FREDERIC DAMEN

Taking the lead The role of affect in leadership effectiveness



Taking the lead: The role of affect in leadership effectiveness

by Frederic Damen

Taking the Lead: The Role of Affect in Leadership Effectiveness

De leiding nemen: De rol van affect in leiderschapseffectiviteit

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Voorwoord (Preface)

"A little less conversation, a little more action please."

Elvis Presley

Dik vier jaar geleden kwam ik op-en-neer vanuit Italië om een gesprek met een jonge, enthousiaste professor te hebben over een mogelijke aanstelling als promovendus aan de Erasmus Universiteit. Ik zou eerst in aanmerking komen voor een project naar charismatisch leiderschap, maar toen deze hoogleraar vernam dat ik wat zou afweten van de psychologie van emoties werd hij helemaal lyrisch. Een nieuw promotieproject -waar nog even een onderzoeksvoorstel voor in elkaar moest worden geflanst- was geboren: Leiderschap en emoties.

Deze professor (inmiddels iets minder jong) werd mijn promotor in dit project, aan wie ik veel dank verschuldigd ben. Daan, bedankt voor je lessen in het bedrijven van wetenschap, voor je onophoudelijke geduld, drive en enthousiasme. Ik heb veel van je geleerd, waarvoor mijn dank en erkentelijkheid! Mijn dank gaat ook zeker eerstens uit naar mijn co-promotor: Barbara, bedankt voor je kritische blik, concrete aanwijzingen, inspiratie, ideeën en luisterend oor.

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Dan wil ik nog erg graag Michaéla, Dirk, Casper, Mark, Bettina, Inge en Victoria bedanken en natuurlijk onze secretaresses van goud: Dicea, Babs en eerder Myra.

Merlijn, mijn andere paranimf, bedankt konijnebol voor de vele 'luchtige' lunches. Vrijdag 12.30 maar doen? Klaas, bedankt voor je acteerprestaties en je weet het hè: Ik breng jou naar de top mannetje! Jorrit, hoe is het met je hondenasiel in San Diego? Snel samen weer rond 'cruisen' in *the Californian desert* lijkt me toch het beste.

Uiteraard wil ik ook 'ons vader' en 'ons moeder' bedanken: Dank jullie wel voor jullie steun en begrip en *vur de goeie bekskes straffe tròast*! Jan en Kiek, bedankt voor het meeleven. Ook wil ik de beren uit Eindhoven bedanken voor de vele mooie avondjes en dat het daarbij vooral niet over werk ging. Keep that flame burning, boys! Truus, jij ook bedankt wijfie.

Janneke, ho fatto ragazza mia. Grazie a te! Ik ben blij dat je in deze periode mijn vrouw wilde worden en altijd met me oploopt –door dik en dun. Bedankt voor je grote liefde. Sei grande! We moesten maar weer eens snel samen naar Blijdorp gaan; naar de tijgers (en andere beesten) kijken. And now it's time for some rock-'n-roll baby...

Frederic Damen
Rotterdam, april 2007

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"The heart is half a prophet"

Yiddish Proverb

1.

Affect and Emotions in Leadership: An Introduction

Parts of this chapter are adapted from van Knippenberg, van Knippenberg, Van Kleef, & Damen (in press).

Leadership has a long history of research in psychology and organizational behavior (e.g., Carlyle, 1841; Fiedler, 1958; Hollander, 1964; Pfeffer, 1977; Vroom & Yetton, 1973).

Most early studies either focused on traits of a leader (e.g., Stogdill, 1948), the behavior of a leader (see for instance Mintzberg, 1973 for an overview) or the fit between a leader's behavior and its contextual environment (e.g., Fiedler, 1964, 1967). The success of these approaches was (and still is) a matter of scholarly debate and despite all these efforts, the search for answers on the question what makes leadership effective and what are the underlying processes continued. In the eighties more emphasis was laid on inspirational aspects of leadership. Especially theories on charismatic and transformational leadership became very influential in the literature (Bass, 1985; Conger & Kanungo, 1987). Nowadays, the search is again mostly directed at the identification of which behaviors and characteristics make leaders effective (Chemers, 2000).

Arguably, the core theme of all these studies has been the question of what makes leaders effective in influencing and mobilizing followers (Bass, 1990; Chemers, 2001; van Knippenberg, van Knippenberg, De Cremer, & Hogg, 2004; Yukl, 2002). This dissertation also dives into the quest for leadership effectiveness. However, I concentrate on a relatively new area in leadership research: affect and emotions. Only recently, the role of emotions in leadership is being discussed in theoretical papers (e.g., Brief & Weiss, 2002; Lord & Brown, 2004), and the *empirical* study of affect and emotions in leadership (Bono & Ilies, 2006;

Glomb & Hulin, 1997; Lewis, 2000; Sy, Côté, & Saavedra, 2005) is now emerging rapidly as well. Since the study of affect and emotions in leadership started only about one decade ago, the underlying processes have hardly been identified yet. For instance, questions that -among others- remain unanswered are: When are negative leader emotions effective and when are positive leader emotions effective? What is the role of physiological arousal in leadership processes? What is the role of follower characteristics in determining effective affective leader behavior? These and other questions will be addressed in the present dissertation.

This dissertation aims to testify to the important roles emotions may play in social interaction in general. However, as the dynamics of leadership essentially revolve around leader-follower relationships and interaction, I expect the role of emotions to be clearly visible in leadership processes specifically (Brief & Weiss, 2002; Humphrey, 2002; Lord & Brown, 2004; van Knippenberg, van Knippenberg, Van Kleef, & Damen, in press). Somewhat surprisingly, however despite its long history, leadership has only recently started to empirically investigate the role of leader and follower affect and emotions. Accordingly, the present dissertation taps into a field of research that is emerging much more than it is established. The central, general question, that functions as a red thread through the dissertation is therefore a rather broad and open one:

What is the effect of leader's affective displays on leadership effectiveness?

The present chapter will consider the role of affect and emotions in effective leadership and will give an overview of the relevant literature regarding this topic. Furthermore, it will give a presentation of questions and problems regarding the role of emotions in leadership effectiveness that has been studied and reported in this dissertation. The chapter will conclude with a more detailed overview of the chapters to follow in this dissertation.

Conceptualizing Emotions and Affect

According to Frijda (1986), there is no emotion without a change in action readiness: "Emotional experience largely consists of experienced action readiness or unreadiness..." (Frijda, 1986; p. 469). This change in action readiness results in an overt (emotional) response and in physiological arousal. Emotions thus refer to discrete feeling states that manifest themselves both physiologically and psychologically (e.g., Frijda, 1986; Oatley & Jenkins, 1996). Furthermore, emotions have a relatively clear cause, beginning, and endpoint and an

emotion is considered as being a result of a conscious or unconscious evaluation (or appraisal) of some event or stimulus (Arnold, 1960; Lazarus, 1991). These stimuli are often social in nature, meaning that others can elicit strong emotional reactions and we ourselves can trigger strong emotions in others (e.g., Knutson, 1996; Oatley & Johnson-Laird, 1987).

Moods, however, often refer to an emotional state with a longer duration (often hours, days or even weeks) and a lower intensity than emotions (Oatley & Jenkins, 1996). Where emotions mainly have an object (e.g., you are enthusiastic *about* something, or angry *with* somebody), moods often do not have an object (anymore), which is a crucial difference between moods and emotions (Frijda, 1993).

The term affect, in contrast, is used to describe feeling states that may range from diffuse, long lasting moods (e.g., depression) to specific, acute, short lasting emotions such as a burst of anger (Frijda, 1994). Some researchers use the term affect for dispositional tendencies towards certain feeling states as well (i.e., positive and negative affectivity; Lazarus, 1991; Watson & Clark, 1984). The term affect is thus adopted to describe feelings in a more general, broader way, whereas emotion is used as a term to refer to a specific, interruptive, and intense process of feelings (e.g., Forgas, 1992; Frijda, 1986; Lewis & Haviland-Jones, 2000).

As described shortly above, emotions play a significant role in social interactions: the stimuli of emotions are often embedded in a social context. More in general it can be claimed that affect and emotions (consciously and non-consciously), may largely determine the successfulness of our interactions with others (Forgas, 2001; Keltner & Haidt, 1999; Schwarz & Clore, 1983), showing that affect in social interactions is often used as an important source of information (Oatley & Jenkins, 1996). Affect of others thus conveys critical social information that people use in determining their own intentions and behavior (Fridlund, 1992; Parkinson, 1996; Scherer, 1986). The basic premise of this affect-as-social information-perspective is therefore that affect and emotions have important social functions and consequences (Frijda & Mesquita, 1994; Keltner & Haidt, 1999; Oatley & Jenkins, 1992; Parkinson, 1996), by which they may influence not only the behavior of those experiencing the emotion but also the behavior of others (Levenson, 1994).

In this dissertation I will use the term affect to encompass specific emotions as well as more diffuse moods, and the term affective displays to refer to the expression of both mood and emotion. My research will be based to a considerable extent on the affect-as-social-information-perspective.

Affect and Emotion: More than Valence Alone

While especially for emotions distinctions with much more nuance may be used (cf. Russell & Feldman Barrett, 1999), the state of the art in leadership, affect, and emotions, seems to be adequately captured by the two dimensions highlighted in affect-circumplex models (cf. van Knippenberg et al., in press). Research in the psychology of affect has resulted in affect circumplex models that identify two core dimensions underlying differences between affective states (Larsen, Diener, & Lucas, 2002; Russell, 1980; Watson, Clark, & Tellegen, 1988): a psychological (valence, pleasantness) and a physiological component (arousal, activation). Most, if not all, affective states can be placed somewhere along the circumplex formed by these two orthogonal dimensions of valence and arousal. Some positive affective states are associated with relatively high levels of arousal (e.g., enthusiasm), whereas others are associated with relatively low levels of arousal (e.g., relaxation). In a similar vein, some negative affective states are characterized by higher arousal (e.g., anger) than others (e.g., sadness).

Hence, next to valence of affect (i.e., positive versus negative emotions) arousal of affect (i.e., active versus inactive emotions) is a principal dimension of affect and emotions. According to William James (1884, 1890), arousal is, in fact, the core element of emotions: the bodily changes that we perceive by ourselves *is* the emotion (James, 1890). The work of James (1884, 1890) has shown us that physiological arousal is indeed a very important aspect of our emotional experience, and consequently arousal has been studied in social psychology and neuropsychology ever since (e.g., Andreassi, 2000; Cacioppo, Berntson, Larsen, Poehlmann, & Ito, 2000; Cannon, 1927; Frijda, 1986; Gazzaniga & Heatherton, 2003; Russell, 1980). Within this large body of literature, (physiological) arousal is mainly seen as being a consequence of the emotion rather than a cause and as being an aspect of our emotional behavior that prepares us for action patterns: fight, flight and sexual behavior (Cannon, 1927, 1929; Oatley & Jenkins, 1996; Plutchik, 1980).

In this dissertation, the arousal element of affect is considered to be just as important as the valence element of affect and I want to emphasize the importance of arousal in studying leadership. Oddly enough however -as we will see- the arousal dimension has hardly been subject of affect research in the leadership arena.

Conceptualizing Effective Leadership

Leadership is defined in many ways in literature. Let me give a sample of definitions:

"Leadership is the process of influencing the activities of an organized group toward goal achievement" (Rauch & Behling, 1984, p. 46).

"Leadership is about articulating visions, embodying values, and creating the environment within which things can be accomplished" (Richards & Engle, 1986, p. 206).

"Leadership is the ability of an individual to influence, motivate, and enable others to contribute toward the effectiveness and success of the organizations of which they are members" (House, Hanges, Ruiz-Quintanilla, Dorfman, Javidan, Dickson et al., 1999, p. 184).

"Leadership is about social relations, usually within a group, and about changing people's behaviors and attitudes to conform to the leader's vision for the group." (Hogg & van Knippenberg, 2003, p.2).

"Leadership is the process of influencing others to understand and agree about what needs to be done and how it can be done effectively, and the process of facilitating individual and collective efforts to accomplish the shared objectives" (Yukl, 2002, p. 7).

These definitions show first of all that the core of understanding leadership lies mainly in the search for what constitutes leadership effectiveness. Effective leadership may be regarded the "holy grail" that researchers are searching for: the core theme in leadership studies has mostly been the question of what makes leaders effective.

In any case, all these views on leadership effectiveness acknowledge the importance of productive followers or subordinates (often in terms of goal achievement)¹. From a psychological perspective, one of the most important mechanisms in attaining productivity among followers, and therefore effective leadership, is getting subordinates motivated

¹ I consider everyone who has one or more subordinates, being a leader. In other words: a leader supervises one or more follower(s)/subordinate(s). Hence also managers are leaders, as long as they have one or more subordinates (cf. Yukl, 2002). To avoid confusion I will mainly speak about leaders and leadership. Followers or subordinates are individuals who are led by the leader.

(Chemers, 2003; Smither, 1994; Yukl, 2002). Indeed, motivation may be seen as a central aspect of effective leadership and an essential issue is what makes leaders effective in influencing and mobilizing followers (Bass, 1990; Chemers, 2001; van Knippenberg et al., 2004; Yukl, 2002). According to Chemers (2003), effective leadership has three necessary components: the leader must have a leadership status and responsibility, the leader then must develop a motivating, goal oriented relationship with the followers and finally, the leader must mobilize the followers and give them directions for this goal attainment.

Therefore to understand leadership effectiveness it is of vital importance to understand the effects of leader behaviors on followers, or as van Knippenberg et al. (2004) nicely phrase it: "...to understand leadership, we need to develop theories of the psychological processes that translate leader behavior into follower action." (p. 826), indicating that effective leadership is mainly a process of exerting social influence (cf. Chemers, 2003).

As I will argue in this dissertation, leader affective displays may be a key element of leader effectiveness and indeed, leader emotions may (partly) explain how leaders may get subordinates motivated, mobilized and otherwise open to the leader's influence. Additionally, I argue that if we want to understand what makes a leader effective, we also need to take the follower into the equation. Indeed, no leader is able to lead without followers, and if we want to comprehend what underlies effective leadership, we need to focus on the leader's perspective as well as the follower's perspective (Hogg & van Knippenberg, 2003; Howell & Shamir, 2005; van Knippenberg et al., 2004; cf. Meindl, 1995). However, until now the role of followers in empirical studies on *affect* and leadership has received little attention. Therefore, an important aspect of this dissertation is the focus on follower characteristics and their interplay with the leader's affective behaviors.

However, let me first turn to give a general overview of the literature on the relation between affective leader behavior and leader effectiveness.

Affect and Effective Leadership: The Core of this Dissertation

Emotions and affect are of major importance for human functioning. Indeed, affect may consciously and unconsciously inform our judgments, attitudes, and behavior (Damasio, 1994; Forgas, 1995; Williams, Watts, MacLeod, & Mathews, 1999). Furthermore, people use their own feelings as well as others' affective displays as informational input for the cognitive processing that is needed to interact successfully with others (Damasio, 1994; Forgas, 2001; Frijda, 1986; Oatley & Jenkins, 1996).

During social interaction, others' feelings as observed from others' verbal and nonverbal communication may convey information that influences the further course of the interaction (Keltner & Haidt, 1999). More specifically, affective displays are argued to influence the interaction between individuals by providing vital information about other's feelings (Scherer, 1986), intentions (Fridlund, 1992), orientation toward the relationship (Knutson, 1996), and concerns (Frijda, 1986). People may use this affective information for adjusting their perceptions and behavior during, or after the interaction. For instance, people tend to attribute higher status to a sender displaying anger than to a sender displaying sadness (Tiedens, 2001), and the expression of anger in a negotiation setting tends to cause more compliant counteroffers than the expression of happiness (Van Kleef, De Dreu, & Manstead, 2004a, 2004b). Moreover, affect can be "contagious" -it may transfer from one person to another (Hatfield, Cacioppo, & Rapson, 1994)- and thus inform the receiver's perceptions, attitudes, and behavior.

Given that affective displays are ubiquitous in social interaction, it is not very surprising that numerous researchers have indeed found that affect and affective displays play a key role in organizational functioning in general, and in leadership and managerial processes in particular (Barsade, 2002; Brief & Weiss, 2002; George & Brief, 1996; Judge & Ilies, 2004; Lord, Klimoski, & Kanfer, 2002; Staw & Barsade, 1993; Staw, Sutton, & Pelled, 1994; Weiss & Cropanzano, 1996). Surely, considering the strong impact that leaders may have on an organization's functioning and productivity (Yukl, 2002), it is of paramount concern to understand the consequences of leaders' emotions for the organization (Brief & Weiss, 2002; Humphrey, 2002; Lord & Brown, 2004; Lord et al., 2002; Staw & Barsade, 1993).

Positive versus Negative Leader Affect

In their interaction with subordinates, leaders may consciously or unconsciously, verbally or nonverbally, express how they feel, and such affective displays may have impact on their effectiveness in motivating followers. Thus, potentially these affective displays may influence followers. Indeed, research in leader affect shows that leader's affective displays influence leadership effectiveness, although the relationship is less clear-cut than one perhaps would think (cf. van Knippenberg et al., in press).

Empirical studies on leadership, affect, and emotions have mainly revolved around the issue of the influence of *positive* leader affect on leadership effectiveness (e.g., Bono & Ilies, 2006; Gaddis, Connelly, & Mumford, 2004; George, 1995; George & Bettenhausen, 1990; Newcombe & Ashkanasy, 2002). Positive leader affect is beneficial for leader effectiveness,

seems the tentative, but also somewhat simplistic conclusion of research on leadership effectiveness in relation to affect. For instance, George and Bettenhausen (1990) found that leader positive mood predicted pro-social behavior (positively) and turnover (negatively) for sales employees. In a related vein, George (1995) observed a positive relationship between leader positive mood and group performance. Gaddis et al. (2004) found furthermore, that group leaders who displayed positive affect in interaction with their follower were perceived as more effective than group leaders who displayed negative affect.

Only recently, some empirical studies also find some beneficial effects of negative leader affect (Sy et al., 2005; Tiedens, 2001), although be it rather marginally. Tiedens (2001) for instance did not look at positive leader affect, but only at leader anger and sadness and found that people attributed more status to an angry leader than to a sad leader. Sy et al. (2005) also found positive effects of positive leader affect, besides the positive effects of negative leader affect: whereas positive leader mood was associated with higher work team coordination, negative leader mood was actually associated with higher work team effort.

Given that empirical evidence regarding leader's affect and emotions and its effects on followers is still rather scarce and unclear, the basic -but crucial- question also still remains largely unanswered: what are the effects of leader's positive and/or negative affective displays on follower performance?

It is therefore necessary to further investigate leader affect and the impact on leader effectiveness. In doing this, it thus may be important to focus specifically on negative leader affect and emotions (besides positive leader affect). Accordingly, one aspect I concentrate on is the leader display of both positive and negative emotions and the underlying factors and processes that most likely (partly) determines the effectiveness of these leader affective displays.

Displays of High-Arousal versus Low-Arousal Affect

While most leadership research on affect is primarily defined in terms of valence (e.g., Bono & Ilies, 2006; George, 1995; Newcombe & Ashkansy, 2002), there are meaningful differences in the extent to which affective states are associated with arousal and activation (e.g., Larsen et al., 2002; Russell, 1980). High-arousal affective states such as anger and enthusiasm may suggest a higher need for action than low-arousal affective states such as sadness or relaxation (cf. Frijda, 1986). Accordingly, followers may respond differently to leader displays of high-arousal affect than to leader displays of low-arousal affect.

