLS) regression, regressing our dependent variable on the participant's aggregated agreeableness rating. We present descriptive statistics in Table 1. We summarize the results of our analyses below and present the full regression results in Table 2, Column 1.

---Insert Table 1 and Table 2 about here---

We argued that agreeableness is positively associated with the emotional tone of an individual's feedback. Our results show that feedback-giver *agreeableness* is positively associated with the *positive emotional tone* ($\beta = .236, p = .001$) of the informational content they provide, showing that feedback-givers who are relatively higher in agreeableness provide feedback that is more positive in emotional tone. This finding is consistent with our Hypothesis 1, suggesting that agreeableness is positively associated with positive emotional tone.

Alternative Explanations & Robustness Checks

We conducted additional analyses to rule out possible alternate explanations. We note that *agreeableness* is negatively associated with *letter quality* (see Table 2, Model II), and when we include this measure as a control, we find that *letter quality* is negatively associated with *positive emotional tone* ($\beta = -.316, p < .001$), and our primary measure of interest—*agreeableness*—remains significant ($\beta = .152, p = .036$). These results together suggest that agreeableness is positively associated with positive emotional tone, even after accounting for the feedback giver's objective assessment of the quality of the feedback. We also find that, when including *education level* and *gender* as control variables (Table 2, Model III), *agreeableness* remains significant ($\beta = .214, p = .005$). Finally, we find that when including each of the other four Big Five dimensions, either with or without the other control variables, our main finding remains significant ($\beta = .242,$

$p = .006$) for the model with all controls and Big Five dimensions). Further, none of the other personality traits is significantly associated with *positive emotional tone*.

Study 2 Data and Methods

To test our remaining hypotheses, we collected survey data from employees in a financial services firm in Canada. In most jurisdictions, professionals and managers in that industry are required to complete continuing education courses to keep their licences in good standing. Such training includes compliance with standards, ethics and professional conduct, general subjects such as laws and regulations and fraud prevention, and other topics specific to each sector. The participating firm also included sales approach (scripts and tools) and features of new products and services it had developed. They hired a consulting firm to design a work-integrated program for both the teams and their leaders to complete the training. The program involved weekly 30-minute activities over a period of 12 weeks. We were invited to provide an impartial analysis of the progress made by the teams and were allowed to survey both team members and team leaders. We leveraged this opportunity to collect data to test our theoretical model.

As we validated through conversations with management at the participating firm, and as has been argued by other team scholars (Harvey, Johnson, Roloff, & Edmondson, 2019), the sales teams met the definition of “real teams.” While many of their exchanges happened on the phone, or one-on-one with customers, team members had interdependent goals to meet by planning and coordinating their activities, sharing information about customers’ needs and issues as well as sales tactics, and following up on leads generated by other members of the team. Team members were also partly remunerated for the achievement of team goals. Thus, the teams displayed task, goal, and reward interdependence.

Participants and Procedures

At the time of data collection, there were 1,027 salespeople working on 101 teams engaged in the training program. We invited all team members and team leaders to complete surveys at different points in time—four weeks after the training program had started (T1), eight weeks into the training program (T2), and as soon as the program ended (week 12; T3). All surveys were strictly voluntary and confidential, and we used non-identifying codes to aggregate data across the surveys and conduct our analysis. Eighty-six (T1), 72 (T2), and 61 (T3) team leaders and 811 (T2) team members completed our surveys. In keeping with other research in our area (e.g., De Jong & Elfring, 2010), we used a cut-off participation rate of 50 percent for each team, yielding a total of 53 teams for analysis. Specifically, a total of 517 team members distributed across 53 teams were included in our analysis, representing an average of 9.76 team members per team ($SD = 3.75$).

