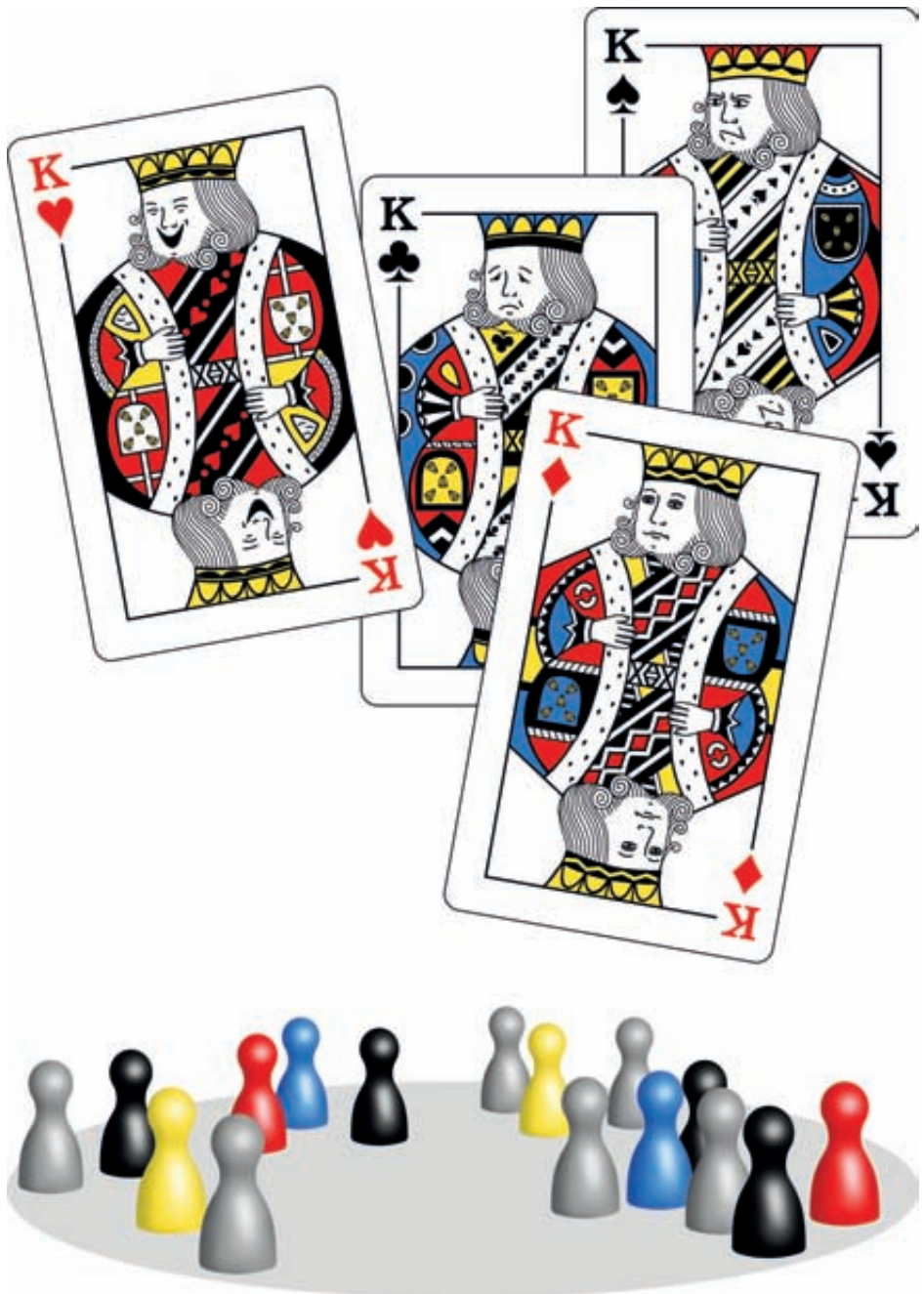VICTORIA VISSER

Leader Affect and Leadership Effectiveness

How Leader Affective Displays Influence Follower Outcomes

Leader Affect and Leadership Effectiveness

How leader affective displays influence follower outcomes

Leader Affect and Leadership Effectiveness
How leader affective displays influence follower outcomes

Leider Affect en Leiderschapseffectiviteit
Hoe leider uitingen van affect uitkomsten van volgers beïnvloeden

Thesis

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by
Victoria Visser
born in Bussum, The Netherlands.

ERASMUS UNIVERSITEIT ROTTERDAM

Doctoral Committee

Promotor: Prof.dr. D. van Knippenberg

Other members: Dr. S.A. Côté
                Dr. S.R. Giessner
                Dr. D. van Dierendonck

Copromotor: Prof.dr. G. A. Van Kleef

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Life is a circus and my next act is this dissertation. Enjoy the show ☺.

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CHAPTER 1

INTRODUCTION:
LEADER AFFECT AND LEADERSHIP EFFECTIVENESS

Leader affective displays are observable indicators of a leader's affective state. The same leader can express different feelings. For instance, Barack Obama cried when he was re-elected as president of the United States in 2012. The same president got visibly angry a month before during a debate with his opponent, and has been seen smiling most often. Barack Obama is just an example of how anyone in a leadership position expresses different affective states over the course of his or her leadership. In this dissertation I will focus on the effects that these different leader affective displays have on the feelings, thoughts and behaviors of the followers, or subordinates. Leader affective displays are often overlooked when it concerns leadership effectiveness and organizational performance while they can be of great influence on both. It is therefore important to gain a better understanding of these influences which has been the aim of the research that is presented in this dissertation.

Any organization hosts people in a leadership position. A countless number of different definitions of leadership have been proposed. A universally accepted definition is that "leadership is the ability to influence, motivate, and enable others to contribute to the effectiveness and success of the organizations of which they are members" (Bass, 2008, p. 23). Central to this, and most other definitions of leadership, is that a leader exerts *influence* on others with the aim to be an *effective* leader. It is therefore of vital importance to understand how leaders influence their followers, since this

knowledge could explain and improve the leader's effectiveness and thereby the well-being of the followers and the organizations.

When people think of leaders influencing followers the things that come to mind first are usually direct orders (e.g., "do this"), verbal feedback (e.g., "good job"), and decisions (e.g., promotions). However, there are other ways in which leaders can influence their followers, namely by expressing how they feel. *Affect* incorporates all feeling states from *emotions* (i.e., discrete feelings states that are evocated by or directed at a specific object, person or event; Frijda, 1986) to *moods* (i.e., general feeling states without a specific cause and usually longer-lasting than emotions; Fijda, 2009). *Affective displays* are facial, vocal, or gestural expressions that indicate someone's affective state (VandenBos, 2007). We will focus on leader affective displays in the form of facial expressions. Facial expressions are universal (Ekman, 1992), so interpreted the same by everyone independent of cultural differences. Moreover, each basic emotion (i.e., anger, fear, enjoyment, sadness, and disgust) has a different facial expression that co-occurs with the experience of this emotion. More than a century ago, Darwin (1872) already highlighted the importance of emotional expressions in interpersonal communication. In the past century, researchers have agreed on the fact that facial expressions of affect can signal relevant information to others (Van Kleef, 2009). Thus, even though displays of affect do not come to mind first when it concerns means of communication, their influence may be significant, and hence, should not be overlooked.

Affective displays serve important signaling functions within interpersonal communications, but also specifically in leadership contexts since it is a core objective for a leader to influence others. To be able to exert influence one has to communicate clear signals. It has been stated that we care

about leaders' affective displays because they are interpreted as important stimuli by the followers (Elfenbein, 2007). Indeed, the results of two experimental studies revealed that a leader's facial expression determines the followers' impressions of how leader-like this person is (Trichas & Schyns, 2012). It has also been found that the leader's facial expressions can be more influential than the leader's verbal message (Newcombe & Ashkanasy, 2002). George (1995) found that leader positive affect fostered followers' group performance and concluded that a leader's affect may explain why some leaders are more effective than others, despite similar skills, abilities, and backgrounds. Previous research has thus demonstrated that leader affective displays can serve an important influencing function. Leadership effectiveness then may depend on how leaders' affective displays influence their followers. Before getting into more detail about the relationship between leader affective displays and leadership effectiveness, I will first discuss one of the main processes through which leader affective displays can influence their followers.

Emotional Contagion

Did you ever laugh only because the people next to you were laughing? Does it make you feel sad when you see or hear another person crying? Chances are that you answer those questions confirmatory, because affective states can, and on a large scale do, transfer from one person to another (Hatfield, Cacioppo, & Rapson, 1994). This process is called *emotional contagion* which is defined as "the tendency to automatically mimic and synchronize facial expressions, vocalizations, postures, and movements with those of another person and, consequently, to converge emotionally" (Hatfield, Cacioppo, & Rapson, 1992, pp. 153-154). A great deal of research has demonstrated that affect can indeed be contagious, meaning that people

can come to experience similar affective states as the person they are observing (Hatfield et al., 1994). Furthermore, emotional contagion has been observed in groups of people (Barsade, 2002; Bartel & Saavedra, 2000) and even within virtual teams (Cheshin, Rafaeli, & Bos, 2011).

It has been suggested that emotional contagion is especially likely to happen from higher power persons to lower power persons, for two reasons (Hatfield, et al, 1994). First, persons in lower power positions usually pay more attention to people in higher power position than the other way around. Second, people in higher power position tend to have clearer expressions, because they can afford to do so without consequences. In support of this, there are numerous examples of emotional contagion from leaders to followers within organizational settings (Elfenbein, 2007). Previous research, especially in the context of charismatic leadership, has made it clear that affect that is displayed by a leader can be transferred to the followers (Cherulnik, Donley, Wiewel, & Miller, 2001). For instance, followers feel more positive when their leader expresses positive emotions than when their leader expresses a neutral affective state (Bono & Ilies, 2006). Moreover, leader-to-follower emotional contagion of both positive and negative affect has been shown in experimental (Sy, Côté, & Saavedra, 2005) as well as field (Johnson, 2008) settings.

Even though emotional contagion comprises the word "emotion", this does not necessarily mean that the process concerns contagion of emotions conform the aforementioned definition. To illustrate, emotional contagion can start with one person's specific discrete emotion, and continue with an unconscious spread of emotion that lacks a clear cause, so what emerges is a more vague and undefined mood in the observer (Cheshin et al., 2011). As a consequence, when I use the term emotional contagion through this dissertation I mean contagion of an affective state. This is also in line with a

conclusion that was drawn in a recent review of the literature on leadership and affect (Gooty, Connelly, Griffith, & Gupa, 2010). Those researchers revealed that leader affective displays influence followers' affective states as well as followers' cognitive and behavioral outcomes through contagion mechanisms of both moods and emotions. This review thereby not only shows us that both leader moods and leader emotions can be contagious, but also that emotional contagion from leaders to followers can be a mediating process. In other words, emotional contagion implies that leader affect impacts follower affect and this can also bring about an influence of leader affect on followers' cognitions and behaviors via follower affect. This way, emotional contagion underlies different processes whereby leader affect influences follower outcomes. For instance, follower affect has been shown to be a mediating mechanism between the effects of a leader's affective display on the followers' evaluation of their leader. Leader displays of anger and sadness yielded negative follower affect that in turn influenced the followers' evaluation of their leader (Madera & Smith, 2009). Likewise, we propose that emotional contagion may be an underlying process in the influences of leader affective displays on a range of different follower outcomes that reflect leadership effectiveness. In short, leader affective displays may influence leadership effectiveness in different ways because (1) leader affect enhances similar affective experiences within the followers and (2) different follower affective experiences can determine the leader's effectiveness, but also prompt certain thoughts and behaviors of followers that reflect on the leader's effectiveness. I will elaborate on this in the next section.

Leadership Effectiveness

Leadership effectiveness has been defined as how well a leader functions (Cherulnik et al., 2001) and we regard someone's leadership as

effective when this leader benefits to the organization as well as the followers. Following this definition, examples of effective leadership are generating profit for the organization, motivating followers, enhancing followers' performance, increasing followers' well-being, and maintaining a good reputation of the organization. Leader affective displays have been proposed to be related to leadership effectiveness, possibly through the mechanism of emotional contagion (Riggio & Reichard, 2008). However, leader affective displays have also been shown to influence follower outcomes directly, that is without the occurrence of emotional contagion (Sy, Côté, & Saavedra, 2005; Van Kleef, et al., 2009). As a consequence, we predict that leader affective displays can exert direct and indirect influences on follower outcomes (see Figure 1). A recent review indicated that leader affective displays, among other factors that are related to leader affect, contribute to leadership effectiveness (Rajah, Song, & Arvey, 2011). But how exactly do leader displays of different kinds of affect relate to leadership effectiveness? As mentioned above, leadership effectiveness can be operationalized in quite some different ways. Previous research investigations have not yet separated different operations of leadership effectiveness when studying its relation with leader affect. The research discussed in this dissertation was conducted with the aim to fill this gap by testing how leader affective displays influence different follower outcomes (i.e., affect, performance, decisions, and unethical behaviors). This way, we try to break new grounds in terms of the outcome variables studied and to shed new light on the complex ways in which leader affective displays relate to leadership effectiveness.

Johnson (2008, p. 15) has stated that "The effectiveness of charismatic leaders may depend upon the situations in which they are leading and the types of followers that they are leading". We predict that exactly the

same holds for leader affective displays. The impact of a certain leader affective display may differ across different situations and across different follower characteristics. Most research on leader affective displays has focused mainly on the kind of affect that he leader displays without paying particular attention to the specific follower outcome variables that they measured. As a consequence, research has not focused so much on how leader affective displays influence specific follower outcome variables and different forms of leadership effectiveness. Influences of leader affective displays have not been compared over different outcome variables and this may be one reason why a straightforward answer to the question which leader affective displays are most effective has not been given yet (van Knippenberg, van Knippenberg, Van Kleef, & Damen, 2008). The overall goal of this dissertation is to investigate how different leader affective displays impact different follower outcomes and thereby determine the leader's effectiveness. Leadership effectiveness criteria can be conceptualized in different ways, depending on the target and objectives (DeRue, Nahrgang, Wellman, & Humphrey, 2011).

Figure 1. The main processes that were investigated in this dissertation.
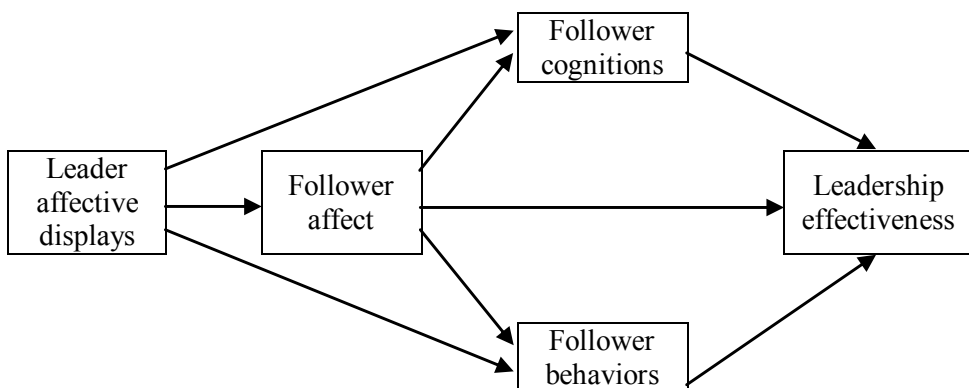
Below I will briefly describe the operationalizations of leadership effectiveness where we have focused on.

Follower performance is a frequently used indicator of leadership effectiveness. It has been argued that a leader's expressions of affect, in combination with managing the followers' affect, is a major way in which leaders influence follower performance (Humphrey, 2002). So far, positive leader affective displays have been found to increase followers' task performance, particularly on creative tasks (Rajah, Song, & Arvey, 2011). Another, and possibly the most frequently used, measure to determine leadership effectiveness is to collect *ratings* where followers indicate how effective they perceive their leader to be. For instance, leader displays of positive affect tend to increase follower ratings of their leader's effectiveness (Bono & Ilies, 2006). Furthermore, as a leader's displays of negative affect were regarded as an appropriate response to a crisis, followers rated this leader more positively (Madera & Smith, 2009). In short, leadership effectiveness is typically understood to be reflected in follower performance outcomes and in perceptions of leadership effectiveness (van Knippenberg, forthcoming). Taking into account the finding that concepts of effectiveness and performance are very broad (Short & Palmer, 2003), there are other outcome variables that can reflect the effectiveness of a leader as well. A first example of such an outcome is *follower decision making,* as an effective leader should prompt followers to make decisions that benefit the organization. The results of a field study have shown that decision making style, in combination with the organization structure, influenced the effectiveness of this organization (Covin, Slevin, & Heeley, 2001). However, despite their relevance for leadership effectiveness, follower decisions seem to be the least explored outcomes in the fields of both leadership and decision making (van Knippenberg, forthcoming).

Affective states have been shown to influence decision making in interpersonal settings (Lerner & Tiedens, 2006), but specific leader affective displays have not been linked to follower decision making yet. Finally, leadership effectiveness can be deducted from follower behaviors that harm or benefit the organization. For instance, *follower unethical behaviors* can harm an organization — financially as well its image. It has been demonstrated that ethical behaviors enhance outcomes that are desired by organizations, like organizational performance (Baker, Hunt, & Andrews, 2006). As a consequence, both business leaders and academics have been trying to understand and improve ethical behaviors of followers (Stenmark & Mumford, 2011). Hence, a leader promoting unethical follower behaviors can be regarded as an ineffective leader while a leader promoting ethical follower behaviors can be regarded as an effective leader. Both positive and negative affective states have been shown to be related to unethical decision making in complex ways (Connelly, Helton-Fauth, & Mumford, 2004). Again, however, these intrapersonal influences have not yet been extended in previous researches to the interpersonal setting were specific leader affective displays impact followers' unethical behaviors.

Summarizing the above, research so far has only tested the effects of leader affect on a few follower outcomes that reflect leadership effectiveness, mainly performance and ratings, while I propose that other follower outcomes can be indicators of leadership effectiveness as well. The central focus of this dissertation was to find out whether and how both positive and negative leader affective displays impact these different follow outcomes. Herewith, we follow a conclusion of a previous investigation that it is as important to study

followers as it is to study leader when investigating leadership processes (Cherulnik et al., 2001).

Overview of the Dissertation

Leader affective displays may have different effects on different follower outcomes, or different indicators of leadership effectiveness. Five empirical studies have been conducted to test ten hypotheses regarding the effects that different leader affective displays exert on followers' affect, performance, decisions, and unethical behaviors.

In chapter 2 I will discuss two experimental studies on the effects of happy versus sad leader displays on follower performance. It will be shown that the effect of leader affective displays on follower performance depends on the kind of task (i.e., analytical or creative) that followers' perform. More specifically, leader happy displays enhance followers' creative performance, whereas leader sad displays enhance followers' analytical performance. One of the studies revealed that leader happiness fosters followers' creative performance through follower happiness. Thus, emotional contagion is the process underlying the effect of leader affective displays on follower performance. Moreover, the results of both studies indicated that a leader displaying happiness is rated as more effective than a leader displaying sadness, independent of the followers' performance. This highlights the importance of differentiating between objective (i.e., performance) and subjective (i.e., ratings) measures of leadership effectiveness.

Chapter 3 will cover the effects of leader affective displays on followers' interteporal decision making. *Intertemporal decisions* are decisions between two outcomes at different points in time (i.e., short-term versus long-term). The results of two empirical investigations showed that a leader with a sad display prompts long-term focused decisions compared to a leader with a

happy, angry or neutral display. As predicted, this effect is mediated by follower sadness, so driven by emotional contagion. A leader displaying sadness increases sadness in the followers which prompts them to make short-term focused decisions. In addition, one of the studies showed that this effect was particularly present for followers who were high on negative trait affect (i.e., inclined to experience negative affect).

Chapter 4 presents one study on the combined effect of leader affective displays and message framing on followers' unethical behaviors. This study revealed that sad leader displays in combination with a pro-self message communicated by the leader yields followers to behave more unethically. Followers' unethical behaviors comprised of (1) cheating behavior, as participants were giving the opportunity to overstate their performance and (2) responses to scenario's describing different unethical conducts. When leaders displayed happiness, anger, or an affective neutral state, followers' unethical behaviors were not influenced differently by the pro-self or the pro-social messages that were communicated by the leader.

In chapter 5 I will present our overall conclusions regarding the effects that different leader affective displays have on followers' affect, cognitions, and behaviors. I will discuss how leader affect relates to leadership effectiveness. In this chapter research on the topics leadership, affect, emotional contagion, decision making and ethical behavior will be integrated. Moreover, new insights and broader implications that can be drawn from all studies together will be discussed.

The studies in chapter 2, 3 and 4 have been conducted in collaboration with several colleagues. Therefore, I speak of "we" instead of "I" within these chapters and when mentioning these researches elsewhere. Moreover, chapter 2, 3 and 4 are separate and independent research conducts. Hence, there may

be overlapping information in those chapters. Nevertheless, all chapters together comprise influences of different affective states displayed by a leader on different follower outcomes that contribute to leadership effectiveness.

CHAPTER 2

HOW LEADER DISPLAYS OF HAPPINESS AND SADNESS INFLUENCE FOLLOWER PERFORMANCE: EMOTIONAL CONTAGION AND CREATIVE VERSUS ANALYTICAL PERFORMANCE[1]

Abstract

Previous studies have found mixed results regarding the influence of positive and negative leader affect on follower performance. We propose that both leader happiness and leader sadness can be beneficial for follower performance contingent on whether the task concerns creative or analytical performance. The results of two experiments supported our hypothesis that a leader's displays of happiness enhance follower creative performance, whereas a leader's displays of sadness enhance follower analytical performance. Additionally, leaders were perceived as more effective when displaying happiness rather than sadness irrespective of task type. Moreover, the effects of leader affective displays on followers' creative performance and perceived leadership effectiveness are mediated by follower positive affect, indicating that emotional contagion partly underlies these effects.

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[1] This Chapter is based on Visser, V.A., van Knippenberg, D., Van Kleef, G.A., & Wisse, B. (2013). How leader displays of happiness and sadness influence follower performance: Emotional contagion and creative versus analytical performance. *The Leadership Quarterly, 24*, 172-188.

Introduction Chapter 2

Inevitably, people in leadership positions display their feelings – facially, vocally, and in more subtle non-verbal communication. Such affective displays may play a role in leadership effectiveness that research has only recently started to address. An important question that emerges from these recent research efforts concerns the contingencies of the effectiveness of leader displays of positive affect (e.g., a team leader in a happy mood) as compared with negative affect (e.g., a team leader in a sad mood). This is the issue that we address in the current study. In doing so, we focus both on the performance effects of leader affective displays and on their influence on subjective perceptions of leadership. We develop the propositions that the creative versus analytical nature of the performance task moderates whether the display of happiness (creative performance) or sadness (analytical performance) is more conducive to follower performance, whereas subjective ratings of leadership effectiveness are more favorable following happy than following sad displays regardless of the nature of the task. We provide experimental evidence for these propositions as well as partial evidence for the hypothesis that these effects are mediated by emotional contagion.

Leadership effectiveness has been a core topic in leadership research (Bass, 2008). Leadership, by definition, implies that a leader influences one or more followers (Yukl & Van Fleet, 1992), and leader affect (i.e., moods and emotions) may be a key issue in understanding how leaders influence their followers and why leaders with equal skills and competences sometimes succeed and sometimes fail (George & Bettenhausen, 1990). The effects of leader affect on their followers are not fully uncovered yet, but critical to understand (Sy, et al., 2005). Humphrey (2002) has argued that a key

leadership function is to manage the affect of followers, and that this is one of the main ways in which leaders influence performance. Thus, affect is a core issue within leadership, but unfortunately also one where our understanding is least developed. The most important criterion for leadership effectiveness is typically understood to be follower performance (Kaiser, Hogan, & Craig, 2008), and our goal in the current study is to contribute to the development of our understanding of the role of affect in leadership effectiveness by zooming in on what arguably is a key issue here: the nature of the task. We advance and test the hypotheses that leader displays of positive versus negative affect influence follower performance differently on creative versus analytical tasks, and that this effect is mediated by emotional contagion.