Unfortunately, we have little evidence testifying to the significance of the arousal

dimension of affect in studies of leader affective displays. A study by Tiedens (2001), although not a leadership study per se, suggests that the display of high-arousal affect may be more effective, because a higher level of arousal is associated with competence and status. She found that perceivers associated other's display of anger with higher competence and status (but less likeability) than the display of sadness. Findings by Lewis (2000) are partly in line with these findings. In a study of perceivers (not subordinates), Lewis investigated perceptions of male and female leaders' displays of anger (a high arousal emotion) and sadness (a low arousal emotion), as compared to a control condition. She found that for a male leader, anger was more effective than sadness, though not more effective than no display of affect. For a female leader, in contrast, both the negative affective displays received less positive reactions than the neutral displays regardless of arousal level.

The available evidence thus seems to suggest that higher-arousal affective displays may be effective in influencing and mobilizing followers. Given the limited number of studies focusing on the arousal dimension, more evidence is clearly needed before we may reach some conclusion. However, it does seem worthwhile to move beyond the distinction between positive and negative affective states, and focus on arousal as well.

Therefore, in this dissertation, a focus is also laid -besides valence of affect- on the particular role of arousal in explaining effectiveness of leader emotions.

Leadership and Follower Characteristics

Unfortunately, research on leadership and affect has hardly been focusing on the follower so far. Empirical evidence regarding the interplay between leader affect and follower characteristics has hardly emerged. Indeed, the understanding of the effects of leader emotional displays may be enhanced by looking at potential moderators of the effectiveness of the display of positive and negative emotions. Therefore, as some researchers have noticed, in order to explain leadership effectiveness it may be necessary to concentrate more on follower characteristics (Lord & Brown, 2004). Indeed, there is no leadership without people following, and it is the followers' behavior in the workplace that enables leaders to be effective.

In doing so, it may be wise to focus on how leader's affective displays may affect follower affective states: because moods and emotions may have such pervasive influence on attitudes, decisions, and behavior, leadership that engenders follower emotions may have a large impact on followers. An obvious question for research in leadership, affect, and emotions therefore is

how leadership potentially influences follower affective states and, through its influence on follower affect, follower perceptions and behavior.

However, follower affect may not only be influenced by leadership; it may also inform responses to leadership. Affective states influence our responses to others (cf. Forgas & George, 2001), and it would seem worthwhile to also explore the role of follower affect as a moderator rather than a mediator of leadership effectiveness. A study by Hui, Law, and Chen (1999) suggests that follower affect may also more directly color responses to leadership. They found that follower negative affectivity was negatively related to follower ratings of the quality of their relationship with their leader (operationalized as leader-member exchange, also see Day & Crain, 1992). Findings like these point to the possibility that follower affect may inform responses to a wide range of aspects of leadership. Indeed, perhaps follower affect also informs responses to leader affective displays. Therefore another important question is how follower affective states per se -regardless how they are caused-may influence effectiveness of leader affective displays.

Therefore, in this dissertation, I also pay attention to the role of follower affect and I study how this may impact the relationship between leader affective displays and leader effectiveness.

Charismatic and Transformational Leadership²

Charismatic and transformational leadership is generally presumed to be a particularly effective form of leadership (Bass, 1985; Conger & Kanungo, 1987; Shamir, House, & Arthur, 1993; cf. Ashkanasy & Tse, 2000). Lowe, Kroeck and Sivasubramaniam (1996), for instance, find in a meta-analysis of 39 studies that charisma correlates strongly positive (between .35 and .81) with leader effectiveness.

Conceptual and anecdotal analyses of charismatic and transformational leadership have proposed that the ability to emotionally engage followers adds to (charismatic and transformational) leaders' effectiveness (Ashkanasy & Tse, 2000; Bass, 1998; Conger & Kanungo, 1998; Shamir et al., 1993). A number of studies indeed show that charismatic and transformational leadership may be associated with more positive and less negative affect

² Let me note that I -like many writers- use the terms charismatic and transformational leadership interchangeably, although in essence charisma is a part of transformational leadership -albeit the most important part (Bass, 1985; Yukl, 2002).

among followers than non-charismatic and transactional leadership (cf. Bono & Ilies, 2006). Although not directly a study of followers, Cherulnik, Donley, Wiewel, and Miller (2001) showed that leaders that were seen as charismatic elicited more positive affect. McColl-Kennedy and Anderson (2002) found that frustration (lower with more transformational leadership) and optimism (higher with more transformational leadership) mediated the relationship of transformational leadership with performance. In a related vein, Rubin, Munz, and Bommer (2005) showed that leaders higher in positive affectivity were rated as more transformational by their followers and Awamleh and Gardner (1999) found that leaders who were smiling when giving a speech were perceived as more charismatic than leaders who were not smiling.

Research in leader affect, and particularly in charismatic and transformational leadership, has been driven by the notion that leaders' display of (positive) affect may be motivating either because it conveys positiveness or because it is contagious and engenders positive affective states in followers that guide their subsequent behavior (see also van Knippenberg et al., in press). As theory on charismatic and transformational leadership has been hinting at the potential role of affect in leadership effectiveness, it may therefore be worthwhile to take ideas about charismatic and transformational leadership as a starting point for the research in the present dissertation.

To Conclude

Research in leadership has a long history, and especially the more recent decades have learned us a lot about the cognitive processes underlying effective leadership (e.g., Lord & Brown, 2004; van Knippenberg et al., 2004). This cognitive focus is complemented more and more by a focus on the role of affective processes, and as this research is gaining momentum we witness increasing evidence of its promise.

The role of emotions is thus receiving increasing attention in leadership research – and rightly so, as the research shortly reviewed in this first chapter shows. Evidence that affect and emotions play a role in determining leadership effectiveness is emerging and research has been focusing increasingly -but cautiously- on the relationship between leader affective displays on the one hand and leader charisma and leadership effectiveness on the other. This evidence is far from straightforward, however, and there are several unresolved issues that invite strong research attention. Indeed, the field of leadership, affect, and emotions appears to be at a more emerging state than the frequent reference to the role of emotions in leadership in

the academic, but also popular literatures (see for instance Goleman, Boyatzis, & McKee 2002) would suggest. In that sense, it would seem important that leadership research has a clear understanding of what has, and has not, been proven in research that meets internationally accepted scientific standards (van Knippenberg et al., in press).

In the previous, I have already pointed to some of the issues that I believe research should address. Among these are the effectiveness of leader positive versus negative affect, the role of the level of arousal associated with affective states, and the ways in which follower characteristics may influence the effectiveness of leader affective behavior. I specifically pointed to the processes on the follower side that may affect the relationship between leader affective displays and follower behavioral response, to the relationship between leader affective displays and arousal (both on the side of the follower and the leader) in predicting leader effectiveness, and to the role of positive versus negative emotions, in explaining leadership effectiveness. This dissertation tries to address these important issues. Let me therefore give an overview of how this dissertation is organized in order to address these topics.

Overview of the Dissertation

In the preceding overview, the evidence for the role of affect and emotions in leadership effectiveness was reviewed. We saw that the scientific study of leadership and affect has been taken up only recently (e.g., Glomb & Hulin, 1997; Sy et al., 2005; Tiedens, 2001). Most of this work is on leader affective displays and leader moods and its effects on followers (i.e., their perceptions with accompanying behavior). Findings generally support the conclusion that affect and emotions play a key role in leadership effectiveness. However, this review showed also the striking gaps in knowledge of leadership, affect, and emotions, especially regarding: the role of positive versus negative leader affect (I), the role of arousal (II), and the role of the follower (III) in determining leader effectiveness and charisma.

In this dissertation, I report a total of six empirical studies to address these important issues in leadership and affect and by doing so, I try to provide some initial answers to the central research question. Three studies were conducted in the laboratory, two studies in the field (surveys) and one study was conducted with scripts (scenarios). The combining of these three methods (laboratory, survey and scenario), adds to the internal and external validity of the studies. In both the scenario and laboratory studies, questions regarding causality are addressed, whereas generalization of findings is possible because of the use of surveys.

In Chapter 2, I report the finding that the transfer of both arousal and positive feelings from leader to followers triggers charisma attributions of followers. More specifically it was hypothesized that positive, high arousal leader emotions provoke strong attributions of charisma and that this relationship is mediated by transfer of arousal (from leader to subordinates) in addition to the transfer of positive feelings. Hence, in this chapter I focused on the valence as well as the arousal dimension of leader affect.

In Chapter 3, I concentrated more specifically on the role of the follower in determining leader effectiveness. In this chapter, I report on the moderating qualities of follower arousal in the effects of leader affective displays on follower performance. It was hypothesized that active leader emotions are more effective than inactive leader emotions. However, this seems only to apply when their subordinates are in a non-aroused state. This study therefore shows the important role that followers may have in explaining the effectiveness of leader's affective displays. Note that this study adds to Chapter 2 were I merely focused on the role of the leader.

In Chapter 4 the focus is on the mood of the follower and it is predicted that leader affective displays are only effective when these displays have the same valence as the valence of the mood of the follower, which I call an affective match effect. I also looked at the content of the message underlying the emotion, to control for confounding effects in leader's emotional displays. Hence, in addition to the arousal dimension of affect on the side of the follower (Chapter 3), I focus more on the valence dimension of follower affect here and how this may feed into effectiveness of leader affective displays.

In the last chapter (Chapter 5), the empirical results are summarized and integrated and a general conclusion is given. In addition, a general discussion with implications, limitations and directions for future research is provided in this chapter.

2.

Leader Affective Displays and Attributions of Charisma: The Role of Arousal

Research suggests that leader displays of positive affect are conducive to attributions of charisma. We qualify and extend this conclusion by arguing that this mainly holds for displays of positive affect that are associated with high levels of arousal. Results of a scenario experiment and a survey support this hypothesis, and show that besides the transfer of positive feelings per se, it is the transfer of arousal that mediates the relationship between leader affective displays and attributions of charisma.

Introduction

Leadership has traditionally been studied mostly from a cognitive perspective (cf. Lord & Brown, 2004; Yukl, 2002). Increasingly, however, research is focusing on the role of affect in leadership processes (e.g., Ashkanasy & Daus, 2002; Brief & Weiss, 2002; Dasborough & Ashkanasy, 2002; Fitness, 2000; Glomb & Hulin, 1997; Lord & Brown, 2004; Sy, Côté, & Saavedra, 2005). Leaders' displays of affect (i.e., emotions, moods) in particular have been quoted as an ingredient of charismatic leadership and a determinant of leadership effectiveness (Bass, 1985; Bono & Ilies, 2006; Conger & Kanungo, 1998; Sy et al., 2005). The main conclusion emerging from this research is that leader display of positive affect (as compared with negative affect or no affect) adds to attributions of charisma and leadership effectiveness (Bono & Ilies, 2006; Gaddis, Connelly, & Mumford, 2004; Newcombe & Ashkanasy, 2002).

Affect can be described not only in terms of its valence, however, but also in terms of its level of associated arousal (Larsen, Diener, & Lucas, 2002; Russell, 1980), and in the present

study we qualify and extend the conclusions from previous research, arguing that the results from previous studies apply mainly to displays of positive affect that are associated with high levels of arousal (e.g., enthusiasm). We present the results of a scenario experiment and a survey of leadership in organizations supporting this hypothesis. Moreover, we show that besides the transfer of positive feelings, it is the transfer of arousal that mediates the relationship between leader affective displays and attributions of charisma.

Leader Affective Displays and Attributions of Charisma

There is a large body of evidence suggesting that charismatic (and transformational) leadership is a particularly effective style of leadership (Conger & Kanungo, 1998; Shamir, House, & Arthur, 1993; Yukl, 2002). Lowe, Kroeck, and Sivasubramaniam (1996), for instance, find in a meta-analysis of 39 studies using the MLQ measure of charisma that charisma correlates between .35 and .81 with leader effectiveness, and there is also ample evidence from experimental and field studies not relying on the MLQ corroborating this conclusion (e.g., De Cremer & van Knippenberg, 2002; Dvir, Eden, Avolio, & Shamir, 2002; Howell & Frost, 1989; van Knippenberg & van Knippenberg, 2005). Several researchers also made a persuasive argument that to a certain extent charisma is in the eye of the beholder – it is an attribution to the leader made by followers (Avolio, Bass, & Jung, 1999; Conger & Kanungo, 1987; Meindl, 1995). Given its clear link to leadership effectiveness, it is therefore an important question for leadership research what leads followers to attribute charisma to a leader (Conger & Kanungo, 1998).

There is emerging evidence that leader affective displays may play an important role in this respect (Bono & Ilies, 2006; cf. Conger & Kanungo, 1998; Meindl, 1995; Shamir & Howell, 1999). Conceptual analyses of charismatic and transformational leadership suggest that the effectiveness of charismatic and transformational leaders derives partly from their use of emotions (Ashkanasy & Tse, 2000; Bass, 1998; Conger & Kanungo, 1988). Empirical studies support this point as well. In an extensive study of charismatic leadership and affect, Bono and Ilies (2006) found that charismatic leaders express more positive emotions. In a related vein, Awamleh and Gardner (1999) found that leaders who are smiling when giving a speech are perceived as more charismatic than leaders who are not smiling. More indirect evidence comes from studies of leader effectiveness rather than charisma that show that leader's positive affective displays are more effective than displays of negative affect (e.g., Gaddis et al., 2004; George, 1995; George & Bettenhausen, 1990; Newcombe & Ashkanasy, 2002). Gaddis et al. (2004) for example found that group leaders who displayed positive

affect in interaction were perceived as more effective than group leaders who displayed negative affect, and George and Bettenhausen (1990) showed that leaders who are in a positive mood have a positive impact on pro-social behavior of workers and a negative impact on voluntary turnover. Furthermore, it was found that leaders who expressed positive affect in a video message were rated as giving more freedom of negotiation to followers than leaders who expressed negative emotions by observers of the video message (Newcombe & Ashkanasy, 2002).

There is also evidence suggesting that the transfer of positive affect (cf. emotional contagion, Hatfield, Cacioppo, & Rapson, 1992) may play a role in the relationship between leader displays of positive affect and attributions of charisma. Bono and Ilies (2006) found that leader display of positive affect predict follower positive affect, and Sy et al. (2005) found that leader positive or negative mood transferred to followers. In addition studies of charismatic and transformational leadership (that did not assess leader affective displays) show that charismatic and transformational leadership are associated with more positive follower affect and less negative follower affect than non-charismatic and transactional leadership (Cherulnik, Donley, Wiewel, & Miller, 2001; Dvir & Wenger, 2004). These findings point to the possibility that the transfer of positive affect mediates the relationship between leader affective displays and attributions of charisma, although this mediational model has to our knowledge not been tested.

Attributions of charisma or effective leadership may flow from the match between leader characteristics and follower pre-conceptions of charismatic and effective leadership (Epitropaki & Martin, 2005; Lord, Foti, & De Vader, 1984; Lord & Maher, 1991; Meindl, 1995; Meindl & Ehrlich, 1987; Meindl, Ehrlich, & Dukerich, 1985, cf. Dasborough & Ashkanasy, 2002). It may be assumed that the display of positive affect (more than of negative or no affect) is also part of followers' cognitive schema for charismatic leadership (cf. Meindl, 1995). Accordingly, leader displays of positive affect would match follower standards for charismatic leadership and thus render attributions of charisma more likely. In a similar vein, the experience that leader positive affect elicits positive affect in oneself may likewise match followers' conceptions of charismatic leadership and thus feed into attributions of charisma.

All studies discussed previously looked at the influence of displays of positive affect in comparison with displays of negative affect and/or no affect, but none of these studies has differentiated affective displays in terms of the associated level of arousal. We argue, however, that arousal may be as important as valence in eliciting attributions of charisma.

The Arousal and Valence Dimensions of Affect and Attributions of Charisma

Research in the psychology of affect has resulted in widely recognized Affect Circumplex Models identifying two core dimensions underlying differences between affective states: a psychological (valence, pleasantness) and a physiological component (arousal, activation) (e.g., Larsen et al., 2002; Russell, 1980; Watson, Clark, & Tellegen, 1988). Some positive affective states are associated with relatively high levels of arousal (e.g., enthusiasm), whereas others are associated with relatively low levels of arousal (e.g., relaxation). In a similar vein, some negative affective states are characterized by higher arousal (e.g., anger) than others (e.g., sadness). Therefore, in an attempt to understand the relationship between leader affective displays and attributions of charisma it stands to reason to not only explore the effects of the valence of the affective display, but also of the associated level of arousal.

Following the same logic that suggests that leader displays of positive affect may be part of follower conceptions of charismatic leadership (cf. Meindl, 1995) and therefore render attributions of charisma more likely, we argue that these attributions of charisma are more likely when the leader displays high arousal positive affect rather than low arousal positive affect. Conceptual analyses have associated charismatic leadership with being action-driven and able to energize followers (e.g., Bryman, 1992; Conger & Kanungo, 1988). Moreover, the display of high arousal affect more than that of low arousal affect suggests power and competence (Tiedens, 2001; cf. Lewis, 2000), which may feed into attributions of charisma. Displaying high arousal affect may therefore be as important as displaying positive affect, and we propose that it is the combination of positiveness and high activation that leads to attributions of charisma.

Transfer of affective state may also play a role in this respect. Indeed, just as the positive and negative components of affective states may transfer from the one person to the other through emotional contagion processes, the arousal associated with affective states may also transfer from one person to the other (cf. Hatfield et al., 1992). Likewise, George (1995, 1996) argues, that energized, aroused states may transfer from leader to followers. For similar reasons as outlined above, such transfer of arousal may elicit attributions of charisma, because the feeling of being energized by a leader is likely to match follower conceptions of charismatic leadership. That is, in addition to the transfer of positive feelings, the transfer of activation may render attributions of charisma more likely.

In sum, then, extending earlier research, we predict that the display of high arousal positive affect causes stronger attributions of charisma than the display of low arousal positive affect and of (high and low arousal) negative affect. In addition, we expect that this

relationship is mediated by the transfer of arousal from leader to follower as well as by the transfer of positive feelings.

We tested these predictions in a scenario experiment (Study 2.1) and a cross-sectional survey of leadership in organizations (Study 2.2). The use of these different methodologies allows us to on the one hand establish the causality implied by our analysis (Study 2.1) while on the other hand establishing that the predicted relationships may also be observed in the field (Study 2.2). Thus, the combination of methods may substantially bolster the confidence in our conclusions (cf. Dipboye, 1990; van Knippenberg, Martin, & Tyler, 2006). As a way of operationalizing high arousal positive and negative affect we focused on enthusiasm and anger respectively (cf. Larsen et al., 2002; Russell, 1980; Watson et al., 1988). Enthusiasm and anger have both been quoted as important emotions in leadership situations (e.g., Conger & Kanungo, 1998; George, 1995, 1996; Lewis, 2000; Tiedens, 2001). As low arousal counterparts, we focused on relaxation and sadness (cf. Lewis, 2000; Russell, 1980; Tiedens, 2001). In terms of these specific affective states, we predicted the following.

Hypothesis 1. Leader displays of enthusiasm lead to higher attributions of charisma than leader displays of anger, relaxation, or sadness.

Hypothesis 2. The relationship of leader displays of enthusiasm (as compared with anger, relaxation, and sadness) and attributions of charisma is mediated by transfer of arousal from leader to subordinates as well as by transfer of positive feelings.

Study 2.1

Method

Participants and Design

One hundred fifty-two business students participated voluntarily in this scenario experiment. The participants were randomly assigned to the four conditions (Leader Affect: enthusiasm/ anger/ relaxation/ sadness). Mean age was 20.50 years (SD = 2.16). Participants were paid 3 euro (approximately US \$4). Seven respondents were omitted from the analyses because of missing data.