Measures

Constructive Leader Feedback. We used the seven-item scale from Sommer and Kulkarni (2012) to measure *constructive leader feedback*. At T1, team leaders were asked how much constructive feedback they gave their team. The scale was prompted with the question: “To what extent do you give feedback to your team that...” Follow-up items included: “focuses on identifiable problems and behaviors upon which one can take action,” “makes reference to specific situations or incidents that are problematic” and “makes clear reference to the behaviors that need to be fixed.” Answers ranged from “never” (1) to “a great deal” (5). Items formed a single scale ($\alpha = .87$).

Leader Agreeableness. At T2, we used the four-item scale from Donnellan et al. (2006) to measure *leader agreeableness*, which is centered on individuals being warm and friendly. Team leaders were asked to rate their agreement with items that included: “I sympathize with

others' feelings" and "I feel others' emotions." Answers ranged from "strongly disagree" (1) to "strongly agree" (5). Items formed a single scale ($\alpha = .67$).

Team Reflexivity. At T2, we used the four items from de Jong and Elfring (2010), which was originally derived from Carter and West (1998), to measure team reflexivity. Items refer to the team reflecting on the goals it is trying to reach, or the strategies deployed to reach them. Team members were asked to rate the extent to which they agreed with items that included: "We often review our approach to getting the job done" and "We often discuss the methods used to get the job done." Answers ranged from "strongly disagree" (1) to "strongly agree" (5). Items formed a single scale ($\alpha = .92$).

Team Performance. At T3, we used four items from the creative outcome scale of Zhou and George (2001) to measure team performance. Items were selected in collaboration with management at the participating firm. Given the changes going on with the sales approach and the new products and services that the sales teams were asked to integrate, management viewed the generation, development, and implementation of new and useful ideas as a key performance indicator. Specifically, team leaders were asked to rate the extent to which they agreed with the following items with regards to the team they managed: "comes up with new and practical ideas to improve performance," "suggests new ways to improve quality," "develops adequate plans and schedules for the implementation of new ideas," and "suggests new ways of performing work tasks." Answers ranged from "strongly disagree" (1) to "strongly agree" (7). Items formed a single scale ($\alpha = .85$).

Control Variables. We controlled for *team size* because it has been shown to have an important effect on team behavior and team outcomes (Hackman, 2002). This variable was based on the total number of members on a team (ranging from four to 19). We also controlled for both

leader team tenure (in months) because time supports the development of interpersonal relationships. Feedback can be received differently when it comes from familiar individuals (Blunden et al., 2019). The age of the feedback-giver can also influence the effectiveness of feedback, as age has been associated with differences in communication patterns (Wang, Burlacu, Truxillo, James, & Yao, 2015), so we controlled for *leader age* (seven-point scale ranging from “18–24” to “75 and older”). Additionally, agreeableness is correlated with gender, as women tend to have higher levels of agreeableness than men (Costa Jr & McCrae, 1992). Thus we also controlled for *leader gender* (0 = male; 1 = female). Finally, we also measured the other four dimensions of the Big Five—*neuroticism* ($\alpha = .72$), *extraversion* ($\alpha = .69$), *conscientiousness* ($\alpha = .70$), or *openness to experience* ($\alpha = .61$)—using each of the four-item scales from Donnellan et al. (2006).

Replicating H1 with team leaders. At the end of the training program, participants were invited to provide their opinion about their overall experience and degree of satisfaction to the organization. Thirty-five team leaders left comments about the training program, and we captured that text. As we did in Study 1, we used LIWC to identify the proportion of words in their feedback that were associated with positive emotions (average = 13.61; $SD = 9.40$). We then regressed this variable on the leader’s aggregated agreeableness rating and found a positive relationship ($b = 6.196$, $s.e. = 2.769$, $p = .025$). This suggests that the feedback from the more agreeable leaders in our sample was also positively associated with positive emotional tone.