Previous studies have shown that leader affect influences leadership effectiveness (Bono & Ilies, 2006; Gaddis, Connelly, & Mumford, 2004). However, the specific direction of this influence remains unclear. Both positive and negative leader affect have been shown to increase and decrease leadership effectiveness. We propose that this ambiguity is due to the fact that the effectiveness of leader affective displays is contingent on the kind of task that has to be performed by the followers. Our studies integrate different lines of research, and test relationships that have been unaddressed in previous studies, with the aim to contribute valuable new insights on leader affect and leadership effectiveness to the existing literature. Another aim of the present studies is to test our prediction that, despite being used interchangeably in previous research, objective (i.e., performance) and subjective (i.e., perceptions) leadership effectiveness measures may not correspond in terms of how they are influenced by leader affect.

Leader Affect and Leadership Effectiveness

The term affect is used to describe feeling states that may range from diffuse, long-lasting moods to specific, acute, short-lasting emotions (Frijda, 1994). For a variety of reasons, leaders may experience positive or negative affective states in the workplace. In interactions with their followers, leaders may express their affective states, either consciously or unconsciously, verbally or non-verbally (George, 1995; Humphrey, 2002; Sy, et al., 2005; Damen, Van Knippenberg, & Van Knippenberg, 2008a). Leader affective displays are observable indicators of the leader's affect, and both positive and negative leader affective displays may impact leadership effectiveness. It has been stated that leader affective displays directly impact followers' behaviors and productivity (Dasborough & Ashkanasy, 2002). Empirical evidence showed that a leader's expression of affect influences followers more than the objective content of this leader's message (Newcombe & Ashkanasy, 2002), stressing the major influence of leader affective displays. We can conclude that leader affective displays influence followers in important ways. However, the direction of this influence is not yet fully understood, and a clear answer to the question whether leader displays of positive or negative affect are more effective cannot be given.

Several studies showed that leader displays of positive affect increase leadership effectiveness. For instance, leaders were perceived as more effective by their followers when they made eye contact and displayed vocal fluency, gestures, and smiles (i.e., displayed positive affect) while giving a speech compared to leaders who avoided eye contact, gestures, vocal fluency, and smiles (Awamleh & Gardner, 1999). Other studies on leader affect specifically showed that leader displays of positive affect result in higher

follower ratings of leadership effectiveness (Bono & Ilies, 2006; Gaddis et al., 2004), higher ratings of leader attractiveness, and more positive follower affect (Bono & Ilies, 2006). Moreover, leader positive affect has been shown to increase group performance (Gaddis et al., 2004; George, 1995). Likewise, negative leader affective displays have been shown to decrease both follower assessments of their leader's effectiveness (Lewis, 2000) and follower performance (Johnson, 2009).

However, some studies have indicated that both leader positive and leader negative affective states can be good or bad depending on the situation. For instance, a study by Newcombe and Ashkanasy (2002) showed that ratings of leader negotiation latitude (i.e., an indication of the followers' relationship with their leader) were contingent on the interaction of the valence of feedback and the valence of leader affect. Followers rated the relationship with their leader most positively when their leader displayed positive affect accompanied by positive feedback, but most negatively when their leader displayed positive affect accompanied by negative feedback. Thus, leader positive affect does not necessarily increase leadership effectiveness, and may even decrease it. Another study showed that the effects of leader positive and negative affective displays on follower team performance depend on people's epistemic motivation (i.e., a desire to develop a thorough understanding of the situation; Van Kleef et al., 2009). Teams with high epistemic motivation performed better on a command-and-control task when their leader had expressed anger (because the anger made them realize that their performance could be improved), whereas teams with low epistemic motivation performed better when their leader had expressed happiness (because they liked a happy leader better than an angry leader).

These studies suggest that instead of asking whether leader displays of positive or negative affect are more effective, a more appropriate question would be in what circumstances leader displays of positive or negative affect are more effective (George, 2011). Some variables have already been identified as moderators of the relationship between leader affect and leadership effectiveness, as indicated above. However, an important moderator, and arguably the most fundamental, has been overlooked so far in research on leadership affect: the role of the task performed.

Task Types

Follower performance has been brought forward as the most important indicator of leadership effectiveness (e.g., Kaiser et al., 2008) and serves as a relevant output for an organization because performance of an employee adds to the overall performance and functioning of the organization. Performance is conditional upon the kind of task that has to be performed. For instance, a financial controller performs best when being analytical and attentive to details, whereas an art director performs best when being creative and innovative. As a consequence, the effects of affect on performance depend upon the task demands (Weiss & Cropanzano, 1996). Surprisingly, despite the fundamental importance of performance and affect for organizational functioning, no previous studies have investigated the effects of leader affective displays on performance comparing different types of tasks. One previous study found that leader positive affect increased group coordination on a tent-building task, while leader negative affect increased group effort on the same task (Sy et al., 2005), suggesting that both positive and negative leader affect can be beneficial for different aspects of a task. However, these authors did not find an effect of leader affect on follower performance, nor

explicitly compare the effects of leader affective displays across different types of tasks.

The purpose of the current studies is to shed new light on the relationship between leader affect and leadership effectiveness by looking at the role of the kind of task that is performed. We tested whether positive versus negative leader affective displays can foster or impede follower performance depending on the kind of task. If the same leader affective display has different effects for different task types, this could represent a significant contribution to the currently available knowledge about leader affect and leadership effectiveness.

The Role of Emotional Contagion

According to socio-functional accounts of emotion, the affective system evolved in part to provide information to observers that may subsequently influence their behavior (Darwin, 1872; Keltner & Haidt, 1999; Van Kleef, 2009). A recent review of the emotion literature revealed that such influence often comes about via processes of emotional contagion, especially in predominantly cooperative contexts (Van Kleef, De Dreu, & Manstead, 2010). Emotional contagion is the process whereby people automatically mimic and synchronize facial expressions, movements, and vocalizations with others they observe, and thereby converge emotionally (Hatfield et al., 1994). Emotional contagion also prevails within organizational contexts, as indicated by an integrated interpersonal process framework for emotion in organization (Elfenbein, 2007). The emotion process starts with exposure to a stimulus, registration and experience of an affective state. This affective state influences attitudes, behaviors, and cognitions, but also facial expressions. This is when emotional contagion takes place, because these facial expressions become the

stimulus for observers. By means of the process of emotional contagion, a follower can experience a similar affective state as displayed by the leader he or she is observing (Strack, Martin, & Stepper, 1988). As stated by Elfenbein (2007, p. 6): "We care about leaders' emotional expressions because followers interpret these expressions as important stimuli". Several empirical studies have shown that leader affect can be contagious. Participants who were exposed to a leader expressing positive affect were in a more positive mood afterwards than participants who were exposed to a leader expressing negative affect (Bono & Ilies, 2006; Sy et al., 2005; Van Kleef et al. 2009). Furthermore, in one study group affective tone mediated the association between leader affect and group coordination (Sy et al., 2005), suggesting that emotional contagion can have consequences for follower behavior. Indeed, leader-to-follower emotional contagion has been shown to impact followers' affect, attitudes and behaviors (Johnson, 2009).

Affect and Task Performance

People's affective states can directly impact their attitudes and behaviors, including performance, as predicted and widely shown by studies on, for example, affective events theory (AET; Weiss & Cropanzano, 1996) or the affect infusion model (AIM; Forgas, 1995). We mentioned earlier that performance is dependent on the type of task to be performed. Likewise, the type of task to be performed may determine in which way affect influences performance. As a result, neither positive nor negative affect inherently benefits or hinders performance (Forgas, 2000). We define a creative task as a task that requires divergent thinking (i.e., producing something with the freedom to change the direction of thinking) and we define an analytical task

as a task that requires convergent thinking (i.e., thinking is channeled by available information and towards an end result; Guilford, 1956).

According to the broaden-and-build theory positive affect broadens people's thoughts and actions (Fredrickson, 1998; 2001), whereas negative affect narrows people's thoughts and actions. Positive affect signals safety and allows exploration (Fiedler, 1988). Therefore, people in a positive affective state broaden their thought-action repertoires (Fredrickson & Branigan, 2005) which may benefit their creative or inductive thinking. Negative affect signals threat and requires focus and careful assessment (Fiedler, 1988). The most adaptive response in that case is narrowing one's thought-action repertoire, which may benefit analytical thinking and close attention to stimulus details. Moreover, the impact of affect on one's thinking style depends on the context (Hunsinger, Isbell, & Clore, 2012), and different task types can be regarded as different contexts. A creative task requires global processing, which is enhanced by positive affect, whereas an analytical task requires attention to details, which is enhanced by negative affect. The influence of affect on task performance has mainly been studied at the interpersonal level. Research has indeed shown that individuals' experience of positive affect is associated with more creativity[2] (Amabile, Barsade, Mueller, & Staw, 2005; Ashby, Isen, & Turken, 1999; Isen, 2004; Baas, De Dreu, & Nijstad, 2008; Davis, 2009), primarily positive affect associated with a high activation level (De Dreu, Baas, & Nijstad, 2008). We can therefore expect that people who experience

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[2] George and Zhou (2002) found that negative mood may increase creativity in specific circumstances. When employees perceive that creative performance is both recognized and rewarded in an organization and when their clarity of feelings is high, negative mood increased creativity. Positive mood increased creativity when recognition and rewards were high and clarity of feelings was low, and when recognition and rewards were low and clarity of feelings was high.

positive affect perform better on creative tasks. On the other hand, negative affect has been shown to be associated with an analytical mode of information processing that is characterized by considerable attention to detail and careful and logical analysis of the available information (Forgas, 1998; Forgas, Laham, & Vargas, 2005; Schwarz & Bless, 1991). We can therefore expect that people who experience negative affect perform better on analytical tasks.

The Present Research and Hypotheses

The review presented in the previous sections shows that (1) a leader's affect can influence the followers' affect, and (2) one's affective state influences one's performance. However, those conclusions were drawn within different lines of research: the first by research on leadership and emotional contagion and the second by research on the intrapersonal effects of affect on behavior. Because leader affect can alter follower affect and follower affect can alter follower performance, it would be worthwhile to investigate whether leader affect can alter follower performance through follower affect. Previous studies do not provide us with an answer to this question and implications cannot substitute for evidence. Integrating the separate lines of research on affective influences on performance on the one hand and on leader affect and contagion on the other hand, we propose that a leader's affective display can influence followers' performance through followers' affect, with positive affective displays benefitting creative performance and negative affective displays benefitting analytical performance.

For several reasons we were interested in leader displays of happiness as positive affect and leader displays of sadness as negative affect. Happiness and sadness are universal basic emotions, also called core affect (Russell & Barrett, 1999), that are easily recognized across situations and cultures.

Moreover, both happiness and sadness are relatively frequently experienced affective states, and therefore expected to also be regularly experienced by leaders in the workplace. Furthermore, following affect circumplex models (Russell, 1980; Russell & Barrett, 1999) that capture similarities and differences between affective states along valence and arousal dimensions, happiness and sadness can be understood as involving similar levels of arousal but clearly opposing valence. Happiness and sadness are also frequently studied in earlier research on affective influences on performance, associating happiness with creative and sadness with analytical performance (e.g., Forgas, 2000; Schwarz & Bless, 1991). The focus on these emotions thus also provides a clear bridge with the work from which we draw and a strong basis for predictions regarding their performance effects.

For leader displays of happiness and sadness, then, we advance the following hypotheses:

Hypothesis 1.1.a: Followers with a leader displaying happiness perform better on a creative task than on an analytical task.

Hypothesis 1.1.b: Followers with a leader displaying sadness perform better on an analytical task than on a creative task.

Objective versus Subjective Leadership Effectiveness

As can be understood from Hypotheses 1.1.a and 1.1.b, we look at follower performance as an indicator of leadership effectiveness. In leadership effectiveness research, it is important to distinguish between subjective ratings of leadership effectiveness and follower performance as indicator of leadership effectiveness (Kaiser et al., 2008; van Knippenberg , 2012).

Leadership categorization theory (Lord, Foti, & De Vader, 1984) and implicit leadership theories (Offerman, Kennedy, & Wirtz, 1994) rely mainly

on how leaders are perceived to determine the effectiveness of a leader. Studies on implicit leadership theories indicate that responses to leadership may be biased by implicitly held beliefs about leadership (Eden & Leviatan, 1975; Lord & Maher, 1991). Even though performance has been brought forward as the most appropriate way to define and evaluate leadership effectiveness, only a minority of the previous studies on leadership effectiveness used performance as a measure (Hogan & Kaiser, 2005). Reliance on how leaders are rated may lead to biased conclusions (Kaiser et al., 2008), and we suggest that this may also be the case for research on leader affective displays. Therefore, a secondary goal of our investigation was to compare the effects of leader affective displays on subjective and objective indices of leader effectiveness. Previous research has been lacking comparing both outcomes within studies, thereby leaving us uncertain about whether leader affective displays influence follower performance and follower ratings of their leader in the same way. A meta-analysis of studies on leadership effectiveness (DeRue, Nahrgang, Wellman, & Humphrey, 2011) did show that different leader traits and behaviors enhanced different kinds of leadership effectiveness. Task-related leader traits and behavior were found to be positively related to follower performance. On the other hand, affective and relational leader traits and behaviors were found to be positively related to affective and relational dimensions of leadership effectiveness. In short, it is important to distinguish between different kinds of leadership effectiveness, and therefore we will measure both objective and subjective leadership effectiveness.

Previous studies have reported that leader displays of positive affect result in higher effectiveness ratings by followers than displays of neutral or

negative affect (Bono & Ilies, 2006; Damen, Van Knippenberg, & Van Knippenberg, 2008b). One possible interpretation of these observations is that positive affective displays by leaders indeed increase their effectiveness. Another possible interpretation is that ratings of effectiveness do not reflect actual (i.e., objective) leader effectiveness but instead are a direct response to how followers feel as a result of their leader's affective display, independent of their performance (see Van Kleef et al., 2009). In other words, followers may use their own affect as a cue to determine how they feel about their leader's effectiveness (i.e., an affect-as-information effect; Schwarz & Clore, 1983). If this were true, then we should find that followers provide more favorable ratings of happy leaders than of sad leaders, regardless of their actual performance. Hence we propose:

Hypothesis 1.2: Followers perceive a leader displaying happiness as more effective than a leader displaying sadness.

In short, we predict that leader affective displays yield different outcomes for objective performance measures (Hypotheses 1.1.a and 1.1.b) and subjective ratings (Hypothesis 1.2) as indicators of leadership effectiveness.

Study 1

We tested our hypotheses with an experiment. For the purposes of this study a controlled surrounding was necessary to allow for the causal conclusions required to support the hypotheses (Bono & Ilies, 2006; Damen et al., 2008a; De Cremer, van Knippenberg, van Knippenberg, Mullenders, & Stinglhamber, 2005; van Knippenberg & van Knippenberg, 2005). Second, to confirm or disprove our predictions it is crucial to measure an effect of leader affective displays only, independent of other variables that could covary with

these displays. It would be extremely difficult to measure the influence of one discrete affective display in survey research, which makes an experiment particularly suited in our case (Glomb & Hulin, 1997; Lewis, 2000; Ting Fong, 2006; Van Kleef, et al., 2009). In field settings many different variables interplay to influence follower performance and leadership effectiveness ratings, which makes it impossible to know the magnitude of the influence of the leader's affective display. Moreover, in a field setting it would not be possible to manipulate different affective displays expressed by the same leader, which is necessary to separate leader affective displays from other leader characteristics that might be of influence. Previous experimental leadership research has successfully used actors to manipulate affective displays, and this created optimal experimental control (Bono & Ilies, 2006; Lewis, 2000; Tiedens, 2001; Van Kleef, et al., 2009). Therefore, our leader was videotaped in advance to guarantee identical affective displays and verbal content for all the participants (Lewis, 2000).

Method Study 1

Participants and design. Our study was conducted at a major business school in the Netherlands and completed by 122 students (81 women and 41 men, age $M = 20.3$ years, $SD = 1.6$). Participation was rewarded with course credit for students of certain courses, and with a monetary reward of €7.50 (approximately USD 11) for other students.

The study had a two-factor within subjects design (Keppel & Wickens, 1994) with leader affective display (happy vs. sad) as the between subjects factor and task type (creative vs. analytical) as the within-subjects factor. Participants were randomly assigned to one of the two leader affect conditions. The order of the creative and analytical tasks was counterbalanced.

Procedure. Upon arrival at the laboratory, the participants were seated in individual cubicles with a PC. They were told that the study was about leadership and one-way communication through electronic devices (see Van Kleef et al., 2009). It was explained that they would be assigned a leader who is a manager at an international trading organization and at the university for an Executive Development Workshop. The participants were told that their leader was positioned in another room, and would give task instructions to all participants at the same time via a webcam. They were going to see and hear their leader several times, but their leader would not be able to see or hear them, so there was one-way communication. In reality, the leader was a professional actor (30 year old, white, male), who was not aware of the purpose of the study. This "double blind" design, where neither the leader nor the participants were aware of the purpose of the study, prevents that such knowledge may change any responses. A close up of the leader's face was filmed. In both leader affect conditions the leader used exactly the same words when instructing the participants and did not refer to his feelings. Leader affect was displayed non-verbally by means of facial expressions and vocal intonation. The happy leader (see Figure 2) had the corners of the mouth up, smiled frequently, looked cheerful, and spoke with an enthusiastic, upbeat tone of voice. The sad leader (see Figure 3) had the corners of the mouth down, glum frequently, looked depressed, and spoke in a quiet pleading tone of voice (see also Lewis, 2000; Van Kleef et al., 2009). The leader first introduced himself to the participants and subsequently gave instructions for the first task, advised on how to conduct the task, and encouraged the participants to perform well. Then, connection with the leader was terminated, and participants individually conducted the first task. The creative task was an idea generation,

or alternate uses, task (Guilford, 1967; Paulus & Huei-Chuan, 2000) because this task requires divergent thinking. Participants were asked to write down as many different things as possible that you can do with a glass of water. The analytical task was a Sudoku, or number place, puzzle (Klep, Wisse, & Van der Flier, 2011) because this task required convergent thinking. This puzzle consists of a 9 x 9 grid of which every row, column, and 3 x 3 subgrid needs to contain a numerical digit from 1 to 9 exactly once. Twenty-seven cells already contained a digit, and by reasoning the empty cells could be filled out. The participants were asked to fill out as many correct answers as possible. After the participants had completed the first task, their leader gave instructions, advice, and encouragement regarding the second task. Subsequently, connection with the leader was ended and the participants conducted the second task.

After completion of the second task, perceived leader happiness and sadness were measured with one item each (Larsen, McGraw, & Cacioppo, 2001). The participants indicated how happy they thought their leader was and how sad they thought their leader was, on a 7-point scale (1 = *not at all*, 7 = *very much*). Furthermore, we measured perceived leadership effectiveness (van Knippenberg & van Knippenberg, 2005) with five items (α = .94), including "This leader is a good leader" and "The leader leads in a way that motivates people" (1 = *completely disagree*, 7 = *completely agree*). Finally, the participants were debriefed, thanked, and paid.

Figure 2. A screenshot of the leader displaying happiness (Study 1).

Figure 3. A screenshot of the leader displaying sadness (Study 1).

Dependent Measures. During the instructions of both tasks, the leader told the participants that it only mattered how well they would do (i.e., quality of performance), and not how much they would do (i.e., quantity of performance). This was to guarantee that all participants would use the same approach when conducting the tasks, thereby preventing that some participants would focus on quality while others would focus on quantity, which could blur the results.

Creative task score. The most commonly used objective measure of creative performance that is in line with our leader's instructions stressing the

quality of performance is originality, or unusualness, of the generated ideas (De Dreu et al., 2008; Isen, Johnson, Mertz, & Robinson, 1985; Pilar Matud, Rodríguez, & Grande, 2007). Two independent raters counted the frequencies of all generated ideas by all participants (ICC[1] = .99, p < .001). These frequencies were recoded (i.e., reversed), so that a higher score reflected greater originality. Subsequently, every idea of every participant was assigned the corresponding reversed frequency and these were added up. This resulted in a total originality score for all ideas of every participant. These originality scores were not normally distributed, but skewed to the left (skewness = .74), which was substantially decreased by a log-transformation (skewness = -.33). The total originality scores of every participant were divided by the number of ideas a participant generated. Originality scores were standardized using z-scores to enable meaningful comparison with scores on the analytical task.

Analytical task score. The analytical score was the proportion of correct entries relative to all entries, which is in line with the leader's instructions stressing the quality of performance. This proportion generates a higher score for people who try to fill out numbers correctly than for people who fill out as many numbers as possible and thereby fill our more correct numbers by chance. The analytical task score was computed by dividing the number of correct answers by the total number of answers, and standardized using z-scores to facilitate comparison with the creativity score.

Results Study 1

Manipulation check. Univariate analyses of variance (ANOVA) showed that leader affective displays influenced the participants' ratings of how happy, $F_{(1, 120)}$ = 908.46, p < .001, η^2 = .88, and sad, $F_{(1, 120)}$ = 657.82, p < .001, η^2 = .85 their leader was. The leader displaying happiness (*M* = 6.02, *SD*

= 1.02) was rated as happier than the leader displaying sadness (M = 1.30, SD = 0.67), and the leader displaying sadness (M = 5.85, SD = 1.26) was rated as sadder than the leader displaying happiness (M = 1.31, SD = 0.59). Thus, the leader affective displays were manipulated successfully.

Task performance. A summary of the results is presented in Table 1. A repeated-measures ANOVA with the followers' creative and analytical performances as the within-subject factor and leader affective displays as the between-subject factor yielded a significant interaction between leader affective displays and follower performance (see Figure 4). No other effects were found. Pairwise comparisons showed that participants scored higher on the creative task than on the analytical task when their leader displayed happiness. Additionally, participants scored higher on the analytical task than on the creative task when their leader displayed sadness.

Perceived leadership effectiveness. ANOVA showed that leader affective displays influenced followers' perceived leadership effectiveness. Participants with a leader who displayed happiness perceived their leader as more effective than participants with a leader who displayed sadness (see Table 1).

Table 1. Results of the main and interaction effects of leader affective displays on follower performance and perceived leadership effectiveness (Study 1).

	$F_{(1,120)}$	p	η^2
Leader Affect x Follower Performance	8.11	.005	.063
Rated Leadership Effectiveness	114.44	<.001	.49

	Happy Leader Display		Sad Leader Display	
	M	SD	M	SD
Follower Analytical Performance	-0.22	1.24	0.23	0.59
Follower Creative Performance	0.11	1.02	-.11	0.97
Rated Leadership Effectiveness	4.26	1.32	2.10	0.87
	$F_{(1,120)}$	p	η^2	$F_{(1,120)}$	p	η^2
Analytical versus creative performance	3.99	.048	.032	4.12	.045	.033

Figure 4. **Followers' analytical and creative performance as a function of the leader's displays of happiness or sadness (Study 1).**
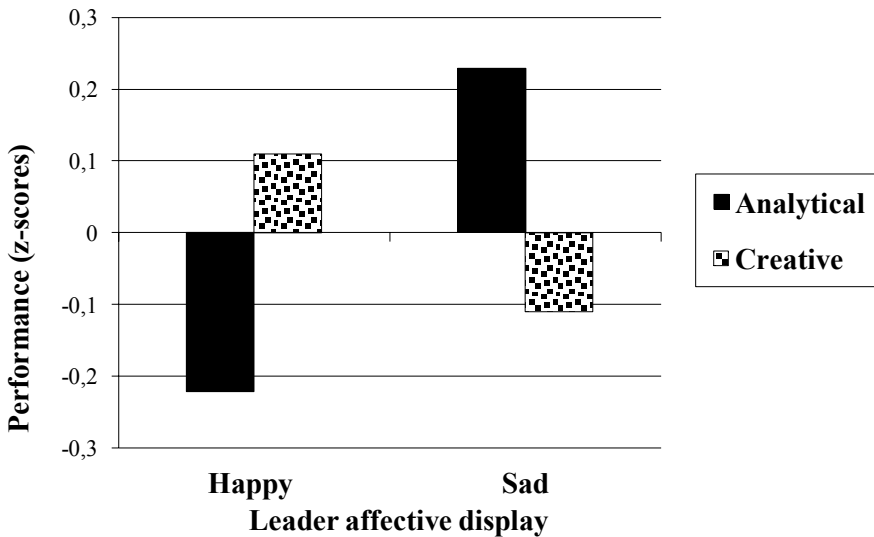
Discussion Study 1

The results confirmed our prediction that a leader's happy displays enhance followers' creative performance compared to their analytical performance, while a leader's sad displays enhance followers' analytical performance compared to their creative performance. Thus, both leader happy and sad displays can benefit follower performance, depending on the type of task that needs to be performed. Moreover, our prediction that followers perceive a leader displaying happiness as more effective than a leader displaying sadness was confirmed. This indicates that objective (i.e.,

performance) and subjective (i.e., ratings) measures of leadership effectiveness do not refer to the same construct.

