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Running Head: ANGRY LEADERS AND AGREEABLE FOLLOWERS

On Angry Leaders and Agreeable Followers:

How Leaders' Emotions and Followers' Personalities Shape Motivation and Team Performance

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Abstract

Do followers perform better when their leader expresses anger or happiness? We propose that this depends on their level of agreeableness. Anger is associated with hostility and conflict—states that are at odds with agreeable individuals' goals. Happiness facilitates affiliation and positive relations—states that are in line with agreeable individuals' goals. Accordingly, two studies show that agreeableness moderates the effects of leader emotional displays. In a scenario study, low-agreeable participants responded more favorably to an angry leader, whereas high-agreeable participants responded more favorably to a neutral leader. In an experiment involving four-person teams, low-agreeable teams performed better when the leader expressed anger, whereas high-agreeable teams performed better when the leader expressed happiness. Team performance was mediated by experienced workload, which was highest among agreeable followers with an angry leader. Besides important practical implications, the findings shed new light on the fundamental question of how emotional expressions regulate social behavior.

On Angry Leaders and Agreeable Followers:

How Leader Emotion and Follower Personality Shape Motivation and Team Performance

Emotional expressions play an important role in regulating social behavior (Keltner & Haidt, 1999; Van Kleef, 2009). This is especially true for emotional expressions by people in power (Keltner, Van Kleef, Chen, & Kraus, 2008). How can people in power, such as leaders, use their emotions to influence others? Anecdotal evidence suggests that leaders can take roughly two approaches. Some use expressions of anger to intimidate followers and motivate them to perform—think of television chef Gordon Ramsey. Others favor a positive approach, expressing joy and enthusiasm to motivate followers and boost performance—think of US president Barack Obama. It is unclear which of these types of emotional expression is more effective. Do people work better when their leader expresses anger or happiness? Drawing on theories of emotion and leadership effectiveness, we develop and test hypotheses about the role of follower personality in determining the social consequences of leaders' emotional expressions.

Leading with Feeling

Several studies have compared the two emotional "strategies" outlined above, producing inconsistent findings. Some studies suggest that expressing anger can be beneficial. Followers may infer from a leader's anger that their performance was suboptimal (Fitness, 2000), which may stimulate effort (Sy, Côté, & Saavedra, 2005) and performance (Van Kleef, Homan, Beersma, van Knippenberg, van Knippenberg, & Damen, 2009). Other studies found beneficial effects of positive emotional displays. Expressions of happiness increased ratings of leader effectiveness (Gaddis, Connelly, & Mumford, 2004), perceived charisma (Bono & Ilies, 2006), positive emotions and liking of the leader (Sy et al., 2005; Van Kleef et al., 2009), and in some cases team performance (George, 1995; Sy et al., 2005; Van Kleef et al., 2009), whereas displays

of negative emotions such as anger were associated with poor evaluations of leader effectiveness (Glomb & Hulin, 1997; Lewis, 2000). In short, some studies suggest that leader expressions of anger are more conducive to follower performance, whereas other studies suggest that expressions of happiness are more effective.

Leader Emotion and Follower Agreeableness

We draw upon classic work on leadership effectiveness and recent theorizing on the social functions of emotions to develop the argument that the effects of anger and happiness displays depend on followers' personality—in particular their level of agreeableness. Classic contingency approaches to leadership hold that leadership effectiveness is an interactive function of leadership style and the social-organizational context (e.g., Fiedler, 1964). This implies that followers may respond differently to the same leadership behaviors depending on personal traits. For instance, Shamir, House, and Arthur (1993) theorized that perceptions of leader charisma hinge on the match between leader behavior and follower values. Furthermore, Ehrhart and Klein (2001) showed that followers respond more favorably to leaders with whom they feel they share similar values and (social) goals.

A similar fit argument derives from emotions as social information (EASI) theory (Van Kleef, 2009; Van Kleef, De Dreu, & Manstead, 2010), which posits that the interpersonal effects of emotional expressions depend, among other things, on the expectations and desires of the target. For instance, individuals differ in their desire for harmonious relationships. According to EASI theory, expressions of anger (compared to happiness or neutral expressions) should be acceptable and effective when observers have a weak desire for social harmony (relative fit between emotional expression and target's expectations), but they should be unwelcome and

counterproductive when observers have a strong desire for social harmony (lack of fit between expression and expectations).