Analytical Techniques

Data Aggregation. We tested whether we could aggregate data on *team reflexivity* from individual team members to teams using two techniques. First, we computed interrater agreement scores ($r_{wg(j)}$) by testing whether the variance of responses is lower within groups compared to

between groups. Assuming a normal distribution in responses and using ANOVA to calculate differences in means, we find that the $r_{wg(j)}$ score is satisfactory: *team reflexivity* (.87). We also calculated intraclass correlation coefficients ICC(1) and ICC(2) to assess the variance explained by team membership and reliability of team means, finding the following: *team reflexivity* (.10; .51) [$F = 2.06, p < .001$]. Considering that aggregation is theoretically justified and $r_{wg(j)}$ is high, an ICC(2) below .60 merely reduces statistical power and should not preclude aggregation (Bliese, 2000). We felt confident that we could aggregate our data from individuals to teams.

Confirmatory Factor Analysis. We performed a confirmatory factor analysis to verify the validity and distinctiveness of our study measures at the team level ($n = 53$). All 19 items were modeled under their respective latent factor, and goodness-of-fit indices show satisfactory fit for a four-factor model of the data: $\chi^2 = 157.337, df = 146$ ($p = .25$), comparative fit index (CFI) = .975, Tucker-Lewis Index (TLI) = .971, root mean square error of approximation (RMSEA) = .039, and standardized root mean square residual (SRMR) = .096.

We also tested for reliability as well as convergent and discriminant validity using each factor's average variance extracted (AVE) and composite reliability (CR). The AVE and CR values were .36 and .67 (*leader agreeableness*), .46 and .86 (*constructive leader feedback*), .62 and .86 (*team performance*), and .77 and .93 (*team reflexivity*). While one AVE value is significantly lower than .50, the CR values are all satisfactory (Fornell & Larcker, 1981). Most importantly, all AVE values are higher than their respective maximum-shared variance (MSV) and the square root value of each AVE is greater than the correlation value with any of the other latent variables. Specifically, the MSV values range from .038 (*leader agreeableness*) to .218 (*team reflexivity*), and the correlation values range from .13 to .19 for *leader agreeableness* and

from .04 to .47 for all variables. Therefore, we concluded that we achieved satisfactory reliability as well as convergent and discriminant validity (Hair Jr, Hult, Ringle, & Sarstedt, 2016).

Analytical Procedures. We conducted structural equation modeling (SEM; Bollen, 2005) using maximum-likelihood estimation to test our hypotheses. Structural equation modeling is a useful framework for multivariate hypothesis testing because it allows for multiple equations to be estimated simultaneously (Ullman & Bentler, 2003). Structural equation models comprise latent variables (i.e., variables that were not directly measured, but may be inferred from measured items). In our case, we used each construct's items to create latent variables—these latent variables represent the common variance between all their respective items. The interaction term between *constructive leader feedback* and *leader agreeableness* was created using double mean centering as described in Lin, Wen, Marsh, and Lin (2010). These three latent variables were allowed to freely covary while also predicting *team reflexivity*. For its part, *team performance* was regressed on both *constructive leader feedback* and *team reflexivity*.

To determine the adequacy of our model, model fit indices were inspected. Model fit indices are estimates of how likely a set of data may have been generated by a given structural equation model. The fit indices for our hypothesized model show an excellent fit to the data: $\chi^2(220) = 241.934$, $p = .15$, CFI = .959, TLI = .953, RMSEA = .043 (.000, .074), SRMR = .089.

Thus we used it to consider each of our hypotheses.

Results

Descriptive results and correlations are shown in Table 3. It is noteworthy that *constructive leader feedback* and *team reflexivity* are correlated ($r = .42$), and that *team reflexivity* is correlated to *team performance* ($r = .27$). For its part, *leader agreeableness* is not correlated with either *constructive leader feedback* or *team reflexivity*. However, it is positively correlated with

leader gender ($r = .42$). This is consistent with previous research that shows that women tend to be more agreeable than men (Costa Jr & McCrae, 1992), allowing greater confidence in our findings. Unsurprisingly, *leader age* and *leader team tenure* are also correlated with each other ($r = .48$).

