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Training leader emotion regulation 1

Training Leader Emotion Regulation and Leadership Effectiveness

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ABSTRACT

Purpose – The purpose of this study was to test whether we could train the regulation of affective displays of leaders in terms of the emotion regulation strategy of deep acting (displaying feelings one also experiences) and display of positive affect. We also tested whether this resulted in improved leadership effectiveness (i.e., a mediation model in which the training results in greater leadership effectiveness through improved emotion regulation).

Design/methodology/approach – Data were obtained from a field experiment. We randomly assigned $N = 31$ leaders (rated by $N = 60$ subordinates) to a control group without training or an experimental group with emotion regulation training. Before and two weeks after the intervention deep acting (leader-rated) and positive affective displays and leadership effectiveness (subordinate-rated) were assessed.

Findings - The training had positive effects on deep acting, positive affective displays, and leadership effectiveness. Deep acting and positive affect mediated the relationship between the intervention and leadership effectiveness.

Implications - We discuss how this both helps build the case for an emotional labor approach to leadership and for the leadership development potential of such an emotional labor approach.

Originality/value – The findings of this study represent the first causal evidence that leader emotion regulation can be trained, improved emotion regulation results in greater leadership effectiveness and is one of the first empirical studies that integrates emotional labor theory to leadership effectiveness. It is therefore important from a theory development perspective.

Training Leader Emotion Regulation and Leadership Effectiveness

The study of leadership research has a long tradition in the behavioral sciences, but it is only relatively recently that leadership research is considering the role of affect – moods and emotions – in leadership (Gooty, Connely, Griffith, & Gupta, 2010; Van Kleef, Homan, & Cheshin, 2012; van Knippenberg, van Knippenberg, Van Kleef, & Damen, 2008). Whereas in many ways the study of leadership and affect is still an emerging field, there is increasing recognition that emotions may be an important influence in leadership effectiveness – leadership’s ability to mobilize and motivate subordinates (Brief & Weiss, 2002). Leaders’ use of their own emotions in particular has received attention in this respect, and evidence is accumulating that leader affective displays influence leadership effectiveness (Gooty et al., 2010; van Knippenberg et al., 2008). A key insight suggested by this evidence is that leaders’ skill in emotion regulation – the deliberate display or suppression of affective states– may be an important factor in leadership effectiveness (Ashkanasy & Humphrey, 2011; Humphrey, Pollack, & Hawver, 2008). This emotion regulation perspective in leadership effectiveness is distinctly underdeveloped, however, with currently an emphasis on conceptual (e.g., Ashkanasy & Humphrey; 2011; Humphrey et al., 2008) and qualitative work (Burch, Humphrey, & Batchelor, 2013; Clarke, Hope-Hailey, & Kelliher, 2007), and surprisingly little empirical tests of the role of emotional labor as it is more broadly understood in terms of the emotion regulation strategies of deep-acting and surface-acting (Hochschild, 1983).

In the present study, we develop the emotion regulation perspective on leadership by testing the effects of an emotion regulation training for leaders – a test that is relevant both in terms of its theoretical contribution and in terms of its implication for leadership education. From a theoretical perspective, we not only provide insights in the relationship between leader emotion regulation and leadership effectiveness – a key test for the conceptual development of the emotion regulation perspective – it also speaks to the question of key

relevance to learning and education practice: *can leaders be trained in the use of emotions?*

There is broader evidence that leadership can be trained, for instance in studies of transformational leadership (Abrell, Rowold, Weibler, & Moenninghoff, 2011, Barling, Weber, & Kelloway, 1996, Dvir, Eden, Avolio, & Shamir, 2002, Frese, Beimeel, & Schoenborn, 2003, Towler, 2003, Vella, Oades, & Crowe, 2013) and charismatic leadership (Antonakis, Fenley, & Liechti, 2011) – even when this comes with the important caveat that the charismatic-transformational leadership construct has substantive validity problems (van Knippenberg & Sitkin, 2013). However, none of these earlier leadership training studies has focused on a leadership concept that is defined and operationalized in terms of the use of emotions (van Knippenberg & van Kleef, 2016). Our study is therefore the first to target the trainability of leader emotion regulation specifically.