The results of Study 1 are informative regarding the relationship between leader affective displays and leadership effectiveness. However, before drawing firm conclusions, we considered a follow-up study useful for several reasons. First, we wanted to replicate the results with a slightly different design, a different leader, a different creative measure, and a different analytical measure. A replication of the results within this different setting would demonstrate that the effects shown in Study 1 are not limited to the specific creative and analytical tasks or the specific leader that we used. Instead, the effects should generalize to other kinds of creative and analytical measures, as well as to other leaders. Moreover, in Study 1 the leader emphasized that quality of performance was most important, so that all participants would conduct the tasks using the same approach. In Study 2 the leader will emphasize that both quality and quantity of performance are important to do well on the task, to demonstrate that the results of Study 1 are not contingent on specific task instructions or approaches. Second, a limitation of Study 1 is that leader happiness and leader sadness were measured with a single item measure. Therefore, we will use scales to measure leader affect in Study 2 so that we are able to assess the internal consistency of this measure. Third, we will add an affectively neutral control condition to be able to specify the effects of leader affective displays on follower performance and on perceived leadership effectiveness. Fourth, we want to test directly whether follower affect mediates the effects of leader affective displays on creative and analytical performance, as suggested by our theoretical model.

Study 2

In Study 2 we set out to replicate the results of Study 1 regarding the effects of leader displays of happiness and sadness on follower creative versus analytical performance (Hypotheses 1.1.a and 1.1.b) and on perceived leadership effectiveness (Hypothesis 1.2). We predicted that leader affective displays influence both follower performance and leadership effectiveness ratings through follower affect (i.e., emotional contagion). In line with previous research at the intrapersonal level, we expect follower positive affect to enhance creative performance (e.g., Baas et al., 2008), but not analytical performance. Moreover, we expect follower negative affect to enhance analytical performance (e.g., Schwarz & Bless, 1991), but not creative performance.

Hypothesis 2.1: The effect of leader affective displays on followers' creative performance is mediated by follower positive affect, and the effect of leader affective displays on followers' analytical performance is mediated by follower negative affect.

We thus expect follower affect to influence performance by altering cognitive processes that are conducive to creative versus analytical performance (Baas et al., 2008; Forgas et al., 2005; Schwarz & Bless, 1991), but we expect follower affect to influence leadership effectiveness ratings through affect-as-information (Schwarz & Clore, 1983). When followers use their affect as information, their leader ratings are based on how their leader makes them feel. That way, a more positive [negative] leader affective display makes followers feel more positive [negative] and the more positive [negative] followers feel because of their leader the more [less] effective they perceive this leader to be.

Hypothesis 2.2: The effect of leader affective displays on followers' perceived leadership effectiveness is mediated by follower affect.

Method Study 2

Participants and design. The study was completed by 161 students from a major business school in the Netherlands (100 male, 61 female, age *M* = 20.04, *SD* = 1.45). The study had a 3 (leader affective display: happy, sad, or neutral) x 2 (task: creative or analytical) between-subjects design. Participants were randomly assigned to one of the six conditions. Completing the study was rewarded with €10 (approximately USD 15).

Procedure. The procedure was largely identical to Study 1, with another actor (28 year old, white, male; See Figures 5 and 6) as the participants' leader, and different tasks and task instructions. The participants were told that both quality and quantity of performance were important to perform well. Furthermore, a neutral leader display control condition was added, in which the leader had an affectively neutral facial expression and tone of voice (see Figure 7). Moreover, leader affect was measured with scales instead of single item measures. Both leader and follower affect were measured with items that ranged from 1 = *not [affective state]* to 7 = *extremely [affective state]*. Leader happiness was measured with four items (i.e., "how happy/joyful/glad/elated was your leader; α = .98) that were averaged into a single index, as was leader sadness (i.e., "how sad/sorrowful/gloomy/ downhearted was your leader; α = .96). Follower affect was measured by combining process (van Kleef et al., 2009) and outcome (Anderson, Keltner, & John, 2003) measures of emotional contagion that have been used in previous studies. Follower happiness (i.e., "the past 30 minutes I felt happy/glad; the leader made me feel happy/glad; α = .79) was measured with four items that

were averaged into a single index, as was follower sadness (i.e., "the past 30 minutes I felt sad/sorrowful; the leader made me feel sad/sorrowful; α = .83).

Figure 5. A screenshot of the leader displaying happiness (Study 2).

Figure 6. A screenshot of the leader displaying sadness (Study 2).

Figure 7. A screenshot of the leader displaying an affective neutral state (Study 2).

Stimulus materials.

      Creative task. The creative task was a drawing task, called "making objects" (Guilford, 1967). The participants were asked to draw objects that only consist of circles, triangles and/or rectangles. This process of creating objects out of the different figures requires divergent thinking. Participants were asked to draw as many different objects as possible, and to write the name of each object they drew underneath it. The instructions of the leader allowed for both quality and quantity measures of creative performance, and we chose four measures that have been used frequently in creativity research using idea generation tasks (e.g., Amabile, 1983; Baas et al., 2008; De Dreu, Baas, & Nijstad, 2008; Guilford, 1967; Torrance, 1966). The first creativity measure component is *fluency*, meaning the number of unique ideas that have been generated. The more ideas someone generates (i.e., the more objects drawn out of circles, rectangles, and triangles) the more creative this person is regarded. The fluency score was the number of unique drawings for every participant, counted by two independent coders (Cohen's kappa = .88; differences were resolved by discussion). The second creativity measure component is *originality,* meaning the infrequency or unusualness of the ideas, which reflects creativity. Originality score was computed in the same way as the creative performance measure in Study 1 (ICC[1] = .99). The third creativity measure component is *flexibility*, reflecting people's flexibility in using different cognitive categories. Someone who draws ideas out of different cognitive categories (e.g., a table, a bird, and a bicycle) is regarded as more creative than someone who draws ideas out of the same cognitive category (e.g., a table, a chair, and a couch). All drawings of all participants could be classified into 23 categories (e.g., furniture, animals, vehicles) and someone's

flexibility score was the number of different categories this participant had used (Cohen's kappa = .89). The fourth creativity measure component is *elaboration*, or complexity of the generated ideas. For instance, a house drawn as a square with a triangle on top can be regarded as a less creative drawing than a house drawn in 3D perspective, with windows, doors, a chimney, curtains, etc. Elaboration score was the total number of figures (i.e., rectangles, circles and triangles) drawn by a participant (ICC[1] = .99). We created a combined measure of all creativity components to be able to compare the creative and analytical task scores within the analyses. Participants' total creative performance scores were their averaged standardized z-scores of fluency, originality, flexibility, and elaboration. A higher score reflected more creativity.

Analytical task. The analytical task was a letter cancelation task called "d2 Mental Concentration task" (Brickenkamp, 1981). The computer version of this task (Stam, van Knippenberg, & Wisse, 2010) consists of a row of 42 symbols on the screen. There were six different symbols: ds and ps, with one, two or no apostrophes above them. Participants were asked to click only on the ds with two apostrophes, and to not click on the other five symbols. This process of finding specific symbols out of different kinds of symbols requires convergent thinking. Fifteen rows were displayed on the screen for 6 seconds each, with 6 seconds of rest in between them. Participants were asked to click on as many correct symbols as possible and to not click on any other symbols. The number of correct clicks was divided by the total number of clicked symbols, and then standardized using z-scores. This way, a higher analytical task score reflected more hits (i.e., correct clicks) and/or less false alarms (i.e., incorrect clicks), thus reflecting better analytical performance.

Results Study 2

  Manipulation check. ANOVA yielded an effect of leader affective displays on perceived leader happiness, $F_{(2,158)} = 561.08$, $p < .001$, $\eta^2 = .88$. Participants rated a leader who displayed happiness ($M = 6.03$, $SD = 0.73$) as happier than a leader who displayed sadness ($M = 1.25$, $SD = 0.40$), $t_{(158)} = 32.21$, $p < .001$, or had a neutral display ($M = 2.45$, $SD = 1.05$, $t_{(158)} = 24.02$, $p < .001$), $t_{(158)} = 24.02$, $p < .001$. ANOVA also yielded an effect of leader affective displays on perceived leader sadness, $F_{(2,158)} = 334.89$, $p < .001$, $\eta^2 = .81$. Participants rated a leader who displayed sadness ($M = 6.38$, $SD = 0.69$) as sadder than a leader who displayed happiness ($M = 1.50$, $SD = 0.76$), $t_{(158)} = 25.82$, $p < .001$, or had a neutral display ($M = 3.66$, $SD = 1.36$), $t_{(158)} = 14.36$, $p < .001$.

  Task performance. An overview of the results is depicted in Table 2. ANOVA yielded a significant interaction of leader affective display x task type on performance (see Figure 8). No other effects were found, and pairwise comparisons confirmed our predictions. Participants scored higher on the creative than on the analytical task when their leader displayed happiness. Furthermore, participants scored higher on the analytical than on the creative task when their leader displayed sadness. Participants' creative and analytical scores did not differ within the neutral leader display condition.

  Perceived leadership effectiveness. ANOVA yielded a significant effect of leader affective displays on perceived leadership effectiveness. Participants with a happy leader rated their leader as most effective, followed by participants with a neutral leader, and participants with a sad leader rated their leader as least effective. In line with our hypothesis, a leader with a happy display was perceived as more effective than a leader with a sad, $t_{(158)} = 8.27$, p

Table 2. Results of the main and interaction effects of leader affective displays on follower performance and perceived leadership effectiveness (Study 2).

	$F_{(2,155)}$	p	η^2
Leader Affect x Follower Performance	5.65	.004	.068

	$F_{(2,158)}$	p	η^2
Rated Leadership Effectiveness	35.05	<.001	.31

	Happy Leader Display		Sad Leader Display		Neutral Leader Display	
	M	SD	M	SD	M	SD
Follower Analytical Performance	-0.39	1.27	0.34	0.49	0.02	0.97
Follower Creative Performance	0.14	0.44	-.11	0.34	0.01	0.42
Rated Leadership Effectiveness	3.09	1.52	1.33	0.46	2.45	1.06

	$F_{(1,155)}$	p	η^2	$F_{(1,155)}$	p	η^2	$F_{(1,155)}$	p	η^2
Analytical versus creative performance	6.62	.011	.041	4.75	.032	.029	0.01	.93	<.001

< .001, or a neutral display, $t_{(158)}$ = 2.96, p = .004. Moreover, a leader with a neutral display was perceived as more effective than a leader with a sad display, $t_{(158)}$ = 5,26, p < .001.

Figure 8. Followers' analytical or creative performance as a function of the leader's happy, sad, or neutral displays (Study 2).
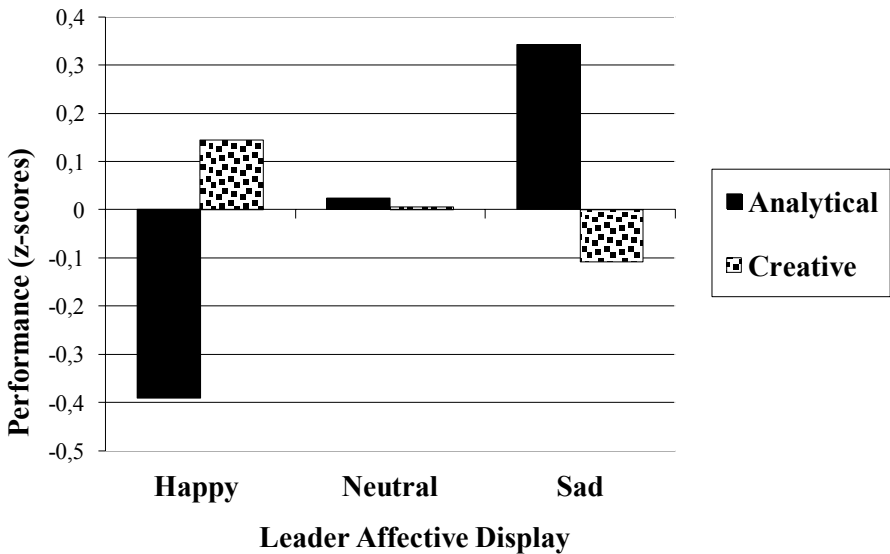
Mediation by follower affect.

     Follower performance. The effect of leader affective displays on follower performance is moderated by the task type. Therefore, to test whether this effect is mediated by follower affect, we are testing a moderated mediation model (see Figure 9). The most recent recommendation to test moderated mediation models is to compute the direct, indirect, and total effect across different levels of the moderator variable (Edwards & Lambert, 2007;

Preacher, Rucker, & Hayes, 2007). Moreover, recent advancements have resulted in the advice to test indirect effects with a bootstrapping procedure, because bootstrapping does not require assumptions regarding the underlying sampling distribution (Shrout & Bolger, 2002; Preacher & Hayes, 2004). Bootstrapping is a non-parametric test, which estimates the sampling distribution of the indirect effect and randomly samples observations with replacement from the data-set to create a larger sample from the original data. Our independent variable (i.e., leader affective displays) of three levels (i.e., happy, sad, and neutral) was dummy coded.

Figure 9. The moderated mediation model, depicting the indirect effect of leader affective displays on follower performance through follower affect.
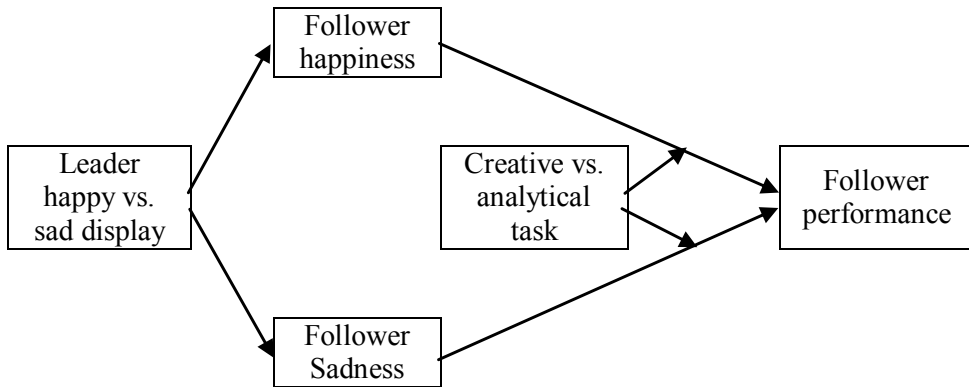
To conduct bootstrapping analyses, we used the SPSS modmed macro provided by Preacher, Curran, and Bauer (2003) on their website. The moderated mediation results for the two analyses with follower happiness as a mediator are shown in Table 3. As can be seen in the mediator variable model results, a happy leader display yields significantly happier follower affective

states than a sad or a neutral leader display. Second, the dependent variable model shows a significant follower happiness x task type interaction on follower performance. Third, the conditional indirect effects show moderated mediation in the creative task condition, but not in the analytical task condition. In short, a happy compared to a sad or a neutral leader affective display increases followers' happy affective states, which in turn increases followers' creative performance. Moderated mediation analyses with follower sadness as a mediator did not yield significant indirect effects.[3]

Rated leadership effectiveness. To test whether the effect of leader affective displays on leadership effectiveness is mediated by follower affect, we have a so called simple mediation model (Baron & Kenny, 1986). Bootstrapping has been demonstrated to be the most powerful and reasonable method to test specific indirect effects (Preacher & Hayes, 2008). To be able to include our dummy-coded independent variable in the analysis we tested our model using the SPSS multmed macro provided by Preacher et al. (2003) on their website. The results are shown in Table 4. As can be seen in the IV to mediator parts, followers with a happy leader felt happier than followers with a sad or neutral leader, and followers with a sad leader felt sadder than followers with a happy or neutral leader. Moreover, the mediator to DV part shows that follower happiness increased followers' leadership effectiveness ratings, while follower sadness did not influence followers' leadership effectiveness ratings.

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[3] The moderated mediation macro does not allow for two mediators in the analysis. Follower happiness and follower sadness were negatively correlated ($r = -.43$, $p < .001$) and when averaged into one single index (after recoding the sadness items; $\alpha = .83$) we found a similar pattern of results. Moderated mediation analysis with the single index of follower affect as a mediator yielded a significant indirect effect in the creative task condition ($p = .04$ for the sad vs. happy contrast and $p = .05$ for the neutral vs. happy contrast), but not in the analytical task condition. Further details about this analysis can be obtained from the author.

Table 3. Conditional indirect effects of leader affective displays on follower performance through follower happiness.

Leader Displays	Sad versus happy				Neutral versus happy			
	Coeff	*SE*	*t*$_{(160)}$	*p*	*Coeff*	*SE*	*t*$_{(160)}$	*p*
Mediator Variable Model								
Leader display	-1.41	.20	-6.98	<.0001	-0.81	.20	-3.98	.0001
Dependent Variable Model								
Leader display	0.30	.17	1.78	.08	0.15	.16	0.97	.33
Follower happiness	-0.09	.08	-1.22	.22				
Task	-0.72	.37	-1.95	.05				
Follower happiness x task	0.22	.10	2.13	.03				
Conditional Indirect Effects	*Indirect effect*	*SE*	*z*	*p*	*Indirect effect*	*SE*	*z*	*p*
Performance								
Analytical	.13	.16	0.84	.40	.07	.09	0.82	.41
Creative	-.18	.09	-2.08	.04	-.10	.05	-1.92	.05

Table 4. Test of conditional indirect effects of leader display on rated leadership effectiveness through follower affect.

Leader displays	sad versus happy				neutral versus happy				neutral versus sad			
	Coeff	SE	t	p	Coeff	SE	t	p	Coeff	SE	t	p
IV to mediators												
L display on F happiness	-1.41	.20	-6.98	<.0001	0.81	.20	-3.98	.0001	0.60	.20	2.96	.0035
L display on F sadness	1.27	.21	5.95	<.0001	0.76	.21	3.52	.0006	-0.51	.21	-2.40	.0176
Mediators on DV												
F happiness on F performance	.45	.08	5.74	<.0001								
F sadness on F performance	-.05	.07	-0.70	.48								
Total effect of IV on DV												
L display on rated L effectiveness	-1.76	.21	-8.27	<.0001	-0.63	.21	-2.96	.0035	1.12	.21	5.26	<.0001
Direct IV on DV												
L display on rated L effectiveness	-1.05	.23	-4.63	<.0001	-0.23	.21	-1.11	.27	0.83	.20	4.15	.0001
Bootstrap indirect effects of	Data	SE	BC 95% CI		Data	SE	BC 95% CI		Data	SE	BC 95% CI	
L display on rated L effectiveness			lower	upper			lower	upper			lower	upper
through F happiness	-.64	.19	-1.01	-0.29	-.36	.13	-0.68	-0.16	.27	.11	0.08	0.48
through F sadness	-.07	.07	-0.22	0.06	-.04	.04	-0.14	0.03	.03	.03	-0.18	0.12

Note. L = leader. F = follower. 5,000 bootstrap samples. BC = bias corrected. CI = confidence interval.

This means that follower sadness cannot mediate the effect of leader affective displays on leadership effectiveness ratings. Finally, for the follower happiness mediator the bootstrap indirect effects show that the bias corrected 95% confidence intervals exclude zero for all contrasts. We can thus confirm our prediction that the indirect effects of leader affective displays on perceived leadership effectiveness through follower happiness are significant.

Discussion Study 2

The results from Study 2 show that a leader's happy displays enhanced followers' creative performance through follower happiness. Moreover, a leader's sad displays enhanced followers' analytical performance. Furthermore, a happy leader display yielded higher leadership effectiveness ratings than a neutral or a sad leader display, and a neutral leader display yielded higher follower leadership effectiveness ratings than a sad leader display, all mediated by follower affect.

This study replicated the findings of Study 1 that a happy leader display increases follower creative performance and followers' perceived leadership effectiveness, whereas a sad leader display increases follower analytical performance but decreases perceived leadership effectiveness. We replicated these findings with a different design, different tasks, different task instructions, different performance measures, and a different leader, thereby demonstrating the robustness of these effects. For instance, the leader's creative task instructions in Study 1 forced the participants to use the same strategy when completing the tasks, while the leader's creative task instructions in Study 2 made it possible to measure several components of creativity. The correspondence of the results in both studies shows that our findings are neither due to merely an effect on strategies to conduct the tasks

(Study 1) nor to a focus on just quality of performance (Study 2). Moreover, Study 2 demonstrated that follower happiness mediates the effects of leader affective displays on both follower creative performance and followers' perceived leadership effectiveness.

We found mediation by follower happiness, but not by follower sadness, which is in line with a study conducted by Sy et al. (2005). They found that a leader's positive affect enhanced group coordination by creating a positive affective tone in the group (mediation), while a leader's negative affect enhanced group effort but not via the affective tone of the group (no mediation). There are several possible explanations for the mediation of happiness but not sadness that could be tested in future research. The first possibility is that positive affect is more important and contagious in social interactions than negative affect, which could have been regarded as inappropriate (Van Kleef & Côté, 2007). This may have reduced the followers' attention paid to their leader (Barsade, 2002), which may hinder emotional contagion. Sadness is associated with internal orientation and withdrawal, thereby less socially oriented and thus associated with less influence on others (Watson, Clark, McIntyre, & Hamaker, 1992) and less contagion (Safran & Safran, 1987). However, a weaker contagion effect of sadness than happiness is not in line with the effect of leader happy versus sad displays on follower performance that we found. A second and therefore perhaps more plausible possibility is that people might be more reluctant to truly admit their sad than their happy feelings, which could have distorted the contagion measurements. People can be reluctant to admit experiencing certain, especially negative, or socially undesirable, affective states like sadness (Watson et al., 1992). As a result, people's negative feelings might actually be stronger than they report.

Third, it may be possible that leader happiness enhances followers' creative performance through follower happiness, while leader sadness enhances followers' analytical performance either directly or via other mechanisms than emotional contagion. Future research will ideally test these possibilities.

General Discussion Chapter 2

The aim of the present studies was to develop our understanding of the relationship between leader affective displays and follower task performance by comparing creative and analytical performance. We integrated research on leadership effectiveness, intrapersonal effects of affect on performance, and emotional contagion. The results show that the effect of leader affective displays on follower performance is indeed dependent on the kind of task that a follower conducts. Follower creative performance is enhanced by a happy leader display, mediated by follower happiness, whereas follower analytical performance is enhanced by a sad leader display.