---Insert Table 3 about here---

Our second hypothesis (H2) stated that *team reflexivity* would be positively associated with *constructive leader feedback*. Results show a significant relationship between the two variables ($\beta = 0.538$, $p = .002$), indicating that constructive feedback from the leader does indeed induce teams to engage in reflexivity. H2 is thus supported.

Our third hypothesis (H3) posited that *team reflexivity* would mediate the relationship between *constructive leader feedback* and *team performance*. We find that *team reflexivity* is positively associated with *team performance* ($\beta = 0.419$, $p = .017$), though *constructive leader feedback* is not. To test the indirect effect of *constructive leader feedback* on *team performance* through *team reflexivity*, we used bootstrapping techniques, which involved generating 5,000 bootstrap samples and computing the 95% confidence intervals (CI) for the effect sizes. We find that the indirect effect of *constructive leader feedback* on *team performance* through *team reflexivity* is positive and significant ($\beta = .273$ [.023, .822]). Altogether, these results indicate that *team reflexivity* mediates the relationship between *constructive leader feedback* and *team performance*, showing support for H3.

Our fourth hypothesis (H4) stated that *leader agreeableness* would moderate the relationship between *constructive leader feedback* and *team reflexivity*. Results show no significant association with *leader agreeableness*, whereas the interaction term is negatively associated with *team reflexivity* ($\beta = -0.469$, $p = .010$), showing support for H4.

To aid in interpreting this significant interaction, we plotted and computed slopes at high (one standard deviation above the mean), average, and low (one standard deviation below the mean) values of the moderating variable. This analysis, shown in Figure 1, affords a more nuanced understanding of how changes in levels of *leader agreeableness* produce corresponding changes in the relationship between *constructive leader feedback* and *team reflexivity*. Results did not show a significant effect for high levels of *leader agreeableness* (1 SD), but there were significant effects for both average ($\beta = .538$, $p < .001$) and low (-1 SD) levels ($\beta = 1.362$, $p = .001$). Altogether, this suggests that leaders in our sample who are disagreeable had the most impact with their constructive feedback on the degree of reflexive behavior displayed by their team.

---Insert Figure 1 about here---

Our final hypothesis (H5) stated that the degree of *leader agreeableness* would moderate the indirect relationship between levels of *constructive leader feedback* and *team performance* via *team reflexivity*. In addition to the indirect effect of *constructive leader feedback*, we find that the indirect effect of the interaction between *constructive leader feedback* and *leader agreeableness* via *team reflexivity* on *team performance* is negative and significant ($\beta = -.260$ [-1.457, -.012]). This shows support for H5.

Our results are summarized in Table 4. We conducted all our analyses including the control variables (*team size*, *leader tenure*, *leader age*, and *leader gender*), and we found no significant improvement in the model fit and the changes to the coefficients and their statistical significance are marginal. Similar results were found when we controlled for other dimensions of the Big Five, and we found that none of *neuroticism*, *extraversion*, *conscientiousness*, or

openness interacted significantly with *constructive leader feedback* to influence *team reflexivity*.

In other words, all our findings hold with and without controls.

---Insert Table 4 about here---

Discussion

Agreeableness has been shown to positively influence leadership effectiveness when effectiveness is defined by affective and relational dimensions (De Vries, 2008; Judge & Bono, 2000), but not when it is defined in terms of execution and performance (De Vries, 2012; DeRue et al., 2011). Task-oriented effectiveness is obviously crucial to leadership scholarship. Drawing from the perspective of teams-as-information-processors (Hinsz et al., 1997), our study provides new, useful insights *vis-à-vis* the instrumental role of agreeableness on a key leadership behavior—feedback-giving (Cannon & Witherspoon, 2005; Kozlowski & Ilgen, 2006)—which helps explain the limited influence agreeable leaders have on their subordinates' performance. Indeed, in Study 1, we show that individuals who are high in agreeableness provide feedback that is higher in positive emotional tone. Building on this finding, we show in Study 2 that agreeable leaders fail to stimulate reflexivity in their team through constructive feedback, and that in turn this lessens the task-oriented benefits of such feedback. Taken together, this means that the positive emotional tone found in agreeable leaders' constructive feedback can mask the cues that the feedback recipient needs to leverage the informational content of the feedback. Overall, our study offers key contributions that help develop theory and motivate avenues for future research, in addition to contributions that support leadership practice.