Theory and Hypotheses

Emotional labor theory

Hochschild (1983) introduced the concept of emotional labor. She argued that people perform emotional labor when they are expected to express emotions as part of their job role. Job roles involving emotional labor a) require direct contact (face to face or voice to voice) with others; b) expect workers to produce an emotional state in others, and c) allow the organization, through supervision and training, to exercise control over the emotional activities of employees. Elaborating on the work of Hochschild, Rafaeli and Sutton (1987) argued that the emotional displays of employees are likely to have the biggest influence on others such as customers. Organizations therefore specify emotions that employees should express (display rules). When expected emotions do not correspond to actual feeling states, employees need to regulate their emotions. Waiters for example are expected to ‘serve with a smile’ even when they are not always experiencing genuine positive feelings.

There are two distinctive strategies for such emotion regulation. When expressing an

emotion one is not actually experiencing (and potentially suppressing an emotion one is experiencing; e.g., displaying happiness to a customer when one is actually irritated), the emotion regulation strategy is called *surface acting*. Surface actors suppress their genuine emotions and put on a mask to show emotions required by the job. The emotion regulation thus is in the affective display itself. In contrast, in using a *deep acting* strategy the emotion regulation is in the activity *before* the actual affective display take place. Deep acting is the action of bringing oneself in a state where one actually experiences the emotion one is required to express. Deep acting thus requires regulation before the emotion actually occurs. It affects the perception and processing of emotional cues at the onset of an emotion; that is before the emotion elicits affective displays. Through deep acting one changes the emotional experience of the situation. To align required and true feelings, people can direct attention towards emotional memories that fit the situation (so-called attentional deployment). Consider for example, a leader who sees a need to stimulate the team at the start of an important project by expressing positive and confident emotions while having just heard that the organization will have to lay off a percentage of its management in the forthcoming period. To engage in deep acting, this leader can redirect his or her attention to memories of success to actually feel positive and confident. Besides redirecting one's attention people can also reappraise the situation (cognitive change) to induce the required emotion (Grandey, 2000). The same leader can reframe the situation as an exciting opportunity for the leader and the team to showcase their abilities.

Using a deep acting strategy is a more effective way to regulate emotions than surface acting. Surface acting leads to lower self-authenticity (Brotheridge & Lee, 2002), and inauthenticity is associated with depressed moods and stress (Erickson & Wharton, 1997), which in turn may harm performance. In deep acting there is no discrepancy between felt and expressed emotions and for that reason authenticity is not compromised (Hülshager &

Schewe, 2011). Moreover, displaying emotions may influence others – the very reason why a leader may engage in emotional displays – and there is evidence that authentic displays have more desired effects on other individuals to the extent that people are able to differentiate between genuine and fake emotional expressions (Ekman, Friesen, & O’Sullivan, 1988).

Emotional labor and leadership

Emotional labor has been conceptualized foremost as a duty of service employees, such as waiters serving with a smile, nurses displaying sympathy and concern, and bill collectors displaying irritation or even anger to get paid (Humphrey et al., 2008). In recent years however it has been suggested that leaders too are expected to express emotions as part of their job role. Leaders’ displays of emotions may influence subordinates through emotional contagion (Bono & Ilies, 2006; cf. Hatfield, Cacioppo, & Rapson, 1994) – the process through which perceived leader emotions are internalized and experienced by subordinates – and by conveying social information (e.g., the need to improve performance conveyed by leader anger at team performance; Van Kleef, Homan, Beersma, van Knippenberg, van Knippenberg, & Damen 2009). Indeed, leaders’ expressed emotions can be interpreted by subordinates as feedback on their behavior (Gaddis, Connelly, & Mumford, 2004; Weiss & Cropanzano, 1996) and therefore influence performance. In line with this recognition of the emotional labor aspect of the leadership role, Brotheridge and Grandey (2002) found that leaders had to perform emotional labor as frequently as service workers.

Since then both conceptual papers (Ashkanasy et al., 2011; Gardner, Fischer, & Hunt, 2011; Humphrey, 2012; Humphrey et al., 2008; cf. Rajah, Song, & Arvey, 2011) and some qualitative studies (Burch et al., 2013, Clarke et al., 2007) reflecting on the role of emotional labor in leadership have been published. Empirical research testing the role of emotion regulation in leadership has lagged behind, however, but the evidence that is there seems to corroborate the notion that emotion regulation may be important to leadership effectiveness.

Glasø and Einarsen (2008) found that leaders were more likely to suppress negative emotions and to express or fake positive emotions, and moreover that suppression has a negative impact on the leader-subordinate relationship whereas expression of positive emotions had a positive influence (Fisk & Friesen, 2012, report similar findings, but it is not clear that their study of subordinate perceptions of leader emotion regulation can be interpreted in emotional labor terms, which relies on the actor's experience of emotion regulation rather than the observer's perception of emotion regulation).