Another aim of the studies was to compare objective (i.e., followers' performance) and subjective (i.e., followers' perceived leadership effectiveness) measures of leadership effectiveness. This in a sense can be seen as a follow-up on the results of a meta-analysis that showed that different kinds of leader traits and behaviors enhance different kinds of leadership effectiveness (DeRue et al., 2011). We found that happy leader displays yielded higher leadership effectiveness ratings than neutral leader displays, and sad leader displays yielded lower leadership effectiveness ratings, all mediated by follower happiness. Therefore, an important conclusion is that objective and subjective measures of leadership effectiveness do not necessarily correspond. A leader displaying sadness was perceived as ineffective, while this leader was actually more effective than a leader displaying happiness when followers

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conducted an analytical task. The other way around, a leader displaying happiness was perceived as more effective, while this leader was in fact less effective with regard to followers' analytical task performance.

Theoretical Implications

Our main finding concerns the moderating role of the nature of the task on the influence of positive versus negative leader affective displays on follower performance. An important implication is that "performance" should be defined in task specific terms, because performance on creative and analytical tasks may diverge, for instance as a function of leader affective displays. A leader affective display that facilitates one kind of performance can very well hinder another kind of performance and two distinct leader affective displays can both facilitate performance, but on different types of tasks. In short, leader affective displays influence follower creative and analytical performance differently. Knowing this, some previous research findings on leadership effectiveness may have been different if a different kind of measure would have been administered. For instance, Bono and Judge (2003) found a positive relationship between transformational leadership and follower performance. However, their performance measure was a questionnaire that included measurements of creative performance (i.e., coming up with new ideas, suggestions, or improvements). Therefore it would be worth asking the question what effect of transformational leadership on follower performance would have been found if an analytical performance measure would have been administered. Likewise, Gaddis et al. (2004) found that leaders' positive affective displays increase follower ratings of leadership effectiveness and follower performance, whereas negative leader affective displays decreased both. They used a creative output as a measure of follower performance (i.e.,

coming up with solutions for a human resource policy). What would these researchers have found with an analytical instead of a creative performance measure? Our findings suggest that their findings would have been the same regarding leadership effectiveness, but reversed regarding follower performance.

Our results demonstrate the pervasive influence of leader affective displays. The leader's messages were identical in wording and the leader did not in any way verbally mention his affective state like in many previous studies where leader affective displays were manipulated (e.g., Damen et al., 2008a; Van Kleef et al., 2009). The influence of leader affective displays on creative versus analytical task performance and on leadership effectiveness ratings can thus be attributed solely to the leader's facial expressions and tone of voice. This implies that leader affect that is displayed unintentionally or even unconsciously may also influence follower performance and perceived leadership effectiveness.

Our studies integrated different lines of research. Previous findings regarding the intrapersonal effects of affect on creative versus analytical performance (e.g., Forgas, 2000; Schwarz & Bless, 1991) were replicated and extended to an interpersonal setting. Not only did we find that one's affect can influence one's performance, but more importantly that another person's affect can influence one's performance. Previous research already demonstrated the process of emotional contagion, whereby a leader's affect is transferred onto followers (Bono & Ilies, 2006; Sy et al., 2005; Van Kleef et al., 2009). Our results demonstrate that emotional contagion can explain the effects of happy leader displays. The leader's affective displays influenced both followers' performance and their leadership effectiveness ratings through follower affect.

It is important for future research to take our findings into consideration when measuring leadership effectiveness or when drawing conclusions concerning leadership effectiveness in relation to leader affect. Previous studies have operationalized leadership effectiveness either objectively or subjectively, but our results show that leader affective displays influence both operationalizations differently. Thus, even though both perceived leader effectiveness and actual follower performance measures can be valuable indicators of leadership effectiveness, when influenced by leader affect the two measures should not be used interchangeably nor assumed to reflect the same construct.

Future research may also explore the implications of the current analysis for an understanding of the relationship between leader personality and leadership effectiveness, which enjoys a longstanding interest in leadership research (e.g., DeRue et al., 2011; van Knippenberg, 2012). Leaders may differ in their disposition to experience and display positive or negative affect, as for instance captured by the traits of positive and negative affectivity (Watson & Clark, 1984) and more indirectly by the personality dimensions of extraversion and neuroticism that are associated with the tendency to experience (and presumably display) positive and negative affect respectively (McCrea & Costa, 1997). One possibility to explore would be that by the virtue of the affective displays they may be associated with, such traits might position some leaders more to be effective in creative environments (i.e., positive affectivity, extraversion) whereas others may position one better for leadership effectiveness in performance contexts with a more analytical focus (i.e., negative affectivity, neuroticism).

Implications for Practice

We should be cautious before drawing conclusions about our results within organizational settings. Preferably, the results will be replicated within organizational settings in future studies. However, it is important for anyone in a leadership position to realize that their affective displays may have (unconscious) effects on how they are perceived and on how well their employees perform on creative or analytical tasks. Leaders can be trained to monitor their facial displays and to adapt these displays to the nature of their followers' task, thereby optimizing performance. For instance, leaders should not display sadness when creativity is required, nor display happiness when followers need to concentrate on an analytical task. Performance could also be optimized the other way around, if leaders who feel sad choose to instruct an analytical over a creative task to their employees, and if leaders who feel happy choose to instruct a creative over an analytical task to their employees.

Another implication is that leaders who chronically score high on positive affect may be most effective when leading people who have to be creative, like designers. On the other hand, leaders who chronically score high on negative affect may be most effective in optimizing follower performance when leading people who have to perform analytical tasks, like financial controllers. Practitioners may therefore benefit from selecting leaders depending on whom or where they need to lead and depending on personal characteristics that might influence their affective displays. This can be done, for example, by using the positive and negative affect scales (PANAS; Watson, Clark, & Tellegen, 1988) that indicate how often someone experiences positive and negative affect in general, which is presumably related to this person's affective displays. This way, leaders' will optimize

their followers' performance. Beside the fact that negative affect can increase leadership effectiveness when it concerns follower performance on analytical tasks, negative leader affect may hamper leader member exchange (LMX) and organization citizenship behavior (OCB; Hui, Law, & Chen, 1999). Caution thus is in order and the current findings should not be generalized beyond the specific task types investigated without further evidence.

Potential leaders could also be selected on the basis of other individual difference variables that, although not directly shown by this study, might be related to the leaders' affective displays. For instance, emotional intelligence (i.e., the ability to perceive, monitor, regulate and understand affect) has been suggested to contribute to effective leadership (George, 2000). Recently, the ability to influence others via affective displays has been proposed as a new dimension of emotional intelligence (Côté & Hideg, 2011). Taken together, leaders high on emotional intelligence may influence followers more effectively by managing their affective displays more successfully. Because emotional intelligent leaders are better at adapting their affective displays to different situations, they will better at altering their affective display to different performance and non-performance situations thereby enhancing follower performance and both objective and subjective leadership effectiveness.

Finally, practitioners should also realize that followers' subjective perceptions of their leaders do not necessarily correspond with the actual performance-related effectiveness of those leaders. In that sense we follow previous studies (Hogan & Kaiser, 2005; Kaiser et al., 2008) with another caution against the potential biases of subjective impressions of leader quality.

Limitations and Directions for Future Research

A controlled experiment was the best way to test the hypothesized influence of specific leader affective displays in the absence of possible confounding factors. As a consequence, however, the absence of a real life leader-follower relationship may be a limitation. Previous studies on leadership in general (De Cremer et al., 2005; De Cremer & van Knippenberg, 2002; van Knippenberg & van Knippenberg, 2005) and on the role of leader affective displays in particular (Bono & Ilies, 2006; Damen et al., 2008b; Glomb & Hulin, 1997; Tiedens, 2001) found similar results for laboratory experiments and field studies. Moreover, a meta-analysis has revealed that laboratory and field studies in psychology find similar effects (Anderson, Lindsay, & Bushman, 1999). Therefore, we may expect that the effects of leader affective displays that we found can be generalized to other settings. Nevertheless, it would be valuable to replicate our results in different settings and with different samples in future research.

Follower affect was measured by combining items measuring the outcome of emotional contagion (I feel [affective state]) and items that measure the process of emotional contagion (the leader made me feel [affective state]). A limitation of this latter subset of items may be that participants were biased toward answering that the leader's affective display influenced their affective state. However, we do not think that these items were leading participants' answers for several reasons. First, we found a mediation effect of follower affect only for follower happiness and not for follower sadness. If our way to measure follower affect would bias responses, we should have found emotional contagion for both follower happiness and follower sadness. Second, at the end of the study we asked participants in an

open ended question to indicate any ideas about the purpose of the study. None of the participants mentioned the actual purpose of the study here.

It would be interesting if future research tested our model for other prevalent affective states of leaders. We focused on two distinct leader affective displays, happiness and sadness, to be able to connect to the intrapersonal literature on affect and performance. Obviously, there are other affective states that are experienced regularly (e.g., anger, fear, pride) and most of these affective states are associated with different appraisals, or cognitive components (Russell & Barrett, 1999; Smith & Lazarus, 1993). Therefore, different affective states may have different effects on leadership effectiveness ratings and on the followers' creative versus analytical performance. Knowing the directions of the effects of other leader affective displays could be a valuable extension to our model.

In our studies a male leader was used and we should be careful with generalizing our results to female leaders before the current model has been replicated with a female leader in future research. Some previous studies have reported interactions between leader gender and other variables (Glomb & Hulin, 1997; Lewis, 2000; Newcombe & Ashkanasy, 2002), whereas another study found similar effects of male and female leader affective displays on the followers' task performance (Damen et al., 2008a). A recent study showed that the effects of leader affective displays on leadership effectiveness ratings were dependent on gender only when followers made dispositional attributions (Schaubroeck & Shao, 2012). This suggests that leader affective displays of male and female leaders may have similar or different effects depending on other factors. The same may hold for other leader characteristics, like ethnicity

or age. Ideally our study will be replicated and tested for generalizability to leaders of different gender, ethnicities, and ages.

In closing, the main conclusions of the present study are that the nature of the task is an important factor in the way leader affective displays influence follower performance. Creativity benefits from a happy leader, whereas analytical performance benefits from a sad leader – and this influence is not picked up by subjective assessments of leadership effectiveness.

CHAPTER 3

LEADER AFFECTIVE DISPLAYS AND FOLLOWER INTERTEMPORAL DECISION MAKING: HOW EXPRESSIONS OF SADNESS INSPIRE LONG-TERM CHOICES[4]

Abstract

In organizational contexts, individuals making intertemporal decisions – choices between costs and benefits at different points in time – are often subject to social influence, for instance by their leaders. Extending theorizing and research on the influence of affect on decision making, we examine how intertemporal decisions are shaped by leader affective displays. In Experiment 3, we compared the effects of leader displays of sadness with displays of anger, happiness, or no emotion. As predicted, leader displays of sadness fueled more long-term choices via emotional contagion. In Experiment 4, we extended our analysis by developing and testing the proposition that the effect occurs predominantly for followers higher (vs. lower) in trait negative affect (NA). In short, leader displays of sadness yielded sadder followers who made more long-term intertemporal decisions, but only when high on trait NA. We discuss how these findings help integrate research in leadership, affect, and decision making.

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[4] This Chapter is based on Visser, V.A., van Knippenberg, D., & Van Kleef, G.A. Leader affective displays and follower intertemporal decision making: How expressions of sadness inspire long-term choices. *Manuscript under revision.*

Introduction Chapter 3

Many decisions made inside and outside an organization are *intertemporal decisions* – decisions that involve a choice between costs and benefits occurring at different points in time (Loewenstein, Read, & Baumeister, 2003). Should we invest in a cheap short-term solution or in an expensive long-term solution? Should I hire a mediocre employee now or wait longer for a better employee? Will we focus on making a smaller profit this year or on making a bigger profit next year? Past research has shown that intertemporal decision making is influenced by factors such as motivation, self-regulation (Loewenstein et al., 2003), optimism (Berndsen & van der Pligt, 2001), and life experiences (Liu & Aaker, 2007). As insightful as this earlier research is, we propose that an important element is missing – at least from the perspective of organizational behavior: In organizational contexts, intertemporal decision making will frequently be subject to social influence, that is, by others in the decision maker's environment.

In this respect, leaders stand out as an important source of influence in organizations, because their very role puts them in the position to influence subordinates (Yukl & Van Fleet, 1992). Side-stepping the obvious but not so interesting issue that leaders in theory could tell people what to decide, we propose that leader affective displays (i.e., observable indicators of affect) are a particularly interesting and relevant source of influence in intertemporal decision making. Integrating previous research indicating that leaders' affective displays influence follower performance (e.g., George & Bettenhausen, 1990; Sy et al., 2005) and research on affective influences in decision making (Forgas & George, 2001; Loewenstein, 1996), we develop and test hypotheses about the effects of leaders' affective displays on followers'

intertemporal decision making. In doing so, we aim to contribute to theorizing on leadership, decision making, and the social effects of emotions.

Leader Affective Displays

Individuals in organizations are embedded within the social context of the organization. Decisions thus are not made in social isolation, and others may influence one's intertemporal decision making. The most important or most influential other in an organization is usually one's leader – indeed, whereas not every leader will be equally effective, the essence of leadership is social influence (Chemers, 1997; Yukl, 2006). Because leaders are expected to be a source of influence, subordinates are particularly sensitive to their actions (Fiske & Dépret, 1996). Unfortunately, follower decision making seems to be among the less explored perspectives in leadership and decision making, which is a little explored angle on leadership to begin with (Van Knippenberg, forthcoming), leaving us largely agnostic about the influence leaders have on their followers' intertemporal decisions. Building on Loewenstein's (1996) proposition that affect plays an important role in intertemporal decision making, we argue that a major source of a leader's influence here is affect (i.e., mood and emotions).

Leadership has been proposed to be an inherently emotional process (Humphrey, 2002), because affect is implicitly at the core of interactions between leaders and followers (Dasborough & Ashkanasy, 2002). Therefore, leader affect may be the key to understanding how leaders influence their followers (George & Bettenhausen, 1990), both consciously and unconsciously. Research has shown that a leader's display of affect influences followers more than the objective content of the leader's message (Newcombe & Ashkanasy, 2002), thus confirming the pervasiveness of leader affective

displays. Moreover, leader affective displays have been shown to influence followers' judgments (Bono & Ilies, 2006) and behaviors (George, 1995; Johnson, 2009; Sy, et al., 2005; Van Kleef et al., 2009). This supports our prediction that leader affective displays may influence followers' intertemporal decisions.

A key mechanism through which leader affective displays influence followers' judgments and behaviors is emotional contagion. Emotional contagion is an automatic process whereby displays of affect are mimicked and synchronized so that two or more people converge emotionally (Hatfield et al., 1994). Emotional contagion has been shown to happen from leaders to followers, such that followers take over their leader's affective state (Bono & Ilies, 2006; Sy et al., 2005). Moreover, previous research has shown that emotional contagion can be the underlying mechanism when leader affect influences the followers behaviors and judgments. For instance, follower affect mediated the effect of leader affect on follower group coordination (Sy et al., 2005) and performance (Van Kleef et al., 2009). In another study, follower positive mood mediated the relationship between leader mood and follower ratings of charismatic leadership, whereas follower negative mood mediated the relationship between leader mood and follower performance (Johnson, 2009).

Affect and Intertemporal Decision Making

Loewenstein (1996; cf. McClure, Laibson, Loewenstein, & Cohen, 2004) proposed an influence of affect on intertemporal decision making. In which direction different affective states influence intertemporal decisions has not been made clear yet by previous theorizing and findings, however. We

therefore base our predictions on previous research on the effects of affect on other types of decision making.

The role of affect in decision making has been pointed out clearly by scientists over the past decades (e.g., Forgas & George, 2001; Loewenstein, 1996; Pfister & Böhm, 1992). For instance, affect has been shown to influence risk taking decisions (Lerner & Keltner, 2001; Shiv, Loewenstein, & Bachara, 2005), partner choice (Forgas, 1991), and holiday preferences (Rucker & Petty, 2004). Many studies have demonstrated that affective states influence decisions, even when such an affective state is incidental, or triggered by a prior, unrelated experience (Loewenstein & Lerner, 2003). Incidental affect has been shown to influence people's judgments (Schwarz & Clore, 1983), advice taking (Gino & Schweitzer, 2008), and economic decisions (Harlé & Sanfey, 2007; Lerner, Small, & Loewenstein, 2004). In short, previous research has demonstrated that specific affective states influence decisions differently, including monetary decisions, and even when the affect is unrelated to the decision at hand. But how exactly does this influence occur?

The action tendencies that are associated with emotional states are goal directed (Frijda, 1986) and thereby influence decision making, especially when situations are uncertain (Lerner & Keltner, 2001). Intertemporal decisions always involve uncertainty, because the choice options involve the future. We therefore expect affect to influence intertemporal decision making. Different negative affective states are known to have different effects on decision making. For example, an investigation comparing sadness and anxiety in risk taking found that sad people preferred a smaller chance of winning a larger reward over a larger chance of winning a smaller reward, while anxious people chose the reverse (Raghunathan & Pham, 1999). The authors suggest

that sadness activates a goal of reward acquisition or replacement. This 'reward goal' motivates sad individuals to choose the option that involves the highest possible reward, even when this option is riskier and it is thus less likely that a reward would be obtained at all.

Several studies have focused on the influence of affect on information processing. Those studies have documented that angry people rely more on heuristic cues than sad people, whereas sad and neutral people do not differ in their reliance on heuristic cues (Bodenhausen, Sheppard, & Kramer, 1994). Previous studies also showed that feeling uncertain yields more systematic processing and that feeling certain yields more heuristic processing. According to appraisal theories, every emotion comes with a certain set of cognitions. An appraisal is a constrained subset of attributions, inferences and/or evaluations directly related to the emotion at hand (Smith, Haynes, Lazarus, & Pope, 1993). Certainty appraisals have been shown to influence judgments unrelated to the emotions. People who experienced a 'certainty emotion' like happiness relied more on superficial cues when making a judgment, therefore processing more heuristically (Tiedens & Linton, 2001). On the other hand, people who experienced an 'uncertainty emotion' like fear did not rely on superficial cues when making a judgment and processed information systematically. In sum, sadness and fear facilitate systematic, detail-oriented and thoughtful processing, while happiness and anger facilitate simple, heuristic processing (see also Forgas, 2000; Schwarz & Bless, 1991).

Study 3

From the literature overview presented above we can conclude that sadness activates both a reward goal and systematic information processing, while happiness and anger activate heuristic processing. What does this mean

for an intertemporal decision; a choice between a smaller reward in the near future and a larger reward in the more distant future? Because sadness activates a reward optimizing goal, sad people take more risks if doing so can result in a higher reward (Raghunathan & Pham, 1999). We therefore expect that sad people are willing to wait longer for a larger reward, as compared to people experiencing other affective states. Sadness also enhances systematic and thoughtful processing, which may lead sad people to think over both options thoroughly, realizing that waiting longer will result in a larger reward and is thus more beneficial in the long run. Heuristic and more superficial processing, on the other hand may, not generate such a well-reasoned conclusion. In the current research we extend these effects to the interpersonal level. We expect that a leader displaying sadness will yield sadder followers because of emotional contagion. As a consequence, followers observing a leader displaying sadness are expected to prefer long-term over short-term options when these long-term options involve a higher reward.

For the present study we compared sad displays on the part of a leader with two other common affective displays, anger and happiness. Including anger and happiness allows us to rule out a simple valence explanation, because both sadness and anger are negative in valence. We also included a leader neutral affective display as a non-affective control condition. People in a neutral affective state are usually biased towards a short term focus (Loewenstein et al., 2003) and we expect that neither happiness nor anger will change that, due to the heuristic processing styles that are associated with these affective states. Sadness on the other hand should result in a long-term focus due to a focus on reward and systematic information processing. In short, we predict that when an intertemporal decision has to be made between a smaller

short-term reward and a larger longer-term reward, sad leader displays will yield a long-term larger reward preference, whereas happy, angry, and neutral leader displays will yield a short-term smaller reward preference.

Hypothesis 3.1: A leader displaying sadness will yield more long-term focused follower decisions, compared to a leader displaying happiness or anger, or an affectively neutral display.

This effect of leader affective display on follower intertemporal decision making is expected to be driven by emotional contagion. Thus, follower sadness is predicted to mediate the effect of the leader's affective display on followers' long-term focused decisions (see Figure 10).

Figure 10. The predicted mediation model (Study 3).
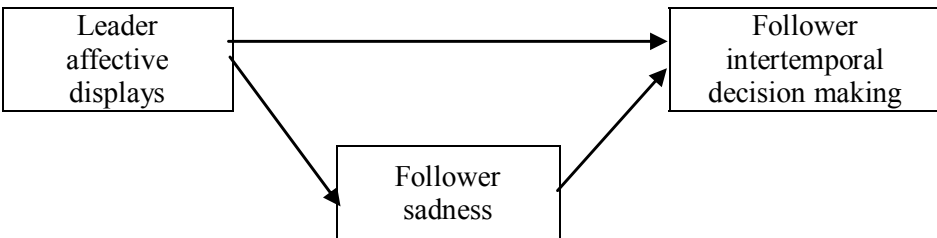
Hypothesis 3.2: The effect of leader affective displays on follower intertemporal decision making is mediated by follower sadness.

To test these hypotheses we manipulated leader affective displays and we measured follower affect and whether followers' intertemporal decisions were more short-term or long-term focused. We tested our hypotheses with an experiment, as this is the only way to measure the effects of different leader affective displays, independent of other variables that could influence leader affect, follower affect, or decision making. In field settings many different

variables interplay to influence our outcome measures, so to separate the effects of different leader affective displays an experimental approach is particularly suited in our case (see also Glomb & Hulin, 1997; Lewis, 2000; Van Kleef et al., 2009). Moreover, in a field setting it would not be possible to manipulate different affective displays using the same leader, which is necessary to separate leader affective displays from other leader characteristics that might be of influence. Furthermore, a controlled surrounding was necessary to allow for the causal conclusions required to support the hypotheses (Bono & Ilies, 2006; Damen et al., 2008a; De Cremer et al., 2005; Tiedens, 2001). Past experimental leadership research has successfully used actors to manipulate affective displays, and this created optimal experimental control (Bono & Ilies, 2006; Lewis, 2000; Tiedens, 2001; Van Kleef, Homan, Beersma, & Van Knippenberg, 2010; Van Kleef, et al., 2009). Therefore, our leader was videotaped in advance to guarantee identical affective displays and verbal content for all participants (Lewis, 2000).

Method Study 3

Participants and design. A total of 121 students (37 female, 84 male, age $M = 18.82$, $SD = 1.07$) of a major business school in the Netherlands participated. Completing the study was rewarded with €7.50 (app. USD 10). Participants were randomly assigned to one of the four leader affective display conditions (happy, sad, angry, or neutral).

Procedure. Participants completed the experiment in individual cubicles on a PC, with a maximum of twelve persons at the same time. On the screen, participants read that the experiment would be about leadership and one-way communication. They were told that they would have a leader during the experiment, who was a manager at a multimedia company and was at the

university for training purposes. The participants were told that their leader was positioned somewhere else and would give task instructions to all participants at the same time via a webcam. They were going to see and hear this leader, but the leader would not be able to see or hear them. Participants were asked to watch and listen carefully. Subsequently, contact with the leader was made, and he introduced himself. After some general computer related instructions, connection with the leader was established for the second time. The leader summarized the task instructions, advised on how to conduct the task, and encouraged the participants to perform well. Participants completed the intertemporal choice task individually, followed by some questionnaires to measure follower affect and leader affect. Finally, participants were debriefed, thanked, and paid.

Stimulus materials.

Leader. A trained actor (29 year old, white, and male) played the participants' leader. To guarantee identical instructions and affective displays for all participants, a close up of the leader's face was videotaped in advance. In all affective display conditions, the leader used the same words to explain the task, and did not refer to his feelings. Leader affect was displayed non-verbally, facially, and vocally. The happy leader (see Figure 11) had the corners of the mouth up (smile), eyebrows up, and spoke with a happy, cheerful tone of voice. The sad leader (see Figure 12) had the corners of the mouth down (glum), eyebrows lower, and spoke dolefully and with a sad tone of voice. The angry leader (see Figure 13) had low eyebrows and a frown above the nose, tight lips and corners of the mouth inwards, and spoke with an angry tone of voice. The neutral leader (see Figure 14) had mouth and eyebrows relaxed, neither up nor down, and spoke with a neutral tone of voice.