Theoretical Contributions

First, our study contributes to leadership scholarship. By combining leader trait with leader behavior, we help deepen our understanding of the causes why agreeableness only predicts the

affective and relational dimensions of leadership effectiveness, but not task-oriented leadership (De Vries, 2012; DeRue et al., 2011). The trait theories of leadership have largely considered agreeableness as a predictor of leadership effectiveness, both with regards to individual followers (e.g., de Vries, 2008) and teams (e.g. Hu & Judge, 2017). Given its equivocal relationship with task-oriented effectiveness, it becomes useful to adapt our approach and conceptualize this leader trait not as a direct predictor of leadership effectiveness but rather as a moderating factor of key leadership behaviors (Yukl, 2012), such as feedback-giving (Cannon & Witherspoon, 2005; Kozlowski & Ilgen, 2006). By doing so, we provide new, useful insights to understand the limitations faced by agreeable individuals in their leadership roles.

Second, our research contributes to the study of teams as information processors by showing how teams respond to constructive feedback. Our results support the idea that constructive feedback helps to focus recipients' attention on goal–performance discrepancies that can calibrate information-processing behavior and outcomes (Klein, 1989; Taylor et al., 1984). The ego-threat that can be generated when constructive feedback is provided to individuals (Kluger & DeNisi, 1996) appears to be less detrimental or harmful in teams. Teams are more resourceful than individuals in terms of their skills and knowledge (Kozlowski & Ilgen, 2006), and our study shows that constructive feedback can activate these resources and put them to good use (Hoever et al., 2018). In short, informational cues contained in constructive feedback fuel team behavior at the foundation of learning and adaptation, in the form of reflexivity, which yields enhanced team performance. Our study thus helps to further substantiate the cognitive benefits of constructive feedback in teams, moving away from its affective drawbacks.

Third, our work contributes to the feedback literature and establishes the importance of the individual characteristics of the feedback source. Most feedback theories understandably

focus on the recipient as the dominant actor in the feedback interaction, and much of the research attempting to disentangle the mixed empirical findings from feedback research has focused on feedback-recipient differences as a possible explanation (Hoever et al., 2018; Kluger & DeNisi, 1996). However, feedback is a dyadic experience, as suggested by some theory examining the feedback interaction (London, 1995). Our work adds to a small but growing body of work applying the lens of individual differences to the feedback-giver (Johnson & Connelly, 2014). Such differences among feedback-givers influence the linguistic features of the feedback, which affect how the informational content is delivered and received, and can help explain the inconsistent association between constructive feedback and feedback responses (Blunden et al., 2019). We argue and show that agreeable leaders provide qualitatively different types of constructive feedback, and that, consequently, their teams are less likely to engage in reflexive processes—and, as a further consequence, are less likely to experience heightened levels of performance.

More generally, in practice, recipients' reaction to constructive feedback likely varies in response to multiple aspects of the feedback that they receive—in ways that a simple focus on valence cannot fully capture. Some research has begun to explore how characteristics of feedback other than valence influence post-feedback behavior, including feedback frequency (Lam et al., 2011), directness (Schaerer et al., 2018), privacy (Mihm & Schlapp, 2018), and ambivalence (Harrison & Dossinger, 2017). Our study adds to this emerging body of work and provides a foundation for conceptualizing the emotional tone differences inherent in feedback, providing some evidence that such nuanced differences may have significant downstream effects on behavior and outcomes.