Procedure

Participants were seated in separate cubicles and were told the study would be about

"communication management". They were introduced to the scenario nature of the study, and asked to do their best to imagine themselves to be in the described situation. The scenario portrayed a situation in which employees of a small organization were spoken to by their leader. Participants were to imagine that they, as an employee of this company, listened to this leader. The leader, being the leader of the company, was giving a speech concerning the quarterly results of the company. As part of the scenario, participants read an excerpt of this speech. In all conditions, the leader announced that quarterly results had stayed stable as compared to the previous quarter, which in itself did not qualify results as either good or bad. Depending on the experimental condition, the leader displayed a different affective state (see below) when announcing the quarterly results. After reading the scenario, participants filled out a short questionnaire assessing reactions to leadership and manipulation checks. Finally, participants were debriefed, paid, and thanked for their participation.

Manipulation of Leader Affect

The wording of the leader's speech was identical in all conditions, aside from the affect the leader quoted to experience. Depending on the condition, the leader claimed to be enthusiastic, relaxed, angry, or sad about the quarterly results. To describe this affective state, the leader used words like "enthusiastic" and "excited" in the enthusiastic leader condition, "angry" and "nettled" in the angry leader condition, "tranquil" and "relaxed" in the relaxed leader condition, and "sad", and "dismal" in the sad leader condition. Such verbal statements of affect have been shown to effectively communicate affective states to others in (simulated) interaction (Van Kleef, De Dreu, & Manstead, 2004a, 2004b, 2006) including in scenario experiments on affective displays (e.g., Sinaceur & Tiedens, 2006).

Measures

For all measures, participants were asked to indicate their agreement on 5-point scales ranging from *disagree completely* to *agree completely*. To check the manipulation, participants were asked by single item measures to indicate how enthusiastic, angry, relaxed, or sad the leader was (e.g., "this leader is enthusiastic").

Perceived charisma of the leader was measured with five items ($\alpha = .87$, M = 2.90, SD = .98), based on the work of Bass (1985) and Conger and Kanungo (1987). An example of an item is "This leader moves people towards a goal".

Transfer of arousal was measured with two items: "This leader transfers energy" and "This leader has an activating impact on me" (r = .75, $\alpha = .86$, M = 2.70, SD = 1.18).

Transfer of positive feelings was measured with two items: "This leader transfers a good feeling to me" and "This leader makes me feel pleasant" (r = .85, $\alpha = .92$, M = 2.42, SD = .98).

Results

Manipulation Checks

Manipulation checks were analyzed in an analysis of variance. This analysis revealed an effect on the question to what extent the leader displayed enthusiasm, F(3, 141) = 38.52, p < .001, $\eta^2 = .45$. The perceptions of leader's enthusiasm was contrasted with the perception of the other three leader affective displays and this analysis showed that in the leader's enthusiasm condition, he was indeed perceived as more enthusiastic (M = 4.29, SD = .93) than the other three leader affective displays (anger, M = 2.77, SD = 1.20, relaxation, M = 2.22, SD = .87, or sadness, M = 2.00, SD = .87), t(141) = 10.45, p < .001.

An analysis on the subordinates' perceptions of the leader's display of anger showed a strong effect, F(3, 141) = 86.50, p < .001, $\eta^2 = .65$. Contrast analysis revealed that a leader displaying anger was also perceived as being in a higher state of anger (M = 4.44, SD = .91) than leaders displaying the other three affective states (enthusiasm, M = 1.63, SD = .81, relaxation, M = 1.58, SD = .73, or sadness, M = 2.80, SD = 1.05), t(141) = 14.69, p < .001.

Leader Affect has also an effect on perceptions of relaxation, F(3, 141) = 51.07, p < .001, $\eta^2 = .52$. Contrast analysis revealed that leaders who were relaxed, were also seen as more relaxed by participants (M = 3.94, SD = 1.29) than the other three leader affective displays (enthusiasm, M = 2.77, SD = .94; anger, M = 1.33, SD = .53; sadness, M = 2.17, SD = .86), t(141) = 10.28, p < .001.

Leader Affect has a significant effect on perceptions of sadness, F(3, 141) = 52.84, p < .001, $\eta^2 = .53$. Displays of sadness contrasted with the other three leader affective displays showed that a leader displaying sadness was seen as sadder (M = 4.29, SD = .83) than the leaders in the other three conditions (enthusiasm, M = 1.60, SD = .81; anger, M = 2.95, SD = 1.10; relaxation, M = 2.06, SD = 1.07), t(141) = 11.13, p < .001.

We may therefore conclude that our manipulation of Leader Affect was successful.

Charisma, Transfer of Arousal, and Transfer of Positive Feelings

An analysis of variance on perceived charisma resulted in an effect of Leader Affect, F(3, 1)

141) = 11.89, p < .001, $\eta^2 = .20$, showing that enthusiastic leaders are seen as more charismatic than angry leaders, relaxed, or sad leaders (see Table 2.1). We found therefore evidence for Hypothesis 1.

Analyses on transfer of arousal, showed a significant effect of Leader Affect (F(3, 141) = 22.19, p < .001, $\eta^2 = .32$). Enthusiastic leaders transferred more arousal than angry, relaxed, or sad leaders (see Table 2.1).

An analysis of variance on transfer of positive feelings revealed an effect of Leader Affect $(F(3, 141) = 12.04, p < .001, \eta^2 = .20)$. Enthusiastic leaders transfer more positive feelings than angry, relaxed or sad leaders (see Table 2.1).

Table 2.1 *Means, Standard Deviations, and Comparison of Means, Study 2.1.*

		Perceived Charisma			Transfer Arousal			Transfer Positive Feelings	
	M	SD	t	M	SD	t	M	SD	t
Enthusiasm	3.53	1.00		3.67	1.00		3.14	.91	
Anger	2.98	.93	2.65*	2.91	1.00	3.32*	1.95	.75	5.80**
Relaxation	2.28	.62	5.93**	1.85	.77	7.81**	2.40	1.00	3.53*
Sadness	2.85	.94	3.21*	2.39	1.13	5.47**	2.23	.87	4.33**

Note. * p < .01. ** p < .001; t-values are for comparisons of enthusiasm with the other affective displays.

Mediation Analysis

We hypothesized (Hypothesis 2) that the transfer of arousal and the transfer of positive feelings mediate the effect of leader display of enthusiasm (vs. anger, relaxation, or sadness) on attributions of charisma. To test this prediction, we conducted mediation analyses following Baron and Kenny (1986).

We have already shown that Leader Affect significantly influences attributions of charisma, transfer of arousal, and transfer of positive feelings. To establish whether the effects on transfer of arousal and transfer of positive feelings accounted for the effect on attributions

of charisma, both transfer of arousal and transfer of positive feelings were included as covariates in the analysis of attributions of charisma. The regression was significant, F(3, 141) = 112.82, p < .001, $\eta^2 = .40$, $\beta = .68$ (transfer of arousal), $\beta = .23$ (transfer of positive feelings). The effect of Leader Affect on perceived charisma disappeared when controlling for both transfer of arousal and transfer of positive feelings, F(3, 140) = 2.10, p = .10, ns., $\eta^2 = .04$. Two Sobel tests (Sobel, 1982) indicated that both transfer of arousal and transfer of positive feelings were significant mediators, z = 4.23, p < .0001 (transfer of arousal), and z = 2.48, p < .05 (transfer of positive feelings). Hypothesis 2 is therefore confirmed.

Study 2.2

Method

Hundred employees of a medium-sized soft drink company, a public health organization, and the railway police were sent a survey by electronic mail with the request to rate their direct leaders, or were approached during a team meeting with this same request. Seventy-one employees (mean age 38.29 years, SD = 9.85; response rate 71%) granted the request.

Measures

Leader affect was assessed by asking respondents to rate on 5-point scales (varying from 1 = disagree completely, to 5 = agree completely) the extent to which their direct leader tended to be relaxed, enthusiastic, angry, and sad in the workplace. Perceived charisma of the leader was measured with the same five items as in Study 2.1 (α = .90, M = 3.57, SD = .90). Transfer of arousal was measured with the same two items as in Study 2.1 (r = .55, α = .71, M = 3.50, SD = .86). Transfer of positive feelings was measured with the same two items as in Study 2.1 (r = .76, α = .86, M = 3.72, SD = .87).

Results

Means, standard deviations, and inter-correlations for all variables are displayed in Table 2.2.

Table 2.2 *Means, Standard Deviations, and Inter-correlations, Study 2.2.*

		M	SD	1	2	3	4	5	6
1	Enthusiasm	3.75	.97	-					
2	Anger	2.20	1.04	21	-				
3	Relaxation	3.23	1.05	.16	44**	-			
4	Sadness	2.11	1.07	21	38**	.65**	-		
5	Transfer Arousal	3.50	.86	.44**	.19	22	29*	-	
6	Transfer Positive Feelings	3.72	.87	.54**	.07	25*	20	.68**	-
7	Perceived Charisma	3.57	.90	.53**	.03	22	24	.73**	.78**

Note. * p < .05. ** p < .01

Charisma, Transfer of Arousal, and Transfer of Positive Feelings

The results of the regression analyses of leader affective displays on perceived charisma, transfer of arousal, and transfer of positive feelings are shown in Table 2.3. Results showed that leader enthusiasm was the only affective display related to perceived charisma, transfer of arousal, and transfer of positive feelings. Furthermore, tests of the regression weight for enthusiasm against the regression weights of the other affective displays showed that enthusiasm was more strongly related to attributions of charisma, transfer of arousal, and transfer of positive feelings than the other leader affective displays (see Table 2.3). Hypothesis 1 was therefore confirmed.

Mediational Analysis

To establish mediation, following Baron and Kenny (1986), leader affective displays must have a significant impact on the mediators (both transfer of arousal and transfer of positive feelings) and the dependent variable (perceived charisma). As we can see (Table 2.3), this is only the case with leader enthusiasm. The mediators must also have a significant impact on perceived charisma, which was the case. Finally, the effect of enthusiasm on perceived charisma must drop to non-significance when including both transfer of arousal and transfer of positive feelings in the regression. This was also the case (see Table 2.3), which was a significant decline as indicated by two Sobel tests, z = 2.65, p < .01 (transfer of arousal), and z = 3.24, p < .01 (transfer of positive feelings). Therefore, we can conclude that transfer of arousal and transfer of positive feelings mediate the relationship between leader displays of enthusiasm and attributions of charisma (Hypothesis 2).

Table 2.3 *Results of Regression Analysis, Study 2.2.*

								Transfer				
		Perceived			Transfer			Positive			Perceived	
		Charisma			Arousal			Feelings	_		Charisma	
	В	SE B	β	В	SE B	β	В	SE B	β	В	SE B	β
Enthusiasm	.52	.10	.52*	.39	.10	.42*	.50	.10	.53*	.12	.09	.12
Anger	12	.13	13	.00	.12	.00	19	.12	22	04	.09	04
Relaxation	11	.10	12	.05	.10	.06	08	.10	09	10	.07	11
Relaxation	.11	.10	.12	.05	.10	.00	.00	.10	.07	.10	.07	.11
Sadness	12	.12	13	21	.12	24	03	.12	03	03	.09	03
Transfer of										.39	.11	.37*
Arousal												
Transfer of										.46	.11	.45*
Positive												
Feelings		for Stan 1. P2										

Note. $R^2 = .34$ for Step 1; $R^2 = .71$ for Step 2 (ps < .001). The regression is significant, F(6, 60) = 23.91, p < .001. Effects marked with an asterisk are significant at p < .001; Difference in regression weights of Enthusiasm vs. other 3 conditions on Transfer of Arousal, Transfer of Positive Feelings and Perceived Charisma are all significant at .05 level (cf. Cohen & Cohen, 1983).

Discussion

Research in leadership is getting more attuned to the role of affect in leadership processes, and the present study adds to the growing body of evidence that leader affective displays influence followers. Extending earlier work suggesting that leader displays of positive affect may engender attributions of charisma and transfer to followers, we showed that this holds mainly for leader displays of high arousal positive affect. The present study also provided the

first test of a mediational model linking transfer of positive feelings to attributions of charisma. Moreover, we showed that it is not only transfer of positive feelings per se, but also transfer of arousal that mediates the relationship between displays of high arousal positive affect and attributions of charisma.

Previous studies of leader affective displays have not distinguished between the valence and arousal associated with affective states, and especially studies distinguishing high and low arousal affective states are scarce. A key contribution of the present study therefore is that it puts the arousal dimension of affect more firmly on the agenda of leadership research (cf. van Knippenberg, van Knippenberg, Van Kleef, & Damen, in press). Arousal adds to the influence of positive affect per se, and transfer of arousal played as important a role in engendering attributions of charisma as transfer of positive feelings. The current study thus suggests that it may be worthwhile to consider the role of the arousal associated with leader affective displays in leadership processes related to leadership effectiveness (Lord & Brown, 2004), identification with the leader (Hogg & van Knippenberg, 2003), and attributions of power and status (Schubert, 2005; Tiedens, 2001), among others. The present findings suggest that in these processes too, arousal may augment the impact of positiveness per se.

Our hypotheses were grounded not only in theory and anecdotal evidence in charismatic leadership, but also in the notion that the display, and transfer, of high arousal positive affect might be part of followers' implicit assumptions about charismatic leadership (cf. Lord & Maher, 1991; Meindl, 1995). While this seems to be a reasonable assumption, and indeed the present findings are consistent with this assumption, future research might explicitly assess the extent to which affective displays, and the transfer of affect, are part of people's implicit beliefs about charismatic leadership.

The finding that arousal plays an important part in the effect of leader positive affective states also has clear implications for practice. Organizations that rely heavily on employees adhering to expression norms (i.e., norms that dictate which and how emotions may be expressed, cf. Hochschild, 1983; Kemper, 2000; Zapf, 2002), as for instance call centers, may benefit from the notion that arousal may be just as an important aspect of affect as valence. Indeed, expression norms often originate from the idea that employees' expression of positive emotions ensures positive feelings of customers or prospects, which in the end leads to higher sales. It may be that especially employees' display of high arousal positive emotions may lead customers to see the organizational representatives in a positive light, which in turn may result in employees being more effective in their dealings with customers. Of course, the present study also implies that leaders may benefit from a stronger focus on arousal. Leaders

displaying positive arousal (i.e., an energized, enthusiastic state) may be more effective, and leadership training could explicitly address the importance of arousal in communication with followers.

The present study is not without its limitations. Clearly it is a strength that we combined scenario experimental and field data, because the strength of the one method may compensate for the weakness of the other (Dipboye, 1990; van Knippenberg et al., 2006), and the use of two different methodologies led to the same conclusions regarding our hypotheses. Whereas the scenario experiment allows for conclusions about causality and yet maintains a relatively high degree of mundane realism, it does describe a hypothetical situation. This aspect of our first study makes the replication in the field important. Conversely, due to its cross-sectional nature the field study is mute in matters of causality and susceptible to common method bias, and the first scenario experiment is important in addressing these shortcomings. The replication in the field may also be argued to be important vis-à-vis our manipulation of leader affective displays (i.e., written statement of affect). While verbal statements of affect have been shown to be effective in conveying affective states (Johnson & Tversky, 1983; Sinaceur & Tiedens, 2006; Van Kleef et al., 2004a, 2004b, 2006), an important part of affective displays is nonverbal and the field data may be assumed to also reflect the influence of these nonverbal aspects of affective displays.

Even though scenario experiments in leadership typically yield results that are replicated in the lab as well as in the field (De Cremer & van Knippenberg, 2002, 2004; De Cremer, van Knippenberg, van Knippenberg, Mullenders, & Stinglhamber, 2005; van Knippenberg & van Knippenberg, 2005), from the perspective of obtaining strong experimental evidence it would be valuable if future research would replicate and extend the current findings in a non-hypothetical experimental set-up in which participants are actually immersed in the leadership situation. Ideally, such an experimental set-up would also allow for the assessment of the transfer of arousal through physiological rather than self-report measures that would increase measurement quality and thus further strengthen the confidence in our findings. In a related vein, follow-up research in the field that combines different data sources would provide a valuable extension of the current findings.

In addition, we should note that while our theoretical analysis concerns valence and arousal in general, our empirical work was limited to four specific instances of high versus low, positive versus negative leader affective displays. While these affective displays were representative of the four quadrants distinguished by Affect Circumplex Models (Larsen et al., 2002; Russell, 1980), we cannot exclude the possibility that the present findings are

limited to the four distinct affective displays under consideration. Therefore, a replication with other affective displays would give us more insights into the effects of leader affect and would bolster our argument. The bottom line is, however, that the present findings provide an important point of departure for future studies of leader affective displays that are not only attuned to the valence of leader affective displays, but also to the interplay of valence and arousal in affecting followers.

3.

Leading with Energy: Activation Level of Leader Affective Displays, Follower Arousal, and Follower Performance

Evidence that leaders' displays of affect impact their influence on followers is accumulating. However, this research focuses mainly on effects of positive and negative affect (the pleasantness dimension), but largely ignores effects of action readiness (the activation dimension). The present study testifies to the importance of the activation dimension by showing that more active affective displays of leaders are associated with higher leadership effectiveness. Importantly, we also find that a contextual factor moderates this effect: Displays of higher activation affect are only more effective when followers are low (vs. high) in physiological arousal. An experiment focusing on follower task performance in which we manipulated the activation level of leader affective displays (enthusiasm vs. relaxation) and follower physiological arousal (high vs. low) supported our predictions. The same pattern of results was found in a cross-sectional survey that focused on rated leadership effectiveness. Implications for leadership in times of crisis, change, and conflict are discussed.

Introduction

Leadership has traditionally been studied from a cognitive perspective (cf. Lord & Brown, 2004; Yukl, 2002), but the interest in the role of affect in leadership processes is increasing rapidly (e.g., Ashkanasy & Daus, 2002; Brief & Weiss, 2002; Dasborough & Ashkanasy, 2002; Fitness, 2000; Glomb & Hulin, 1997; Lord & Brown, 2004; Sy, Côté, & Saavedra, 2005). Thus far, studies on affect in leadership processes have mainly concentrated on the

pleasantness dimension of affect – for instance investigating the consequences of leader displays of positive and negative affect (e.g., Awamleh & Gardner, 1999; Bono & Ilies, 2006; Gaddis, Connely, & Mumford, 2004). However, affect circumplex models (Diener, 1999; Larsen, Diener, & Lucas, 2002; Russell, 1980; Watson, Clark, & Tellegen, 1988) point to the fact that affect can be described not only in terms of its valence, but also in terms of the associated activation level. The activation dimension has received little attention in leadership research so far, but we propose that for a more comprehensive understanding of affect in leadership processes the activation associated with affective displays should be taken into account. More specifically, we argue that leader displays of higher activation (as compared with lower activation) affective states are associated with greater leadership effectiveness.

Displays of higher activation affective states signal a readiness for action (cf. Frijda, 1986; Lang, 1994) on the part of the leader. This preparedness for action, in turn, may transfer to followers and may stir them to increase their performance levels. Importantly, however, we also argue that the extent to which the information conveyed by the display of high activation affective states (Fridlund, 1992; Oatley & Jenkins, 1996; Parkinson, 1996) is readily picked up by followers depends on the context in which leader-follower interaction takes place. Followers with highly aroused states (as may for instance obtain in times of crisis, organizational change, or conflict) may suffer from impaired information processing (cf. Pavelchak, Antil, & Munch, 1988), and as a consequence they may be less sensitive to the information conveyed by leader affective displays. Accordingly, we expect that leader affective displays with a high activation level lead to higher leader effectiveness than less active leader affective displays, to the extent that followers are low in (physiological) arousal.

Leader Affective Displays and Follower Behavior

According to Frijda (1993), the term affect may refer to moods (e.g., cheerfulness, depression) as well as to specific and acute emotions (e.g., happiness, anger). In general, emotions last shorter, are more tightly coupled to specific events or persons, and are more readily observed than moods (Forgas & George, 2001; Frijda, 1993; Lord, Klimoski, & Kanfer, 2002). Importantly, several literatures suggest that leader emotions may serve multiple social purposes (cf. Frijda, 1988; Johnson-Laird & Oatley, 1992; Keltner & Gross, 1999). Of course, an individuals' emotions may hold relevant social information to him or herself (e.g., anger may inform a person about the justice of some event; Miller, 2001), and they may also move that individual towards action (e.g., guilt may lead people to restore damage that has been done by their acts; Schmader & Lickel, 2006). Of specific importance to

the present discussion, emotions may not only affect the behavior, thoughts, and attitudes of those who experience the emotion, they may also affect those of others.