Integrating these perspectives, we propose that the effectiveness of leader expressions of anger depends on followers' preferences for social harmony. Such preferences have a stable basis in the Big Five factor agreeableness (McCrae & Costa, 1987). Individuals high on agreeableness tend to be courteous to other people, to prefer cooperation over competition, and to be thoughtful and considerate. Because they value harmony they also expect others to treat them with courtesy (Graziano, Jensen-Campbell, & Hair, 1996). Individuals low on agreeableness more often get into arguments, are skeptical of others' intentions, and do not shy away from conflict. Being more cynical and less preoccupied with maintaining social harmony, they also expect less courtesy from others and are less sensitive to inconsiderate behavior (Graziano et al., 1996).

Present Research

Our primary focus is on anger, which is especially interesting in relation to agreeableness and associated preferences for social harmony. Anger is associated with interpersonal distance, hostility, and conflict (Clark, Pataki, & Carver, 1996; Smith et al., 1993; Van Kleef, De Dreu, & Manstead, 2004), states that are at odds with a preference for harmony. We contrast anger with no emotion (preliminary study) and happiness (main study). Happiness facilitates affiliation, trust, and social connectedness (Clark & Taraban, 1991; Smith, Haynes, Lazarus, & Pope, 1993), and as such it is compatible with agreeable individuals' preference for harmonious relations. We propose that leader expressions of anger (compared to no emotion or happiness) can be beneficial or counterproductive depending on their fit with followers' level of agreeableness.

Agreeable individuals value constructive interpersonal behaviors rather than power-asserting strategies (Graziano et al., 1996), of which anger is a prime example (Tiedens, 2001).

Because expressions of anger are at odds with agreeable individuals' preference for social harmony (McCrae & Costa, 1987), for them the confrontation with an angry leader should be particularly demanding and stressful (Suls, Martin, & David, 1998). As cognitive resources are depleted by the taxing situation (Hockey, 1997; McEwen & Sapolsky, 1995), experienced workload may increase, rendering individuals less able to process information and make high-quality decisions (Steinhauser, Maier, & Hübner, 2007), thereby undermining motivation and performance. Individuals low on agreeableness should be more tolerant of anger, because they are less concerned with protecting social harmony (McCrae & Costa, 1987). As a result, they should be less distracted by stressful conflict (Suls et al., 1998), experience the task as less taxing, and be more likely to benefit from the motivating qualities of expressed anger established in previous work (Sy et al., 2005; Van Kleef et al., 2009).

Preliminary Study

As a first test of our model, we examined the effects of leader displays of anger and follower agreeableness on judgments of leadership quality and on motivation, a proxy of performance. A total of 112 students (66 female, 46 male, 18-55 years old, $M = 22.21$, $SD = 5.43$) participated for course credit. Agreeableness was measured at the start of the experimental session (see Main Study for scale details), followed by several unrelated questionnaires.

Participants read a scenario about an advertisement company, in which a team leader provided feedback on the team's performance. In the angry-leader condition, participants read that their leader gave the feedback "in an angry way," and they saw a picture of the leader's angry face. In the neutral condition the feedback was delivered "in a neutral way," and they saw a neutral picture (see Appendix). Pictures were taken from the Karolinska Directed Emotional Faces set (Lundqvist, Flykt, & Öhman, 1998), which has been extensively pretested and used in

previous research, including work on the social effects of emotions (Pietroni, Van Kleef, De Dreu, & Pagliaro, 2008).

We measured participants' motivation with ten items (e.g., "This leader motivates me to perform well"; "This leader brings out the best in me"; "I would like to work under this leader"; "I will put in extra effort for this leader" ($\alpha = .94$), and judgments of leadership quality with five items (e.g., "This person has good leadership qualities"; "This is an effective leader"; "This leader knows how to get things done" ($\alpha = .90$; 1 = *strongly disagree*, 5 = *strongly agree*).

Regression analysis revealed the predicted Emotion x Agreeableness interaction on motivation, $\beta = -.23$, $t(109) = -2.85$, $p < .01$, and on ratings of leadership quality, $\beta = -.29$, $t(109) = -3.59$, $p < .001$ (see Figure 1). Individuals with lower levels of agreeableness reported higher motivation and leadership quality when confronted with an angry rather than a non-emotional leader, whereas those with higher levels of agreeableness showed the reverse pattern.