Despite the underdeveloped nature of the emotional labor perspective in leadership research, there does seem to be enough circumstantial evidence to conclude that emotion regulation skills may have a positive impact on leadership effectiveness. This conclusion would be based both on the evidence that deep acting is more sustainable in terms of individual well-being (e.g., Grandey, 2000) and in terms of the evidence that well-chosen emotional displays may contribute to leadership effectiveness (e.g., Gooty et al., 2010). Accordingly, from a leadership education perspective it would be valuable to determine whether emotion regulation skills can be developed in leadership training. Such an intervention-based test of the effects of leader emotional labor would also be valuable in terms of the quality of the evidence (i.e., experimental-causal) it would yield for theory development.

Training leader emotion regulation

An emotional labor perspective would open the door for organizations to train the emotional activities of workers (Hochschild, 1983). Because deep acting is preferable over surface acting both for the actor and for the organization in terms of its effects on actor and recipients, organizations could presumably promote deep acting and prevent surface acting through targeted interventions aimed at training deep acting (Hülshager et al., 2011). Indirectly corroborating the viability of such an approach, Gross (1998) showed instruction

for emotion regulation to be effective in reducing emotion-expressive behavior. Participants were shown a disgusting movie while their emotional responses were recorded. Participants received either a deployment instruction (deep acting condition), suppression instruction (surface acting condition) or no instruction at all (control condition). In comparison with the control group both deep acting and surface acting were effective in reducing emotional expressions but only deployment also reduced the disgust experience. This study shows that instruction (cf. training) can facilitate effective emotion regulation. More recently, it was also found that training police officers significantly enhanced their emotion regulation skills (Berking, Meier, & Wupperman, 2010). Direct evidence for the effectiveness of training emotion regulation in leaders is however still lacking.

The present study

For leaders, we propose that using deep acting to regulate emotions is more effective because deep acted emotional expressions are more authentic and therefore more contagious and more informative, than surface acted expressions. Leaders who use deep acting in their affective expressions therefore will have more influence on the thoughts, feelings, and ultimately actions of employees. The concept of emotional labor and the extensive research on the topic is also not something leaders are well aware of (Burch et al., 2013). So, providing leaders with insights and training skills in emotion regulation could be very beneficial. For the aim of this research, we developed a training designed to achieve exactly this. The training educated leaders about why emotional expressions could help them to obtain their goals, making them aware of the importance of emotional expressions, and guided them in developing deep acting regulation skills to express appropriate emotions (the training is described in more detail in the Methods section). Thus, because of the evidence that deep acting is trainable and that leaders are typically not aware of the importance of emotional labor and deep acting in their leadership, we expected that leaders who were

provided with this training would increase their deep acting.

Hypothesis 1: Emotional regulation training increases leader use of deep acting.

Because, as per our analysis in the previous, the expression of more deep acted emotions would benefit leaders' ability to influence subordinates, we also expected an increase in leadership effectiveness following the training:

Hypothesis 2: Emotional regulation training increases leadership effectiveness.

Hypothesis 3: The effect of emotional regulation training on leadership effectiveness is mediated by deep acting.

Leader affective displays

There is a longstanding tradition to describe affect – moods and emotions – along a circumplex that is formed by two underlying dimensions – valence/pleasantness and arousal/activation (Watson, Clark, & Tellegen, 1988). Valence – positive versus negative affect – refers here to how the affective state is subjectively experienced by the person in that state. Even though positive and negative affect refers to a subjective experience, this experience is so consistent across individuals that we can safely identify affect as positive or negative more or less as an objective given (Russell & Feldman Barrett, 1999).

Much research on the effects of leader emotional expressions is based on the notion that showing positive affect is motivating. Displays of positive affect elicit positive feelings in employees. It may be important for employees to feel positive affect, because relationships have been found between positive emotions and organizational outcomes like motivation (Erez & Isen, 2002), creativity (George, 1991, 1996; Spector & Fox, 2002), task performance (Ashby, Isen, & Turken, 1999), job satisfaction (Fisher, 2000), team coordination (Sy, Côté, & Saavedra, 2005), and team performance (Gaddis et al., 2004). There is an important caveat, however, in that the evidence is also growing that whether leader positive affective displays or negative affective displays are more effective is contingent on characteristics of the task

and the subordinates (e.g., Damen, van Knippenberg, & van Knippenberg, 2008a, 2008b; Sy et al., 2005; Van Kleef et al., 2009; Visser, van Knippenberg, Van Kleef, & Wisse, 2013). At the same time, some effects seem to be consistently tied to positive affective displays rather than negative affective displays, such as positive leadership evaluations (Visser et al., 2013), or seem to be more important for leadership effectiveness on the side of positive affect (motivating cooperation; Sy et al., 2005) than on the side of negative affect (motivating competition; cf. Forgas & George, 2000). The prediction that leader display of positive affect plays a role in leadership effectiveness and the effects of emotion regulation training thus is made presuming that leaders will display relatively sound judgment in terms of their emotional displays after emotion regulation training.