Practical Contributions

Giving constructive feedback is one of the tasks that people dislike the most, yet it is also a crucial learning and performance enabler that leaders in organizations can't ignore (Cannon & Witherspoon, 2005). Our study therefore provides a much-needed incentive to leaders who must deliver constructive feedback to teams. Team leaders can find additional motivation in the fact that they can expect their constructive feedback to have a positive influence on team processes in ways that ultimately produce significant benefits.

Furthering our understanding of the team leader as a feedback source is a necessary endeavor to support leadership practice. Our study shows that not all leaders will have the same impact when giving constructive feedback to teams because of the way they frame that very feedback, which is associated with their individual makeup. This is another key practical insight that can be leveraged when staffing leadership positions, but, perhaps more importantly, in training and developing leaders. It's not lost on us that agreeableness is positively associated with general assessments of leadership abilities—and presumably with the likelihood of receiving future promotions. High agreeableness, though negatively associated with team level feedback responses in our study, isn't inherently bad in leaders. Indeed, individuals who score high on agreeableness should not be overlooked for leadership positions, but instead should be coached to sidestep their individual predispositions when providing constructive feedback. For instance, agreeable leaders can learn to leverage multiple information sources by using additional tools (e.g., scorecards) when delivering constructive feedback to better highlight the informational cues that can send teams into a reflexive mode. By doing so, agreeable leaders may deploy feedback interventions that are more effective and efficient. As their agreeable leaders improve the way they provide feedback to teams, organizations may get the best of both

worlds, since those individuals tend to outperform their less agreeable counterparts in other leadership areas (Judge & Bono, 2000; Nahrgang et al., 2009).

Limitations and Avenues for Future Research

Future research may build on our study and address some of its limitations to develop theory on leader personality and feedback in the context of teams. For instance, it may be important to consider team characteristics with leader agreeableness to understand if some teams still respond to constructive feedback from an agreeable leader. In our field study, we only examined sales teams in the financial sector. Teams in this context are fairly homogeneous in terms of their professional background, particularly relative to sales teams in other sectors, such as pharmaceuticals or manufacturing (Johnston & Marshall, 2016), or other types of teams, such as new product development teams (Alexander & Van Knippenberg, 2014). Given that the diversity of the information and perspectives that team members hold can influence the way teams respond to feedback (Hoever et al., 2018), more research is needed to determine whether our findings also apply to less homogeneous teams. Individuals from different professional backgrounds may react to different informational cues (Edmondson & Harvey, 2018), making it more likely that one team member picks up a cue and starts a conversation that spurs reflexivity within the team. High team diversity could therefore reduce the influence of the emotional tone of constructive feedback provided by agreeable leaders. More generally, feedback is not divorced from context; the nature of the feedback leaders provide, and the systematic response tendencies of recipients, likely differ based on myriad contextual features (e.g., rewards and incentives). Future research should both examine leader agreeableness and feedback dynamics in other contexts, but also work to identify moderating contextual factors—features of organizational contexts that dampen or accentuate the effects we identify in our samples.

Other limitations that future research could address relate to our measures, the source of our data and our sample size. First, participants in Study 1 were invited to provide feedback on a cover letter, which can be highly contextualized. Future research should examine this phenomenon either using a similar feedback domain, but in specific contexts, or alternately using more context-specific feedback instruments (e.g. specific work-task feedback). Second, drawing only from self-report on a variable such constructive feedback in Study 2 is not optimal as social desirability may lead to range restriction that can limit generalizability. Future research that leverages different sources to measure these factors should try to replicate and extend our results. Besides, while our team performance measure is “specified in behavioral terms as things that people do” (Campbell & Wiernik, 2015), it only covers one dimensions of team performance: task performance. Hackman (1990) identified additional dimensions of team performance: the team’s ability to work well together in the future, and team members’ satisfaction with the team experience. Due to limitations placed on the research by the participating organization, collection of these data was not permitted. This opens avenues for future research on leader feedback, team reflexivity, and other facets of team performance.