In the main study we extend these findings to a team task with an objective performance outcome. Furthermore, we compare anger with happiness to rule out that the effects are due to expression of any emotion and to create a comparison condition that involves similar levels of activation (cf. Barsade, 2002). Finally, we explored whether the interactive effects of leader emotion and follower agreeableness on team performance can be explained in terms of experienced workload, which should be highest among agreeable individuals with an angry leader.

Main Study

Method

Participants and Design

A total of 144 students (84 female, 60 male, 18-42 years old, $M = 21.15$, $SD = 3.29$)

participated for course credit or €20. They were randomly assigned to 36 four-person teams, which were randomly assigned to the angry-leader or the happy-leader condition (18 teams each). Agreeableness was included as a continuous variable.

Procedure

Assessment of agreeableness. Participants completed the 12-item agreeableness subscale of the Revised NEO Personality Inventory-Short Form (Costa & McCrae, 1992). Examples of items are "I try to be courteous to everyone I meet"; "I often get into arguments with my family and co-workers" (reverse coded); and "I generally try to be thoughtful and considerate" (1 = *strongly disagree*, 5 = *strongly agree*). The scale's reliability (α) in the current sample was .70.

Cover story. Participants learned that the purpose of the study was to compare the effects of leadership through modern communication technologies with traditional live interaction. All participants were in the "e-leadership" condition, which meant that their leader (in reality a trained actor) would observe and coach them from another room via cameras and a computer network (see Van Kleef et al., 2009). The experimenter explained that the leader had a master's degree in management and was enrolled in a postdoctoral program on leadership. The leader would supervise the teams as part of this program to gain more experience with e-leadership. It was emphasized that the leader had extensive experience with the task. The experimenter then pointed to the camera through which the leader would observe them during the task.

Introduction of the leader. Team members sat together in front of a large computer monitor. They learned that their leader was sitting in another room and that he would speak to them via a webcam connection. Specially designed software made it appear as though a live stream of the leader was shown while in reality the leader's message had been pre-recorded. The experimenter pushed a button on the computer, and a text box on the screen said "connection

being established." Participants learned that they would see their leader on the screen, but that the leader could not see them at that point (the camera through which the leader allegedly monitored their behavior hung in the adjacent room where the team would work on the task). Then the leader appeared on the screen. He briefly introduced himself, repeating some of the information the experimenter had given earlier. Then he wished the team good luck with the task and announced that he would comment on their performance later on. All teams viewed the same introductory video of their leader, in which he displayed no emotions.

The task. We used a dynamic computer simulation of a military command-and-control situation in which team members work together to protect a restricted airspace from enemy intruders (MSU-DDD; e.g., Beersma, Hollenbeck, Humphrey, Moon, Conlon, & Ilgen, 2003; Homan, Hollenbeck, Humphrey, van Knippenberg, Ilgen, & Van Kleef, 2008). The task consists of detecting, identifying, and disabling enemy targets while avoiding disabling friendly forces. Each member controlled four different vehicles that they could use to defend the area (for details, see Beersma et al., 2003). Before engaging in the task, teams received extensive training. The first 60 minutes of training familiarized teams with the technical and practical aspects of the simulation (e.g., moving vehicles around the area, identifying and disabling targets). The final part of the training consisted of a 15-minute practice trial.

Manipulation of leader's emotional display. After the practice trial, team members were again seated together in front of the screen in the adjoining room. The experimenter "established a connection" with the leader's computer, and shortly thereafter the leader re-appeared on the screen. He identified a number of aspects of the team's performance that could be improved. The leader's comments were chosen to be non-specific, so that they would be valid in all situations and for all teams irrespective of their performance. (Note also that due to the task's complexity it

is impossible for these inexperienced teams to judge the quality of their performance.) For instance, the leader pointed to the importance of working fast, communicating efficiently, and engaging targets accurately—aspects that can always be improved. The leader spoke exactly the same text in both emotion conditions, expressing either happiness or anger by means of facial expressions, vocal intonation, and bodily postures. In the happy condition the leader looked cheerful, spoke with an enthusiastic, upbeat tone of voice, and smiled frequently. In the angry condition he frowned a lot, spoke with an angry and irritable tone of voice, clenched his fists, and looked stern (for similar procedures, see Barsade, 2002; Bono & Ilies, 2006; Lewis, 2000; Van Kleef et al., 2009).