Hypothesis 4: Emotional regulation training increases leader positive affective displays in interactions with their subordinates.

Hypothesis 5: The effect of emotional regulation training on leadership effectiveness is mediated by positive affective displays.

Method

Participants and Design

To provide a causal test of our hypotheses, we designed a field experiment with a pretest-posttest experimental group – control group design. To assess the effectiveness of the training, we focused on subordinate ratings of leadership to measure actual on-the-job training influences (i.e., rather than an in-training assessment that does not speak to transfer to the job situation). The study combined three sources of information: the experimentally induced manipulation, leader self-ratings of deep acting (as well as gender and leadership experience as controls), and subordinate ratings of displays of positive affect and leadership effectiveness.

Participants were recruited through the leadership development network of an

acknowledged consultancy firm in the Netherlands. Thirty-one individuals holding a leadership position for at least a year in the public or private sector participated in this study ($N = 20$ men; $N = 11$ women), with ages ranging from 32 to 56 ($M = 43$, $SD = 7.62$). Their experience ranged from 1 to 30 years ($M = 10.47$, $SD = 8.53$). Furthermore $N = 60$ subordinates (two per participant with the exception of two participants for which only one rating was available) were involved to appraise the participants ($N = 29$ men; $N = 31$ women, ages ranging from 19 to 62 ($M = 40$, $SD = 10.45$). Whereas this sample of leaders and subordinates is clearly not large, the experimental set-up provides a much sharper contrast than the study of relationships in survey research typically does, and accordingly is associated with more power than a comparable correlation test.

Participants were randomly assigned to the experimental group or the control group. The experimental group ($N = 17$) started with the pretest, which consisted of a questionnaire filled in by subordinates of the participants, to measure the leadership effectiveness of the participant and his or her expression of positive affect. The pretest also contained a self-report questionnaire to measure the use of the emotional labor strategy deep acting. The pretest was directly followed by a training on the use of emotions in leadership and deep acting skills. Two weeks after the training the experimental group and the same group of subordinates filled out the posttest, which consisted of the same measurements as the pretest.

The control group ($N = 14$) and associated subordinates also started with the pretest and two weeks later completed the posttest. To be able to offer the participants in the control group the same treatment as the participants of the experimental group, they were given the training on emotional skills after they completed the posttest.

Measures

Leadership effectiveness. Leadership effectiveness was assessed with a 5-item measure (van Knippenberg & van Knippenberg, 2005) rated by two subordinates of the

participant on a 5-point scale ranging from 1 = *totally disagree* to 5 = *totally agree* at the two measurement times: '*The participant is an excellent leader*', '*The participant is an effective leader*', '*The participant leads in a way that motivates people*', '*Others like to work together with the participant*' and '*The participant motivates people to work hard for their organizational unit*'. There was a satisfactory interrater agreement, $rwg = .86$ for the pretest and $rwg = .88$ for the posttest. Cronbach's alpha showed good internal consistency for this scale, with $\alpha = .86$ for the pretest and $\alpha = .88$ for the posttest.

Deep acting. Deep acting, was measured by the deep acting subscale of the Emotional Labor Scale (Brotheridge & Lee, 2003). Deep acting is a 3-item self-rating on a 5-point scale ranging from 1 = *never* to 5 = *always*. The scale consists of the following statements; '*I make an effort to actually feel the emotions that I need to display to others*', '*I try to actually experience the emotions that I must show*' and '*I really try to feel the emotions I have to show as part of my job*'. Overall the scale showed satisfactory reliability with Cronbach's α 's of .70 for the pretest and .86 for the posttest.