Figure 11. A screenshot of the leader displaying happiness.

Figure 12. A screenshot of the leader displaying sadness.

Figure 13. A screenshot of the leader displaying anger.

Figure 14. A screenshot of the leader displaying neutral affect.

Intertemporal choice task. The leader asked the participants to pretend that they worked for a company that provides personal budgets to spend on projects. The budgets have to be spent in a way that results in as much profit as possible as quickly as possible. The task consisted of 7 items (α = .76), each containing two options. One option was spending one's budget in a way that yields a certain amount of profit in the current month, and the other option was spending one's budget in a way that yields more profit in more than one month. For example, €200 profit this month or €400 profit in two months, or €100 profit this month or €600 in six months. The order of the short-term and long-term options was counterbalanced. For every item a score of zero indicated that a participant chose the short-term option and a score of one indicated that a participant chose the long-term option. The total intertemporal choice score was the average of all seven item scores, with a lower score indicating more short-term focused decision making, and a higher score indicating more long-term focused decision making.

Affect questionnaires. Follower and leader affect were measured by asking participants to indicate, on 7 point-Likert scales (1 = *not at all*, 7 = *very much*), how intense several affective states were experienced. Follower sadness was measured by asking participants how sad and sorrowful their leader had made them feel (α = .80). Leader affect was measured by asking how happy, cheerful (leader happiness; α = .84), sad, sorrowful (leader sadness; α = .92), angry, and mad (leader anger; α = .82) participants thought their leader had been.

Results Study 3

Manipulation check. Univariate analysis of variance yielded significant effects of leader affective displays on participants' ratings of their

leader's happiness, $F_{(3,117)} = 62.23$, $p < .001$, $\eta = .62$, sadness, $F_{(3,117)} = 64.67$, $p < .001$, $\eta = .62$, and anger, $F_{(3,117)} = 21.69$, $p < .001$, $\eta = .36$. All other statistics are displayed in Table 5. A leader with a happy display was rated as happier than a leader with a sad, angry, or neutral display. Furthermore, a leader with a sad display was rated as sadder than a leader with a happy, angry, or neutral display. Finally, a leader with an angry display was rated as angrier than a leader with a happy, sad, or neutral display.

Intertemporal decision making. Univariate analyses of variance yielded an effect of leader affective displays on intertemporal decision making, $F_{(3,117)} = 9.78$, $p < .001$, $\eta = .20$ (see Figure 15). Sad displays on the part of the leader ($M = 0.54$, $SD = 0.28$) yielded a higher intertemporal choice score than happy ($M = 0.23$, $SD = 0.28$), angry ($M = 0.25$, $SD = 0.23$), or neutral ($M = 0.23$, $SD = 0.28$) displays.

Figure 15. Follower intertemporal decision making scores as a function of the leader's affective displays (Study 3).
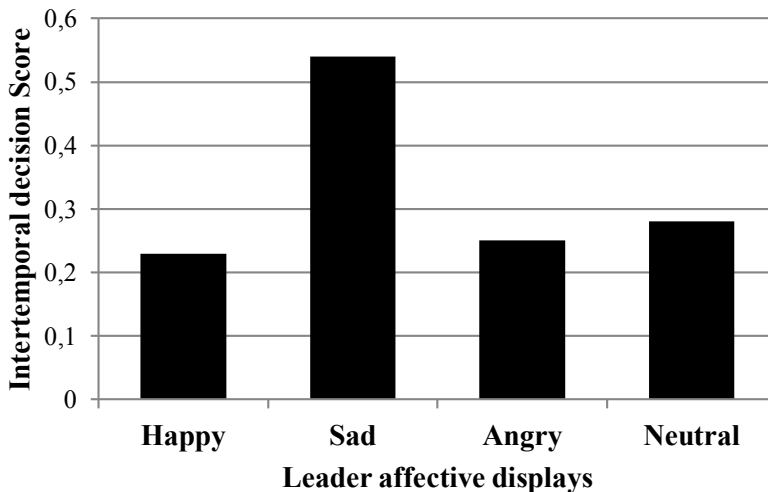
Table 5. Statistics for rated leader affect (Study 3).

Leader affective display	Rated leader happiness				Rated leader sadness				Rated leader anger			
	M	SD	$t_{(117)}$	p	M	SD	$t_{(117)}$	p	M	SD	$t_{(117)}$	p
Happy	4.97	1.48			1.74	1.14	12.24	<.001	1.67	0.92	7.49	<.001
Sad	1.33	0.79	12.61	<.001	6.07	1.43			2.40	1.30	5.40	<.001
Angry	1.91	1.09	10.86	<.001	2.11	1.29	11.47	<.001	4.27	1.87		
Neutral	2.44	0.93	8.92	<.001	2.50	1.49	10.26	<.001	2.23	1.06	5.97	<.001

Note. t- and p-values indicate differences of a certain leader affective display with the happy leader display condition for rated leader happiness, with the sad leader display condition for rated leader sadness, and with the angry leader display condition for rated leader anger.

Planned contrast analyses showed that participants with a leader displaying sadness made more long-term focused decisions than participants with a leader who had a happy, $t_{(117)} = -4.49$, $p < .001$, angry, $t_{(117)} = -4.26$, $p < .001$, or neutral expression, $t_{(117)} = -4.58$, $p < .001$. Intertemporal decision scores did not differ among participants with happy, angry, and neutral leaders (ps = .72 - .99). This pattern of results supports Hypothesis 3.1 that sad leader displays yield more long-term focused follower decisions than happy, angry, or neutral leader displays.

Mediation of follower sadness. To test whether the effect of leader affective displays on followers' intertemporal decision making is mediated by follower sadness, we used a bootstrap procedure (Stine, 1989). In this procedure, 1000 random samples are drawn with replacement from the full sample. Then, the indirect effect was computed, as well as a bias-corrected interval to test whether the indirect effect differs significantly from zero (MacKinnon, Lockwood, & Williams, 2004). The bias-corrected bootstrap confidence intervals have been shown to perform best in testing for mediation effects, with more accuracy and higher power than other mediation tests (Cheung & Lau, 2008). To test the indirect effect of leader affective display on intertemporal decision making through follower sadness, we need to multiply the effect of leader affective display on follower sadness, and the effect of follower sadness on intertemporal decision making. This procedure requires regression analyses. Because we had a categorical independent variable with more than two levels, we contrasted the sad leader display against the happy, angry, and neutral leader display conditions. This allowed us to test mediation for the effect of sad as compared to happy, angry, and neutral leader displays,

which is the contrast that we hypothesized and that indeed came out as significant in the preceding analyses.[5]

First, a sad leader display yielded higher follower sadness ratings than happy, angry, and neutral displays ($b = 0.40$, $\beta = .46$, $t_{(120)} = 5.71$, $p < .001$). Second, higher follower sadness yielded higher intertemporal decision making scores ($b = 0.06$, $\beta = .30$, $t_{(120)} = 3.43$, $p = .001$). The indirect effect for sad compared to happy, angry, and neutral leader displays was $0.40 * 0.06 = 0.02$, and the 95% confidence interval of this effect excluded zero (0.01, 0.04). Thus, a leader with a sad expression made followers feel sadder than a leader with a happy, angry, or neutral expression, and because followers of a leader with a sad expression felt sadder, they made more long-term focused decisions than did followers of leaders with a happy, angry, or neutral expression. This analysis corroborates Hypothesis 3.2 that the effect of leader affective displays on follower intertemporal decision making is mediated by follower sadness.

Discussion Study 3

The results of the third study support both hypotheses 3.1 and 3.2. We demonstrated that a sad leader display yields more long-term focused follower decisions compared to a happy, anger, or neutral leader display. As predicted, emotional contagion is the mechanism underlying this effect. A sad leader display increased long-term intertemporal choices through follower sadness.

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[5] Preliminary analysis showed that follower happiness and follower anger did not have a mediating role between leader affective display and follower intertemporal decision making. Moreover, mediation analysis with all leader affective display conditions separately showed that happy, angry, and neutral leader displays, compared to sad displays, also resulted in significant mediation effects in the same directions. For economy of exposition we directly tested the sad leader display against happy, angry, and neutral leader displays. Interested readers can contact the author for more details about these results.

Intertemporal decisions can thus be part of an interpersonal process whereby leaders influence the decisions of their subordinates. Because emotional contagion is an automatic process, leader and follower may or may not be aware of this influence.

Worth noting here is that, in line with previous research, we demonstrated the importance of separating affective states on the basis of their appraisals and not just based on their valence when looking at the influence on decision making, both at the intrapersonal level (Lerner & Keltner, 2000; Raghunathan & Pham, 1999) and at the interpersonal level of analysis (Van Kleef et al., 2006). Different affective states with the same valence can have different effects on intertemporal decision making. Our results are explained by sadness specifically, and not by other negative affective states like anger.

Before drawing further conclusions we present a second study that we conducted to replicate and extend the model that we have tested in Study 3.

Study 4

The results of Study 3 indicate that intertemporal decision making can be influenced by the affective displays of leaders. As much as others influence our decisions, personal characteristics have been shown to moderate these influences. For instance, in one study epistemic motivation moderated the influence of leader affective displays on follower performance, because it affected considerations of the implications of the displayed affect (Van Kleef et al, 2009). Followers with high epistemic motivation performed better when their leader expressed anger (mediated by inferences regarding performance adequacy), while teams with low epistemic motivation performed better when their leader expressed happiness (mediated by liking of the leader). Moreover, the effects of leader affective displays on follower performance have been

shown to depend on the followers' agreeableness. In this study, teams with lower levels of agreeableness performed best when their leader expressed anger, while teams with higher levels of agreeableness performed best when their leader expressed happiness (Van Kleef et al., 2010). Another study introduced an affective match hypothesis and showed that leader affective displays have more effect when they match follower positive affectivity (PA), independent of the valence of the leader's message, because people are more open to communication that matches their mood (i.e., that is delivered with a display of affect similar to recipient affect; Damen et al., 2008a).

Building on and extending this earlier work on leader-follower affective match, we expect that the effect of leader displays of sadness on increased long-term decision making on the part of the followers is contingent on follower trait negative affectivity (NA). High NA reflects a general dimension of subjective distress and displeasure resulting in a negative mood state, while low NA reflects calmness and serenity (Watson et al., 1988). Trait NA reflects an individual difference in the extent to which someone is inclined to experience negative affect. NA may influence people's responses to their leader's sad affective displays. According to the associative network theory, people have more and stronger connections among affective information that matches their affective experience (Collins & Loftus, 1875). As a consequence, information congruent with one's affect is processed and remembered more easily, and influences judgments and perceptions to a greater extent (Bower, 1981). For example, when someone's emotional state matched rather than mismatched the emotional tone of a message, people were persuaded more by that message (DeSteno, Petty, Rucker, Wegener, & Braverman, 2004). In a related vein, people higher on neuroticism (i.e., which

is associated with NA) processed affectively negative information better (Rusting & Larsen, 1998). Combining these previous findings suggests that leaders may be more influential when their affective displays match followers' trait affect.

Based on the foregoing considerations, we predict that follower NA moderates the effect of leader affective displays on follower intertemporal decision making. More specifically, we expected leader displays of sadness to yield more long-term focused follower decisions when follower trait NA is higher. To keep the experimental design manageable, we compared sad leader displays with two comparison conditions in this study, namely happy and neutral displays.

Hypothesis 4.1: Leader displays of sadness (as compared to happy or neutral displays) result in more long-term focused follower decisions when followers score high rather than low on trait negative affectivity.

As in Study 1 we predict that emotional contagion is the mechanism underlying the effect of sad leader displays on followers' long-term decision making. Therefore, we predict that the effect of leader affective displays on followers' intertemporal decision making is mediated by follower sadness. Thus, leader displays of sadness yield sadder followers, which results in more long-term decision making when follower trait NA is higher (see Figure 16).

Hypothesis 4.2: There is an indirect effect of leader affective display on follower intertemporal decision making through follower sadness, and the effect of follower sadness on follower intertemporal decision making is moderated by follower negative affectivity.

These two hypotheses were tested with an experiment similar to Study 3. To be able to test the robustness of the results that we found in Study 3, we used a different leader.

Figure 16. The predicted moderated mediation model (Study 4).
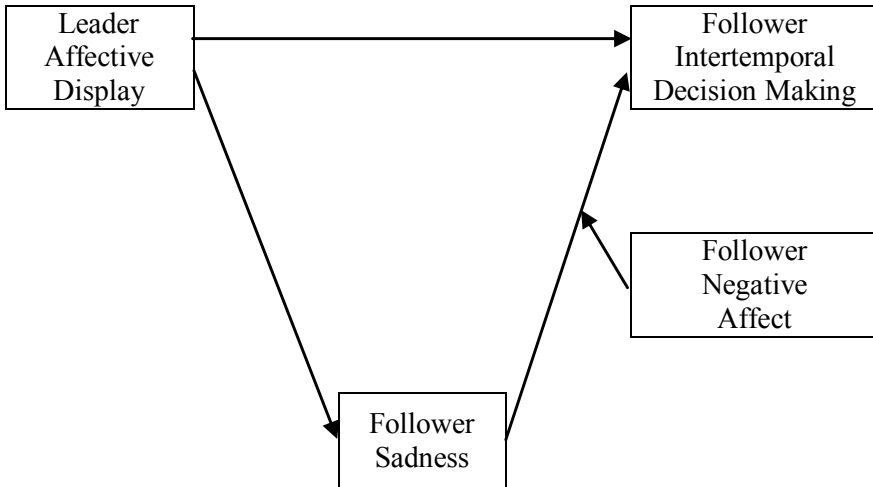
Method Study 4

Participants and design. A total of 141 students (76 male, 65 female, age $M = 19.8$, $SD = 2.0$) of a major business school in the Netherlands participated. Completing the study was rewarded with €7.50 (app. USD 10). Participants were randomly assigned to one of the leader affective display conditions (happy, sad, or neutral).

Procedure. The procedure was similar to the procedure of the first study. A different leader was used (28 year old, white, male), to rule out that the effect of Study 1 was caused by idiosyncratic characteristics of the leader (e.g., looks, sound of voice). Moreover, to increase reliability some items were added to the intertemporal choice task and to the leader and follower affect

questionnaires. Finally, we added a questionnaire to measure positive and negative follower trait affectivity.

Stimulus materials. The intertemporal choice options were the same as in Study 1, but two items were added ($\alpha = .78$). Follower sadness was measured by asking participants how sad, sorrowful, and doleful their leader had made them feel ($\alpha = .88$). Leader affect was measured by asking how happy, cheerful, and glad (leader happiness; $\alpha = .95$), and how sad, sorrowful, and doleful (leader sadness; $\alpha = .97$) participants thought their leader had been. The PANAS (Positive and Negative Affect Scale; Watson et al., 1988) was used to measure followers' positive and negative trait affect. Participants were asked to indicate to what extent they experience certain feelings in general (1 = *not at all*, 7 = *extremely*), for 10 positive affect items ($\alpha = .86$) and 10 negative affect items ($\alpha = .87$).

Results Study 4

Manipulation check. Univariate analysis of variance yielded significant effects of leader affective display on participants' ratings of their leader's happiness, $F_{(2,138)} = 429.84$, $p < .001$, $\eta = .86$, and of their leader's sadness, $F_{(2,138)} = 210.19$, $p < .001$, $\eta = .75$ (see Table 6 for all other statistics). A leader with a happy display was rated as happier than a leader with a sad or neutral display. Moreover, a leader with a sad display was rated as sadder than a leader with a happy or neutral display.

Intertemporal decision making and negative affect. Because we hypothesized a difference between sad leader affective displays on the one hand and happy and neutral leader affective displays on the other hand, we dummy coded the leader affective display variable with sad as the reference

Table 6. Statistics for rated leader affect (Study 4).

Leader display	Rated leader happiness				Rated leader sadness			
	M	*SD*	$t_{(138)}$	*p*	*M*	*SD*	$t_{(138)}$	*p*
Happy	5.83	1.01			1.16	0.38	20.02	<.001
Sad	1.27	0.43	22.00	<.001	5.97	1.20		
Neutral	2.15	0.87	27.70	<.001	2.62	1.63	13.71	<.001

Note. t-values indicate differences with the happy leader condition for rated leader happiness, and differences with the sad leader affective display condition for rated leader sadness.

group (Aiken & West, 1991). We performed linear regression analysis with the happy and neutral leader affective display dummies, negative follower affect, and the three interactions as independent variables, and the intertemporal decision making score as dependent variable.[6] The results showed interactions of leader affective displays and follower negative affect on follower intertemporal decision making, for happy compared to sad leader displays, b = -.15, β = -.28, $t_{(140)}$ = -2.48, p = .01, and for neutral compared to sad leader displays, b = -.11, β = -.24, $t_{(140)}$ = -1.98, p = .05 (see Figure 17). Simple slope analysis revealed that among followers low in negative affect (- 1 SD) leader affective displays did not influence follower intertemporal decision making (*p*s = .44). Among followers high in negative affect (+ 1 SD), happy, b = -.20, β =

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[6] In the interest of completeness we also measured Positive Affect (PA), because this subscale is part of the same questionnaire. When adding PA to the analysis, results showed no main effect or interaction effect of PA. Therefore, PA was not included in our analysis. Interested readers can contact the author for more details about these results.

-.39, $t_{(140)}$ = -2.82, p = .006, and neutral, b = -.14, β = -.26, $t_{(140)}$ = -1.98, p = .05, leader displays yielded more short-term focused decisions than sad leader displays. No other effects were found. This pattern of results supports Hypothesis 4.1 that a sad leader affective display will yield more long term focused follower decisions than a happy or neutral leader affective display, but only among followers high in negative affect.

Figure 17. Followers' intertemporal decision making scores as a function of leader affective displays (LAD) and follower negative affect (Study 4).
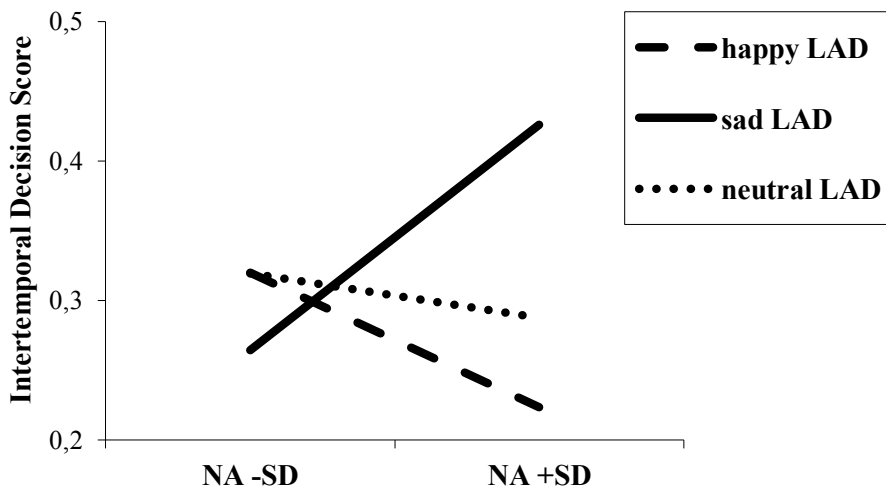
Mediation of follower sadness. To test whether the interaction of leader affective displays and follower negative affect on follower intertemporal decision making is mediated by follower sadness, we need to test for moderated mediation. We predicted that leader affective display influences

follower sadness, and that follower sadness influences follower intertemporal decision making, moderated by follower negative affect (see Figure 16). This model was tested with the same bootstrapping method as in Study 3, but this time to test a moderated mediation model (Edwards & Lambert, 2007). For the same reasons as in Study 3, we contrasted the sad leader display condition with the happy and neutral leader display conditions.

Regression analysis yielded a significant effect of sad, compared to happy and neutral leader displays on follower sadness ($b = 0.53$, $\beta = .52$, $t_{(140)} = 7.19$, $p < .001$). Second, the interaction of follower sadness x follower negative affect significantly influenced followers' intertemporal decision making scores ($b = 0.04$, $\beta = .19$, $t_{(140)} = 2.20$, $p = .029$). The indirect effect of sad, compared to happy and neutral, leader displays was $0.53 * 0.04 = 0.02$, and the 95% confidence interval of this effect excluded zero (0.00, 0.04). Thus, a leader with a sad display made followers feel sadder than a leader with a happy or neutral display, and when followers felt sadder because of their leader and were high in negative affect, they made more long-term focused decisions than followers of leaders with a happy or neutral display or than followers who were low in negative affect. This corroborates Hypothesis 4.2, which posited that there is an indirect of effect of leader affective displays on follower intertemporal decision making through follower sadness, and that the effect of follower sadness on follower intertemporal decision making is moderated by follower negative affectivity.

General Discussion Chapter 3

Leader affective displays influence follower intertemporal decision making through follower affect. Our third study showed that leader affective displays can influence follower intertemporal decision making through

follower sadness. Specifically, a sad compared to happy, angry, or neutral leader display makes followers more inclined to make more long-term focused decisions. The fourth study showed that this effect is contingent on follower trait NA. Leader sad displays enhance follower short-term focus mainly among followers higher in NA. Emotional contagion, the transferal of affective states through affective displays, is the mechanism behind these effects. Sad leader displays yield sad followers and when these followers are high in NA they make more long-term focused decisions.

These results are in line with an affective match hypothesis, meaning that leaders influence followers more when their affective displays match their followers' trait affect. We thus found an interplay between state and trait affect. Leader affective displays influence followers' state affect and, together with the followers' trait affect, this has an influence on their intertemporal decisions.

Theoretical Implications

Our main finding that temporal focus is influenced by others' affective displays is new and thereby an addition to the existing literature. By integrating different lines of research, our results form a contribution to the fields of decision making, leadership, and affect. Leader sad displays yielded more long-term follower decisions, while leader happy, angry, and neutral displays did not. This is in line with previous research demonstrating that not all negative affect yields similar effects (e.g., Lerner & Keltner, 2000; Raghunathan & Pham, 1999) and that distinguishing affective states merely by valence is not sufficient. This is also the core of the Different Affect – Different Effect (DADE) model (Raghunathan & Corfman, 2004). Affective states of the same valence can generate different cognitive and behavioral

outcomes. Sadness and anger are both negative affective states, but yield different intertemporal decisions.

Also noteworthy is that leader positive affective displays are often regarded as beneficial and people prefer a leader who displays positive affect over a leader who displays negative affect (e.g., Bono & Ilies, 2006; George, 1995). Our findings show that sad leader displays can be beneficial for the long-term profits of an organization. Focusing on just short-term benefits may lead people to overlook better or more benefits in the long run. Thus, even though a leader displaying sadness may not be preferred, at least temporary displays of sadness enhance long-term focused decisions that may be good for the long-term success of an organization.

Our studies complement previous research that has demonstrated several social effects of affective displays. Displays of affect help others to know feelings, beliefs, and intentions of the displayer, and serve as incentives for others' behavior (Keltner & Haidt, 1999; Van Kleef, 2009). Moreover, emotional contagion of positive moods among group members increases cooperation, decreases group conflict, and increases performance ratings (Barsade, 2002). Furthermore, negotiation behavior has been shown to be to be influenced by the affective displays of the opponent (e.g., Van Kleef et al., 2006). Participants whose opponents expressed emotions of supplication (i.e., disappointment or worry) made smaller demands than did participants whose opponents expressed emotions of appeasement (i.e., guilt or regret). These studies have in common that they demonstrated social effects of expressions of affect, and our results complement these findings by showing that someone's affective display may influence others' decisions through emotional contagion.

Implications for Practice

The intention of our study was to develop fundamental theory in leadership, affect, and decision making. The experimental nature of our research is commensurate with this aim, because conclusions regarding causality are crucial for theory development. At the same time, we caution against drawing too far-reaching conclusions regarding the implications for practice based on our studies and would prefer that strong conclusions in this respect await further research.