Assessment of team performance. Next, teams worked on the task for 30 minutes. Each team started the simulation with 50,000 points. They lost 1 point for each second that any unfriendly target was in the so-called "restricted zone" and 2 points for each second that an unfriendly target was in the "highly restricted zone" (see Beersma et al., 2003). Teams also lost 25 points for disabling any friendly force or disabling forces outside the restricted zone. Teams gained 5 points for each successful attack. Reflecting the interdependent nature of the task, the software records the performance of the team as a whole (not the performance of individual members), and this was our central dependent variable. Team performance in the present sample ranged from 24446 to 47616 points.¹

Post-task questionnaire. Participants completed a measure of experienced workload and manipulation checks, indicating their agreement with a number of statements on a 5-point scale (1 = *strongly disagree* to 5 = *strongly agree*).

Experienced workload was measured with four items: "During the task I had to pay attention to too many things"; "I often had too little to do during the task" (reverse coded);

"While working on the task I often received assignments that were too difficult or complicated";
"During the task I had to make too many decisions" ($\alpha = .70$).

Perceptions of the leader's anger were measured by four items (e.g., "The leader appeared angry after the training session"; $\alpha = .97$). Perceptions of the leader's happiness were also measured by four items (e.g., "The leader appeared happy after the training session"; $\alpha = .94$).

Analyses

Our dependent variable, team performance, was defined and operationalized at the group level. When individual characteristics are used as predictors of group-level outcomes, the individual characteristics must be aggregated. Such data cannot be analyzed with current multilevel techniques (Croon & Van Veldhoven, 2007)—these techniques can be used to predict lower-level outcomes from lower- and/or higher-level predictors, not vice versa. In this case, aggregation of individual-level predictors to the group level is the only possible strategy to analyze the data (Kashy & Kenny, 2000). The appropriate aggregation of personality variables depends on the type of task (Barrick, Stewart, Neubert, & Mount, 1998; Steiner, 1972). Steiner distinguishes among disjunctive, conjunctive, and additive tasks. Of these three categories, the additive model best represents the present task, because each team member had an equal level of responsibility and an equal share of input into the team's output. (Note that this situation is fundamentally different from a disjunctive task [e.g., solving a difficult math problem], where the team's best member determines the team's performance, or a conjunctive task [e.g., mountain climbing], where the weakest link determines the team's performance). Given the additive nature of the task, we used the average of the team member's scores to represent agreeableness at the team level (Barrick et al., 1998; see also Homan et al., 2008, and Van Kleef et al., 2009, for similar aggregation procedures used in this task). This logic is analogous to averaging the height

of individual members of a basketball team to predict the team's performance.

Experienced workload and the manipulation checks were also aggregated to the team level. Because participants were exposed to the leader's emotional displays *as a team*, aggregation of these measures was based on a direct-consensus model (i.e., some degree of consensus among team members is required to justify aggregation to the team level; Chan, 1998). To examine whether aggregation was appropriate, we first calculated ICC(1) coefficients (i.e., indices of inter-rater agreement). ICC(1) values pertaining to experienced workload (.12, $F[35, 108] = 1.54$, $p < .05$), perceived anger (.76, $F[35, 108] = 13.36$, $p < .001$), and perceived happiness (.68, $F[35, 108] = 9.67$, $p < .001$) were all significant. Further support for aggregation was provided by r_{wg} coefficients. The average r_{wg} values for experienced workload, perceived anger, and perceived happiness were .89, .73, and .76, respectively, representing satisfactory agreement. Together, these data justify aggregation of the individual-level measures to the team level.

The hypotheses were tested using hierarchical linear regression. Agreeableness was treated as a continuous variable. The leader's emotional display was dummy coded (0 for anger and 1 for happiness), and the interaction between leader emotional display and agreeableness was computed based on centered variables (Aiken & West, 1991). We included the standard deviation of team-level agreeableness to account for differences between individual team members (Klein & Kozlowski, 2000; also see Homan et al., 2008; Van Kleef et al., 2009).