Affective display. Affective display was measured with a 5-item measure rated by the leader's subordinates. Three of these were adapted from the Positive and Negative Affectivity Schedule (PANAS) (Watson et al., 1988). The original PANAS intends to measure to what extent someone experiences positive or negative affect and contains a 10-item mood scale to assess positive affect. In this study, we adapted this approach to be more specific to the high-arousal positive affect that is primarily associated with leadership effectiveness (Damen et al., 2008a). We therefore selected three positive emotions with the highest level of arousal – enthusiastic, inspired, and excited. In addition, instead of assessing a self-rating of the extent to which someone feels a certain emotion, the items were formulated to assess subordinate ratings of the extent to which the leader expresses a certain emotion. An example item was '*The participant expresses enthusiasm*'. We extended the scale with an additional two items:

'*The participant expresses positive emotions*' and '*The participant expresses joy*'. Ratings to these items had to be given on a 5-point scale ranging from 1 = *seldom* to 5 = *always*.

Interrater agreement was satisfactory, $r_{wg} = .81$ for the pretest and $r_{wg} = .90$ for the posttest.

The scale also showed satisfactory reliability: Cronbach's $\alpha = .76$ for the pretest and $\alpha = .88$ for the posttest.

Control variables. We included leader gender and leadership experience as controls. Leader gender was included because leader affective displays may be judged differently for male and female leaders (Lewis, 2000) even when this is not necessarily the case (Damen et al., 2008b). Leadership experience was included because leaders might learn through experience the skills targeted by the training. Pretest measures of leadership effectiveness, deep acting, and displays of positive affect were also included to more accurately capture changes in these variables as a function of the training.

The Training

Based on the empirical literature on emotions and leadership described earlier, we designed a three-hour training. A maximum of eight participants per session took the training, which was supervised by two professional trainers. The aim of the training was to increase leaders' effective use of emotional expressions to influence subordinates.

To reach this goal, we provided participants with insights in the affective influencing mechanisms of emotional expressions. We also provided them with knowledge of emotional contagion as well as of the communicative value of emotional displays. The essentials of emotions and management were explained to the leaders. The difference between positive and negative emotions was discussed, as was the relationship between leadership effectiveness and the use of positive emotions. Also the different branches of emotional intelligence conceptualized as an ability (Mayer & Salovey, 1997) – the recognition, understanding, use, and management of emotions – were explained through examples. Finally

emotion regulation strategies were discussed. Knowing this participants should become able to see their emotional expressions as an instrument to influence their employees.

Besides knowledge, we provided participants with an instrument called the Emotional blueprint, which is developed by Caruso and Salovey (2004). The Emotional blueprint integrates scientific theory into a practical tool (Ciarrochi & Mayer, 2007) that is helpful when encountering emotionally charged situations. It offers a framework to identify the emotions involved, to understand how these emotions influence cognitive processes and to determine the causes and effects of the emotions. Analyzing emotionally charged situations in a systematic way enables participants to make judgments concerning which emotional displays are more appropriate.

The Blueprint exercise had to be made in pairs. Leaders were asked to make a short analysis of an emotionally charged situation they had encountered or would encounter with the questions: 'What is the situation?' and 'Who are involved?'. After that they had to take the four steps of the Emotional blueprint, which correspond with the different branches of emotional intelligence. The recognition of emotions needed to be done according to the main question 'How do the people involved feel in this situation?'. The leader and the subordinate had to be assessed to what extent they were feeling the specific emotion on a 5-point scale, 1 = *completely absent* to 5 = *clearly present*. There were questions below the table to help identifying their own emotions, for example 'how did I feel in this situation?'. To identify the emotion of the other, there were tips about what to pay attention to, for example to facial expressions. The understanding of emotions was assessed by identifying the cause of the emotion 'where could this feeling come from?' and the consequence of the emotion 'how can the emotion evolve?' for the leader and the subordinate. The use of emotions was assessed with the analysis of the thinking process of the leader and the subordinate. The aim of this part was to identify the emotional impact on the thinking process. The emotions that were

present had to be put in the right place in the table. Part of the thinking process was for example focussed. The managing of emotions is to resolve potential problems. When trying to manage one should bundle the information from the earlier steps, so that one can make decisions based on this data and can act on an emotionally intelligent manner. Hereafter the Emotional blueprint exercise was evaluated. So, During the training we practiced using the Emotional blueprint and also stimulated participants to make use of it in anticipation of a real emotionally charged interaction situations they would face in the near future.

The training especially aimed to develop deep acting skills. To develop deep acting skills, participants were trained to regulate their emotions. An exercise let participants experience the power of emotional contagion. They were asked to sit across a confederate, who was given instructions to only say “NO”, with very strong negative emotional expression. The participant had to feel as much positivity as possible and keep saying “YES”. All context was removed from the exercise on purpose to keep the focus on emotional transference. In the second round, participants were told to use deep acting strategies. In this latter case, it is much easier to keep feeling positive because they not only say yes, but actually feel it. In the final part of the training, authentic and non-authentic emotions were shown to let the participants experience the difference in affective transferal. More detailed information on the training program is shown in Table 1.