Having said that, we note that our findings provide further support for the importance of leader affective displays to organizational behavior. In that respect, they underscore the importance in developing leaders' understanding of the pervasive influence that subtle affective displays may have on the decisions of people they interact with. Such awareness typically is not on the agenda in leadership training and development programs, but our findings add further arguments to the case that perhaps this practice should change. Moreover, to the extent that there is an awareness of the potential benefits of leader affective displays, this seems to be largely driven by an understanding that positive affect is a good thing and negative affect is to be avoided (cf. Bono & Ilies, 2006). The current findings add to the case for a more nuanced reading of the benefits of positive and negative affect (cf. George, 2011). Even if we would not argue that decisions with a longer-term focus are always better, there seems to be a case that decisions in organizations often focus too much on the short term. An example is Escom, a German computer corporation that went bankrupt in 1996 because it had grown too quickly. Another example is Enron, an American energy company that got bankrupt in 2001 after six successful years because it had only focused on short-term

gains. From this perspective that focusing only on short-term benefits may result in the downfall of an organization, the current evidence speaks to the benefits of negative affect. Importantly, however, it also suggests that this does not hold for negative affect across the board – sadness, but not anger produced the focus on the longer-term.

Leveraging the current understanding of the role of leader affect may thus require some emotional sophistication on the leader's part. If effective leadership requires adapting affective displays to the situation (including followers), leaders' ability to do so may be of critical importance. This is where recent discussions of the role of emotional intelligence (i.e., the ability to perceive, monitor, regulate and understand affect) in leadership play in (e.g., George, 2000). Particularly relevant in this respect may be the recent proposition made by Côté and Hideg (2011) that the ability to influence others through one's affective displays should be considered as part of emotional intelligence. Whereas clearly these are suggestions that await further research, the complexity of leader affective displays illustrated by the current findings suggests that organizations may benefit from taking leader selection on emotional intelligence into consideration.

Limitations and Directions for Future Research

As we outlined in the previous, there are persuasive reasons to rely on controlled experiments for the study of leader affective displays. As a consequence, however, the absence of a real life leader-follower relationship and of actual monetary gains or losses are potential limitations of our studies. Previous studies on leadership in general (De Cremer et al., 2005; De Cremer & van Knippenberg, 2002; van Knippenberg & van Knippenberg, 2005) and on the role of leader affective displays in particular (Bono & Ilies, 2006;

Damen et al., 2008b; Glomb, & Hulin, 1997; Tiedens, 2001) have found similar results for laboratory experiments and field studies. Moreover, a meta-analysis has revealed that laboratory and field studies in psychology find similar effects (Anderson, et al., 1999), and it has been demonstrated that real and hypothetical monetary rewards yield similar results (Johnson & Bickel, 2002). Therefore, we can assume that the effects of leader affective displays on follower intertemporal decision making that we found can be generalized to other settings. Nevertheless, it would be interesting to replicate our results in different settings and with different samples in future research.

A second possible limitation of the two preceding studies is that both studies employed a white male leader. Consequently, it remains unclear whether our results would also generalize to contexts where the leader is female or non-white. A previous study reported similar effects of male and female leaders who displayed sadness (Lewis, 2000). Nevertheless, it would be valuable if future studies will replicate our design with both female and non-white leaders to be certain of the effect that sad displays of these leaders have on followers' intertemporal decisions.

An additional interesting direction for future research would be to test in which direction different leader affective displays influence other kind of follower decisions. For instance, high versus low risk decisions or self-serving versus cooperative decisions. Previous research has demonstrated that both leader procedural fairness and leader charisma promote followers' cooperative behaviors (De Cremer & van Knippenberg, 2002). This model could be extended by future research when assessing whether happy, sad, angry, and other leader affective displays engender more or less follower cooperation.

It would also be fruitful if future studies investigate whether other follower traits, besides negative affect, moderate the influence of leader sad displays on follower intertemporal decision making. For example, followers higher on emotional intelligence may better indentify, process, and understand variations in their leader's facial affective displays (Mayer, Salovey, Caruso, & Sitarenios, 2001).

Conclusion

Research in leadership has only paid modest attention to decision making, just as decision making research can be said to by and large have neglected the role of leadership. Our study clearly is only a modest step towards changing this state of affairs. Even so, the current findings clearly speak to the viability of further developing the analysis of leadership and decision making, and moreover suggests that affective influences may play an important role here. The current study thus extends a clear invitation for future research to engage with these important issues.

CHAPTER 4

HOW LEADERS CAN CREATE UNETHICAL FOLLOWERS:
THE INTERPLAY BETWEEN LEADER AFFECTIVE DISPLAYS AND MESSAGE FRAMING[7]

Abstract

Determinants of unethical behavior have been studied for a long time, and recently some studies have linked affect to unethical behaviors. Moreover, leader affective displays have been shown to influence followers' affect, cognitions and behaviors. With an experimental study we tested the combined influence of leader affective displays and framing of the leader's instructions on followers' unethical behaviors. We measured both actual cheating behavior (i.e., overstating one's performance) and indicated likelihoods of performing different kinds of unethical behaviors. The results supported our prediction that sad leader displays enhanced followers' unethical behaviors when the leader communicated pro-self instructions but not when the leader communicated pro-social instructions. Moreover, leader happy, angry, and neutral displays did not influence followers' unethical behaviors – independent of instruction framings. Our prediction that these effects were mediated by follower sadness (i.e., driven by emotional contagion) was not supported.

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[7] In collaboration with Stéphane Côté, Daan van Knippenberg, and Gerben van Kleef

Introduction Chapter 4

Every organization has to deal with unethical behaviors of their employees. Whether it is setting up rules to prevent unethical behaviors or dealing with the consequences of unethical behavior performed by one or more employees. Unethical behavior of employees brings about costs for an organization. Therefore, it is important to better understand when employees are more or less inclined to perform unethical behaviors. Since any organization entails some form of leadership and because leaders influence their followers, we will investigate how leaders can alter their followers' unethical behaviors. More specifically, we will test how different leader affective displays and pro-social versus pro-self framed instructions interplay in influencing followers' unethical behaviors. Determinants of unethical behavior have been studied for a long time (Hegarty & Sims Jr., 1978), but affect (i.e., moods and emotions) has only in the last decade been sparsely included in those studies (Craft, in press). We propose that leader affective displays may influence followers' unethical behaviors, dependent on the framing of the leader's message. Despite the fact that both unethical behaviors of followers and leader's affective and verbal expressions are factors that exert pervasive influences within organizations, their relationship has not been investigated before. Studying whether leader's affective displays and verbal messages influence followers' unethical behaviors could bring about insights that are beneficial for leaders and organizational functioning. Therefore, we will conduct a laboratory experiment with the aim to contribute knowledge to the literature in the fields of ethics, leadership, and affect.

Affect and Unethical behaviors

Unethical behavior is behavior that is either illegal or morally

unacceptable to the larger community (Jones, 1991). Different determinants of unethical behavior have been studied. Mostly how different personality factors, gender, moral philosophy, cultural values, and nationality impact unethical behaviors (Craft, in press; Loe, Ferrell, & Mansfield, 2000). Furthermore, unethical decisions have been shown to be reinforced by rewards and competition, whereas ethical decisions have been shown to be reinforced by threat of punishment (Hegarty & Sims Jr., 1978). The term *affect* incorporates all feelings from long-lasting moods without a specific cause to short-lasting emotions with a specific cause (Frijda, 1986). Affect has only recently been examined in relation to unethical behaviors and unethical behavior has been shown to influence someone's affective state. For instance, when people had been treated unfairly they felt more satisfied, happier, less angry, and less guilty after having engaged in unethical behavior, compared to people who had been treated fairly (Schweitzer & Gibson, 2008). The other way around, affective states can influence unethical behaviors. For instance, the more frustrated people are, the more inclined they are to perform unethical behaviors (Lowe & Reckers, 2012). In the same study it was found that low levels of both fear and frustration yield the least intentions to perform unethical behavior. Additionally, enthusiasm yields low intentions to perform unethical behaviors. Moreover, feelings of envy (caused by the presence of abundant wealth of others) have been demonstrated to elicit unethical behavior (Gino & Pierce, 2009). More specifically, people who felt envy caused by inequity perceptions overstated their performance to acquire unearned money. Furthermore, a negative mood induced by performing poorly at an exam lowered intentions to report the unethical actions of others to a superior within the organization (Curtis, 2006), indicating that negative affect may promote

unethical behaviors.

We can conclude from these results that unethical behaviors can be altered by ones affective state. Another empirical investigation showed that both positive and negative trait emotions influenced unethical decisions (i.e., outcomes where the participants gained something at the expense of another individual) in complex ways (Connelly et al., 2004). This tells us that there may not be a clear-cut relationship between affect and unethical behaviors. First, the influence of affect on unethical behaviors may not be straightforward, but moderated by certain variables. Second, it may be possible that affective states of the same valence (positive or negative) have different effects on unethical behavior, meaning that specific affective states need to be taken into account. The importance of investigating effects of different specific affective states instead of positive versus negative valenced affective states has been demonstrated by numerous previous studies (e.g., Raghunathan & Pham, 1999; Tiedens & Linton, 2001). We not only propose that specific affective states influence unethical behaviors differently, but take this notion one step further and will investigate whether and how different leader affective displays can alter the followers' unethical behaviors.

Leader Affective Displays

Leaders play a central role within organizations and being a leader implies influencing others (Bass, 2008). One major source of influence is leader affect (van Knippenberg et al., 2008). *Leader affective displays* are observable indicators of the leader's affective state. Leader affective displays can influence followers' affect, cognitions, and behaviors through inferential processes and/or through affective reactions (Van Kleef, 2009). Inferential processes mean that a follower infers information from the affect that is

displayed by the leader. For example, when a leader displays happiness followers may infer that their leader feels positive and that they are doing well. Affective reactions to a leader displaying happiness may cause followers to like this leader better or to also feel happy themselves. The latter process is called *emotional contagion* and entails that someone automatically mimics and synchronizes the affective displays of another person, so that consequentially the two persons converge emotionally (Hatfield et al., 1994).

Previous research provides many examples of these different influences of leader affective displays on follower's affect, cognitions and behaviors. For instance, a leader displaying positive affect makes the followers experience more positive affect (i.e., emotional contagion) and is rated as more effective by the followers compared to a leader displaying a neutral affective state (Bono & Ilies, 2006). Moreover, it has been demonstrated that a leader's displays of positive affect increase followers' coordination through follower positive affect (i.e., emotional contagion), while a leader's displays of negative affect directly increase followers' effort and strategy (Sy et al., 2005). Furthermore, leader affective displays can influence follower performance, and the direction of this influence depends on other factors. Teams with high epistemic motivation have been shown to perform best with an angry leader (mediated by performance appraisals), whereas teams with low epistemic motivation have been shown to perform best with a happy leader (mediated by liking of the leader; Van Kleef et al., 2009). Also, leader displays of happiness increased follower performance on a creative task (mediated by follower happiness thus driven by emotional contagion), while leader displays of sadness increased follower performance on an analytical task (Visser, van Knippeberg, Van Kleef, & Wisse, 2013). In short, leader affective displays

Leader Affect and Followers' Unethical Behaviors

influence a variety of follower outcomes, but this influence is not always straightforward and often contingent upon other variables.

Previous research has provided us with a great deal of knowledge on the influences of leader affective displays. However, knowledge on the combined influence of leader affective displays and the content of the leader's message is scarce. A previous experimental study showed that leader affective displays can interact with the verbal content of the leader's message in influencing the followers (Newcombe & Ashkanasy, 2002). Followers had the most positive relationship with their leader (i.e., highest negotiation latitude) when their leader displayed positive affect accompanied by positive verbal feedback. However, followers had the least positive relationship with their leader (i.e., lowest negotiation latitude) when their leader displayed negative affect accompanied by positive verbal feedback. We can thus conclude that the effects of leader affective displays interact with the verbal content of the leader's message. We will build upon this interaction in our study by predicting an interactive influence of leader affective displays and framing of the leader's verbal message on followers' unethical behaviors.

Affect, Framing and Unethical Behavioral

Affect and Information Processing. According to the broaden-and-build theory (Fredrickson, 1998) the experience of positive affect broadens people's momentary thought-action repertoires, while the experience of negative affect narrows a person's momentary thought-action repertoire. This way, negative affect is functional because it carries direct and immediate adaptive benefits in situations that threaten survival. On the other hand, positive affect is functional by carrying indirect and long-term adaptive benefits due to a broadened thought-action repertoire that builds enduring

personal resources (Fredrickson, 2001). Is has indeed been demonstrated in experimental studies that positive affect (i.e., amusement and contentment) broadens one's scope of attention and one's thought-action repertoires relative to neutral affective states (Fredrickson & Branigan, 2005). Negative affect, on the contrary, is characterized by attention to detail, careful, step-by-step analysis of information, and a high degree of logical consistency (Schwarz & Bless, 1991). This way, negative affect increases the use of detail-oriented, analytical processing strategies.

However, not all negative affective states have been found to have similar effects. According to the appraisal theories (Smith & Ellsworth, 1985; Smith & Lazarus, 1993) and the affect-as-information perspectives (Schwarz & Clore, 1983), different affective states have different antecedents and informational functions. Thus, each affective state is associated with a specific pattern of characteristics. Therefore, affective states with the same valence can differ on other dimensions. For instance, it has been shown that sadness increases systematic information processing, whereas anger increases heuristic processing (Tiedens & Linton, 2001). These authors suggest that anger, happiness and disgust have similar effects because these affective states involve certainty. On the other hand, hope, surprise, fear, worry, and sadness involve uncertainty and therefore should also have similar effects on someone's processing, which differ from those of emotions involving certainty. Affective states associated with uncertainty enhance systematic information processing compared to affective states associated with certainty.

Within a model that illustrates how emotions impact ethical decision making, it has also been proposed that happiness and anger have similar effects on ethical decision making (Gaudine & Thorne, 2001). Extending this

proposition from an intrapersonal to an interpersonal level, we expect that leader displays of happiness and anger will have equal effects on followers' unethical behaviors. Leader displays of sadness are expected to impact followers' unethical behaviors differently than leader displays of happiness or anger. It has been demonstrated that sad individuals are biased in favor of high risk/high reward options (Raghunathan & Pham, 1999). This means that people in a sad state are willing to take more risks when this can result in a higher reward. Unethical behavior usually results in some form of personal gain, so sadness may promote performing unethical behavior. We predict that leader displays of a certain kind of affect can bring about a similar affective experiences among the followers, because of emotional contagion. When a leader's affective state is also experienced by the followers, previous intrapersonal effects of affect on unethical behaviors can be extended to an interpersonal effect where leader affect influences followers' unethical behaviors through follower affect. Following this line of reasoning, we predict that observing a leader who displays sadness will experience more sadness themselves and, as a result, may be more inclined to perform unethical behaviors.

Framing. Previous research has shown that an interaction between a regulatory focus state and framing of the message influenced people's unethical behaviors (Gino & Margolis, 2011). In line with this study we assume that an interaction between a leader affective displays and framing of the leader's message may influence followers' unethical behaviors. This expectation is supported by the finding that specific affective states alter people's susceptibility to their leader's unethical directives (Lowe & Reckers, 2012). Thus, the framing of a leader's message and the follower's affective

state interplayed in influencing followers' unethical behaviors. Following up on this result and extending it, we predict that leader affective displays and framing of the leader's message interplay in influencing followers' unethical behaviors. More specifically, we predict that framing of the leader's message only has an effect when the leader displays sadness and not when the leader displays anger or happiness.

This prediction is based on the previous finding that individuals who experience negative affect are more susceptible to issue framing than individuals who experienced positive affect (Mittal & Ross, 1998). Negative affect here was induced by telling participants that their performance was in the lowest category the group. Since anger involves others doing something with negative consequences for oneself and sadness involves unpleasantness beyond one's control (Smith & Ellsworth, 1985), we assume that the negative affective state that was induced in this particular study resembles sadness more than anger. The framing of the message had a stronger effect on risk taking when followers experienced negative affect than when followers experienced positive affect. Similarly, we expect a stronger effect of the framing of the leader's message when the leader displays sadness than when the leader displays other kinds of affect. This is also in line with the result that people in a negative affective state spontaneously elaborate more on the content of a message (Schwarz & Bless, 1991). As mentioned before, sadness fosters careful detail-oriented information processes, while happiness and anger foster quicker heuristic processing (Tiedens & Linton, 2001).

The Present Research and Hypotheses

The literature review above resulted in three main propositions. First, a leader's affective state can be contagious. As a consequence, followers

observing a leader displaying a certain kind of affect can become to experience the same kind of affect. For instance, when followers observe a leader displaying sadness they may feel sadder themselves. Second, a sad affective state is expected to promote unethical behavior due to the reward seeking motives accompanied by this affective state. As a result, we do expect that followers with a leader who displays sadness are more inclined to behave unethically. Third, a leader displaying sadness may induce a narrower thought-action pattern and more attention to details so that followers will better process the leader's verbal message. Taking this all together, followers may behave more unethically when their leader displays sadness and frames the instructions in a pro-self way (i.e., promoting personal gain) compared to a pro-social way (i.e., promoting thinking about others). When a leader displays happiness or anger, we do not expect that the framing of the leader's message has any influence on the followers' unethical behaviors, because followers observing a happy or angry leader are not expected to focus on nor to thoroughly process the verbal message of the leader. The same applies to a leader with a neutral affective display. To demonstrate that a possible effect is caused by leader sadness specifically, we compare leader sad displays with leader happy, angry, and neutral displays. This way, we will be able to compare leader sad displays with another positively valenced leader affective display (i.e., happiness), another negatively valenced leader affective display (i.e., anger), and an affectively neutral leader display. A possible effect, then, would be caused by leader sad displays specifically, and not by just any (negative) emotion. Furthermore, this would rule out the explanation that a possible effect could also be caused by leader arousal (i.e., both neutral and sadness involve low arousal).

Hypothesis 5.1: Leaders displaying sadness will foster followers' unethical behaviors when they communicate a pro-self compared to a pro-social framed message, while happy, angry or affective neutral leader displays will not foster followers' unethical behaviors, independent of message framing.

As mentioned in the rationale above, we predict that emotional contagion is the mechanism underlying the effect of leader affective displays and leader instructions on followers' unethical behaviors. More specifically, we predict that a leader displaying sadness yields higher sadness among the followers which increases their processing of their leader's message. As a result, a leader displaying sadness increases followers' unethical behaviors when communicating a pro-self messages, but does not when communicating a pro-social message.

Hypothesis 5.2: The combined effect of leader affective displays and instruction framing on followers' unethical behaviors is mediated by follower sadness.

To be able to investigate the effects of different leader affective displays without other intervening variables a laboratory experiment was chosen as the best way to test our hypotheses. A controlled surrounding is a prerequisite for drawing causal conclusions regarding the effects of leaders (De Cremer et al.,, 2005; Tiedens, 2001; van Knippenberg & van Knippenberg, 2005). In real life leadership settings many different variables interplay and this makes it impossible to gather the influence of a specific leader affective display (Glomb & Hulin, 1997). Previous experimental studies on leader affective displays have used actors as leaders to successfully manipulate different leader affective displays (Bono & Ilies, 2006; Tiedens,

2001; Van Kleef et al., 2009). Therefore, our leader was played by an actor. The leader was videotaped in advance to guarantee identical affective displays and verbal content for all the participants (Lewis, 2000). This allowed us to measure effects of leader affective displays only, independent of possible effects of other variables that may covary with a leader in a field setting.

Method Study 5

Participants and Design

Our study was completed by 226 students (65% female; age $M = 21.65$, $SD = 4.74$) of a major University in Canada. Each participant received $10 CAD (approximately $10 USD) as a compensation for participating.

The study had a 4 (leader affective display: happy, sad, angry, or neutral) x 2 (framing: pro-self or pro-social) factorial between-subjects design. Participants were randomly assigned to one of the eight conditions.

Procedure

Upon arrival, participants were individually welcomed and seated in front of a computer. They read introduction information on the screen. Participants read that the purpose of the study was to compare the effects of leadership via modern technologies with leadership via traditional live interaction between leaders and subordinates. All participants were informed to be in the 'e-leadership' condition, meaning that their leader would coach them from another room by means of a computer network (see Van Kleef et al., 2009, for a similar procedure). The participants' leader was introduced as Derek Wood, who has a BA and MBA in management and is currently working as manager for a bank. Mr. Wood was stated to be enrolled in an executive development program on e-leadership for which he was supervising the participants. Furthermore, it was stated that the leader had extensive

experience with the tasks that the participants were going to perform, and that the leader would check and rate the work of the participants after completion. In reality, the participants' leader was a professional actor (36 year old, white, male), who was not aware of the purpose of the study.

Participants read on the screen that their leader would communicate with them via the computer network, but that he could not see or hear them nor the input they give on the computer. Thus, participants' input on the computer would be completely anonymous and their leader would only see and check their answers on paper. Participants were urged to watch and listen carefully when connected with their leader. Dependent on which leader affective display condition participants were in their leader displayed happiness, sadness, anger or had an neutral affective display every time leader and participant were connected. The first time the participants were allegedly connected to their leader he gave task instructions for the first task, the same for all conditions. After that, participants conducted the first task on the computer. Subsequently, they were connected to their leader once more and he instructed them on how they had to check their answers on the first task, with either a pro-social or a pro-self framing of the instructions. During the answer checks on paper participants were disconnected from their leader. When connection with the leader was established again, the leader gave instructions for the second task, with either pro-social or pro-self framing of the instructions.

After having completed the second task participants were asked to indicate their leader's affect, their own sadness, and demographics. Leader affect was measured by asking participants to indicate "How [affective state] is your leader?" on a 7 point scale that ranged from 1 = *not [affective state]* to 7 = *extremely [affective state]*. Follower sadness was measured the same way

with the question "How [affective state] do you feel at this moment?". To measure leader happiness we used happy, delighted, joyful (Izard, 1977), and glad (α = .94) as affective states, which were averaged into a single index. To measure leader sadness we used sad, discouraged, downhearted (Izard, 1977), and sorrowful (α = .92) as affective states, which were averaged into a single index. To measure leader anger we used angry, aggravated, irritated (Van Kleef, De Dreu, Pietroni, & Manstead, 2006), and mad (α = .91) as affective states, which were averaged into a single index. Follower sadness was measured with the items sad, sorrowful, downhearted, and discouraged (α = .89) that were averaged into a single index. Finally, participants were debriefed, thanked, and paid.

Leader affective displays. The leader's face was filmed like he was sitting in front of a webcam. Except for the pro-social versus pro-self framing parts of the message, the leader spoke exactly the same words in all four affective display conditions. Leader affect was displayed non-verbally, by means of facial expressions and vocal intonation. The happy leader had the corners of the mouth up, smiled frequently, looked cheerful, and spoke with an enthusiastic, upbeat tone of voice. The sad leader had the corners of the mouth down, glum frequently, looked depressed, and spoke with a quiet pleading tone of voice. The angry leader had low eyebrows, frowned frequently, looked stern, and spoke with an angry and irritable tone of voice. The neutral leader looked non-emotional, and spoke with a constant neutral tone of voice. (see also Lewis, 2000; Van Kleef et al., 2009). The leader did not verbally refer to his affective state.

Framing of the leader's message. While explaining to the participants how they had to check their answers of the first task, the leader in

the pro-self condition said that "the world would be a much better place if everyone would prioritize personal achievement" and that "it is necessary to maximize personal gain". The leader in the pro-social condition said that "the world would be a much better place if everyone would prioritize collective achievement" and that "it is necessary to maximize other people's gain". While explaining the second task, the leader in the pro-self condition said that "it is very important to optimize personal benefits" and that "you should always think about yourself before thinking about others". The leader in the pro-social condition said that "it is very important to optimize the greater good" and that "you should always think about others before thinking about yourself".