Keltner and Haidt (1999) discuss three ways in which the perception of emotions of one person may affect another person. First, affective displays may influence the interaction between individuals by providing vital information about other's feelings (Scherer, 1986), intentions (Fridlund, 1992), and orientation toward the relationship (Knutson, 1996). Second, because an individual's emotional displays may be informative about the feeling states of this person, emotional displays may evoke complementary or reciprocal actions in others (e.g., in negotiations, angry behavior of the other party may invite larger concessions than non-emotional behavior; Van Kleef, De Dreu, & Manstead, 2004a). Third, others' emotional displays may be informative about the social desirability of one's behavior. For instance, an angry leader may send the signal that the current work performance is not satisfactory. In sum, affective displays of the one person may markedly affect motivation and (goal-directed) behavior of the other person.

Given the fact that affective displays play an important role in social interaction by conveying information, it is perhaps not surprising that several researchers have found that affect and affective displays play a key role in organizational functioning in general, and in leadership and managerial processes in particular (Barsade, 2002; Brief & Weiss, 2002; George & Brief, 1996; Judge & Ilies, 2004; Lord et al., 2002; Staw & Barsade, 1993; Staw, Sutton, & Pelled, 1994; Weiss & Cropanzano, 1996). Overall, the empirical evidence suggests that leaders' affective displays make them more influential vis-à-vis their followers (Bono & Ilies, 2006; Gaddis et al., 2004; Newcombe & Ashkanasy, 2002; for a review, see van Knippenberg, Van Kleef, & Damen, in press). The display of emotions seems to increase the persuasiveness of leaders' influence attempts. Followers (consciously or unconsciously) seem to pick up on the information that is conveyed by the leaders' display of affect and act accordingly in response.

Importantly, displays of different affective states communicate different information. These differences between affective states are captured by affect circumplex models (Diener, 1999; Larsen et al., 2002; Russell, 1980; Russell & Feldman Barrett, 1999; Watson et al., 1988). In these circumplex models, affective states are placed around the circumference of a circle. The principal axes of this circle are the independent dimensions of affect. One principal axis denotes the pleasantness dimension (or hedonic valence), and the other denotes the activation dimension. The pleasantness dimension reflects the extent to which the person feels good (positive) or bad (negative), while the activation dimension reflects the extent to

which the person is prepared for action (e.g., Frijda, 1986). Indeed, the more activated a person is, the more likely it is that this person holds an emotion that prompts him or her towards action. Thus, when a person has the affective state "enthusiasm", aside from feeling good, that person is ready to act. In contrast, when a person is "relaxed", feelings are still positive, but are also associated with a lower preparedness for action. As emotions are considered to have an informational or signaling function, we may assert that the extent to which a person feels good or bad as well as the extent to which a person is prepared for action is observable from emotional displays of that person. In a review of the literature, Jones and Rittman (2002) similarly conclude that there are compelling reasons to believe that emotional displays communicate motive-readiness (i.e., signals regarding action orientation) in social situations. Thus, a leader who is angry does not only feel negative and ready to act, but may also signal this information to others through observable displays of anger.

The majority of studies on the effects of leader affective displays has focused on the effects of affective display in terms of their valence. For instance, it has been found that leaders displaying positive affect have more impact on followers' mood than leaders not displaying affect (Bono & Ilies, 2006), that leaders who smile during speeches are perceived as more charismatic than leaders who do not smile (Awamleh & Gardner, 1999), and that positive affective displays of leaders lead to more positive leadership ratings (e.g., Gaddis et al., 2004) to the extent that the message content is positive as well (Newcombe & Ashkanasy, 2002). Importantly, however, these studies largely ignore the potential importance of the extent to which the displayed positive or negative emotions conveyed information about action readiness. The emotions displayed by the leaders in these studies may have communicated information to followers that did not only concern the valence of leaders' feelings, but also the extent to which the leader was likely to proceed towards action (cf. Frijda, 1986; Jones & Rittman, 2002; Lang, 1994; LeDoux, 1996). Aside from the fact that the potential role of action readiness has been overlooked in studies of the effects of positive and negative emotional displays, there also seems to be no research tradition that focuses on the effects of the activation level associated with leader affective displays. As a consequence, we know little about whether and when the activation level associated with leader affective displays influences leadership effectiveness.

There are, however, compelling reasons to expect that high activation affective states (e.g., enthusiasm, anger) transmit information more easily than low activation affective states (e.g., relaxation, sadness). Higher activation is usually displayed by an increased use of gestures, a louder voice, a quickened pace of speaking and moving, and more dynamic facial

movement (Bartel & Saavedra, 2000; Ekman, Friesen, & Ancoli, 1980; Hess, Banse, & Kappas, 1995; Johnstone & Scherer, 2000; Wild, Erb, & Bartels, 2001). These behaviors are likely to attract more attention than the behaviors that are used to display lower activation affective states (i.e., less gestures, softer voice, etc.). Therefore, followers who are confronted with high activation emotional displays of their leader are usually more likely to pay attention than followers who are confronted with low activation emotional displays of their leader. This heightened attention, in turn, may facilitate information transfer.

Moreover, as displays of high activation signal the leader's preparedness for action, one may expect that these displays may create a similar sense of urgency and readiness for action in followers (cf. Frijda, 1986; Frijda, Kuipers, & ter Schure, 1989; Jones & Rittman, 2002). To the extent that emotional displays communicate social information, the display of high activation emotion may communicate the message that the leader him/herself is action-oriented and that he or she expects followers to be similarly action-oriented (e.g., a leader approaching a task with enthusiasm may engender a similar task orientation in followers). In addition, highly activated displays may send out the signal that the leader is ready to intervene in a particular situation or has a strong appraisal of the current state of affairs, which may evoke complementary behavior in followers (i.e., a leader that is angry about former task performance may lead followers to improve performance). Displays of high-activation affect may also convey status and competence (Tiedens, 2001; cf. Lewis, 2000), further adding to the persuasiveness of leaders' appeal. In sum, a leader may activate followers to a larger extent when he or she displays affect with a higher activation level.

We propose that for affective displays to have these effects, the context must allow employees unhampered information processing. In this respect, we concur with George and Zhou (2002) who make a compelling argument for the importance of context in the influence of affect (cf. Forgas, 1995; Martin & Stoner, 1996). George and Zhou argue that affect provides people with information (cf. Schwarz & Clore, 1988), but that the significance and consequences of the information provided by one's current affective state depend on the context. In the present study, we extend this argument, and suggest that the significance and consequences of the information provided by other people's (i.e., a leader's) affective displays may also depend on context.

The proposed greater effectiveness of leader displays of higher activation affective states assumes processing of the information implied by the leader's affective display. Clearly, then, when circumstances are less conducive to information processing, the effects of activation level of leader affective displays may be smaller. One factor related to follower information

processing that is also highly relevant to organizational practice is follower arousal. Work stress (e.g., caused by time pressure or high work loads), conflicts at work, organizational change, etc., may all be associated with heightened states of (physiological) arousal (e.g., Ashford, Lee, & Bobko, 1989; Callan, Terry, & Schweitzer, 1994; Perrewé, Zellars, Ferris, Rossi, Kacmar, & Ralston, 2004). As we will argue, such a state of high follower arousal may render followers less sensitive to situational cues and information from others. A heightened state of arousal may thus also stand in the way of follower processing of the information that is communicated by leader affective displays. Accordingly, we propose that when followers are in a less aroused state, the information that is communicated by the affective displays of leaders may have a stronger impact on follower behavior than when the followers are in a more aroused state.

Follower Arousal in the Use of Affective Information

In general, arousal is considered to affect information processing ability. There are ample studies that show that the attention and cognitive capacity of individuals confronted with stressful events (i.e., threat, task overload, fear), or with higher physiological arousal levels (i.e., due to exercise or caffeine intake) is reduced extensively (Baron, Inman, Kao, & Logan, 1992; Eysenck, 1976, 1982; Kahneman, 1973; Mano, 1997; Newell, Henderson, & Wu, 2001; Pavelchak et al., 1988; Petty & Cacioppo, 1986; Pham, 1996; Sanbonmatsu & Kardes, 1988). It is assumed that heightened arousal states reduce the number of environmental cues that people direct attention to (Easterbrook, 1959), and that they reduce the amount of processing capacity that is available for performing cognitive tasks. For instance, Pavelchak et al. (1988) found a strong negative effect of people's physiological arousal on recall of advertisements. Moreover, others have found that arousal may impair the processing of social information (Baron et al., 1992; Baron & Moore, 1987; Kim & Baron, 1988). Interestingly, physiological arousal is also associated with increased self-focused attention (Fenigstein & Carver, 1978; Hansen, Hansen, & Crano, 1989; Wegner & Giuliano, 1980). Perhaps the increased selffocused attention goes hand in hand with lesser orientation towards social external cues, explaining why arousal may hamper social information processing.

We expect that follower arousal also impairs the processing of information that is communicated by leader affective displays. Higher arousal levels may reduce attention capacity, which may result in less interest in or consideration of the affective displays of leaders. In addition, higher arousal may also impede cognitive processing, which may further decrease the potential effects of the already reduced number of leader affective displays that

have been receiving attention. Accordingly, the hypothesis tested in the present study is that leader displays of higher activation as compared with lower activation affect is associated with higher leadership effectiveness, but that this effect is weaker with higher levels of follower arousal.

We tested this hypothesis in a laboratory experiment (Study 3.1) and a small crosssectional survey of leadership in organizations (Study 3.2). The experimental nature of our first study makes causal inferences possible; the cross-sectional survey aims to investigate the occurrence of the expected relationships in more natural settings. In our first study we focused on positive affective displays, manipulating the activation level associated with displays of positive affect. For that purpose, we concentrated on the positive affective states of enthusiasm and relaxation. These two affective states are similar in valence, but vary in activation level (Diener, 1999; Larsen et al., 2002; Russell, 1980; Watson et al., 1988). Enthusiasm is considered to be a positive affective state with a high activation level. Relaxation, in contrast, is considered to be a positive affective state with a low activation level. Our specific expectation is that leader displays of enthusiasm lead to higher follower performance than leader displays of relaxation, but mainly when the context allows followers to be in a relatively low-arousal state rather than in a heightened state of arousal. Replicating and extending the findings of Study 3.1, in Study 3.2 we investigated the interaction between leader enthusiasm and follower arousal in predicting ratings of leadership effectiveness in the field, and complemented this focus on positive affect with a similar test for the effectiveness of the display of high-activation negative affect (anger).

Study 3.1

Method

Participants and Design

Eighty-two first and second year business and economics students were recruited (mean age was 20.01 years, SD = 1.64; 70.7% male). All participants received euro 10 (approx. USD 13) for their participation in the study. Participants were randomly assigned to one of the four conditions of the Leader Affective Display (relaxation vs. enthusiasm) x Follower Arousal (low vs. high) factorial design.

Procedure

Participants were seated in separate cubicles with a personal computer on which the experimental materials were shown. The participants were told that they were about to be supervised by a leader who was introduced as a manager of a big IT-company enrolled in an Executive Development program at participants' university to perfect his management skills. We explained that the aim of the research was "to investigate how leaders communicate". Participants were told that they had to perform a computer-based task and were given task instructions.

The task (developed by Hertel, Deter, & Konradt, 2003) simulated a computer retail store in which the participants had to combine hardware packages of a personal computer (PC), a monitor, and a printer according to customer requests. Each request consisted of a price limit (e.g., 3680 euro) and one specific request (e.g., a 1200 dpi printer). The participants had to combine these hardware packages without violating the customer requests. The available PCs (standard; 1750 euro, standard-plus; 2000 euro, and professional; 2250 euro), monitors (15"; 750 euro, 17"; 950 euro, and 19"; 1150 euro) and printers (bubble-jet; 530 euro, 600 dpi-printer; 660 euro, and 1200 dpi-printer; 890 euro) were shown on the computer-screen of the participant. The participants had to choose one PC, one monitor, and one printer by clicking the corresponding button with their mouse. After picking the three items, the participant had to click on the "Send" button, which completed one request, and then the next order was shown. The number of completed orders was displayed in the upper right corner of the screen. The use of watches, pocket calculators or paper and pencil was not allowed during the experiment (see Hertel et al., 2003, for more details). Participants practiced this task for two minutes.

Subsequently, the *physiological arousal* of participants was manipulated by having participants perform a physical exercise or a relaxation exercise. Participants in the high arousal condition were instructed to perform push-ups, followed by knee-bends. Male participants performed 20 push-ups and 30 knee-bends and female participants did 10 push-ups and 25 knee-bends. Participants were instructed to do their exercises behind the open door of their cubicle. Hence they could not see each other so that they could concentrate better on their own performance. Participants were asked before the exercise if they had some physical impediments and were instructed to stop immediately if they did not feel fit enough to complete the exercise. All participants were in good shape, however, and nobody had to abort the exercises. Note that physical exercise is considered to be a valid method to induce physiological arousal in people and it is used widely in laboratory settings (e.g., Kim &

Baron, 1988; Pham, 1996; Sanbonmatsu & Kardes, 1988; Wegner & Giuliano, 1980). Participants in the low arousal condition were instructed to breathe deeply and slowly for three minutes with their eyes closed in their own cubicle. This breathing exercise was based on autogenic training as developed by Schultz (1932) and is used widely, together with other breathing exercises, in clinical settings for relaxation purposes (cf. Matsumoto & Smith, 2001).

Directly after participants finished their exercises they were instructed to continue with the experiment. Immediately after filling in two questions to assess the successfulness of our manipulation (see dependent measures), a male leader appeared on everybody's computer screen and he introduced himself with his name. This leader was in fact a trained actor who was taped earlier. To present participants with a leader that was not too dissimilar to them, we selected an actor who was relatively young (27 years). The leader introduced himself as someone who had earned a MBA degree at participants' university some years ago. He told participants that he was asked, as one of the requirements of the executive development program, to manage that particular group of participants. He indicated to be pleased by the choice of task (i.e., processing of customer requests), allegedly because this task had been done well in the recent past. The leader gave additional task instructions (that were similar to the ones they received earlier) for the processing of the preprogrammed customer requests. He attempted to motivate participants to do well on this task and specifically assigned them the goal to process as much customer requests as they could in the 20 minutes time slot that was preserved for subsequent task performance. The leader used the same phrasing in all experimental conditions.

However, depending on condition, and for the duration of the video clip, the leader displayed either *enthusiasm* or *relaxation*. Our manipulation consisted mainly of variations in non-verbal behavior (e.g., facial expression, body posture, and tone of voice; see Bartel & Saavedra, 2000, for a detailed discussion). For instance, when the leader displayed enthusiasm – a pleasant, high activation affective state – he showed his teeth while smiling, had a lot of facial movement, spoke relatively loud and in a high pitched tone, moved his body frequently, and made frequent gestures. When the leader displayed relaxation – a pleasant, low activation state – he smiled with closed mouth, had little facial movement, spoke in a soft but audible voice and in a low pitched tone. Moreover, he moved his body less frequently and made less gestures. In both conditions, the leader also mentioned his affective state (enthusiasm or relaxation). Thus, the leader displayed positive affect in both conditions, but the *activation level* of the affective display varied between conditions.

After that, the participants processed customer requests for 20 minutes. Subsequently, several questions were asked as manipulation checks or to measure participants' perceptions. Finally, participants were paid, debriefed, and thanked for their participation.

Dependent Measures

Task performance. The number of customer requests that participants completed after viewing the leader's instructions was our performance measure. The two minute task trial was used as covariate to adjust for individual differences in order process capacity (i.e., differences in arithmetic capability).

Action readiness. Action readiness was measured to test whether a high activation level of leader affective displays indeed transfers to a higher behavioral readiness on part of the follower when follower activation is low rather than high (cf. Frijda, 1986). We measured action readiness with three items (e.g., "This leader moved me to undertake action", $\alpha = .78$, M = 2.92, SD = .86).

Manipulation checks and perceived pleasantness. Arousal of followers was measured with two items based on Thayer's work (1989) on measurement of physiological arousal ("Could you indicate how active you feel right now" and "Could you indicate how energetic you feel right now", $\alpha = .79$, r = .65, M = 3.56, SD = .85). Responses were on scales ranging from 1 (very drowsy) to 5 (very active/ energetic). The perceived activation level of leader affective displays was assessed with two items ("This leader was active" and "This leader was energetic", $\alpha = .90$, r = .81, M = 3.50, SD = .94). We also used one item to assess the perception of leader's enthusiasm ("This leader was enthusiastic"; M = 3.79, SD = .86) and one to measure leader's relaxation ("This leader was relaxed"; M = 3.76, SD = 1.01). In addition, one item assessed the perceived pleasantness of leader's affective display, "This leader conveys a positive feeling"; M = 3.39, SD = .98. On these last three items responses ranged from 1 (disagree completely) to 5 (agree completely).

Results

Manipulation Checks and Perceived Pleasantness

Participants who were in the high Follower Arousal condition reported that they were more aroused (M = 3.94, SD = .70) than those in the low Follower Arousal condition (M = 3.02, SD = .77), F(1, 78) = 28.79, p < .0001, $\eta^2 = .27$.

Furthermore we found that the enthusiastic leader was considered to display a higher

activation level (M = 3.99, SD = .61) than the relaxed leader (M = 2.85, SD = .95), F(1, 78) = 40.39, p < .0001, $\eta^2 = .34$. The enthusiastic leader was also perceived as more enthusiastic (M = 4.16, SD = .65) than the relaxed leader (M = 3.40, SD = .88), F(1, 78) = 18.02, p < .0001, $\eta^2 = .19$. Moreover, the relaxed leader was perceived as displaying more relaxation (M = 4.51, SD = .65) than the enthusiastic leader (M = 3.16, SD = .89), F(1, 78) = 55.21, p < .0001, $\eta^2 = .41$.

No other effects were found. Therefore, our manipulations can be considered successful.

In addition, we assessed the perceived pleasantness of leader affective displays. As expected, perceived pleasantness did not differ as a function of Leader Affective Display, F(1, 78) = 2.49, ns, indicating that leaders displays of enthusiasm were not considered to be more or less positive than leaders displays of relaxation. Interestingly and importantly, perceived pleasantness did differ as a function of Follower Arousal, F(1, 78) = 5.86, p < .05, $\eta^2 = .07$. Leaders were considered to display less positive affect (M = 3.16, SD = .97) when followers were aroused than when followers were non-aroused (M = 3.68, SD = .90), suggesting that leader's affective display was more noticed when follower arousal was low than when it was high.

Task Performance

We performed an analysis of variance on the amount of orders processed with Follower Arousal and Leader Affective Display as independent variables and the amount of processed orders in the trial period of two minutes as a covariate. The analysis revealed the predicted interaction of Leader Affective Display and Follower Arousal, F(1, 77) = 4.20, $\eta^2 = .05$, p < .05. Further analysis showed that when participants were aroused, the affective displays of the leader had no effect on the number of processed orders (relaxation: M = 47.22, SD = 25.33; enthusiasm: M = 43.86, SD = 27.49), F(1, 79) = .59, ns. On the other hand, when participants were not aroused, the high activation affective display led to a higher number of processed orders than the low activation affective display (relaxation: M = 41.11, SD = 37.27; enthusiasm: M = 51.23, SD = 27.49), F(1, 79) = 4.35, p < .05, $\eta^2 = .05$. We found no main effects.