Based on earlier research on affect and leadership, we also taught participants that showing positive emotions works motivating and contagious, positively altering employees' behavior. We advocated the use of positive emotions and warned them on the use of negative affective displays. Whereas this is not to negate that negative emotional expressions can be useful, this emphasis on positive emotions was inspired by the idea that positive emotions are more likely to be effective across situations.

If leaders want to develop emotional regulation skills, they have to practice in many

situations; using it during the training is not enough. Participants should keep practicing in their own organizations. They were therefore asked to form implementation intentions – intentions targeted on the enactment of actions necessary to achieve goals – for using the skills in an anticipated situation. Recent meta-analyses revealed a medium to large effect size ($d = .65$) of implementation intentions on goal achievement on top of the effects of mere goal intentions (Gollwitzer & Sheeran, 2006; Webb & Sheeran, 2008).

Results

Means, standard deviations and effect sizes were computed among study variables.

The results compared by group are shown in Table 2.

Analyses of covariance of the effects of the training

To test whether emotion regulation training resulted in posttest improvements of deep acting, positive affective displays, and leadership effectiveness, we performed ANCOVA analyses in two variants. The first variant was without controls, and only included the experimental versus control group factor and the pretest score (i.e., so posttest scores can be interpreted better in terms of change from pretest to posttest). The second variant was with the control variables added. The results are shown in Table 3.

We found effects of the experimental manipulation on deep acting ($F = 5.08, p < .04$), positive affect ($F = 4.47, p < .05$), and leadership effectiveness ($F = 4.83, p < .04$). The experimental group scored higher on each of the three variables: deep acting ($M = 3.86$ vs. 3.60), positive affect ($M = 3.82$ vs. 3.54), and leadership effectiveness ($M = 3.96$ vs. 3.69). We also performed ANCOVA analyses in which we controlled for experience, and gender. These results are shown in Table 4. Again, we found an effect of deep acting ($F = 4.25, p < .05$), positive affect ($F = 5.06, p < .04$), and leadership effectiveness ($F = 6.34, p < .02$). These findings support our Hypotheses 1, 2, and 4.

Mediation analysis

Our prediction as captured in Hypothesis 3 and 5 was that the effects of the training on deep acting and positive affect displays mediate the training's effect on leadership effectiveness. To test these hypotheses, we conducted a mediation analysis, following Preacher and Hayes (2008; Hayes, 2009), to simultaneously test the indirect effects mediated by deep acting and displays of positive affect. Because this approach includes a direct test of the mediation path – the path from the independent variable via the mediator to the dependent variable – it is superior to the four-step approach to test for mediation based on Baron and Kenny (1986) that only provides indirect evidence of mediation (i.e., the indirect path itself is not tested in the latter approach). Group served as the independent variable, posttest leadership effectiveness as dependent variable, and posttest deep acting and positive affect as mediators. We controlled for the pretest scores of leadership effectiveness, deep acting, and positive affect. We chose not to add gender and experience as control variables in this analysis, because these variables showed no effect in the ANCOVA analyses.

The mediation analysis showed evidence for both proposed mediations. The indirect effect via deep acting was significant, point estimate = .09, SE = .07, 95% CI: .004, .287, as was the indirect effect for displays of positive affect, point estimate = .05, SE = .05, 95% CI: .004, .259. Based on these results, we can conclude the effectiveness of the training is due to increases in deep acting and the display of positive affect. Hypothesis 3 and 5 were therefore supported.

Discussion

The aim of this study was to test whether leaders could be trained to better regulate their emotions to contribute to their leadership effectiveness. To do so, we designed a three-hour training in which actual leaders were educated about the importance of (positive) emotional displays, were provided with a tool to analyze emotionally charged situations, and most importantly were guided in developing deep acting skills which would enable them to

regulate their emotions and improve the authenticity of the displays delivered. We expected leaders receiving this training to engage in more deep acting and to show more positive emotions, and that their leadership effectiveness would improve as a consequence. The results of a field experiment evaluating this training supported our analysis and suggest that leader emotion regulation skills can be trained to improve leadership effectiveness. These findings have important implications in supporting the conceptual notion that emotional labor is an important element of leadership (Ashkanasy et al., 2011; Gardner et al., 2011; Humphrey, 2012; Humphrey et al., 2008; Rajah et al., 2011) as well as important educational implications in demonstrating that emotion regulation skills are trainable.