Unethical behavior measures. The first and second tasks were measures of unethical behavior. The first task was a problem-solving task where participants had the option to either cheat or be honest when reporting their scores to their leader. In the second task the participants were asked to indicate how likely it is that they would behave unethically in certain situations.

Cheating Behavior. The first task was a "matching numbers task" (Mazar, Amir, & Ariely, 2008). Participants saw 20 matrices on their screen. Every matrix consisted of 12 three-digit numbers (see Figure 18 for an example). The leader asked the participants to find two numbers within every matrix that added up to exactly 10.00. For example, 8.89 plus 1.11 is 10.00, and would be correct, while 8.90 plus 1.11 is 10.01 which would be incorrect. Participants had to type in the two matching numbers underneath each matrix and they had five minutes to complete the task. After this task the leader told the participants that he was interested in their final scores on the number

matching task. He asked them to check their own scores for efficiency reasons. Participants could see the numbers they had matched for each matrix on their screen. The experimenter gave them an answer sheet were the participants could check a check box for all matrices of which they had matched the two correct numbers. Moreover they were asked to indicate their final score (i.e., the total number of matrices of which they had solved correctly) on the bottom of the answer sheet. We calculated the participants' possible cheating magnitude (i.e., 20 minus the number of correctly solved matrices) and used their percentage of cheating (the number matrices of falsely reported as solved out of the possible cheating magnitude) as an indicator of their cheating behavior (See also Gino & Pierce, 2009; Gino & Margolis, 2011; Schweitzer, Ordóñes, & Douma, 2004).

Figure 18. Example of one matrix (Study 5)

4.73	2.12	8.90
0.63	8.89	9.33
1.02	2.34	4.98
1.11	0.65	2.9

Unethical Decision Making Scale. The second task was the "Unethical decision Making Scale" (Detert, Klebe Trevino, & Sweitzer, 2008) that consisted of descriptions of eight different situations ($\alpha = .69$). Some examples of unethical conducts that are described are stealing paper from your work, not returning too much change that you received, illegally copying software, or plagiarize a team study project. For each situation, participants were asked to imagine as vividly as they could that they were in this situation.

The leader asked the participants to indicate on a 7-point scale how likely is it that they would engage in each of the behaviors described (1 = *not likely*, 7 = *highly likely*). A participant's unethical decision making score was the average of their eight answers.

Results Study 5

Manipulation Check

Univariate analyses of variance (ANOVA) yielded an effect of leader affective displays on perceived leader happiness, $F_{(3,222)} = 151.18$, $p < .001$, $\eta^2 = .67$ (see Table 5 for more statistics regarding rated leader affect). Participants rated a leader who displayed happiness as happier than a leader who displayed sadness, anger, or had a neutral display. Furthermore, there was an effect of leader affective displays on perceived leader sadness, $F_{(3,222)} = 123.53$, $p < .001$, $\eta^2 = .63$. Participants rated a leader who displayed sadness as sadder than a leader who displayed happiness, anger, or had a neutral display. Moreover, leader affective displays influenced perceived leader anger, $F_{(3,222)} = 83.97$, $p < .001$, $\eta^2 = .53$. Participants rated a leader who displayed anger as angrier than a leader who displayed happiness, sadness, or had a neutral display. In short, the leader affective displays were manipulated successfully.

Unethical Behavior

Cheating behavior. ANOVA yielded no main effect of leader affective displays and a main effect of framing of the leader instructions, $F_{(1,218)} = 4.39$, $p = .037$, $\eta^2 = .02$, on the participants' cheating behavior. We will not further interpret this main effect, because of a significant interaction of leader affective displays x leader's message framing on participants' cheating behavior, $F_{(3,218)} = 2.78$, $p = .042$, $\eta^2 = .04$. Figure 19 depicts this interaction.

Table 7. Statistics for rated leader affect (Study 5).

Leader affective display	Rated leader happiness				Rated leader sadness				Rated leader anger			
	M	SD	$t_{(222)}$	p	M	SD	$t_{(222)}$	p	M	SD	$t_{(222)}$	p
Happy	4.93	1.16			1.67	0.81	18.25	<.001	1.73	0.86	15.13	<.001
Sad	1.44	0.73	19.74	<.001	5.71	1.47			2.72	1.29	10.66	<.001
Angry	1.97	0.95	16.43	<.001	3.16	1.32	11.19	<.001	5.12	1.41		
Neutral	3.01	0.92	10.83	<.001	2.49	1.08	14.42	<.001	2.49	1.11	11.67	<.001

Note. t- and p-values indicate differences of a certain leader affective display with the happy leader display condition for leader happiness, with the sad leader display condition for leader sadness, and with the angry leader display condition for leader anger.

Figure 19. Followers' cheating behavior in percentage of the possible cheating magnitude for happy, sad, angry and neutral leader displays with pro-self or pro-social framed instructions.

Error Bars: +/- 1. SD
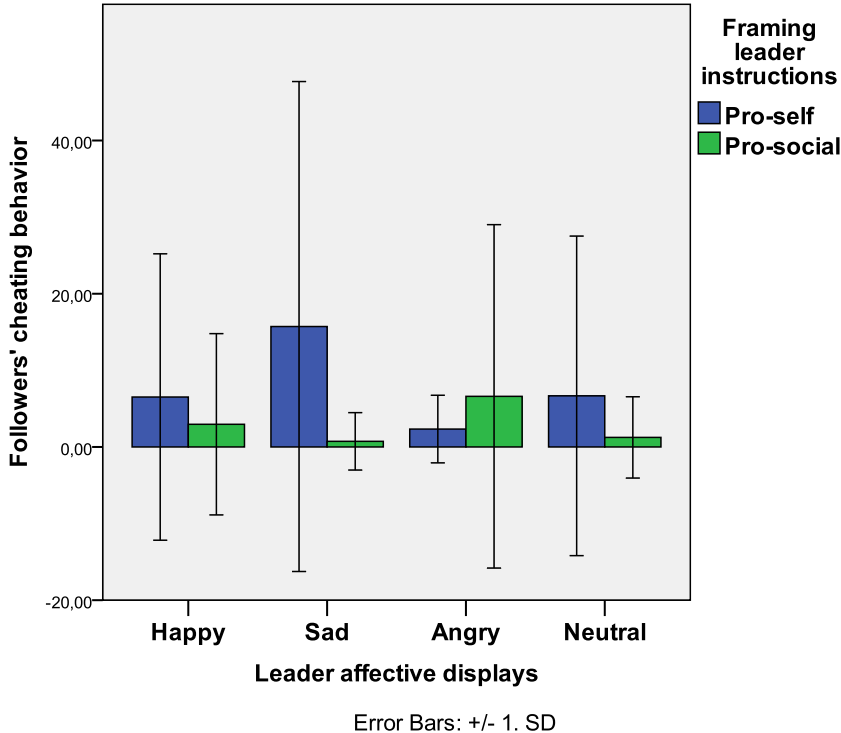
Follow-up analysis showed that sad leader displays yielded more cheating behavior in the pro-self than in the pro-social condition, $F_{(1,218)} = 10.28$, $p = .002$, $\eta^2 = .05$. For happy, angry and neutral leader displays cheating behaviors did not differ between the pro-self and pro-social instruction conditions ($ps = .25 - .44$). Moreover, within the pro-self instruction condition, leader sad displays yielded more follower cheating behaviors than leader happy ($SE = 4.67$, $p = .05$), angry ($SE = 4.76$, $p = .005$) or neutral ($SE = 4.67$, $p = .05$) displays. This corroborates Hypothesis 5.1. No other effects were found.

Unethical decision making scale. ANOVA yielded a significant interaction of leader affective displays x leader's message frame on participants' unethical decision making, $F_{(3,218)} = 3.57$, $p = .015$, $\eta^2 = .05$. Figure 20 depicts this interaction.

Figure 20. Followers' unethical decision making for happy, sad, angry and neutral leader displays with pro-self or pro-social framed instructions.

Error Bars: +/- 1. SD
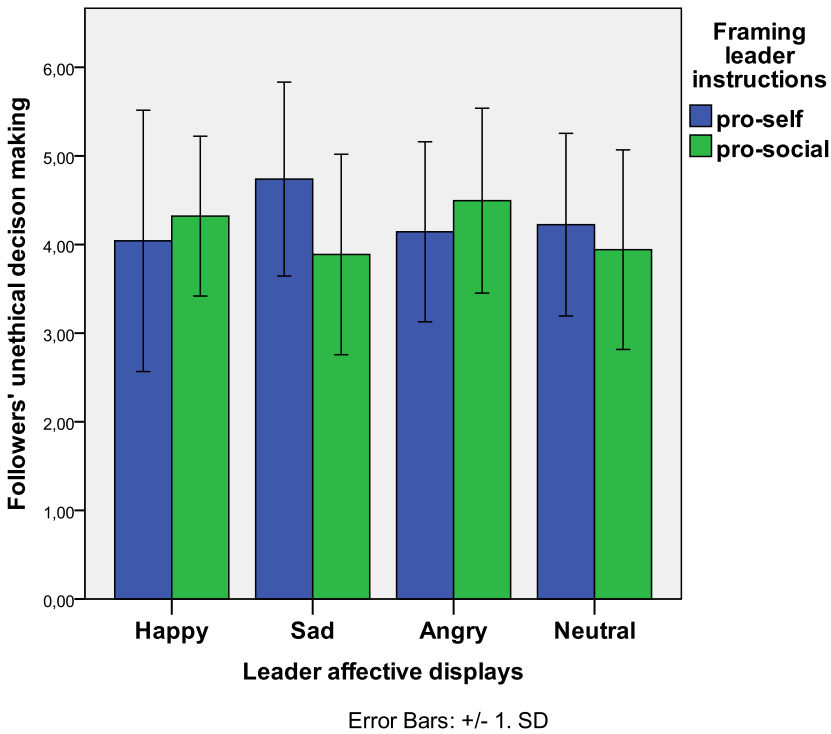
Follow-up analysis showed that, as predicted, sad leader displays yielded more unethical decisions in the pro-self than in the pro-social condition, $F_{(1,218)} = 8.31$, $p = .004$, $\eta^2 = .04$. For happy, angry and neutral leader displays unethical decisions did not differ between the pro-self and pro-

social instruction conditions. Moreover, within the pro-self instruction condition, leader sad displays yielded more follower unethical decisions than happy (*SE* = 0.30, *p* = .02) or angry (*SE* = 0.30, *p* = .05) leader displays. The difference between sad and neutral leader displays was only marginally significant (*SE* = 0.30, *p* = .08). This largely corroborates Hypothesis 5.1. No other effects were found.

Emotional Contagion

To test whether follower sadness mediates the effect of leader affective displays on followers' unethical behaviors we first tested the effect of leader affective displays on follower sadness. ANOVA yielded a significant effect of leader affective displays on follower sadness, $F_{(3,222)}$ = 5.26, p = .002, η^2 = .07. A leader displaying sadness (*M* = 2.98. *SD* = 1.51) yielded higher follower sadness than a leader displaying happiness (*M* = 2.14. SD = 1.35), $t_{(222)}$ = -3.37, p = .001 and than a leader with an affective neutral display (*M* = 2.12. *SD* = 1.10), $t_{(222)}$ = -3.46, *p* = .001. A leader displaying sadness yielded only marginally higher follower sadness than a leader displaying anger (*M* = 2.52. *SD* = 1.36), $t_{(222)}$ = -1.80, *p* = .07. No mediation effects were found of follower sadness mediating the relationship between leader affective displays on followers' unethical behaviors. So, Hypothesis 5.2 was not supported by the results.

Discussion Study 5

We found that a leader who displays sadness enhances followers' unethical behaviors when communicating pro-self framed compared to pro-social framed instructions. On the other hand, leader happy, angry, and neutral displays did not enhance followers' unethical behaviors, independent of message framing. We found this effect on two different measures of unethical

behavior. First, we measured actual cheating behavior by providing participants with the opportunity to overstate their scores on a number matching task. Second, we measured intentions to perform different kinds of unethical behaviors by letting participants visualize certain situations and indicate how they would behave.

Theoretical Implications

This is the first study that has investigated the combined influence of leader affective displays and framing of the leader's message on followers' unethical behaviors. Thereby, our results provide a new and unique contribution to the literature in the fields of leadership as well as ethics. This study is a first step in uncovering the complex combined influence of leader affective displays and the leader's verbal instructions on follower unethical behaviors. Our results follow-up on several studies showing that the effects of leader affective displays on follower outcomes are contingent upon other factors like followers' positive affect (Damen et al., 2008a), followers' epistemic motivation (Van Kleef et al, 2009), followers' agreeableness (Van Kleef et al., 2010), and task type (Visser et al., 2013). The current study also complements other studies that have shown that the framing of the leader's message can interact with other variables, like follower affect (Lowe & Reckers, 2012) and regulatory focus (Gino & Margolis, 2011), in influencing followers' behaviors. Pro-self versus pro-social messages conveyed by a leader can determine whether the followers enact unethical behaviors or not, at least when the leader displays sadness.

Even though previous studies have investigated many different antecedents for unethical behavior, our results suggest that most leader affective displays and most leader instructions do not increase follower's

unethical behavior. Happiness and anger are affective states that are often experienced and displayed in leadership contexts and leader-to-follower communications (Glomb & Hulin, 1997; Lewis, 2000; Van Kleef et al., 2009). We found no evidence, however, that happy or angry leader displays influence unethical follower behaviors, whether the leaders communicated pro-social or pro-self messages. Only the combination of sad leader displays and a verbally communicated pro-self message fostered followers' unethical behaviors.

Our results were similar across two different outcome measures of unethical behavior, namely actual cheating behavior (i.e., over-reporting scores) and responses on the unethical decision making scale (Detert et al., 2008). This suggests that the unethical decision making scale can be a valid proxy for actual unethical behaviors. Moreover, the correspondence of the two measures of unethical behavior might reflect the robustness of the effect that we found.

We found an interaction effect for sad leader displays specifically. This indicates that specific leader affective displays have different effects on followers and that it is not sufficient to compare effects of positive versus negative leader affect. In correspondence with earlier notions to study specific affective states instead of separating affect by valence (Raghunathan & Pham, 1999; Tiedens, 2001) we once again highlight the importance of this notion. We found that leader displays of sadness in combination with pro-self instructions fostered followers' unethical behaviors, but it is possible that other specific affective states displayed by a leader have the same effect. Therefore, it would be interesting if future research tested our model for other leader affective displays, including affective states that resemble sadness in terms of their appraisal structure and conveyed information. Other affective states that

are associated with unpleasantness and a lack of control are disappointment and fear. Additionally, other affective states that may activate reward seeking motives could be hope or shame. It would be worth testing whether these affective states, when displayed by a leader, have similar effects as sadness on followers' unethical behaviors.

Implications for Practice

Since our study was an experiment, we should be cautious in generalizing our results to organizational settings. Ideally, future studies will replicate our results within organizational settings.

On the bright side, most leader affective displays yield followers to behave ethically, and leader affective displays only yield unethical behaviors in specific circumstances (i.e., when the leader displays sadness and communicates pro-self framed instructions). This is beneficial for organizations, as ethical behavior of the employees is desired. Furthermore, when the leader communicated pro-social instructions participants in none of our leader affective display conditions performed unethical behaviors. This means that pro-social instructions may be an easy and effective means to prevent unethical behaviors of employees. On the dark side, a leader who wants the followers to perform unethical behavior can make them do so by emphasizing selfish goals while expressing sadness.

Leaders often focus on the verbal content of their message, but their affective displays are as influential on their followers' unethical behaviors. Only when leaders display sadness it makes a difference for followers unethical behaviors whether pro-self or pro-self messages are communicated. When leaders display happiness or anger, pro-self versus pro-social instructions do not differently influence followers' unethical behaviors. As a

consequence, leaders should be aware of the fact that different verbal instructions not evidentially make a difference in influencing the (un)ethical behaviors of their followers.

People in a leadership position who have a chronic tendency to experience sad affective states might profit from focusing on their verbal messages. These leaders can prevent unethical behaviors of their followers by explicitly mentioning the importance of pro-social and ethical behavior. Moreover, in some professions ethical behavior has special priority because, for example, employees have to deal with confidential information or large amounts of money. Supervisors in these branches may be more successful in guiding their employees to behave ethically when they avoid displaying sadness. Along the same line, people with a tendency to feel sad or depressed should ideally not be hired to occupy those positions.

Limitations and Directions for Future Research

Overall, future studies that replicate our design are desired. A replication of our results is important to be confident of the effect that we have found. Besides replicating the effects that we demonstrated, additional future research is desirable to extend our model and to clarify some aspects of it. Those directions for future research will be discussed below.

Despite the fact that our results supported our main prediction regarding a combined impact of leader affective displays and leader's framing of instructions on followers' unethical behaviors, our prediction that this process is driven by emotional contagion has not been supported. Consequentially, the process of how sad leader displays enhance follower unethical behavior when instructions are framed in a pro-self way remains unclear. Future studies should ideally replicate this study and test some

possible mechanisms underlying this effect. As mentioned in the rationale for our hypothesis, followers may attend more to the content of the verbal message of their leader and/or better process the message of their leader when the leader displays sadness than when the leader displays happiness or anger. If followers of a leader displaying sadness process the message of their leader more thoroughly than followers of a leader displaying happiness or anger, this might explain why the followers in the sad leader condition behave according the pro-self versus pro-social instructions of their leader while those different instructions do not make a difference within the other leader affective display conditions. A first option is that the influence of leader affective and verbal displays on followers' cognitions and behaviors may have been a direct process, explaining why we did not find a mediation effect of follower sadness. A second option is that our self-reported measure of follower sadness did not fully capture the – maybe unconscious – contagion of sadness. Participants may either not have been aware of this contagion or may have been unwilling to report their actual sadness level because that was believed to be socially undesirable (Watson et al., 1992). In both cases, a self-reported measure of sadness may be, at least party, distorted. A third possibility is that followers obey leaders displaying sadness more than leaders displaying happiness or anger, due to inferential processes (Van Kleef, 2009). Maybe followers feel sorry for a leader displaying sadness, in contrast to a leader displaying happiness or anger, and this may result in more obedience as a way to help or please their leader. It may be worth investigating whether followers feel sorry for a leader displaying sadness and as a consequence obey more by acting according to the leader's instructions.

We tested our prediction in a laboratory experiment to be able to

manipulate leader affective displays in the absence of possible confounding factors. As a consequence, a real life leader-follower relationship was lacking and this may be a limitation. However, a meta-analysis has shown that laboratory and field studies in psychology find similar effects (Anderson et al., 1999). Furthermore, previous researches on leadership found similar results in both the field and the experimental studies that each research comprised (De Cremer et al., 2005; De Cremer & van Knippenberg, 2002; van Knippenberg & van Knippenberg, 2005). Moreover, previous studies on the effects of leader affective displays specifically have also reported the same results collected in the field as in the laboratory within each research (Bono & Ilies, 2006; Damen et al., 2008b; Glomb, & Hulin, 1997; Tiedens, 2001). As a result, we expect that the same pattern of results would be obtained if this study would be replicated in a field setting. Nevertheless, it is recommended that this study will be replicated in a field setting that encompasses real life leader-follower relationships.

A white male leader was used in the current study. It would therefore be interesting to replicate our study with a female and/or a non-white leader. A previous study found similar effects of leader affective displays of male and female leaders (Damen et al., 2008a), while another study reported different effects of male and female leaders when they expressed anger, but similar effects of male and female leaders when they expressed sadness (Lewis, 2000). If leader displays of sadness have similar effects for male and female leader, our model might replicate when a female leader is displaying the affect. Nevertheless, we should be careful not to generalize our results to female leaders before such a replication has been conducted.

To conclude, unethical behavior of followers can be triggered by the

combination of leader's sad displays and a pro-self framed message. Leader's happy, angry or neutral displays yield ethical follower behaviors' independent of the framing of the leader's message.

CHAPTER 5

DISCUSSION:
LEADER AFFECT AND LEADERSHIP EFFECTIVENESS

Leader affective displays influence a range of follower outcomes that all impact a leader's effectiveness. I have conducted five empirical studies with the aim to uncover the different ways and processes through which leader affective displays can foster or hinder leadership effectiveness. The results of these studies were discussed in the previous chapters and revealed that different leader affective displays differently influence followers' affect, performance, leadership effectiveness ratings, intertemporal decision making, and unethical behaviors. The impact of leader affective displays on leadership effectiveness is not straightforward, but often indirect via emotional contagion processes, and can be contingent upon situational (i.e., kind of task), personal (i.e., trait affect), or contextual (i.e., verbal instructions) factors.

Summary of the Main Findings

In chapter 2 we discussed two laboratory studies that had been conducted to investigate the effects of leader affective displays on followers' creative versus analytical performances and on followers' ratings of their leader's effectiveness. The results of the first study showed that leaders who display happiness enhance followers' creative performance, whereas leaders who display sadness enhance followers' analytical performance. Moreover, a leader displaying happiness was rated as more effective than a leader displaying sadness. A second study replicated these results and also revealed that a neutral affective leader display did not yield differences between

followers' creative and analytical performances. Additionally, emotional contagion – at least party – underlies the effects of leader affective displays on follower performance and on followers' effectiveness ratings of their leader. More specifically, a leader displaying happiness yielded happier followers and as followers experienced more happiness they performed better on creative tasks and rated their leader as more effective. Another important conclusion from both studies is that objective and subjective measures of leadership effectiveness do not necessarily correspond. Follower performance, an objective measure of leadership effectiveness, is dependent on the kind of task that was performed. Leaders who displayed happiness were most effective in optimizing their followers' creative performance, while leaders who displayed sadness were most effective in optimizing follower analytical performance. On the other hand, followers' ratings of their leader's effectiveness, a subjective measure of leadership effectiveness, is independent of the task type. A leader displaying happiness was always perceived as more effective than a leader displaying sadness, whether this leader did or did not optimize the performances of the followers.

　　　　Chapter 3 covered two empirical investigations on the effects of happy, sad, angry, and neutral leader displays on followers' intertemporal decision making. The results of the first study demonstrated that sad leader displays foster long-term focused decisions, whereas happy, angry and neutral leader displays foster short-term focused decisions. This effect was mediated by follower sadness and therefore driven by emotional contagion. Thus, a leader displaying sadness increased sadness in the followers which yielded more long-term focused follower decisions. The results of the second study replicated the results of the first study, and also revealed that follower trait

negative affect moderated this effect. Accordingly, a leader who displays sadness enhances sadness of the followers and, as a consequence, followers who have a chronic tendency to experience negative affect make more long-term focused decisions.

In chapter 4 we argued that a combination of leader affective displays and leaders' verbally communicated instructions influenced followers' unethical behaviors. The results showed that leader sad displays, combined with pro-self instructions, increased followers' unethical behaviors. Follower who received pro-self instructions from a leader displaying sadness cheated more when they had the opportunity to overstate their scores on a number matching task. Moreover, followers with a sad leader who communicated pro-self instructions indicated their likeliness to perform certain unethical behaviors to be higher. When a leader displayed happiness, anger or an affective neutral expression, pro-self and pro-social instructions had similar effects and both did not increase followers' unethical behaviors.

All findings are summarized in Figure 21.

Theoretical Contributions

The main finding of the five studies that we have discussed in the previous chapters is that the influence of leader affective displays on leadership effectiveness is contingent upon which follower outcome is at stake and also dependent on certain situational (i.e., task type) and personal (i.e., follower trait negative affect) factors. These results are in line with an earlier statement that the effectiveness of a leader depends upon the situation as well on the type of followers (Johnson, 2008). Moreover different leader affective displays each have a specific impact on a certain follower outcome. Our

Figure 21. The findings of the five empirical studies on the effects of leader affective displays.