Action Readiness

A 2 x 2 analysis of variance on the action readiness measure revealed the expected interaction between Follower Arousal and Leader Affective Display, F(1, 78) = 4.35, p < .05, $\eta^2 = .05$. The action readiness of participants who were physiologically aroused did not differ

for the leader displaying enthusiasm (M = 3.06, SD = .83), and the leader displaying relaxation (M = 2.67, SD = .80), F(1, 80) = 2.68, ns. However, when participants were non-aroused, they reported more action readiness when the leader was displaying enthusiasm (M = 3.42, SD = .54) than when he displayed relaxation (M = 2.28, SD = 1.00), F(1, 80) = 17.43, p < .001, $q^2 = .18$.

Discussion

Our first study showed that the activation level of the affect displayed by a leader impacts leadership effectiveness in influencing follower task performance. The impact of activation level in affective displays is, however, contingent on the context in which leader-follower interaction takes place. We found that leader display of enthusiasm lead to more follower action readiness and to higher performance levels than leader display of relaxation when follower arousal was low, but not when the context induced physiological arousal. According to affect circumplex models, the difference between enthusiasm and relaxation lies mainly in the activation dimension of affect. Our manipulation reflected this conception of affective states. The leader was always pleased and spoke identical text, but displayed more or less activation by variations in non-verbal behavior. Our first study thus corroborates our hypothesis that a higher activation level of leader affective displays results in higher leadership effectiveness – when followers are non-aroused.

Study 3.1 provides important first evidence for our hypothesis, but also raises some questions that we aimed to address in Study 3.2. First, the confidence in the findings of an experimental study may be bolstered by replication in a field setting, indicating that the proposed relationships do actually occur in more natural settings (Dipboye, 1990), which may further testify to the potential value of the practical implications of our study. Second, in our first study we contrasted a pleasant high activation affective state with a pleasant low activation affective state. In Study 3.2, we would also like to establish that the extent to which a high activation affective state is displayed by a leader (e.g., more or less enthusiasm) similarly predicts leadership effectiveness. Last, as our reasoning hinges on the activation associated with affect and not its pleasantness, it should also hold for displays of negative affect (e.g., anger).

Therefore, in Study 3.2, we assessed the extent to which leaders displayed high activation negative as well as positive affect. Specifically, we focused on the extent to which leaders displayed anger – an unpleasant high activation affective state. Negative affect has received less attention in leadership research than positive affect has, although a couple of studies

suggest that it may impact leadership effectiveness (Sy et al., 2005; cf. Tiedens, 2001). Just like positive affective displays, negative affective displays communicate social information. The display of high activation negative affect may not only communicate the message that the leader is displeased; it may also signal action orientation on behalf of the leader. This action orientation, in turn, may affect follower perceptions and may instill them with an urge to proceed towards action as well. Moreover, highly activated displays of negative affect may send out the signal that the leader appraises the current state of affairs negatively, which may evoke restoring behavior in followers (i.e., a leader that is angry about former task performance may lead followers to improve performance). In sum, a leader may also raise his or her effectiveness by displaying more high activation negative affect. However, because arousal is considered to affect information processing ability, we again expected this effect to occur specifically if the context allows for follower calmness instead of arousal. In order to test the hypotheses, we measured the extent to which leaders displayed the high activation affective states of enthusiasm and anger, the level of follower arousal, and leader effectiveness.

Study 3.2

Method

Respondents

Ninety-seven employees of a company manufacturing ship engines and the Dutch railway police (district south) were sent a survey by electronic mail with the request to rate their direct supervisors, or were approached during a team meeting with this request. Sixty-one employees (mean age 41.98 years, SD = 10.68; response rate 63%; 90% male) granted the request.

Measures

Leader affective displays were assessed by asking respondents to report on the extent to which their direct supervisor displayed enthusiasm or anger concerning work in the preceding week (i.e., "Last week, my supervisor showed enthusiasm about work related matters."). Follower arousal was measured with two items ("Last week, I felt active" and "Last week, I felt energetic"; r = .77, $\alpha = .87$). Based on work by van Knippenberg and van Knippenberg

(2005), *leader effectiveness* was measured with five items (e.g., "Last week, my supervisor was a good team leader" and "Last week, my supervisor focused on realizing output"; $\alpha =$.78). All variables were measured on a 5-point scale (varying from $1 = disagree\ completely$, to $5 = agree\ completely$).

Results

First, a principal-components analysis with OBLIMIN rotation of the items of the independent variables (leader enthusiasm, leader anger, and follower arousal) was performed.

Table 3.1 *Means, Standard Deviations, and Inter-correlations, Study 3.2.*

		M	SD	1	2	3	4
1	Leader Enthusiasm	3.95	1.07	-			
2	Leader Anger	2.49	1.36	13	-		
3	Follower Arousal	4.11	.83	.41*	02	-	
4	Leadership Effectiveness	3.70	.79	.47*	.15	.50*	-

Note. * p < .01

Table 3.2 *Results of Regression Analysis, Study 3.2.*

		Step 1			Step 2	
	В	SE B	β	В	SE B	β
Leader Enthusiasm	.28	.09	.35*	.32	.09	.40*
Leader Anger	.11	.06	.19	.18	.07	.30*
Follower Arousal	.35	.11	.36*	.34	.11	.35*
Follower Arousal x Leader Enthusiasm				18	.08	23*
Follower Arousal				18	.09	23*
x Leader Anger						

Note. $R^2 = .38$ for Step 1; $R^2 = .46$ for Step 2 (p's < .001). Effects marked with an asterisk are significant at p < .05. N = 59. Dependent variable is leadership effectiveness.

This analysis yielded a three-factor solution that accounted for 94.3% of the variance. All the items load above |.94| on the intended scale and cross-loadings were below |.03|. Then we performed a principal component analysis on the items of the dependent variable (leadership effectiveness), which revealed a one-factor solution accounting for 54.3% of the variance. All items loaded above .58 on this factor. Means, standard deviations, and inter-correlations for all variables are displayed in Table 3.1.

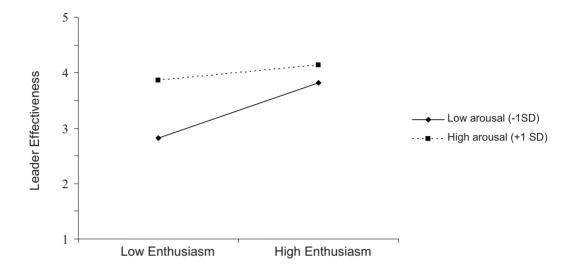
We conducted a hierarchical regression analysis to test our hypotheses. First, we centered leader enthusiasm, leader anger, and follower arousal (cf. Aiken & West, 1991). In Step 1, we entered these centered main effects. In Step 2, we entered the follower arousal x leader enthusiasm and follower arousal x leader anger interactions into the equation. The results of this hierarchical regression analysis are shown in Table 3.2.

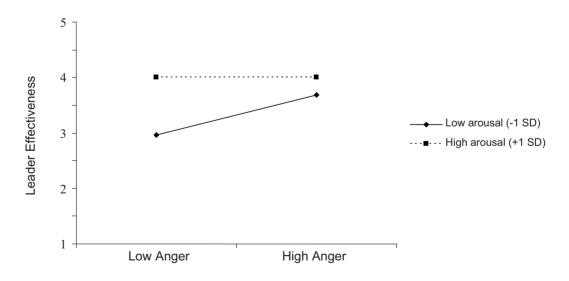
As expected, both interactions were significant. Second, we conducted simple slopes analysis (Aiken & West, 1991). When follower arousal was high (1 SD above the mean), leader affective displays were unrelated to leadership effectiveness (enthusiasm: β = .22, p = .12; anger: β = .05, p = .72). However, when follower arousal was low (1 SD below the mean), leader displays of high activation emotions had a positive influence on leadership effectiveness (enthusiasm: β = .59, p < .001; anger: β = .55, p < .01). The results of the simple slope analysis are depicted in Figure 3.1.

In sum, we found that leader effectiveness perceptions increased with the display of high activation affect to the extent that followers were low in arousal. Importantly, we obtained this effect for positive as well as negative affect with a high activation level.

Figure 3.1

Results of simple slope analysis for Leader Affective Display x Follower Arousal, Study 3.2.





General Discussion

The present study adds to the growing body of evidence that leader affective displays influence follower behavior and attitudes. Most importantly, however, it shows that the level of activation associated with leader's affective display impacts leadership effectiveness, both in terms of motivating follower performance and in terms of engendering perceptions of leadership effectiveness – but only to the extent that followers are relatively non-aroused. In Study 3.1, we found that leader display of enthusiasm lead to higher follower performance and higher perceptions of leader action readiness than leader display of relaxation, but only when the context allowed followers to be non-aroused rather than invited physiological arousal. Study 3.2 provided further support for our hypothesis by showing that perceptions of leadership effectiveness were contingent on leader displays of high activation positive and negative affect, particularly when followers experienced little arousal.

In addition to highlighting the role of the activation level associated with leader affective displays, the present study also points to the value of paying attention to the important role of specifically follower characteristics and, more generally, contextual factors in studies of affect. In general, it has been found that arousal impedes cognitive processing (Baron et al., 1992; Eysenck, 1976; Kahneman, 1973; Pavelchak et al., 1988). Contextual factors that produce high arousal may thus hamper the processing of information that is communicated by affective displays. This study corroborates this reasoning by showing that the (physiological) arousal of followers moderated the effects of leader affective displays. These findings suggest that factors associated with heightened follower arousal may moderate follower sensitivity to leader affective displays. There may be several contextual factors that enhance arousal. Organizational change, conflict, or approaching deadlines all have been associated with higher levels of anxiety and stress in the organization (Ashford et al., 1989; Bordia, Hobman, Jones, Gallois, & Callan, 2004; Callan et al., 1994; Garst, Frese, & Molenaar, 2000; Perrewé et al., 2004; Terry, Callan, & Sartori, 1996). Because both stress and anxiety are associated with heightened arousal, we may expect similar attention and information processing losses to occur. This means that the information conveyed through leader affective displays may to a lesser degree affect follower behavior and attitudes under such more stressful and uncertain circumstances. Leader display of affect may thus be less likely to lead to enhanced leadership effectiveness in times of change, uncertainty, and crises.

Interestingly, while the present findings suggest that followers may be less sensitive to (the activation level of) leader affective displays in stressful times, other analyses have

suggested that employees are more open to (charismatic) leadership under crisis conditions (e.g., Pillai & Meindl, 1998; van Knippenberg & Hogg, 2003). While the one does not exclude the other, conceptual analyses have also associated charismatic leadership with the display of high activation affective states such as enthusiasm (e.g., Conger & Kanungo, 1998). This, then, gives rise to the question of whether leaders may mobilize followers in times of crises through the display of high activation affect. The present analysis suggests that to do so, they should be able to create a lower-arousal window of opportunity in these stressful times – find the eye of the storm, as a figure of speech – to achieve the intended effect. While clearly this reasoning is more speculative, it does point to the possibility worthy of further research that part of the effectiveness of (charismatic) leadership in times of crises is finding or creating the opportunity to connect with followers.

The findings on follower arousal raise yet another interesting point. Follower arousal apparently created a differential sensitivity to leader affective displays. However, the results of the experimental study showed that follower arousal did not affect general task performance. That is, we did not find a main effect of follower physiological arousal on the number of customer requests that were processed. How may we explain this finding in light of general assertion that arousal impedes cognitive processing? It has been argued that arousal leads to processing of cues with high informational value, at the expense of cues that contain less information. Thus, arousal may cause a sharpening of action and concentration leading to a stronger focus on those aspects of task performance that are deemed essential. This selective processing hypothesis was first suggested by Easterbrook (1959) and has received additional corroboration in later studies (Mano, 1997; Pham, 1996; cf. Christianson & Loftus, 1987; Heuer & Reisberg, 1990). As a consequence, it may be that higher arousal did not interfere with the processing of customer requests because the participants may have deemed this their core activity. The attention to and processing of leader affective displays however may have been deemed of lesser importance, thereby making it more prone to effects of varying levels of follower arousal. Future research should further disentangle the effects of cue centrality, affect, and physiological arousal before we may reach a more definite conclusion on the matter.

Our study suggests that a leader may benefit from displaying high activation level affective states. Interestingly, these results may also (partly) explain findings suggesting that extravert leaders may be particularly effective leaders (Judge & Bono, 2000; Judge, Bono, Ilies, & Gerhardt, 2002). Several researchers have found a positive relationship between extraversion on the one hand and positive affectivity (PA) on the other (Chang, 1997; Watson

& Clark, 1992). It has been argued that extraversion may feed into trait positive affectivity, which in turn may lead to a more frequent occurrence and display of positive state affectivity (cf. Nemanick & Munz, 1997). As PA is considered to be comprised mainly of high activation affect (Larsen et al., 2002), it likely that extravert leaders may be more likely to display high activation level positive affect, which may explain their effectiveness. If this proposition were to be corroborated by empirical findings, as we would expect, the implications for leadership practice would then seem to be that it may sometimes be worthwhile to select and develop leaders who score high on the extraversion dimension.

Clearly it is valuable that we combined experimental and field data, because the strength of the one method may compensate for the weakness of the other (Dipboye, 1990; van Knippenberg & van Knippenberg, 2005). Whereas the laboratory experiment (Study 3.1) allows for conclusions regarding causality, it may raise questions as to whether the same relationships may be obtained in the field. The cross-sectional field study (Study 3.2) may address this question, but is mute in matters of causality (note, however, that common method bias is not a problem here, as common method bias suppresses the likelihood of finding interactions in regression; McClelland & Judd, 1993). Taken together, however, the fact that the use of two different methodologies leads to the same conclusions vis-à-vis our hypothesis substantially bolsters our confidence in our findings. However the present study is not without limitations. Support for our findings would be even more convincing if field data would also support the relationship between leader affective displays and follower performance (or other behavioral indicators of leadership effectiveness). Additionally, we should note that our evidence is based on findings for a restricted number of affective states. Affect circumplex models help to identify many more affective states that differ in associated level of activation but are similar in pleasantness. It would be valuable to extend the current test of our hypothesis to these affective states, to more firmly establish that it is differences in associated activation and not other differences associated with the diverse affective states (cf. Russell & Feldman Barrett, 1999) that drive these effects.

The clear implication of the present study is that the activation dimension of affect deserves more attention in leadership research. So far, attention has mainly been devoted to the pleasantness dimension of affect. Although this has led to important theoretical insights, the risk of this one-sided view may be that researchers and practitioners develop a limited understanding of affect in leadership processes, and that leaders come to miss opportunities for effective emotion management (Hochschild, 1983) in organizations. We hope that our study contributes in putting the activation dimension of affect on the agenda of leadership

Chapter	3

research.

4.

Affective Match:

Leader Emotional Displays, Follower Positive Affect, and Follower Performance

Based on Damen, van Knippenberg & van Knippenberg (in press)

Leader emotions may play an important role in leadership effectiveness. Extending earlier research on leader emotional displays and leadership effectiveness, we propose that the "affective match" between follower positive affect (PA) and leaders' emotional displays moderates the effectiveness of leader emotional displays. Leader display of emotions has more positive effects on follower behavior if the match between the valence of leader emotion and follower PA is strong rather than weak. Support for this hypothesis was found in two experiments. Congruency between leader emotional displays and follower PA determined follower task performance and extra-role compliance. Results from the second experiment indicated that this effect is due to affective aspects of leader behavior and not to the valence of the message content.

Introduction

Although the interest in leadership and affect is increasing, empirical evidence for the role of affect (i.e., emotions and moods) in leadership processes is still scarce. Recent studies have shown that leaders' affective displays may influence leadership effectiveness (e.g., Bono & Ilies, 2006; George, 1995; Glomb & Hulin, 1997; Lord & Brown, 2004; Sy, Côté, & Saavedra, 2005), but at the same time suggest that this is not always the case (e.g., Lewis,

2000; Locke et al., 1991). In addition, some studies suggest that the display of positive affect may be more effective than the display of negative affect (Gaddis, Connelly, & Mumford, 2004; McColl-Kennedy & Anderson, 2002; Newcombe & Ashkanasy, 2002; cf. Martin, Ward, Achee, & Wyer, 1993), whereas other evidence suggests that the display of negative emotions may also be effective, or may even be more effective in influencing others than the display of positive emotions (Tiedens, 2001; cf. Van Kleef, De Dreu, & Manstead, 2004a, 2004b).

Clearly, we still have limited understanding of the role of affect in leadership processes. Importantly, the somewhat muddled picture that arises from the literature seems to suggest that we may advance our understanding of the relative effectiveness of leader positive and negative emotional displays by looking at potential moderators. In the present study, we address this issue by investigating how follower characteristics may inform responses to leader affective displays. Specifically, we will zoom in on the role of follower affective state as a moderator of the effectiveness of leader positive versus negative emotional displays in engendering follower task performance. We propose that leader emotional displays are more effective when there is a better "affective match" between leader affective display and follower affective state. We tested this affective match hypothesis in two experimental studies of leader emotional displays and follower performance.

Leader Emotional Displays and Leadership Effectiveness

There is an abundance of evidence indicating that affect is of major importance for human functioning. Indeed, affect strongly influences cognitive processes such as memory, imaging, attention, judgment, and planning (Damasio, 1994; Forgas, 1995; Williams, Watts, MacLeod, & Mathews, 1999). Additionally, people use both their own feelings and others' affective displays as informational input for the cognitive processes that are needed to interact successfully with each other (Damasio, 1994; Forgas, 2001; Frijda, 1986; Keltner & Haidt, 1999; Oatley & Jenkins, 1996). For instance, affective displays are argued to influence the interaction between individuals by providing vital information about other's feelings (Scherer, 1986), intentions (Fridlund, 1992), and orientation toward the relationship (Knutson, 1996). Affect is considered to shape social interaction in groups as well. For instance, affective displays are thought to build identification with the group (Keltner & Haidt, 1999), adjust behavior in the group (Cacioppo & Gardner, 1999), and define group boundaries (Frijda & Mesquita, 1994). Evidently, affect colors people's perception of the social world and plays an important role in social interaction (Oatley & Johnson-Laird, 1987; Schwarz & Clore, 1983).

Given the fact that affect is important for social interaction, it is perhaps not surprising that affect also plays a key role in organizational functioning. Indeed, evidence showing that affect plays a pervasive influence in organizations is accumulating (Brief & Weiss, 2002; George & Brief, 1996; Judge & Ilies, 2004; Lord, Klimoski, & Kanfer, 2002; Staw, Sutton, & Pelled, 1994; Weiss & Cropanzano, 1996). Affective displays for instance influence behavior in work teams (Barsade, 2002; George, 1990; Kelly & Barsade, 2001), negotiation settings (Carnevale & Isen, 1986; Van Kleef et al., 2004a, 2004b), sales representative-client interaction (Grandey, Fisk, Mattila, Jansen, & Sideman, 2005; Sutton & Rafaeli, 1988), and managerial processes (Staw & Barsade, 1993).