Theoretical implications

Our study shows that it is possible to train leader emotion regulation to increase leadership effectiveness. These findings are important from a learning and education perspective as first evidence for the effectiveness of training leader emotion regulation. The conceptual implication here is that emotion regulation at least to a trainable degree is a skill – something that can be developed through educational efforts – and not purely a trait, even when there may be trait elements to emotion regulation (e.g., Côté & Hideg, 2011).

These findings are also important from a theory development perspective, because they represent the first causal evidence that improved emotion regulation results in greater leadership effectiveness – and only the second empirical study directly linking leader emotion regulation to indicators of leadership effectiveness (cf. Glasø & Einarssen, 2008). Based on emotional labor theory, one may assume that leaders using a deep acting strategy delivered their emotional displays in a more authentic way, and that it is this increased authenticity in combination with the increased use of positive affective displays that accounts for the greater effectiveness of leaders post training.

That said, we would advance the current findings as a basis for further development of

the emotional labor perspective on leadership and not as in any way representing the final word on the issue. Indeed, helpful as they may be, the current findings still represent a relatively crude model of the role of emotional labor in leadership. Future research could use the current findings and training set-up as a basis to develop more fine-grained analyses that speak to how exactly leaders can use their emotion regulation skills beyond deep acting and the prioritization of positive affective displays per se. Important questions may for instance concern the timing/frequency of emotional displays (i.e., emotional displays presumably are also something that can be overused by leaders, and poorly timed emotional displays might backfire), and the more nuanced analysis of what emotions the leader shows exactly (e.g., enthusiasm and happiness are both positive emotions, but enthusiasm is more action-oriented than happiness, and presumably may thus also inspire more action in subordinates; cf. van Knippenberg et al., 2008).

It would be an empirical question if and how such more sophisticated models could effectively feed back into leadership training. Arguably, the advantage of the current training set-up was that its message was relatively straightforward with its focus on understanding and developing deep acting and positive emotional displays. More sophisticated conceptual models would suggest more sophisticated training efforts, but it would be an empirical question how such sophistication could be used in training without overloading participants. This is not to say that it could not be done – indeed, we would expect that a more elaborate and extended training would achieve its aim. Rather, our point is that trainability of more sophisticated models should not be taken for granted based on the current findings, but rather be studied in its own right.

Practical implications

Turning to practice, the stakes are high in management education and training. For instance, in 2012, 25% of all Dutch organizations (the national context of the current study)

had a management development policy and the average organization in the Netherlands spent € 2976 (USD 3990) per head on management training and education (Van Dam, Van der Spek, & Sylva, 2013). Although the investments are high, evidence-based principles are not being used to the extent that they should be in management education (Antonakis et al., 2011). Our research provides the field of management development practitioners with evidence that emotion regulation can be trained and gives guidelines on how to do so. The value of this is all the more significant because of the fact that there is not much solid empirical research (e.g., field experiments) evaluating leadership training. Our research contribute to insights in the means to make organizational leaders more effective. Especially leaders who do have a hard time dealing with emotions could benefit from emotion regulation training. Obviously, our point here is not that emotion regulation is the end all and be all of leadership effectiveness – we can be sure it is not. Emotion regulation does represent not only an understudied aspect of leadership effectiveness but also an aspect of leadership that is underused in leadership training and development, and our findings add to the business case of investing in such training and development efforts.

Limitations and future research

Inevitably, there are also limitations to our study. Given the straightforward set-up of our study as a two-group pretest-posttest field experiment, our small sample size should, and apparently did, give us sufficient statistical power for hypothesis tests. Even so, in terms of the robustness of conclusions, larger samples would always be desirable, and it would be worthwhile if future research would not only extend the current study with new insights but also include replication of the current findings to bolster the confidence in the current conclusions.

A second issue to mention here is that the measurements of deep acting, positive affective displays, and leadership effectiveness in this study were collected soon after the

intervention. This is not a problem per se in that it represents a valid test of our hypothesis. Even so, it means that we do not know whether training effects persist over time or are relatively short-lived – and if the latter, whether further development of the training such as a booster session after a couple of weeks would be able to ensure a more sustained effect. For now, this is an issue for future research to address. Related to this is that practical constraints did not make it possible to again assess our dependent variables after the control group also received the training (i.e., which they did after the posttest). Although clearly this is not required for our design and hypothesis tests, it would have been valuable to be able to do so to further bolster our conclusions (i.e., at a second posttest after the control group received the training, this group should also improve their leadership effectiveness). Moreover, this would have allowed for the investigation of the duration of the experimental effect over time (i.e., assessing possible changes in the experimental group from the first to the second posttest).