Finally, while the smaller size of our sample for Study 2 is common in team research, our results should be interpreted with caution and replication studies would be useful. Yet tradeoffs are necessary to develop insights about “real teams,” which remains valuable to understand leadership and team dynamics (Harvey et al., 2022). Future research, especially meta-analysis, can integrate our results to further identify the interplay between leaders’ personality and the impact of the feedback they provide to their team.

Conclusion

Our research suggests that the individual characteristics of the leader play an important role in providing, through feedback, the valuable content that fosters information processing. A high degree of agreeableness in a leader influences the emotional tone of their feedback. The emotional tone is interpreted as an informational signal by the receiving team, muting the effectiveness of the other tactical information present in the constructive feedback. Our research contributes to the body of work showing that feedback is richer than can be adequately captured by simple valence. It helps unpack its effective delivery, which could be applied beyond the workplace. As further research works towards a multicausal model of the effect of feedback on teams, we believe that the individual characteristics of the feedback-giver will continue to be an important piece of the feedback puzzle.

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Tables & Figures

Table 1: Means, standard deviations, and bivariate correlations, Study 1

<i>Variable</i>	<i>M</i>	<i>SD</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
1. Agreeableness	3.75	0.79	(.86)				
2. Positive Emotional Tone	70.64	31.78	0.24**	1			
3. Letter Quality	3.63	1.58	-0.27**	-0.36**	1		
4. Sex	0.41	0.49	0.09	0.01	-0.05	1	
5. Education Level	4.28	1.28	0.01	0.04	0.08	0.06	1

Notes. $N = 182$; * $p < .05$, ** $p < .01$.

Table 2: OLS Regression results, Study 1

	I		II		III	
	<i>Positive Emotional Tone</i>		<i>Positive Emotional Tone</i>		<i>Positive Emotional Tone</i>	
	β (t)	<i>p</i>	β (t)	<i>p</i>	β (t)	Sig.
<i>Agreeableness</i>	.236 (3.25)	0.001	.152 (2.12)	0.036	.214 (3.00)	0.005
<i>Letter Quality</i>			-.316 (-4.42)	0.000	-.323 (1.42)	0.000
<i>Sex (M=0; F=1)</i>					-.022 (4.50)	0.753
<i>Education Level</i>					.068 (1.72)	0.329
r^2	.06		.15		.15	

Table 3: Means, standard deviations, and bivariate correlations, Study 2

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. <i>Team size</i>	11.64	3.77	1						
2. <i>Leader team tenure</i>	76.23	71.62	-.10	1					
3. <i>Leader gender</i>	.77	.42	-.09	-.09	1				
4. <i>Leader age</i>	3.52	1.04	.13	.48**	-.01	1			
5. <i>Constructive leader feedback</i>	4.11	.47	-.06	.04	-.19	-.12	(.87)		
6. <i>Leader agreeableness</i>	4.15	.52	.11	.03	.42**	-.02	.05	(.67)	
7. <i>Team reflexivity</i>	3.77	.38	-.09	-.04	-.03	.05	.42**	-.13	(.89)
8. <i>Team performance</i>	4.92	.94	-.10	-.07	-.10	-.03	.06	-.09	.27* (

Notes. *N* = 53 teams; * $p < .05$, ** $p < .01$.

Table 4: Results of the moderated mediation model

	Team Reflexivity		Team Performance	
	β (t)	<i>p</i>	β (t)	<i>p</i>
<i>Constructive leader feedback</i>	.538 (3.102)	.01	-.179 (-.998)	.32
<i>Leader agreeableness</i>	-.072 (-.559)	.58		
<i>Constructive leader feedback x Leader agreeableness</i>	-.469 (-2.593)	.01		
<i>Team reflexivity</i>			.419 (2.387)	.02
Indirect effect (LLCI, ULCI)				
<i>Constructive leader feedback</i>			.273 (.004, .697)	
<i>Constructive leader feedback x Leader agreeableness</i>			-.260 (-1.457, -.012)	
<i>R</i> ²	.485		.134	

Figure 1: Illustration of the moderation effect of leader agreeableness