Results

Manipulation Check

Regression revealed that teams in the angry display condition perceived the leader as more angry than did teams in the happy display condition, $\beta = -.95$, $t(32) = -16.58$, $p < .001$; teams in the happy display condition perceived the leader as happier than did teams in the angry display

condition, $\beta = .96$, $t(32) = 18.37$, $p < .001$. Paired-sample t tests further revealed that teams in the angry condition rated the leader as more angry than happy ($M = 3.88$ and $M = 1.77$, respectively), $t(17) = 10.80$, $p < .001$, and those in the happy condition rated the leader as more happy than angry ($M = 3.82$ and $M = 1.37$), $t(17) = 27.20$, $p < .001$. There were no main effects of agreeableness (perceived anger: $\beta = .01$, $t[32] = .14$, *ns*; perceived happiness: $\beta = .05$, $t[32] = .27$, *ns*) and no interactions (anger: $\beta = .02$, $t[32] = .30$, *ns*; happiness: $\beta = -.01$, $t[32] = -.27$, *ns*).

Team Performance

Regression analyses are presented in Table 1. As can be seen, there were no main effects of leader emotion and agreeableness. However, as predicted, we found a significant Emotion x Agreeableness interaction (see Figure 2). Further probing of the interaction (Aiken & West, 1991) revealed that low-agreeable teams performed better when the leader expressed anger rather than happiness, $\beta = -.55$, $t(31) = -2.04$, $p < .05$, whereas high-agreeable teams performed better when the leader expressed happiness rather than anger, $\beta = .66$, $t(31) = 2.04$, $p < .05$.

Experienced Workload

Regression revealed no main effect of leader emotion on experienced workload (see Table 1). We did find a main effect of agreeableness (agreeable followers experienced higher workload than less agreeable followers), which was qualified by the predicted Emotion x Agreeableness interaction (see Figure 3). Probing of the effect revealed that low-agreeable teams did not experience differential workload as a function of their leader's emotional displays, $\beta = .28$, $t(31) = 1.46$, *ns*. However, high-agreeable teams experienced a higher workload when their leader expressed anger rather than happiness, $\beta = -.52$, $t(31) = -2.32$, $p < .03$.

Mediation Analysis

We conducted mediated regression analyses to test whether the workload experienced by agreeable followers with an angry leader can account for their impaired performance. We have already demonstrated that the interaction between leader emotion and agreeableness predicts team performance (Step 1) and experienced workload (Step 2). Simultaneously entering the predictors (emotion, agreeableness, and their interaction) and the proposed mediator (workload) into the equation (Step 3) yielded a significant effect of workload on performance, $\beta = -.39$, $t(30) = -2.07$, $p < .05$, and reduced the formerly significant Emotion x Agreeableness interaction to non-significance ($\beta = .23$, $t[30] = 1.28$, *ns*). A Sobel test indicated that the indirect effect was significant ($z = 1.65$, $p < .05$, one-tailed).²

Discussion

We demonstrated that the effects of leader emotional displays on follower performance depend on followers' agreeableness. Low-agreeable followers were more motivated and performed better when their leader expressed anger rather than no emotion or happiness, whereas high-agreeable followers performed worse when their leader expressed anger. Performance was mediated by experienced workload, which was highest among agreeable followers with an angry leader. These findings bridge classic work on the contingencies of effective leadership (e.g., Fiedler, 1964) with contemporary research on the social functions of emotions (e.g., Keltner & Haidt, 1999; Van Kleef, 2009) and the effectiveness of leader emotional displays (e.g., Bono & Ilies, 2006; George, 1995; Lewis, 2000; Sy et al., 2005; Van Kleef et al., 2009).

Past research on the consequences of emotional displays had yielded inconsistent findings, with some studies pointing to the beneficial effects of positive displays (e.g., Bono & Ilies, 2006; George, 1995), and other studies suggesting that negative displays are more effective (e.g., Tiedens, 2001; Van Kleef et al., 2004). These disparate findings can be better understood by

considering the (mis)match between leader emotion and follower personality. Future research could investigate whether other personality characteristics, individual differences in values and belief systems, or cultural differences also shape the interpersonal effects of emotional expressions.

The conclusion that the consequences of emotional expressions depend on the target's personality has important implications for theorizing about the social functions of emotions. Although recent theories have suggested a possible role for personality (e.g., Van Kleef, 2009), to our knowledge the present study is the first to demonstrate that the social consequences of emotional displays are indeed contingent upon the target's personality—a finding that sheds new light on the boundary conditions of emotional functionality. The importance of this conclusion may generalize to other domains, such as intimate relationships, parenting, conflict management, sports, and social influence. For instance, successful relationships may be those where partners' emotional tendencies and personalities are aligned, and individuals who tailor their emotional expressions to a target's expectations and desires may be more persuasive and influential.