We may also note that forced by limitations to our opportunities we relied on a subjective indicator of leadership effectiveness. Follow up research with more objective, behavioral indicators of leadership effectiveness such as subordinate performance or creativity (cf. Visser et al., 2013) would be important here to further build the emotional labor perspective on leadership. This is all the more important, while we do acknowledge the limitations of our indicator of leadership effectiveness, both with respect to its subjective nature and the short period of time between the pretest and posttest. Future research has to shed light on the plausibility of alternative hypotheses for our leader effectiveness results. Other factors could be in play. It could for example be halo, if leaders do display more positive affect.

Met opmerkingen [PE1]: *While we all recognize that ratings of leader effectiveness are perceptions of leader effectiveness (and not effectiveness in some absolute real sense), I think this is easy to forget. So, it is ratings of effectiveness that may have changed. It could be that they were more effective for all the reasons that speculate on in your introduction for the importance of leader emotional regulation. It could be halo, if they do display more positive affect. There could be other factors in play. However, I think it's important to acknowledge the limitation of your DV and the plausibility of alternative hypotheses for your leader effectiveness results.*

The findings of our study are limited to one national setting – the Netherlands.

Research in leadership and emotions (e.g., van Knippenberg et al., 2008), emotional labor (e.g., Grandey, 2000), and leader emotional labor (Glasø et al., 2008) give some confidence that these findings should generalize to other Western national contexts at least. However, the proof of the pudding is in the eating, and it would be valuable if future research would further build the evidence based relying on samples from other national contexts.

Conclusions

Our findings add important causal evidence to the case for an emotional labor perspective on leadership. They also provide first evidence that leader emotion regulation can successfully be included in leadership training and development. Our study thus extends an invitation to leadership researchers as well as to practitioners in leadership education, training, and development to further develop the emotional labor perspective in leadership research and education.

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Table 1. Overview of training schedule

Program of the training	Time spent
Introduction and theory explaining of emotions and management	20 minutes
Blueprint exercise	45 minutes
Evaluation Blueprint	15 minutes
Introduction emotion management and the explanation of the Yes/No exercise	10 minutes
Yes/No exercise Round one	10 minutes
The explaining of the theory behind surface and deep acting	15 minutes
The participants were asked to develop a deep acting strategy	5 minutes
Yes/No exercise	10 minutes
Round two	
Implementation intention based on the Blueprint situation	30 minutes

Table 2
Means, standard deviations and effect sizes per variable compared per group

	M (<i>SD</i>)	Effect size
Gender	.35 (.49)	.18
Experience	10.47 (8.53)	.01
Leadership effectiveness pre-test	3.87 (.52)	.15
Leadership effectiveness post-test	3.84 (.45)	
Deep acting pre-test	3.48 (.61)	.04
Deep acting post-test	3.74 (.56)	
Positive affect pre-test	3.68 (.44)	.04
Positive affect post-test	3.69 (.50)	

Note. $N = 31$ (experimental = 17, control = 14).

Table 3
ANCOVA analyses on the effect of group at time 2 (experimental vs. control)

	Leadership effectiveness			Deep acting			Positive affect		
	<i>F</i>	<i>p</i>	partial η^2	<i>F</i>	<i>p</i>	partial η^2	<i>F</i>	<i>p</i>	partial η^2
Group	4.83	.04	.15	5.08	.03	.15	4.47	.04	.14
Pretest	61.25	.00	.69	23.39	.00	.46	36.51	.00	.57

Note. *N* = 31 (experimental = 17, control = 14). Covariate: Pretest.

Table 4
ANCOVA analyses on the effect of group at time 2 (experimental vs. control)

	Leadership effectiveness			Deep acting			Positive affect		
	<i>F</i>	<i>p</i>	partial η^2	<i>F</i>	<i>p</i>	partial η^2	<i>F</i>	<i>p</i>	partial η^2
Group	6.34	.02	.20	4.25	.05	.14	5.06	.03	.16
Pretest	52.15	.00	.67	21.87	.00	.46	34.23	.00	.57
Experience	.64	.43	.02	.46	.50	.02	.01	.94	.00
Gender	1.86	.18	.07	.10	.76	.00	1.44	.24	.05

Note. $N = 31$ (experimental = 17, control = 14). Covariates: pretest, experience, and gender.