Affect has also been related more specifically to leadership effectiveness. The literature provides more anecdotal analyses of charismatic and transformational leadership suggesting that leadership effectiveness may in part derive from leaders' use of emotions (Ashkanasy & Tse, 2000; Awamleh & Gardner, 1999; Bass, 1998; Cherulnik, Donley, Wiewel, & Miller, 2001; Conger & Kanungo, 1998). Empirical tests of the relationship between leader emotional displays and influence on followers are still scarce, but the available evidence does support the conclusion that leaders' emotional displays affect leadership effectiveness. A number of studies have documented the positive effects of leader positive emotional displays (e.g., Bono & Ilies, 2006; Damen, van Knippenberg, & van Knippenberg, 2003). Another body of empirical research focuses on the relative effectiveness of positive and negative emotional displays. Some of these studies suggest that the display of positive emotions is more effective than the display of negative emotions, possibly because the display of positive emotions signals more positive feedback than the display of negative emotions (Gaddis et al., 2004; McColl-Kennedy & Anderson, 2002; Newcombe & Ashkanasy, 2002; cf. Martin et al., 1993). However, Sy et al.'s (2005) findings suggest that the relative effectiveness of positive and negative displays may be contingent on the indicator of leadership effectiveness in question. Their study, although a study of leader mood and not necessarily leader affective display, indicated that a leader in a positive mood compared with a leader in a negative mood produced more coordination among group members, but less effort on the group task. Other studies suggest that the display of negative affect can be effective as well, or even suggest that the display of negative emotions can be more effective than the display of positive emotions (Tiedens, 2001; cf. Van Kleef et al., 2004a, 2004b). The available evidence thus suggests that both positive and negative emotional displays may at times add to leadership effectiveness. Yet, it is unclear what conditions influence the relative effectiveness of the display of positive versus negative emotions.

We may advance our understanding of the effects of leader emotional displays by looking at potential moderators of the effectiveness of the display of positive and negative emotions. Of course, the list of potential moderators is abundant, varying from contextual factors to, for instance, leader traits and conduct. However, as some researchers have noticed, in order to explain leadership effectiveness it may be wise to concentrate more on the follower (Lord & Brown, 2004; van Knippenberg, van Knippenberg, De Cremer, & Hogg, 2004). There is no leadership without followers, and it is the followers' compliance, cooperation, and endorsement that enables leaders to be effective. While the role of followers in the leadership process has been acknowledged, research in this respect has been cognitive in flavor. It has focused mainly on cognitive representations of leadership to explain reactions to leadership (e.g., Howell & Shamir, 2005; Lord & Maher, 1991; Meindl, Ehrlich, & Dukerich, 1985) and on follower self-definition as a factor informing responses to leadership (e.g., van Knippenberg & Hogg, 2003). It has not, however, addressed the possibility that follower affective states influence responses to leadership.

People use their emotions and affective states as informational input in evaluating social situations (Bower, 1981; Forgas, 1995, 2001; Schwarz & Clore, 1983). Affect colors the way that the social world around us is perceived. More importantly, affective states influence the attention to, the evaluation of and the memory for affective stimuli (Blaney, 1986; Forgas, 1994; Singer & Salovey, 1988). Applying these insights to leadership processes, we may expect that follower affect informs responses to leadership in general, and to leaders' emotional displays specifically. In the present study, we focus on follower positive affect (Watson & Tellegen, 1985), and investigate whether it operates as a moderator of the effectiveness of leader positive versus negative emotional displays.

Follower Positive Affect and Leader Emotional Displays

Positive Affect (PA) "represents the extent to which one feels enthusiastic, active and alert" (Watson & Tellegen, 1985, p. 221; see also Watson, Clark, & Tellegen, 1988). PA encompasses both emotions as specific, interruptive, and intense feelings and moods as relatively lower-intensity, longer lasting and more diffuse feelings states with often less clearly identifiable causes (Forgas, 1992; Frijda, 1986; Lewis & Haviland-Jones, 2000). People with high PA are likely to experience positive emotions and moods such as for instance enthusiasm and excitement, while people with low PA are likely to do so to a lesser extent and may experience feelings like sadness instead. PA has been shown to be an important moderating factor in predicting organizational attitudes and behavior (e.g.,

Anderson & Thompson, 2004; Barsade, Ward, Turner, & Sonnenfeld, 2000; Cropanzano, James, & Konovsky, 1993; Duffy, Ganster, & Shaw, 1998; Fortunato & Stone-Romero, 2001; Hochwarter, Kiewitz, Castro, Perrewé, & Ferris, 2003; Iverson & Deery, 2001; Judge & Ilies, 2004; Yoon & Thye, 2000). Importantly, PA may represent an affective trait (referring to individual differences in the disposition to experience positive affect) as well as an affective state (referring to an individual's PA at a particular point in time). Because trait PA should express its influence through state PA, and we were interested in the effects of PA (i.e., in whether followers' current affective state informs responses to leader affective displays), in the present study we focused on state PA.

Of particular relevance to the present analysis are findings that suggest that PA may influence responses to affective stimuli. Bower's (1981) network theory implies that people may have stronger and a greater number of connections among emotional experiences that are congruent with their affective states. As a consequence, people's affective state invites mood congruent information processing and retrieval of information (Blaney, 1986; Forgas, 1994; 1995; Niedenthal & Showers, 1991; Singer & Salovey, 1988). Positive mood states, therefore, are thought to increase the accurate perception of positive stimuli and the tendency to make positive judgments and retrieve positive memories.

Gray's theory of affective traits (Gray, 1971, 1981, 1987) also points to the possibility that follower affect may inform responses to affective stimuli. Gray posits that individual differences in impulsivity may account for the relative strengths of a motivational system that regulates behavior in the presence of signals of reward. As a consequence, some people may be more sensitive to positive emotional stimuli than others (e.g., Lord et al., 2002). Likewise, other authors (Larsen & Ketelaar, 1991) also suggest that traits like extraversion make people more susceptible to positive affect and less susceptible to negative affect. Although these theories do not explicitly focus on PA, the high correlations between impulsivity/extraversion and state and trait PA may suggest that these theories are applicable to a wider range of affect-related concepts (Rusting & Larsen, 1997, 1998; Zelinski & Larsen, 1999).

In sum, these combined perspectives suggest that individuals are more sensitive and open to experiences that are congruent with their own affective state. Importantly, there is also evidence for the idea that individuals have better relationships with, have more positive attitudes towards, and are more strongly persuaded by others that have a congruent affective state. For instance, there is growing evidence that work groups function better when there is similarity of especially PA (Barsade, 2002; Bartel & Saavedra, 2000; Bauer & Green, 1996; Totterdell, 2000). Barsade et al. (2000), for instance focused on the effects of the extent to

which top management team members had similar levels of trait PA, and found that a match of affect between the managers in a team was associated with positive attitudes towards and perceptions of the team. In similar vein, Bauer and Green (1996) found that leader-follower relationships were better when leader and follower were similar in trait PA. Although these findings again do not concern state PA, these findings clearly hint at the possibility that leader affective displays may have positive effects when they match followers' affective state. Research on affect and persuasion (e.g., Albarracín & Kumkale, 2003; DeSteno, Petty, Rucker, Wegener, & Braverman, 2004; DeSteno, Petty, Wegener, & Rucker, 2000; Mackie & Worth, 1989) reveals comparable mood congruity effects. For instance, DeSteno et al. (2004) manipulated the mood of participants and found that a message was more persuasive when it was likely to elicit similar affective responses. When the message was likely to trigger sadness, people induced with a sad mood were more likely to be persuaded than people in an angry or neutral mood. However, when the message was likely to elicit anger, people in an angry mood were more likely to be persuaded than neutral or sad participants. These findings thus suggest that leaders may be more influential when their affective displays match followers' affective state.

There is also evidence that PA is more important than its counterpart negative affect or NA (negative affect refers to trait or state differences in the experience of negative affective states; Watson & Clark, 1984). In studies that focused on social interaction (i.e., as in leader-follower relationships) and affect congruency effects, PA appeared to be substantially more influential than NA (e.g., Barsade et al., 2000; Blaney, 1986; Singer & Salovey, 1988; Watson, Clark, McIntyre, & Hamaker, 1992). Because PA may affect responses to affective stimuli to a larger extent than NA, the present study focuses specifically on the role of PA.

Thus, extrapolating the above findings to the present study one would expect that the relative fit between a leader's emotional display and follower PA influences the persuasiveness of the leader's influence attempt. More specifically, we propose that followers are more open to leaders' appeals if the valence of the leader's emotional display matches follower's level of PA more closely. Thus, for followers high in PA the match with leaders that display positive emotions (such as enthusiasm and happiness), is closer than the match with leaders that display negative emotions (such as sadness and anger). For followers that lack PA, the match with leaders that display positive emotions is weaker than the match with leaders that also seem to lack positive affect and display negative emotions instead. Thus, for followers high in PA, appeals accompanied by positive emotional displays are relatively more effective than appeals accompanied by negative emotional displays. For followers low in PA

appeals accompanied by positive emotional displays are relatively less effective than appeals accompanied by negative emotional displays. We tested this hypothesis in two experiments. The first was designed to test our core prediction that leaders' emotional displays are more effective in engendering desired follower behavior when the valence of the display matches follower PA. The second was designed to replicate the core finding with another (different-gender) leader, and to establish that the predicted effect is driven by leaders' emotional display and not by the valence of the content of the message per se.

Study 4.1

We manipulated leader's positive versus negative emotional display and added a measure of follower PA as a factor to the design. To manipulate emotional displays of the leader, we focused on anger and enthusiasm. Both anger and enthusiasm are clearly recognizable and reflect high levels of arousal. In addition, they are each other's opposites in terms of their pleasantness or valence (Larsen, Diener, & Lucas, 2002). Thus, anger is seen as a strong negative emotion, whereas enthusiasm is seen as a strong positive emotion.

Analyses suggest that enthusiasm and anger are highly relevant to leadership effectiveness (e.g., Fitness, 2000; Glomb & Hulin, 1997; Lewis, 2000; Lord et al., 2002; Tiedens, 2001). Although relying on anecdotal evidence rather than systematic research, analyses of charismatic leadership have pointed to charismatic leaders' ability to motivate through the display of their own enthusiasm (cf. Conger & Kanungo, 1998), and other analyses suggest that the display of anger is associated with perceptions of power and status, and may motivate compliance (Tiedens, 2001; Van Kleef et al., 2004a, 2004b).

The importance of enthusiasm and anger may follow from the information that is communicated about the action-orientation of the person who displays these affective states (cf. Frijda, 1986; Larsen et al., 2002). Enthusiasm and anger are high-activation affective states and both imply a readiness for action. To the extent that emotional displays communicate social information (Keltner & Haidt, 1999), the display of high activation emotion may communicate the message that the leader his or herself is action-oriented and that he or she expects followers to be similarly action-oriented. Both enthusiasm and anger may thus convey the desirability of action and may therefore motivate followers into action.

We assessed two behavioral indicators of leadership effectiveness: task performance and extra-role compliance. Although we expected to find the same pattern of results for both measures, it is nevertheless important to test this explicitly, because it cannot be assumed that

in-role task performance and extra-role behavior are governed by the same processes (e.g., Motowidlo, Borman, & Schmit, 1997; Organ, 1990; Wright, George, Farnsworth, & McMahan, 1993). Therefore, the use of both measures may give us important information about the extent to which effects of leaders' affective displays generalize from task performance to extra-role behavior.

Method

Participants and Design

We recruited forty-seven first and second year business and economics students (mean age was 20.47 years, SD = 2.04; 55% of the participants were male). They received 10 euro (approximately \$13) for participation in a study on "leadership and communication". The participants were randomly assigned to one of two conditions (Leader Emotion: angry/enthusiastic). To measure state Positive Affect (PA) we used nine items developed by Watson et al. $(1988)^1$. By using a median split (Mdn = 2.89), we distinguished between participants high and low in PA and added this variable as a factor in the design ($\alpha = .90$, M = 2.96, SD = .71). A test of the difference in PA between the two groups confirmed that people in the low PA group indeed scored lower (M = 2.34, SD = .51) on positive affect than people in the high PA group (M = 3.46, SD = .38), t(45) = -8.62, p < .0001, $\eta^2 = .62$.

Procedure

The participants were seated in separate cubicles with a personal computer, which was used to present all experimental materials and to collect all data. The participants were told that they were about to be supervised by a person who was introduced as a manager of a big IT-company who was enrolled in an executive development program at participants' university to perfect her management skills. They were told that this leader was present in another room and that a live video connection between them and the leader was established. It was explained that the aim of the research was "investigating how leaders communicate". Then a female leader appeared on everybody's computer screen and she introduced herself. This leader was in fact a trained female actor who was taped earlier. To present participants with a leader that was not too dissimilar to them, we selected an actress who was relatively

¹ We were not able to translate "attentive" into Dutch while maintaining the same affective connotation. Therefore we used nine items for PA rather than the original 10.

young (28 years). Also, the leader introduced herself as someone who had earned a MBA degree at participants' university some years ago. She told participants that she was asked, because of the course she followed, to manage the present group of participants. She then instructed participants to start task performance. The task simulated a computer retail store in which participants had to process preprogrammed customer requests (see dependent measures section). The leader attempted to motivate participants to do well in this task and specifically assigned them the goal to process as much customer requests as they could in 20 minutes time. After that, the participants processed the customer requests for 20 minutes. Subsequently, the assessment of extra-role compliance took place, manipulation checks were assessed, and participants were paid, debriefed, and thanked for their participation.

Manipulation of Leader Emotion

The leader allegedly knew how other groups had performed on this task in the past, and on the basis of this (bogus) information expressed her feelings about the fact that the group of participants was assigned this particular task. When performance on the task had allegedly been bad in the past, she expressed anger. When performance on this task had allegedly been good in the past, she expressed enthusiasm. Leader Emotion was manipulated mainly by variations in facial expressions (e.g., smile or frown), tone of voice (high pitched pleasant or high pitched unpleasant), and body language (such as body posture; e.g., making a fist in anger or raising thumbs in enthusiasm). The leader also mentioned the emotion she felt (angry or enthusiastic). In both conditions the leader said almost exactly the same, thus except for the fact that she either said to be angry or enthusiastic, referring to past task performance.

Dependent Measures

Task performance. After these instructions from the leader, the customer requests appeared on the computer screen. The task, developed by Hertel, Deter, and Konradt (2003), simulated a computer retail store in which the participants had to combine hardware packages of a personal computer (PC), a monitor, and a printer according to customer requests. Each request consisted of a price limit (e.g., 3680 euro) and one specific request (e.g., a 1200 dpi printer). The participants had to combine these hardware packages without violating the customer requests. The available PCs (standard; 1750 euro, standard-plus; 2000 euro, and professional; 2250 euro), monitors (15"; 750 euro, 17"; 950 euro, and 19"; 1150 euro) and printers (bubble-jet; 530 euro, 600 dpi-printer; 660 euro, and 1200 dpi-printer; 890 euro) were shown on the computer-screen of the participant. Then the participants had to choose one PC,

one monitor and one printer by clicking the corresponding button with their mouse. After picking the three items, the participant had to click on the "Send" button, which completed one request, and then the next order was shown. The number of completed orders was displayed in the upper right corner of the screen. The use of watches, pocket calculators or paper and pencil was not allowed during the experiment.

The number of completed customer requests functioned as our performance measure (see Hertel et al., 2003, for more details). Hertel et al. developed this task primarily to assess effort exerted in task performance, and following from our analysis that pointed to the motivation for action that may be engendered by leader display of enthusiasm or anger, we adopted the task for exactly these purposes. A comparison of the total number of orders completed (i.e., the primary indicator of effort exerted) to the number of orders completed without errors (i.e., as indicator that more clearly reflects quality, or accuracy, of performance) showed that in both experiments reported here the current measure correlated very highly with the alternative measure that emphasized quality more (Exp. 1, r = .92; Exp. 2, r = .94).

Extra-role compliance. After twenty minutes, this task ended automatically and the leader appeared for the second time on the computer screen. In the same emotional mode (angry or enthusiastic) she told the participant that, while they were working on the task, she discovered some spelling errors in the written task instructions. She said that she considered this to be rather unprofessional and asked the participant to let the experimenter know that spelling errors had been found, when they would be offered the opportunity to make some remarks about the study later on in the experiment. Not much later, participants received the opportunity to type in any remarks they might have about the study. Here, participants could inform the experimenter about typing errors if they chose to do so. Whether or not participants notified the experimenter of spelling errors was our behavioral measure of compliance with the leader.

Manipulation Checks

Finally, the participants filled out a small questionnaire in which manipulation checks were measured. We used one item to check the perception of leader's anger ("This manager was angry") and one to check leader's enthusiasm ("This manager was enthusiastic"). Responses were on scales ranging from 1 (disagree completely) to 5 (agree completely).

Results

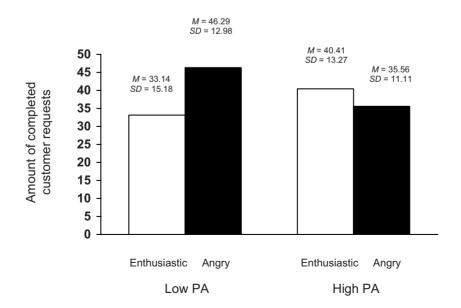
Manipulation Checks

Manipulation checks were analyzed in a Leader Emotion by Follower PA analysis of variance. In the condition where the leader was enthusiastic, she was also perceived as more enthusiastic (M = 4.25, SD = .68) than in the condition where she was angry (M = 2.04, SD = 1.15), F(1, 43) = 51.58, p < .0001, $\eta^2 = .55$. When the leader was angry, participants indicated that she was angrier (M = 4.04, SD = 1.07) than in the condition where the leader was enthusiastic (M = 1.21, SD = .42), F(1, 43) = 125.76, p < .0001, $\eta^2 = .75$. No other effects were significant. The manipulation of Leader Emotion can therefore be considered successful.

Task Performance

We neither found a main effect for Leader Emotion, nor for follower PA. However, as expected, we found an interaction between Leader Emotion and follower PA, F(1, 43) = 4.91, p < .05, $\eta^2 = .10$. The pattern of results was as predicted in our affective match hypothesis (see Figure 4.1).

Figure 4.1
Performance per condition, Study 4.1.



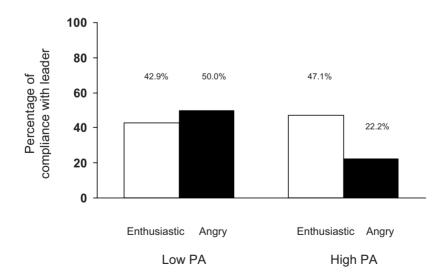
To further test our hypothesis, we used planned comparisons. We tested whether participants processed more orders in case of a relative affective match between leader and follower (i.e., an angry leader combined with followers low in PA, or an enthusiastic leader with followers high in PA) than in case of a relative affective mismatch (i.e., an angry leader with followers high in PA, or an enthusiastic leader with followers low in PA). As expected, participants in the match conditions processed more orders (M = 43.07, SD = 13.07) than participants in the mismatch conditions (M = 34.50, SD = 12.63), t(45) = 2.13, p < .05.

Extra-Role Compliance

The behavioral measure which assessed effectiveness of the leader in terms of compliance with the leader (informing the experimenter of spelling errors in the task instruction), was analyzed in hierarchical loglinear analysis. Although the pattern of the PA x Leader Emotion interaction was conform our expectations it failed to reach significance, χ^2 (1, N = 47) = 1.20, ns. (see Figure 4.2). No other effects were significant.

Figure 4.2

Compliance with leader per condition, Study 4.1.



Discussion

We found the predicted interaction between Leader Emotion and Follower PA. Participants processed more orders in case of an affective match compared to an affective mismatch. We found the same pattern of results for our compliance measure, but possibly due to our modest sample size, this interaction failed to reach significance. The findings for task performance thus provide important first evidence that follower affect moderates the effectiveness of leaders' display of positive as compared to negative emotions.

An important issue to consider is that, even though results are in line with the affective match hypothesis, the observed effects could also have been caused by valence of the actual message content per se rather than by the affective display of the leader. Even though the leader always made an optimistic appeal to followers to perform to the best of their abilities, the leader quoted poor task performance by earlier participants as a reason for her anger, and good task performance by earlier participants as reason for her enthusiasm. Hence, the content of the leader's message in the enthusiasm condition was more positive than in the anger condition. The reason for this is self-evident: positive emotions typically are linked to more positive messages than negative emotions. Yet, from a research-methodological perspective this raises the issue to what extent the observed effects are due to leader's emotional display rather than to the valence of the content of the message itself. This issue was addressed in Study 4.2.