These notions have clear practical implications. Leaders must match their emotional expressions to their followers' personality to maximize performance. When dealing with agreeable subordinates, managers should refrain from expressing anger, for such expressions would be unlikely to result in desired outcomes. In such situations, leaders are better advised to show no emotion or to display positive emotions to generate a constructive and harmonious atmosphere. When followers are less concerned with maintaining social harmony, however, expressing anger may promote performance.

Our findings suggest that leaders who are capable of accurately diagnosing their subordinates' personality, and of regulating their emotions accordingly, will be more successful

in managing group processes and stimulating performance. When selecting leaders, managers should consider characteristics and abilities that are predictive of such qualities, such as emotional intelligence (Mayer, Salovey, & Caruso, 2004). Training programs and leadership courses should therefore devote attention to teaching prospective leaders socio-emotional skills to increase their effectiveness.

Our conclusions may be limited by our experimental task, which was relatively complex and demanding. As a result, agreeable followers may have suffered more from the workload they experienced due to the leader's anger. Future work could explore whether our findings generalize to simpler tasks. Awaiting future research, we conclude that emotional expressions may have different social consequences depending on the personality of the target—a conclusion that adds a new chapter to theorizing about the social functions of emotions.

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Footnotes

¹ If we assume that all members made an equal contribution to the team's performance, we can *simulate* individual-level analyses by assigning $\frac{1}{4}$ of the team-performance score to each team member. We can then conduct analyses at the individual level, while controlling for group membership to account for nonindependence. This analysis produced significant Emotion x Agreeableness interactions on estimates of individual performance ($\beta = -.16, t = -2.08, p < .04$) and workload ($\beta = .20, t = 2.45, p < .02$). Workload significantly predicted individual performance ($\beta = -.19, t = -2.35, p < .02$) and mediated the Emotion x Agreeableness interaction on performance ($z = 1.70, p < .05$). Although these analyses lend additional credence to our team-level results, they rest on the untested assumption that all team members contributed equally to the team's performance, and therefore we must interpret the results with care.

² The reverse mediational path was non-significant ($z = 1.43, p = .15$).

Table 1

Hierarchical Regression Analyses

	Experienced Workload	Team Performance
<i>Step 1 - Control</i>		
Agreeableness SD	.11	-.13
R^2	.01	.02
<i>Step 2 - Main Effects</i>		
Agreeableness SD	.25	-.20
Leader Emotional Display	.01	-.05
Agreeableness	.47**	-.17
R^2	.21*	.05
<i>Step 3 - Interaction</i>		
Agreeableness SD	.16	-.11
Leader Emotional Display	-.08	.04
Agreeableness	.52**	-.22
Leader Emotional Display x Agreeableness	-.39*	.37*
R^2	.35*	.21*

^a $N = 36$ groups. Standardized coefficients (β) are reported. Leader emotional display was dummy-coded 0 for anger and 1 for happiness.

* $p < .05$

** $p < .01$

Figure 1. Motivation (left panel) and judgments of leadership quality (right panel) as a function of leader emotional display and agreeableness