Leader   Followers   Leadership
                                                   Effectiveness

```
┌──────────┐        ┌──────────┐              ┌──────────────┐
│ Leader   │        │ Follower │              │Follower creative│
│ happy    │───────▶│ happiness│              │  performance   │
│ display  │        │          │              └──────────────┘
└──────────┘        └──────────┘
                                               ┌──────────────┐
                                               │  Leadership  │
                                               │ effectiveness│
                                               │   ratings    │
                                               └──────────────┘

                                               ┌──────────────┐
                                               │  Follower    │
                                               │  analytical  │
                                               │ performance  │
                                               └──────────────┘

                              ┌──────────┐
                              │ Follower │
                              │ trait NA │
                              └──────────┘

┌──────────┐        ┌──────────┐              ┌──────────────┐
│ Leader   │        │ Follower │              │Follower long-│
│ sad      │───────▶│ sadness  │─────────────▶│term decisions│
│ display  │        │          │              └──────────────┘
└──────────┘        └──────────┘

                                               ┌──────────────┐
                                               │  Follower    │
                                               │  unethical   │
                                               │  behaviors   │
                                               └──────────────┘
┌──────────┐
│ Leader   │
│ Pro-self │
│instructions│
└──────────┘
```
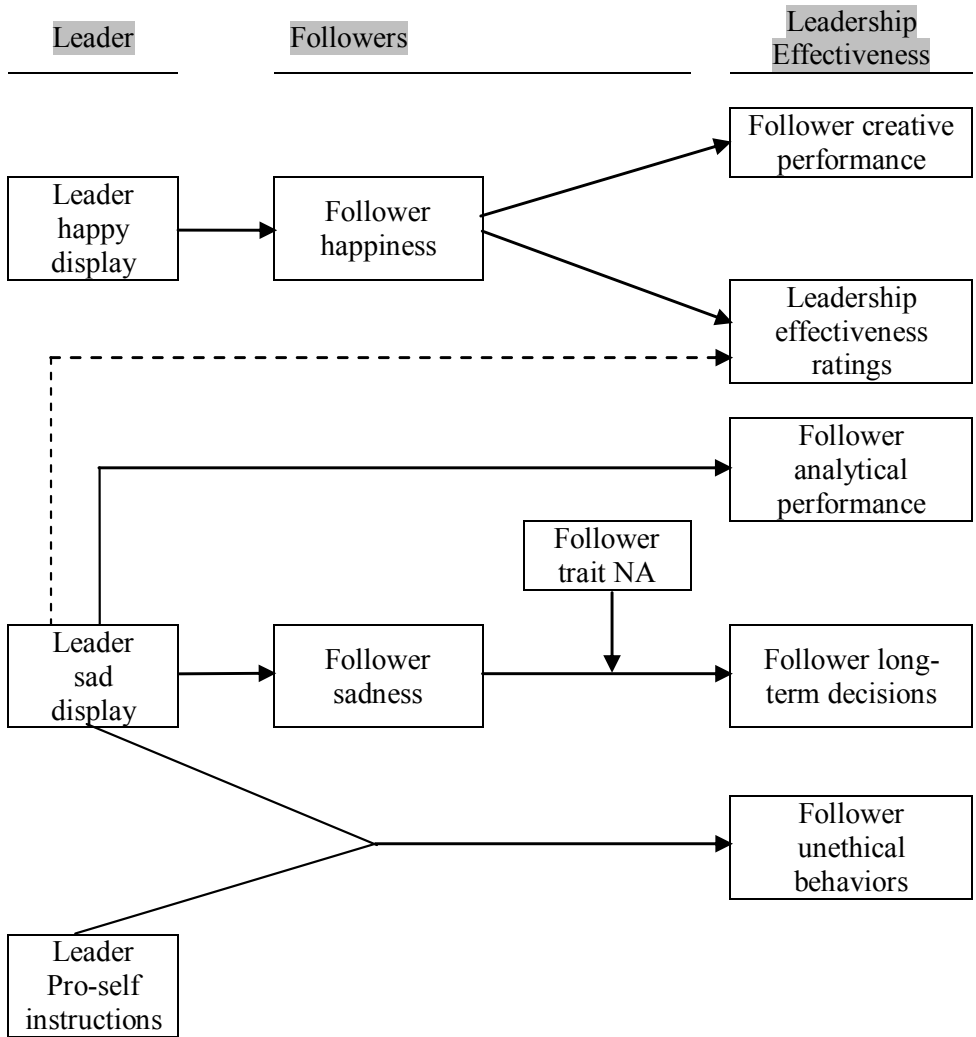
Note: solid lines indicate a positive relationship and the broken line indicates a negative relationship

research has complemented previous research on leadership effectiveness by comparing different follower outcomes. Previous research on leader affect and leadership effectiveness is often limited to leadership effectiveness ratings or (creative) performance measures (Rajah et al., 2011; Van Knippenberg, forthcoming). Our studies linked leadership effectiveness to some other indicators of leadership effectiveness, like followers' decision making and followers' unethical behaviors. We therewith support an earlier notion that leadership effectiveness has different determinants (DeRue et al., 2011). The research conducted in the previous chapters has demonstrated that different conceptualizations of leadership effectiveness can all be influenced by specific leader affective displays.

It has been argued that leaders can only be effective when they handle their own emotions in order to be able to manage emotions among their followers (Rajah et al., 2011). Our results support this statement by showing that a leaders' affective displays influence this leader's effectiveness, often through eliciting similar affect within the followers (i.e., emotional contagion). Therefore, both affective and interpersonal processes can contribute to a leader's effectiveness. It has also been stated that a main function of displaying affect is to communicate simplified but high impact information (Arbib & Fellous, 2004). Our findings have demonstrated that this also applies to displays of a leader's affect. A leader's display of affect is a short and relatively simple way of communicating, but at the same time can have great impact on followers' affect, cognitions and behaviors.

In all of our studies leader affect was displayed solely facially, thus without verbally mentioning or otherwise expressing the affective state. As a consequence, all studies together provide a solid proof for the variety of –

sometimes complex – influences that solely non-verbal facial displays of a leader's affect can have. This may be overlooked sometimes when thinking about, for example, leadership styles, leader strategies, or leader-follower interactions. It is therefore important that future leadership studies take into account that subtle variations in a leader's facial expressions can impact followers' affect, cognitions and behaviors.

Previous research on affect has extensively demonstrated that the experience of affect that is unrelated to a task or decision can still influence one's performance on that task (Baas et al., 2008; Schwarz & Bless, 1991) or that decision (e.g., Forgas & George, 2001; Gino & Schweitzer, 2008; Lerner & Keltner, 2000). Our studies have shown that this effect can be extended, because an affective state of another person, in this case your leader, can also influence one's performance or decision. Such interpersonal influences of affect have been brought forward by researchers studying the social functions of affect (Keltner & Haidt, 1999; Fischer & Van Kleef, 2010). We have provided additional evidence for such interpersonal affective influences, specifically within leader-to-follower interactions.

In short, the studies that have been conducted in the previous chapters have brought forward new insights within the fields of both leadership and affect, as well as in the fields of task performance, decision making and ethics. The relationship between leader affective displays and leadership effectiveness has been clarified by uncovering some important processes that play a role here. The main findings within chapters 2 and 3 were replicated over two different studies and the main finding in chapter 4 was replicated over two different dependent measures. This increases the robustness of our results.

Practical Implications

The studies discussed in the previous chapters were all experimental studies conducted in a laboratory setting. This was necessary to isolate the influences of different leader affective displays (Johnson, 2009) to be able to draw causal conclusions regarding the effects of leader affective displays (Sy et al., 2005). As a consequence, we should be cautious when drawing conclusions that apply to practical settings. However, previous studies have reported similar results in laboratory and field settings (Locke, 1986), also when studying leader affect specifically (Glomb & Hulin, 1997; Schaubroeck & Shao, 2012). Moreover, a meta analysis has shown that laboratory and field studies in psychology yield similar results (Anderson et al., 1999). We therefore have good reasons to expect that our results can be replicated within field settings. Nevertheless, future research should replicate our studies within organizational settings to be certain. If the results of our studies will replicate within the field, some practical implications may be relevant and those will be discussed below.

Selecting Leaders

Our results have shown that leader affective displays can contribute to leadership effectiveness, but not in a straightforward way. To be effective, a leader should be able to vary his or her displays of affect according to the situation. Leaders who express their affect in ways that optimize their followers' ratings, performance, decision making and unethical behaviors will be more effective than leaders who do not express their affect in accordance with the situation at hand. This is in line with an earlier proposition that a leader's emotional skills impact the effectiveness of this leader (Riggio & Reichard, 2008). As a consequence, organizations may benefit from selecting

leaders who possess emotional skills over those who do not. George (2000) has suggested five ways in which emotional intelligence can contribute to leadership effectiveness. It might therefore benefit an organization to select leaders who are high as opposed to low in emotional intelligence as those leaders are expected to be more effective – especially when choosing between leaders who are similar in other abilities and characteristics. Furthermore, it has been suggested that the ability to influence others should be another dimension of emotional intelligence (Côté & Hideg, 2011). The same authors also proposed that people with the ability to influence others through their affective displays will choose the most appropriate display, which is exactly what makes a leader a more effective leader according to our findings.

Modern Phenomena and Facial Displays

The studies that have been discussed in the previous chapters all focused on affective states that were displayed solely by facial and vocal expression since the verbal content was kept constant. Even though there are several ways to display affect (i.e., facial, verbal, physical), non-verbal and facial displays of affect have been shown to be of significant influence. The introduction of, among other things, the internet and mobile phones has made face-to-face contact less necessary and less frequent. It is therefore important to think about what possible consequences it can have for leadership effectiveness when leaders do not communicate face-to-face with their followers.

E-mail. With the introduction of more advanced technologies, modern ways of communicating increase and replace face-to-face contact. Team members mostly communicate face-to-face, over e-mail and through phone calls. Within virtual teams (i.e., when team members are not physically

in the same location) e-mail is the main way of communicating (Webster & Wong, 2008). As e-mail messages lack facial displays, the question arises whether communication over e-mail may impair leadership effectiveness that is gained by certain facial displays of affect. It has been stated that emotions can be communicated equally well via computer mediated communication as face-to-face (Derks, Fischer, & Bos, 2008). Furthermore, it has been shown that emotional contagion can occur between persons who textually communicate happiness and anger (Cheshin et al., 2011). However, in this study someone's affective state was explicitly mentioned and this is an important difference from the studies conducted within this dissertation – where affect was only displayed by facial and vocal expressions, but not referred to in wording. Future studies should reveal whether a leader's expressions of affect over e-mail can be as influential as their facial displays of affect. Since emotional contagion can be partly due to (unconscious) imitation of a facial expression (Hatfield et al., 1992), which can also be displayed unintentionally, written displays of affect may not fully replace facial displays of affect when looking at the effects on leadership effectiveness. Moreover, e-mail communication lacks non-verbal cues but those may be partly replaced by the use of emoticons.

Emoticons. Emoticons (also called smiley's) are written or pictorial representations of a facial expression (see Figure 22 for an illustration). In my opinion, emoticons have been introduced for a reason in almost all current textual communication methods via mobile phone or the internet. The reason that people cannot communicate satisfactory without conveying affective displays. Displays of affect have interpersonal and interactional functions (Fischer & Van Kleef, 2010) and words cannot fully replace an affective

display, as shown by the studies in the previous chapters as well as by previous research (e.g., Damen et al., 2008a). Currently, emoticons are most often used within informal communication settings and less within official settings, like leader-follower e-mail communications within organizations. However, as digital communication becomes more prevalent (Webster & Wong, 2008), leader-follower communications may also become more textual and less face-to-face. As a result, current leaders should consider using emoticons in, for example, their e-mails. It has been suggested that emoticons can replace non-verbal cues when people communicate textually instead of face-to-face (Derks et al., 2008). Future studies could test whether emoticons can – partly – replace facial leader affective displays when leaders communicate textually (e.g., e-mail or phone texts) with their followers. That way emoticons could add to a leader's effectiveness.

Figure 22. Examples of some commonly used emoticons and the affect that they depict.

Written	Picture	Affect
: -)		Satisfaction
: - D		Happiness
: - (		Sadness
: '- (		Sadness
		Anger
: - O		Surprise
		Embarrassment

Video. Modern ways of communicating also add ways to convey facial displays of affect. For instance, the use of a webcam can make it possible for two people to see each other's faces even when they communicate between two different rooms, countries or continents. Moreover, a webcam allows one leader to instruct many different followers at once. Nowadays, videos can even be recorded and transmitted with smart phones and and/or over the internet. Thus, modern ways of communication make it possible for leaders to display their affect through facial expressions without actual face-to-face contact (e.g., video contact). Within all studies that we have conducted the leaders communicated through a webcam, so this can add to a leader's effectiveness when the right – depending on the circumstances – kind of affect is displayed.

In short, modern technologies have lead to a decrease in face-to-face leader-to-follower contact, but on the other hand have brought more convenient ways for leaders to communicate facial expressions to their followers.

Botox. Another modern phenomenon is a cosmetic technology called Botox. The application of Botox decreases wrinkles by temporarily paralyzing the muscles that cause these wrinkles. The paralyzing of the facial muscles impedes someone's facial expressiveness. When leaders choose to get Botox to reduce their wrinkles, another effect may be a reduction of their facial expressiveness and thereby of their affective displays. As a consequence, their emotional experience may be limited (Davis, Senghas, Brandt, & Ochsner, 2010). The current studies have demonstrated that this may also impair their effectiveness as a leader. It would be worthwhile if future studies investigate

whether the usage of Botox can impede a leader's effectiveness because it limits influences through their facial affective displays.

Directions for Future Research

Future research is necessary to uncover additional processes regarding the relationship between leader affect and leadership effectiveness, to specify established relationships, and to gain our understanding and ability to improve leader and organizational functioning. Some investigations that should ideally be conducted in the future were already mentioned above. Below I will set out some other important and relevant issues.

First, future studies should ideally investigate the influences of other kinds of leader affective displays. We have investigated the effects of leader displays of happiness, sadness, and anger. Specific affective states have been argued to influence thoughts and behaviors in different manners (DeSteno, Petty, Wegener, & Rucker, 2000; Lerner & Keltner, 2000). However, only for the basic emotions (i.e., anger, sadness, happiness, fear, and disgust) it has been robustly and consistently demonstrated that they each have a distinctive and universal facial expression (Ekman, 1992). As a consequence, fear and disgust would be the most solid affective states to investigate first. Other affective states like for instance shame, guilt, pride, hope, or distress may have less clear facial displays that distinguish them, so might best be researched accompanied by verbal and/or bodily displays in addition to facial displays.

Second, it would be fruitful to study the influences of different leader affective displays on other follower outcomes that may be indicators of leadership effectiveness. Examples include follower turnover, follower stress, follower satisfaction, follower compliance, leader member exchange (LMX), organization citizenship behaviors (OCB's), or follower motivation (van

Knippenberg & Hogg, 2003). Our results revealed that each follower outcome that reflects on a leader's effectiveness is influenced differently by specific leader affective displays. It is therefore important to study the influences of a specific leader affective display on each follower outcome separately, to gain a full understanding of the relationship between leader affect and leadership effectiveness.

Third, the influence of leader affective displays on follower outcomes may be driven by other mechanisms than emotional contagion. For example, the study by Van Kleef et al. (2009) demonstrated that the performance of people high in epistemic motivation was driven by inferences that they made regarding their leader's affective display, whereas the performance of people low in epistemic motivation was driven by affective reactions to their leader's affective display. Thus, the same leader can generate either inferences or affective reactions from followers which in turn mediate the influence of leader affect on followers' behaviors (see also Van Kleef, 2009). Future research could investigate other moderators that determine when the influence of leader affect on leadership effectiveness is mediated by emotional contagion and when by inferences. This will shed more light on the underlying process and thereby increase our understanding regarding leader affect and leadership effectiveness.

Fourth, all of our studies utilized a white male leader. Future studies could therefore extend our model by replicating these studies with female leaders as well as with non-white leaders. Lewis (2000) found similar leadership effectiveness ratings for male and female leaders who expressed sadness or a neutral affective display, but gender differences for leader displays of anger. A female leader was rated as more effective when

expressing a neutral affective display compared to sadness or anger, whereas a male leader was rated as more effective when expressing an affective neutral display or anger compared to sadness. Other investigations found similar outcomes for male and female leaders' displays of affect (Schaubroeck, & Shao, 2012; Damen et al, 2008a). I therefore advise future researchers to compare the influences between male and female leaders for each specific affective display and over different follower outcomes.

Finally, physiological measures could be used in replications of our studies, to capture follower affect in a different way than by self-reports. It has been argued that biopsychological measures can improve the understanding of the processes underlying affect, because psychological models cannot capture all processes that are playing a role in affective phenomena (Winkielman, Knutson, Paulus, & Trujillo, 2007). Consequentially, it would be useful to compare followers' self-reports of their affective states with physiological measures. This may lead to either new insights or solid confirmations of existing findings, which would both be valuable to both researchers and practitioners dealing with measures of affect.

The Bigger Picture

Within this dissertation I focused mostly on how leader affective displays influence followers, but not the other way around. As discussed in the first chapter, leaders by definition exert influence on their followers (Bass, 2008), and in addition, emotional contagion is most likely to happen from higher to lower power individuals (Anderson et al., 2003). Nevertheless, even though leaders can exert more influence and do receive more attention than followers, followers can also influence their leader in several ways (Hollander, 1992). As a consequence, leader affective displays may also be influenced by

the followers'. On the same line, emotional contagion may also operate from followers to leaders (Rajah, et al., 2011), meaning that happy or sad followers may cause their leaders to feel similarly. If this is the case, the effects of leader affective displays that we have demonstrated in the previous chapters are important processes that operate within a larger set of process, reciprocal between leaders and followers, and influenced by their context.

Conclusions

A leader's facial expressions of affect can have far reaching consequences for both leadership and organizational effectiveness. A leader's affective display may at least influence followers' affect, performance, decision making, unethical behaviors, and ratings of the effectiveness of their leader. All these outcomes can impact the effectiveness of a leader and the success, reputation, and well-being of the organization concerned. There is no clear-cut relationship between a certain leader affective display and this leader's effectiveness. Consequently, the most effective leader will display the kind of affect that will yield an optimal outcome within the situation at hand.

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SUMMARY

The aim of this dissertation is to uncover the relationship between leader affective displays and leadership effectiveness. Five empirical studies were conducted to test the influence of several leader affective displays on different follower outcomes that indicate leadership effectiveness.

The results showed that leader happy displays enhance followers' creative performance, whereas leader sad displays enhance followers' analytical performance. In addition, a leader displaying happiness is rated as more effective than a leader displaying sadness, independent of followers' performance. Moreover, increased follower happiness mediated the effects of leader happy displays on followers' creative performance and followers' ratings of their leader's effectiveness indicating that emotional contagion processes play a role. Another line of research demonstrated that a leader displaying sadness yields more long-term focused decisions than a leader with a happy, angry or an affective neutral display. This effect is mediated by follower sadness, thus driven by emotional contagion. Furthermore, leader sad displays increase followers' long-term decisions particularly for followers who have a chronic tendency to experience negative affect. The final study revealed that sad leader displays combined with pro-self leader instructions enhanced followers' unethical behaviors. When leaders display happiness, anger, or no affect (neutral), followers' unethical behaviors are not influenced differently by the pro-self or the pro-social leader instructions.

All studies together provide a solid base for the main ways in which leader affect influences leadership effectiveness. Leader happy, sad and angry displays differently influence followers' performance, decisions, unethical behaviors and ratings of their leader's effectiveness. Consequently, leaders

who display the kind of affect that is most optimal within a certain context will be the most effective leaders.

SAMENVATTING

Het doel van dit proefschrift is de om aan het licht te brengen wat de relatie is tussen een leiders uitingen van affect en de effectiviteit van deze leider. Er zijn vijf empirische studies uitgevoerd om de invloed te testen van verschillende affectieve expressies van leiders op verscheidene volger uitkomsten die de effectiviteit van een leider reflecteren.

De resultaten lieten zien dat blije expressies van een leider de creatieve prestaties van volgers bevorderen, terwijl verdrietige expressies van een leider de analytische prestaties van volgers bevorderen. Daarnaast wordt een leider die blij kijkt als effectiever beoordeeld dan een leider die verdrietig kijkt, onafhankelijk van de prestaties van de volgers. Bovendien medieert blijheid van de volgers de effecten van blije leider uitingen op de volgers' creatieve prestaties en hun oordelen over de leider. Een andere onderzoekslijn toonde aan dat een leider die verdrietig kijkt meer lange termijn beslissingen van volgers voortbrengt dan een leider die blij, boos of een neutraal kijkt. Dit effect wordt gemedieerd door verdriet van de volgers. Verder stimuleren verdrietige expressies van een leider vooral de lange termijn beslissingen van de volgers wanneer zij een chronische aanleg hebben om negatieve gevoelens te ervaren. De laatste studie onthult dat leiders met een verdrietige expressie die zelfgerichte instructies geven, onethisch gedrag van de volgers uitlokken. Wanneer leiders blije, boze of neutrale expressies tonen, wordt het onethisch gedrag van de volgers niet verschillend beïnvloed door zelfgerichte of sociaalgerichte instructies van de leider.

Alle studies tezamen geven een duidelijk beeld van de belangrijkste manieren waarop een leiders' affect de effectiviteit van deze leider beïnvloed.

Blije, verdrietige en boze expressies van leiders hebben verschillende invloeden op de prestaties, beslissingen, gedragingen en oordelen van de volgers. Derhalve zijn de meest effectieve leiders de leiders die het soort affect uiten dat optimaal is binnen een bepaalde context.

ABOUT THE AUTHOR

Victoria Visser was born on July 30, 1982 in Bussum, the Netherlands. In 2006 she obtained a Research Master's degree in Social Psychology (cum laude) from the Vrije Universiteit in Amsterdam in. After that, Victoria started as PhD student at the Rotterdam School of Management, Erasmus University. Her research on leader affective displays and leadership effectiveness was supervised by Prof. Dr. Daan van Knippenberg (Rotterdam School of Management, Erasmus University) and Prof. Dr. Gerben van Kleef (University of Amsterdam). During her time as a PhD student, Victoria conducted a four month research visit the Rotman School of Management, University of Toronto, Canada. Some of her work has been published in The Leadership Quarterly. Victoria also presented her work at various international conferences such as the Society for Industrial and Organizational Psychology and the European Association for Work and Organizational Psychology.

 Besides researcher, Victoria also is a certified fitness instructor and Pole fitness master trainer. She is two-fold Pole fitness champion (2012 and 2013) and has released her own Pole fitness DVD.

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LEADER AFFECT AND LEADERSHIP EFFECTIVENESS
HOW LEADER AFFECTIVE DISPLAYS INFLUENCE FOLLOWER OUTCOMES

People in a leadership position exert influence with the aim to be an effective leader. A leader can influence the followers by expressing words or behaviors, but also by displaying affect. Although leader affective displays are easily overlooked when it concerns leadership effectiveness, they can be of great influence.

This dissertation comprises five empirical studies on the effect of leader affective displays on leadership effectiveness. Leadership effectiveness is operationalized as follower performance, follower ratings, follower decision making and follower unethical behaviors. Happy, sad, and neutral leader displays were compared in their influence on followers' creative versus analytical performances and followers' ratings of their leader's effectiveness. Thus, objective and subjective measures of leadership effectiveness were compared. Moreover, happy, sad, angry and neutral leader displays were compared in their influence on followers' short-term versus long-term focused decisions and on followers' cheating behavior.

All studies together demonstrate that leader affective displays can be important determinants of a leader's effectiveness. Whether a specific leader affective display increases or decreases leadership effectiveness depends upon the follower outcome that defines the leader's effectiveness within the situation at hand. It is therefore important for future researchers to carefully consider how they should operationalize leadership effectiveness and to not underestimate the impact of leader affective displays.

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Erasmus Research Institute of Management - ERiM	**Tel.** +31 10 408 11 82
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Erasmus University Rotterdam (EUR)	**Internet** www.erim.eur.nl
P.O. Box 1738, 3000 DR Rotterdam,	
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