Another important issue raised by Study 4.1 is that the evidence it yielded in support of the affective match hypothesis is tied to the performance of a single leader. Replication of the findings of the first Study with another leader would bolster our confidence in the conclusions. Moreover, leader stereotypes and expectations are not gender-neutral (Lord, DeVader, & Alliger, 1986; Lord, Foti, & Philips, 1982), so we should not assume that findings for a female leader (note that Study 4.1 employed a female leader) more or less by definition generalize to a male leader. As a case in point, Lewis (2000), although not a study involving followers, showed that perceivers' evaluations of a male leader displaying anger were more positive than evaluations of a female leader displaying anger. Although we have no reason to believe that the main effect observed by Lewis (2000) affects the interaction between leader emotion and follower PA, it is nevertheless important to test whether the affective match hypothesis also holds for a male leader. This issue was addressed in Study 4.2 as well.

Study 4.2

The aim of our second study thus was twofold. First, it was designed to disentangle the effects of leader's emotional displays from those of the valence of the message per se. Second, Study 4.2 aimed to replicate the findings of Study 4.1 with a different, and male, leader. Study 4.2 basically followed the same design and procedures as Study 4.1, with the addition of two conditions in which the leader's message (i.e., including the reference to earlier task performance) was not accompanied by an emotional display.

Our argumentation leading to the relative affective match hypothesis included evidence pertaining to the idea that a state of positive affect leads people to be more open to information (i.e., including appeals by others) that is congruent with that affective state (e.g., people in a positive affective state may be more open to positive information than to negative information). Importantly, there is evidence that this congruency effect may hold even stronger for affect-laden information, however (DeSteno et al., 2000). That is, the affect congruency effect seems to be stronger for information implying similar affect (e.g., remembering a happy occasion when in a happy mood) than for information that only implies similar valence (e.g., remembering a positive outcome when in a happy mood).

Accordingly, we expected that the moderating effect of follower PA is first and foremost linked to the additional influence of leader's affective display and not to the valence of the message per se. In other words, we expected that the observed effect is primarily a matter of affective match rather than of what may be called valence match (i.e., a match between the valence of the message content and follower PA). In order to find support for our hypothesis the moderating effect of follower PA on responses to leader appeals should be stronger for appeals accompanied by emotional displays than for otherwise identical appeals without the display of emotion.

Note that we decided not to include a negative message accompanied by a positive emotion and a positive message accompanied by a negative emotion. We considered that such conditions would be artificial and of less relevance. Indeed, positive and negative affective displays usually communicate congruent positive or negative information (e.g., Johnson-Laird & Oatley, 2000; Keltner & Haidt, 1999; Miller & Leary, 1992; Oatley & Jenkins, 1996; Scherer, 1986).

Method

Participants and Design

Ninety-nine first and second year business and economics students (mean age was 20.91 years, SD = 1.95; sixty-two percent of the participants were male) participated voluntarily in this experiment in return for 10 euro. The participants were randomly assigned to the conditions of a 2 (Leader Emotion: yes/no) x 2 (Valence of Message: negative/positive) between-participants design.

Positive Affect was measured with the same nine items from the PA scale (Watson et al., 1988) as in Study 4.1. We used a median split (Mdn = 3.11) and distinguished participants high and low in PA and added this variable as a factor in the design ($\alpha = .87$, M = 3.07, SD = 0.66). The participants who were low in PA (M = 2.47, SD = .44) scored lower on PA than participants who were high in PA (M = 3.55, SD = .36), t(97) = -13.33, p < .0001, $\eta^2 = .65$.

Procedure and Dependent Measures

The leader in this study was a trained 27 year old male actor. The procedure was the same as in Study 4.1. The only difference lay in the gender of the leader and in the extension of the design with two conditions in which the leader did not display emotions. Thus, as our manipulation of Valence of Message, the leader stated in the video-taped message that this task was typically executed poorly in the past ("I have been working with this task before and I experienced that people perform poorly on this task. The results are often bad on this task and that annoys me."), or that it was typically executed well ("I have been working with this task before and I experienced that people perform well on this task. The results are often good on this task and that pleases me."). Just as in Study 4.1, the manipulation of Leader Emotion consisted of the leader being emotional about the necessity to work with this task (angry in the case of a negative valence of message and enthusiastic in the case of a positive valence of message). The actor displayed anger and enthusiasm in the same manner as in Study 4.1, or he was not emotional about it (i.e., neutral; displaying no emotions, but still conveying the same negative or positive message). We used the same dependent measures as in Study 4.1.

Manipulation Checks

We added and adjusted manipulation checks in order to cover all independent variables in this extended design. Again, all responses potentially ranged from 1 (*disagree completely*) to 5 (*agree completely*). To check the manipulation of Leader Emotion, participants were asked

to indicate to what extent the leader displayed an emotion ("This leader did not show emotions"). In addition, we asked which emotion, if any, the leader displayed ("This leader was angry" or "This leader was enthusiastic"). We also assessed the successfulness of the manipulation of Valence of Message, by measuring how well participants indicated that the task had been done in the past. A two-item scale was used; "The task I did has been done badly before" (reverse-scored) and "The task I did has been done well before" (M = 2.99, SD = 1.57, $\alpha = .86$, r = .76).

Results

Manipulation Checks

First, we found the expected main effect of Leader Emotion on the extent to which the participants perceived the leader to display emotion. Participants indicated that the leader showed less emotion in the no emotion condition (M = 2.24, SD = .98) than in the emotion condition (M = 3.61, SD = .96), F(1, 91) = 48.72, p < .0001, $\eta^2 = .35$. No other effects were significant.

Furthermore, we found that the participants clearly recognized Valence of Message as communicated by the leader. We checked, more specifically, the positiveness of the message and found that participants in the positive Valence of Message condition, scored higher on this scale (M = 4.33, SD = .86) than those in the negative Valence of Message condition (M = 1.75, SD = .93), F(1, 91) = 194.90, p < .0001, $\eta^2 = .68$. No other effects were significant.

A successful manipulation of the specific emotions of the leader should be apparent from an interaction of Valence of Message x Leader Emotion on the extent to which the participants considered the leader to be enthusiastic and angry. We indeed found a Valence of Message x Leader Emotion interaction on the extent to which the leader was perceived as enthusiastic, F(1, 91) = 14.48, p < .0001, $\eta^2 = .14$. When the leader was enthusiastic, followers rated him as more enthusiastic (M = 4.20, SD = .58) than when the leader was angry (M = 2.45, SD = 1.00), t(43) = 7.37, p < .0001, when the leader displayed no emotion with a positive message (M = 2.65, SD = .98), t(46) = 6.72, p < .0001, or when the leader combined no emotions with a negative message (M = 2.29, SD = .90), t(54) = 9.17, p < .0001. No other effects were significant.

For perceptions of the leader's anger, we also found an interaction of Valence of Message x Leader Emotion, F(1, 91) = 45.22, p < .0001, $\eta^2 = .33$. Thus, angry leaders were perceived as angrier (M = 4.05, SD = 1.10) than enthusiastic leaders (M = 1.40, SD = .65), t(43) = 10.09,

p < .0001, and than leaders who did not display emotions but had a positive message (M = 1.22, SD = .42), t(41) = 11.45, p < .0001, or a negative message (M = 1.81, SD = .75), t(49) = 8.68, p < .0001. No other effects were significant.

Therefore, we concluded that our manipulations were successful.

Task Performance

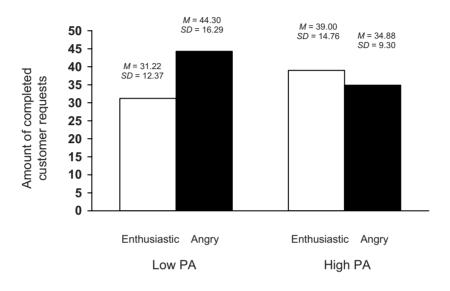
We did not find main effects for Leader Emotions, Valence of Message or followers' PA, nor did we find two-way interactions. However, an analysis of variance on the amount of orders that the participants completed, revealed the expected three-way interaction of Positive Affect x Leader Emotions x Valence of Message, F(1, 91) = 4.20, p < .05, $\eta^2 = .04$ (see Figure 4.3).

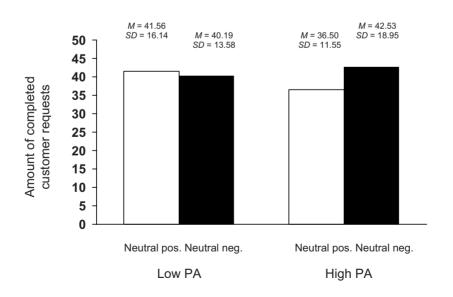
To test our hypothesis, planned comparisons were used (see Table 4.1). First, comparing performance within the emotion conditions, we tested whether participants processed more orders when there was a match between leader emotion and follower PA versus a mismatch, which would signify a replication of Study 4.1 (contrast 1). Second, comparing performance in the no emotion condition, we examined whether participants processed more orders when there was a valence match compared to a valence mismatch (contrast 2). Note that we expected no difference here. If contrast 1 is significant while contrast 2 is not, this shows that the observed effect may be attributed to the additional influence of emotional display of the leader and not to the valence of the leader's message per se.

In addition, we included two other contrasts to test the relative effectiveness of leader appeals with versus without accompanying emotional displays. Although these contrasts are not central to the current focus on follower PA as moderator of the effectiveness of leader positive versus negative emotional displays, they are of interest from the perspective that leader emotional displays may increase leadership effectiveness. Therefore, we also compared performance in the affective match versus valence match conditions (contrast 3), and performance in the affective mismatch versus valence mismatch conditions (contrast 4), to determine whether leader emotional displays may add to leadership effectiveness (in case of affective match) or decrease leadership effectiveness (in case of affective mismatch).

Contrast 1 was significant. In case of an affective match participants processed more orders (M = 41.04, SD = 15.27) than in case of affective mismatch (M = 33.11, SD = 10.70), t(97) = 2.01, p < .05. This finding is a replication of the results of Study 4.1. Contrast 2 was not significant, as expected, indicating that valence match did not affect follower performance, t(97) = -.94, p = .35.

Figure 4.3
Performance per condition, Study 4.2.





Contrary to expectations, Contrast 3 was not significant. Although participants in the affective match conditions appeared to process more orders (M = 41.04, SD = 15.27), than participants in the valence match conditions (M = 38.47, SD = 12.59), this difference was not significant, t(97) = .67, p = .50. In support of our predictions, however, contrast 4 showed that participants in the affective mismatch conditions performed worse (M = 33.11, SD = 10.70) than participants in the valence mismatch conditions (M = 42.17, SD = 17.59), t(97) = 2.05, p < .05. In sum then, results are largely in line with predictions. Follower PA moderates the effects of leader's display of positive versus negative emotions, whereas participants were unaffected by the content of the message per se. In addition, affective mismatch led to poorer performance than valence mismatch, but affective match did not lead to significantly better performance than valence match.

Table 4.1 *Means, Standard Deviations and Contrasts Computed to Test Hypothesis (Study 4.2).*

	Condition							
	Enthusi asm PA+	Enthusi asm PA-	Anger PA+	Anger PA-	Message+ Neutral PA+	Message+ Neutral PA-	Message- Neutral PA+	Message- Neutral PA-
M	39.00	31.22	34.80	44.30	36.50	41.56	42.53	40.19
(SD)	(14.76)	(12.37)	(9.30)	(16.29)	(11.55)	(16.14)	(18.95)	(13.58)
Contrast 1*	1	-1	-1	1	0	0	0	0
Contrast 2	0	0	0	0	1	-1	-1	1
Contrast 3	1	0	0	1	-1	0	0	-1
Contrast 4*	0	1	1	0	0	-1	-1	0

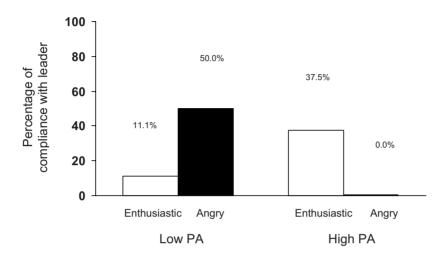
Note. Standard deviations are presented between brackets. Contrasts marked with an asterisk are significant at p < .05.

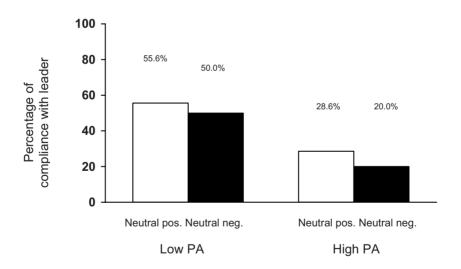
Extra-Role Compliance

For followers compliance with the leader's request, the only significant effect in a hierarchical log linear analysis was the predicted three-way interaction, χ^2 (1, N = 99) = 6.14, p = .01. We found the same pattern of results as we did for task performance (see Figure 4.4).

Figure 4.4

Compliance with leader per condition, Study 4.2.





We further explored the results on extra-role compliance by conducting a series of γ^2 -tests, contrasting different match and mismatch conditions following the same logic as outlined above. In the emotion conditions, we expected to find that people who experience an affective match comply more with their leader than people who experience an affective mismatch. Indeed, participants who experienced an affective match with their leader complied in 42.3% of the cases, whereas participants who experienced an affective mismatch complied only in 5.3% of the cases, χ^2 (1, N = 45) = 7.70, p < .01. Note that Study 4.1 revealed a similar, although not significant, pattern of results. In case of an unemotional leader, we did not expect a difference between the valence match and mismatch conditions. Indeed, we found no significant difference here $(\chi^2 (1, N = 54) = .25, p = .61; 40.0\%)$ of the participants complied in case of a valence match, and 33.3% of the participants complied in case of a valance mismatch). We furthermore expected a difference between the affective match and valence match conditions and between the affective mismatch and valence mismatch conditions. Comparable to the results of task performance, we did not find differences in extra-role compliance between the affective match and valence match conditions: In the affective match condition 42.3% of the participants complied and in the valence match condition 40% did, χ^2 (1, N = 56) = .03, p = .86. In case of an affective mismatch only 5.3% complied, which differed, as expected, from the compliance in the valence mismatch conditions (33.3%), χ^2 (1, N = 43) = 5.05, p < .05.

Discussion

The results of Study 4.2 add to the findings of Study 4.1 in three important ways. First, they show that the findings of Study 4.1 are not tied to one particular leader. The affective match hypothesis holds for a male as well as for a female leader. Second, the results of Study 4.2 showed that the greater effectiveness of leader emotional displays that match follower PA is tied to the leader's emotional display and not to the valence of the leader's message per se (i.e., we did not find a valence match effect, only an affective match effect). Third, Study 4.2 showed that the effects observed for task performance may also obtain for extra-role behavior. In combination, these findings substantially bolster the confidence in the conclusion that the relative effectiveness of leaders' positive versus negative emotional displays in engendering desired follower behavior is contingent on the match between the leader's emotional display and follower PA.

Study 4.2 yielded the predicted effect for extra-role compliance whereas Study 4.1 did not. Inspection of compliance levels in the emotion conditions across the two experiments

suggest that this is mainly due to higher levels of compliance in the affective mismatch conditions of Study 4.1 as compared with Study 4.2. People seemed less hesitant to turn down a less appealing request for extra-role compliance (i.e., in the mismatch conditions) when the leader was male than when the leader was female. Possibly, this points to a gender effect in the relation between affective mismatch and extra-role compliance, but more empirical evidence is required for a less tentative conclusion.

Interestingly, Study 4.2 showed that affective mismatch led to lower leadership effectiveness than a comparable message without the accompanying emotional display. Affective match, in contrast, did not lead to significantly better performance than a comparable appeal without emotions. If we assume that follower affective state leads followers to expect others, including their leader, to be in a similar state (cf. DeSteno et al., 2000), the observation that affective mismatch had a stronger impact on follower performance than affective match is consistent with evidence that circumstances that are incongruent with expectations tend to attract more attention than circumstances that are congruent with expectations (e.g., Fiske & Taylor, 1991; Stangor & McMillan, 1992).

General Discussion

There is more and more evidence that leaders' affective displays influence leadership effectiveness. Less clear is which factors influence the relative effectiveness of positive as compared with negative emotional displays. Focusing on a possible moderator of the relative effectiveness of positive versus negative emotional displays, the present study showed that the affective match between the valence of leaders' emotional display and followers' level of positive affect influenced leaders' ability to engender desired follower behavior. The contribution of the present study to the emerging field of leadership, affect, and emotions thus is that it highlights the role of follower characteristics, specifically follower PA, as moderator of the effectiveness of leaders' positive versus negative emotional displays.

The present findings, as well as the current study's limitations, suggest a number of issues that warrant further consideration and research. First, the stability and duration of affective experiences may differ considerably. Positive affect may concern relatively short-lived affective states, fluctuating over time and situations in the course of even a single day (Larsen et al., 2002; Lord & Brown, 2004; Watson, Wiese, Vaidya, & Tellegen, 1999), but it may also concern a trait which is more stable over time (Watson et al., 1988). For the purposes of our study it seemed most relevant to focus on how participants were feeling at the moment that

they were confronted with their leader. However, it may also be interesting to investigate to what extent trait affect functions as a moderator of the effects of leader emotional displays. Although one may expect PA as a trait to operate in a similar manner as PA as state (given the fact that there is considerable overlap between the two, Schmulke, Egloff, & Burns, 2002), work by George (1991) suggests that the effects of trait PA on behavior in organizations may be smaller than the effects of state PA. The affective match effect might therefore be stronger for follower state PA than for follower trait PA.

Another issue concerns the determinants of state PA. State PA may be affected by recent history, encounters with others, or other aspects of the situational context. Situational factors that could affect PA may thus be expected to moderate the relative effectiveness of leader positive and negative emotional displays. For instance, in times of organizational crisis and change subordinates often feel more depressed and stressed (Bordia, Hobman, Jones, Gallois, & Callan, 2004; Terry, Callan, & Sartori, 1996) than in more stable organizational circumstances. Accordingly, PA of subordinates may be lower in times of organizational crisis and change and higher in times of organizational prosperity. The current analysis would therefore suggest that in times of crisis and change, displays of negative emotions by the leader are relatively more effective and displays of positive emotions relatively less effective than in more stable and prosperous times. The present study thus suggests that a range of moderators of the relative effectiveness of leader positive versus negative emotional displays may be identified by focusing on the determinants of PA.

Note that the differential effects of leader positive and negative affective displays may also have an especially strong impact on followers during crisis and change, because these situations may be described as weak situations (Jacobson & House, 2001; Mischel, 1973). In weak situations few external cues to guide behavior are present and people may feel uncertain about the appropriateness and desirability of certain behaviors. As a consequence they will be more attentive to the existing external cues in the hope that these may diminish feelings of uncertainty. Leader affective displays may provide such an external cue. The effects of leader affective displays may therefore be stronger in weak rather than strong situations.

We focused on the match between follower PA and the valence of leader's emotional display. We may raise the question whether a similar affective match would obtain for follower negative affect (NA). NA refers to the experience of discomfort and negative emotionality (Watson & Clark, 1984). Accordingly, one could argue that leader display of negative emotions should be a better match with high follower NA then leader display of positive emotion, and accordingly that follower NA should also moderate the relative

effectiveness of positive versus negative leader affective displays. However, there is evidence that the affect congruence effect is stronger for positive affect than for negative affect (Blaney, 1986; Singer & Salovey, 1988), and that PA is more important than NA in social interaction (Barsade et al., 2000; Watson et al., 1992). Barsade et al. (2000), for instance found that similarity in PA, but not NA, predicted team process. We would thus expect that follower NA is less important in informing responses to leader affective displays than follower PA. Because we assessed PA with the Positive Affect Negative Affect Schedule (PANAS; Watson et al., 1988), we were able to also test the moderating role of follower NA. Consistent with the current reasoning, we did not find evidence for an effect of follower NA in either experiment.