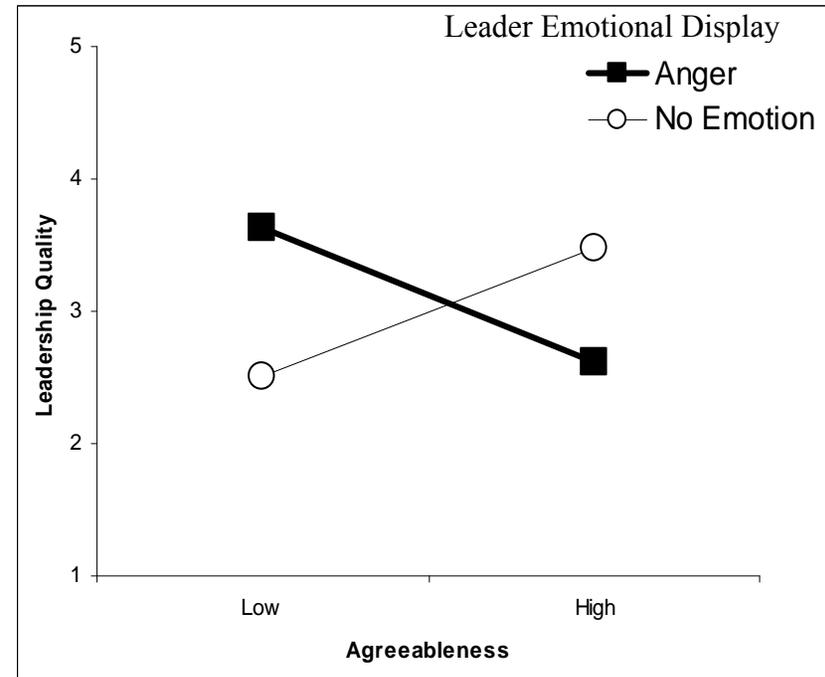
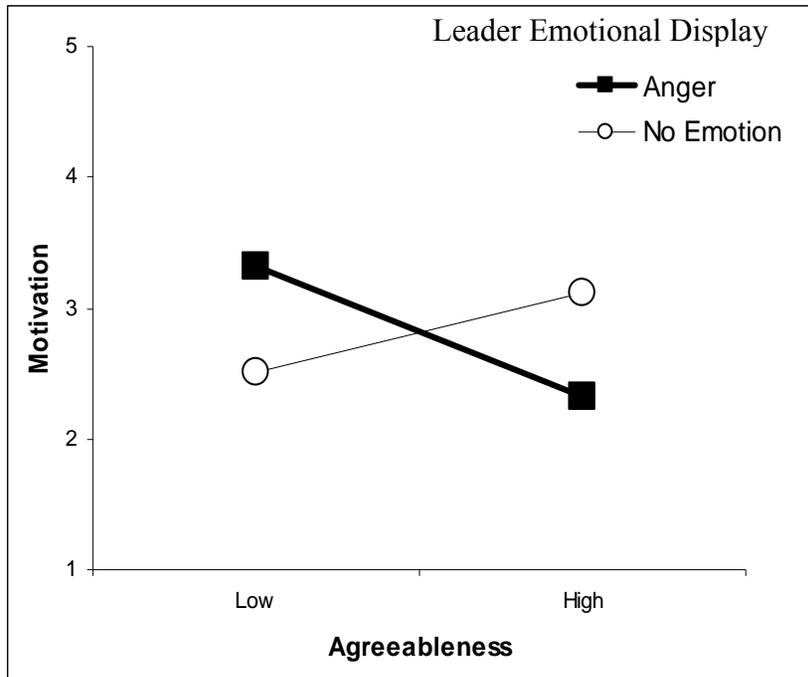


Figure 2. Team performance as a function of leader emotional display and agreeableness

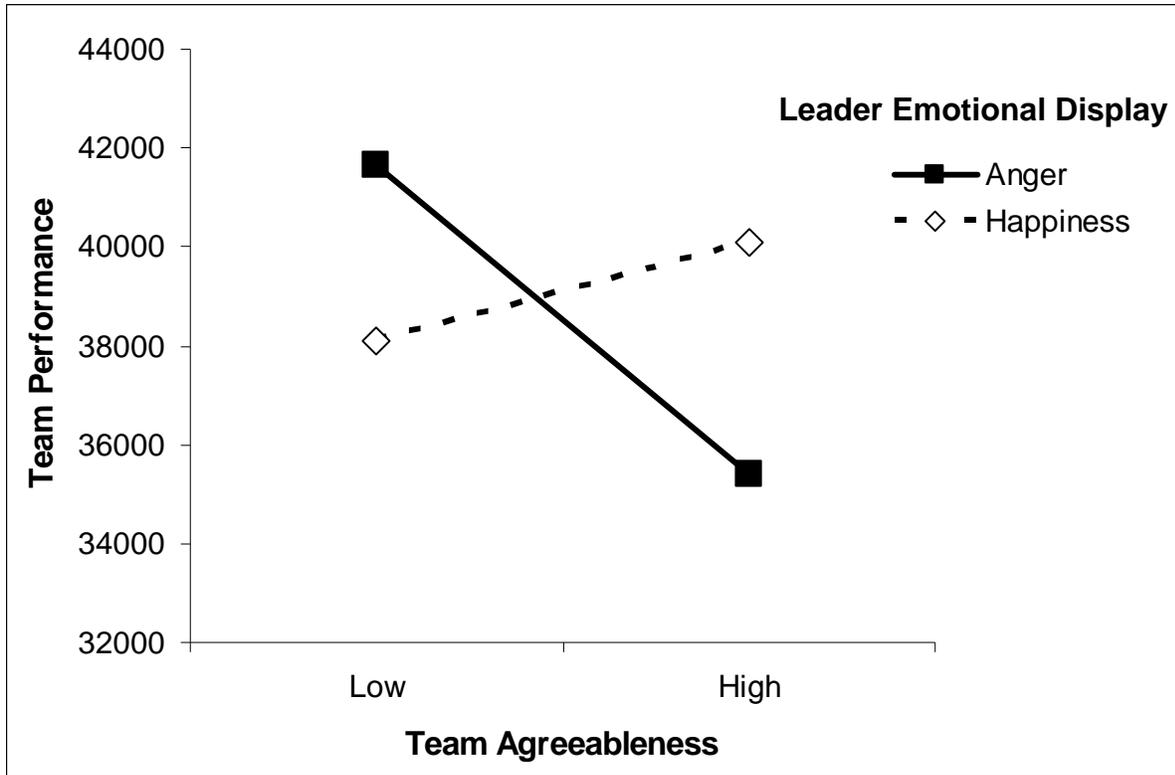
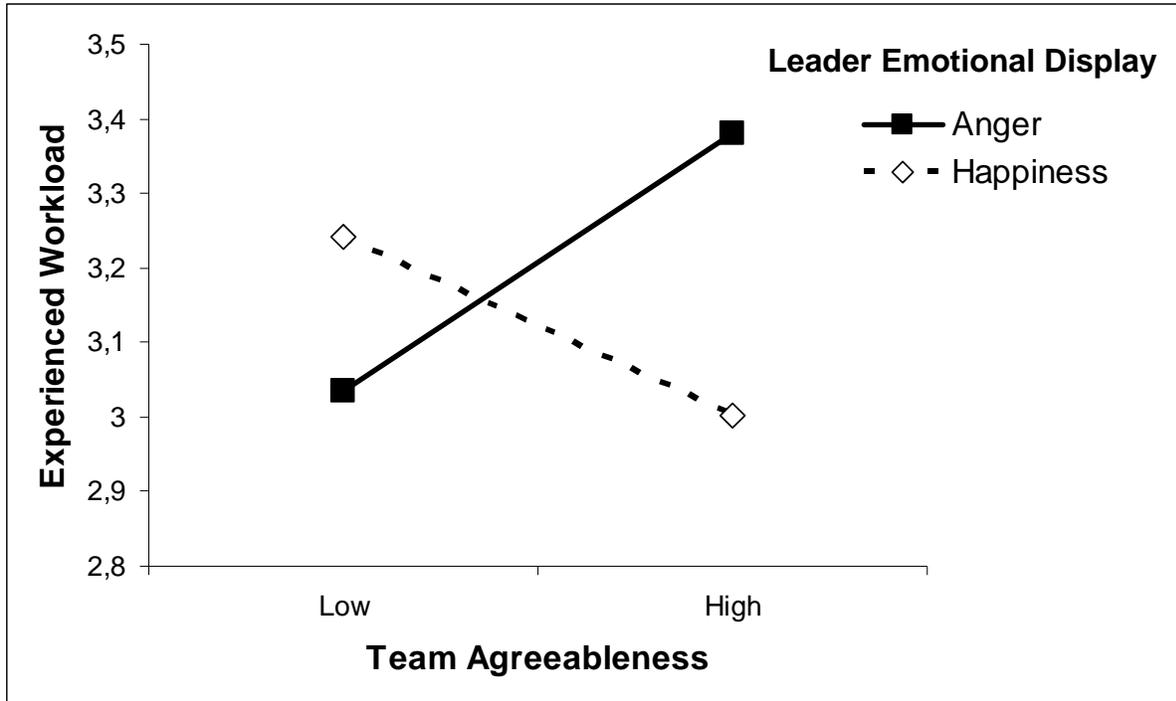


Figure 3. Experienced workload as a function of leader emotional display and agreeableness



Appendix

Pictures Used for the Manipulation of the Leader's Emotional Display (Preliminary Study)

Angry Leader



KDEF/AM34ANHR

Neutral Leader



KDEF/AM34NEHR

Note. The pictures were taken from the Karolinska Directed Emotional Faces set (Lundqvist et al., 1998). Codes refer to the classification system of this stimulus set.