Although the present study gives support to our affective match hypothesis, it gives little insight into the reason why affective match is of importance. It may be that similarity between people (i.e., between leader and follower) plays a significant role in the processes we studied. People in general like similar others (e.g., Berscheid & Reis, 1998; Fiske & Taylor, 1991), and leaders who are liked by their subordinates are more effective (Emrich, 1999; Engle & Lord, 1997; Stang, 1973). Leaders who are similar to their followers on demographic dimensions (e.g., gender, race, tenure: Tsui & O' Reilly, 1989; Tsui, Porter, & Egan, 2002) and leaders who are more representative of the workgroup (e.g., van Knippenberg & van Knippenberg, 2005) have for instance been shown to be more effective. In line with these observations, we may expect that similarity in affect (i.e., affective match) between leader and follower feeds into liking for the leader and thus into leader's effectiveness in influencing followers. Another possible process that may play a role was already alluded to in the previous. Affect-congruent information and communication is more easily processed (e.g., DeSteno et al., 2004). The same may hold for the information conveyed by leader affective displays. Followers confronted with affect-congruent affective displays may experience less cognitive load and more easily pick up the leader's message and be persuaded by the leader's message than followers confronted with leader affective displays that are less congruent with their own affective states. Yet, although it seems plausible that these processes may have played a part, empirical evidence is necessary in order to reach a firm conclusion. Future research may address this important issue.

There are some studies that suggest that people perform better in organizational settings in the presence of others who experience similar (mainly positive) affect than being together with others who experience dissimilar affect (e.g., Barsade et al., 2000; Bauer & Green, 1996). The leader, being such an influential group member, may receive a lot of attention

from other group members. As a consequence, the leader's affective displays may, over time, strongly affect the affective states of the work group members, which may result in the development of an affective tone of the work group (George, 1996; George & Brief, 1992). This homogenous affective tone amongst group members, in turn, may make followers particularly sensitive to the leaders' influence. Leaders that are able to transfer affective information (for instance because they have regular face-to-face contact with followers) may thus, in the long run, be more influential than leaders that miss the opportunity to transfer affect.

Related to this issue, and of particular relevance to managerial practice, some circumstances may be expected to produce relatively homogeneous follower affective states that are easily identifiable by the leader (e.g., a crisis that affects everyone), whereas other circumstances may be expected to lead to more heterogeneous affect among followers (e.g., success unique to an individual follower) or to less predictable affect among followers (e.g., when the causes of affective state lie outside of the leader's awareness). To the extent that leaders can control their emotional displays (e.g., suppress felt emotions, or selectively show specific emotions), it would therefore seem easier and more viable for leaders to effectively use their emotions in situations in which follower affective state can be expected to be relatively homogeneous and predictable than in situations where follower affective state is likely to be more diverse or unpredictable. Indeed, in the latter case refraining from the display of emotions would perhaps seem the better option, especially in view of the current findings that suggest that affective mismatch may have stronger negative effects than that affective match has positive effects. Homogeneity and predictability of follower affective state might thus also be an important determinant of the effectiveness of leader affective displays.

The key indicator of leadership effectiveness in our experiments was task performance. We argued that, contingent on affective match, leader affective displays may engender action-readiness and task motivation in followers, and tested this prediction in a task in which performance should primarily be effort-driven (cf. Hertel et al., 2003). Research on affect and task performance suggests, however, that affective states may also have more task-specific influences. For instance, people typically perform better on creative tasks when in a positive mood rather than a negative mood (Amabile, Barsade, Mueller, & Staw, 2005), while they tend to perform better on more knowledge-intensive information processing tasks when in a negative rather than a positive mood (Forgas, 2001, in press). These findings raise the question of whether the effectiveness of leaders' display of positive and negative affect may

similarly be contingent on the nature of the task – could it be that positive affective displays are also more effective in motivating creative performance, whereas negative affective displays are more effective in motivating performance on knowledge-intensive information processing tasks? Findings by Sy et al. (2005), who found that leaders in a positive mood were more effective in engendering cooperation while leaders in a negative mood were more effective in engendering persistence in task performance, suggest indeed that the effects of leader affective displays may be contingent on task requirements. Exploring this issue in future research would thus seem highly valuable to our understanding of leadership effectiveness in organizational contexts.

A limitation of the current study is that we focused on two distinct emotions: anger and enthusiasm. Anger and enthusiasm are acknowledged as important aspects of leaders' emotional behavior (e.g., Lewis, 2000; Lord & Brown, 2004; Tiedens, 2001) and studying them therefore has definite value, but they represent only one positive and one negative emotion. Ideally, we would be able to extend our conclusions to other positive and negative emotions. It would therefore be valuable to test the affective match hypothesis with a broader range of positive and negative emotions to more firmly establish that the results obtained in the present study are attributable to the valence of the emotions studied and not to more specific characteristics of anger and enthusiasm.

In a sense related to this, it would also be very relevant to look at the effects of different causes of the leaders' affective displays. In the present study, leaders' emotions were elicited by the task context and not directed at followers. Although this may be a very plausible cause of leader emotions, we should be careful not to overgeneralize in this respect. Other causes of the leader's affect may lead to different influences on leadership effectiveness. Leader anger that is targeted at the follower, for instance, may work out quite differently than leader anger that is targeted at the task. Cause and target of leader emotional displays seem critical to take into account if we are to develop a proper understanding of the effects of leader emotional displays, and in this respect the generalizability of the current (and previous) findings might be limited to the kind of cause/target studied.

Another issue is raised by the fact that we conducted laboratory experiments. The obvious advantage of this is that it made it possible to reach conclusions regarding causality and allowed us to use an objective measure of follower performance. The experimental methodology was also important in disentangling the effects of emotional displays from those of the leader's appeal per se. However, even though experiments are not conducted in a quest for external validity (Brown & Lord, 1999; Mook, 1983), reports of experimental research

may always elicit questions of external validity. A thing to note in this respect is that several leadership studies testing their hypotheses in the lab as well as in the field have consistently shown that findings from laboratory experiments generalize to field settings (De Cremer & van Knippenberg, 2002, 2004; De Cremer, van Knippenberg, van Knippenberg, Mullenders, & Stinglhamber, 2005; van Knippenberg & van Knippenberg, 2005; cf. Dipboye, 1990). Even so, it would be valuable if future research would study leader emotional displays and the moderating role of follower PA in organizational settings where leaders and followers are in an ongoing relationship. This would also allow the study of the effects of leader emotional displays on the performance on more complex tasks than the current order-processing task, as well as the effects of leader emotional displays on performance of tasks that last longer than 20 minutes, or repetitive tasks, to attain a broader picture of the effects of leader emotions.

Given the important role of affect in guiding people's perceptions, attitudes, and behaviors, developing our understanding of the effects of leader emotional displays would seem highly relevant to our understanding of leadership effectiveness, and more generally organizational behavior. By highlighting the role of follower affective state in this respect, the present study hopes to make a contribution to the development of this analysis. Indeed, it is our firm belief that the effectiveness of leader emotions can only be understood if the role of followers is given as much weight as the role of the leader.

5.

General Discussion

Leadership can be seen as a social process (i.e., leader-follower interactions are omnipresent in the workplace; cf. Hogg & van Knippenberg, 2003) and motivating followers in these social interactions may be the essence of leader effectiveness (e.g., Chemers, 2003). Thus, leaders who have the capability to motivate their subordinates may often be more effective leaders, especially if followers get inspired by their leader to achieve work goals (Fiedler, 1967; Thomas, 1988; Yukl, 2002). I stated in this dissertation that in this process of motivating subordinates to perform, emotions and affect fulfill a pivotal role, both in negative and positive sense. As we saw, affect and emotions are omnipresent in social and organizational life. This strong role of affect in social settings is adaptive and functional (Oatley & Jenkins, 1996) and emotions are achingly influential in interaction with others (Keltner & Haidt, 1999; Oatley & Johnson-Laird, 1987; Parkinson, 1996). Therefore, research on the role of affect in leader-follower interactions is both important and inevitable.

The research reported in this dissertation has mainly focused on the arousal dimension of affect and the role of the follower in engendering effectiveness of both positive and negative leader emotions. This focus fills a void in leadership research. Previous research has almost exclusively concentrated on the role of the leader (i.e., neglecting the followers) and on positive affective displays without paying attention to the arousal dimension of affect. This dissertation aimed to give insights in what makes the leader effective in using emotions and in doing so, give special consideration to the arousal dimension and the role of the follower.

First, I briefly summarize the main findings of each chapter of the dissertation and try to highlight the results and contributions of my studies. Then I turn to an overview of the theoretical and practical implications before I describe the strengths and limitations of the

studies. This discussion leads to guidelines for future research and I close this chapter and dissertation with some possible directions for leadership and affect research that may be important for the further development of the field.

Summary of Main Findings and Contributions of the Studies

The objective of this dissertation was to increase comprehension of the effects of leader affective displays on leadership effectiveness. In an attempt to achieve this, I proposed a main, broadly defined, open research question:

What is the effect of leader's affective displays on leadership effectiveness?

In this dissertation, I described in total six empirical studies that were developed as an attempt to lay the foundations of a research line that may eventually answer this general question. To dissect this general research question, three important issues in leadership and affect research were defined (see also Chapter 1):

- I) the role of valence of leader affect
- II) the role of arousal
- III) the role of the follower

I reported in total six empirical studies in three chapters that were developed to (partially) address these issues in order to be able to give a (partial) answer to my research question.

In Chapter 2 (containing a scenario and a field study) I extended conceptual work on charismatic leadership that suggests that leader displays of positive affect may engender attributions of charisma and transfer of affect to followers. I showed that this holds mainly for leader displays of high arousal positive affect (i.e., enthusiasm) and demonstrated that the relationship between high arousal positive affective leader displays and leadership effectiveness is mediated by both transfer of arousal and transfer of positive feelings (from leader to follower). Thus, arousal adds to the influence of positive affect, and transfer of arousal is as crucial in instigating attributions of charisma as transfer of positive feelings. Both the experiment and survey provided a test of a mediational model linking transfer of positive feelings to attributions of charisma. In line with these findings Damen, van Knippenberg, and van Knippenberg (2004) found that leaders displaying enthusiasm

(compared to leaders displaying relaxation) were perceived as being charismatic by subordinates. They revealed that arousal was transferred from the enthusiastic leader to the follower and this transfer resulted in heightened attributions of charisma. The relaxed leader did not transfer arousal and was consequently seen as less charismatic. This study and the study reported in Chapter 2 therefore both point to the importance of the arousal dimension of affect in leadership processes.

In Chapter 3 (a laboratory study and a survey), I demonstrated that active leader emotions (both negative and positive) influence leader effectiveness positively. However, a premise is that subordinates are in a non-aroused state. When followers are tranquil instead of aroused, they feel a stronger urge to act upon leaders displaying active emotions as opposed to inactive emotions. More specifically, follower performance is better when their leader displays active emotions rather than inactive emotions. Again, this only holds for followers who are in a calm, non-aroused state. When followers are aroused however, there was no difference between active or inactive emotions. In tranquil states subordinates thus may use affective information of their leader more than in an active, aroused state. The results of Chapter 3 add to the findings of the second chapter in four critical ways. First of all, it can be concluded that leader affective displays also add to leadership effectiveness and not only to leader charisma per se. Furthermore, it was made clear in this chapter that not only leader's positive emotional displays are effective, as is also emphasized in several other studies on leadership and affect (e.g., Bono & Ilies, 2006), but that negative leader emotions can have beneficial effects as well. Indeed, I found in Chapter 3 that negative, active leader affective displays (i.e., anger) engender leadership effectiveness as well (again, when followers are tranquil). Third, it was demonstrated that the follower is a central player in determining the effectiveness of the leader's emotions. In this study the focus was on follower physiological arousal and I revealed that this is an important moderator in explaining the effect of both positive and negative affective displays of the leader. Therefore, the importance of follower arousal is shown here. Finally, this chapter also shows that the activation component of both negative and positive leader affective displays is crucial in explaining effectiveness of leader affective displays. Therefore, Chapter 3 contributes in putting the activation dimension of affect, the beneficial effect of negative leader emotions and the moderating role of the follower on the agenda of leadership research.

In Chapter 4 (containing 2 laboratory experiments), I concentrated on a possible moderator of the relative effectiveness of positive versus negative leader emotional displays. I showed that an affective match between the valence of leaders' emotional display (positive

versus negative) and followers' level of positive affect (high versus low) influenced leaders' ability to draw desired follower behavior. In the two studies reported, subordinates scored better on the task at hand (i.e., processed more orders) in case of an affective match compared to an affective mismatch. In other words: followers high in Positive Affect (PA), performed relatively better when their leader was displaying enthusiasm instead of anger and followers low in PA worked relatively more effective when their leader displayed anger instead of enthusiasm. Additionally, I demonstrated that the affective match hypothesis holds for male as well as for female leaders and showed that effectiveness of leader emotional displays matching follower PA is tied to the leader's emotional display per se and not to the underlying content of the leader's message.

In this chapter, I showed anew that both positive *and* negative leader emotions can have a beneficial effect on follower behavior. Furthermore, it was confirmed that the effectiveness of the valence of leader affective displays was influenced by a moderator. Follower affect was shown to be of great importance in explaining leader effectiveness and thus the critical role of the follower is again marked in this chapter. More specifically, it was demonstrated here that -besides arousal of followers as outlined in Chapter 3- the mood of followers (in terms of Positive Affect) also influences the effectiveness of leader emotions. Hence, the role of the follower -and more specifically follower affect- is of critical importance in understanding the desired (or undesired) outcomes of leader affective displays.

Recently, the importance of (teams of) followers in explaining affective leader behavior was scrutinized in a study by Van Kleef, Homan, Beersma, van Knippenberg, van Knippenberg, and Damen (2006). This study revealed that leader's negative emotional displays improve the productivity of teams with high epistemic motivation, while leader's positive emotional displays improve the productivity of teams with low epistemic motivation. This study points, as one of the few, to the crucial role of follower characteristics in explaining effectiveness of affective leader behavior. Although this study concentrates on follower motivation instead of follower affect, it also nicely shows that both positive and negative leader affective displays can provoke effective follower behavior. These findings are therefore in line with the findings of the studies reported in Chapter 4 of this dissertation, indicating that we may have to focus more on follower characteristics in explaining effectiveness of leader emotions (note that this particular conclusion is also in line with the outcomes of Chapter 3). The contribution of the fourth chapter to the emerging field of leadership, affect, and emotions is that it highlights the role of follower characteristics, specifically follower affect, as a moderator of the effectiveness of (both female and male)

leader's positive versus negative emotional displays. Another contribution worth mentioning, is that insights in the strong incremental motivating effect of emotions in leader's communication (i.e., in addition to the content of the leader's message per se) toward followers were also gained.

In general, in the present dissertation, I showed that the effectiveness of the display of leader affect is contingent on follower mood and arousal. Furthermore, I showed that charismatic leadership (being an effective leadership style; Conger & Kanungo, 1987; Howell & Frost, 1989; Lowe, Kroeck, & Sivasubramaniam, 1996; Shamir, House, & Arthur, 1993) is influenced by leader affective displays. Again, the follower plays a crucial part in this process albeit in a different mode than in the other studies reported in this dissertation: subordinates attribute charisma to the leader when the leader transfers both arousal and positive feeling to them and these affective components are transferred mainly by a leader displaying enthusiasm. Hence, several processes play a role in explaining effective affective leader behavior, but it seems legitimate to conclude that both the follower and the arousal dimension (of leaders and followers) play a crucial role in understanding leader affective behavior.

Theoretical and Practical Implications

The current dissertation implies that it is worthwhile to study the role of arousal and the role of the follower in affective leadership processes related to leadership effectiveness.

Regarding leadership, we saw that the utterance of leader emotions and affect can have beneficial effects on follower perceptions and performance. Positive as well as negative leader emotions may feed into leader effectiveness, contingent on follower characteristics. These results are additional -if not contradictory- to the probably still dominating paradigm that leaders should demonstrate emotional stability and should not act too emotional in the workplace (cf. Locke et al., 1991; see also Muchinsky, 2000). However following this dissertation, the bottom line is that subordinates, contingent on several contextual factors, *are* motivated by leaders' emotional behavior.

As mentioned in the previous chapters, it is necessary in leadership research to consider the role of activation associated with leader affective displays (also in interaction with physiological arousal of followers) in the persuasion power of the leader, cognitive load and cognitive capacity of followers (e.g., in difficult, highly cognitive work tasks or intensive social interactions like professional meetings cf. Bargh, 1984; Fiske & Taylor, 1991). Also interesting is to study the role of active leader displays (again, also in combination with

follower arousal) in attributions of power and status (Schubert, 2005; Tiedens, 2001), identification with the leader (Hogg & van Knippenberg, 2003) among other variables such as for instance liking of the leader, self and team efficacy of the followers, esteem and job satisfaction of the followers and trust in the leader. My findings could imply that leader emotions may have a considerable effect on these variables. Especially active leader emotions may have a positive influence on most of these constructs as long as the subordinates are in a calm state, whereas high levels of physiological follower arousal may attenuate the impact of leader emotions per se.

Moreover, this dissertation also focused on the match of follower PA and the valence of leader's emotional display. Follower PA proved to be an important moderator of the effectiveness of leader affective displays. These findings thus suggest that a range of moderators of the relative effectiveness of leader positive versus negative emotional displays may be identified by focusing on the determinants of PA. Additionally, one may expect that follower negative affect (NA, which refers to the experience of discomfort and negative emotionality; Watson & Clark, 1984), may also moderate the effectiveness of leader affective displays. However, as I already argued in Chapter 4, there is general evidence that affect congruence effects are stronger for positive affect than for negative affect (Blaney, 1986; Singer & Salovey, 1988), and that PA is more crucial than NA in social interaction (Barsade, Ward, Turner, & Sonnenfeld, 2000; Watson, Clark, McIntyre, & Hamaker, 1992). Although I did not find an affective match effect for NA in particular (see Chapter 4), still there may be some expectations that NA may have a moderating effect on follower performance, albeit much less strongly so than PA.

Furthermore, following this dissertation it could be argued that a leader who gets angry when the situation in an organization or team is bad, but also gets enthusiastic when things turn out for the better, will be more effective than the other way around, or showing no emotion at all in these situations. I think, therefore that leaders and managers should be made aware that their emotions and the display of emotions have a serious impact on how subordinates feel, think and act. For instance in the context of giving a speech, it can be expected that communicating in a positive, energetic way feeds into charisma and effectiveness. Probably, speech writers can take this implication into account, just as trainers in the applied field of speech training and education. Most likely, this already happens intuitively and the relationship between rhetoric and charisma has already been studied (e.g., Den Hartog & Verburg, 1997; House, Spangler, & Woycke, 1991; Shamir, Arthur, & House,

1994), but I highlight specifically the role of positive, active leader emotions (such as enthusiasm) in charismatic and effective leadership here.

The present dissertation also implies that leaders may benefit from a stronger focus on arousal. Leaders displaying positive arousal (i.e., an energized, enthusiastic state) may be more effective, and leadership training could explicitly address the importance of arousal in communication with followers. Other practical implications of the studies may lie in the applications to situations of crises (e.g., managerial crisis, approaching deadlines or mergers). It could be that managers must calm subordinates down when they are highly aroused because of a crisis (or other arousing or stressful situations). If subordinates become tranquil again, they will listen more carefully, the leader's (emotional) information is conveyed better and thus the followers may be influenced more by the affect used in the leader's messages. Consequently, when subordinates are experiencing stress or are highly aroused for other reasons, affective communication of the manager may not have any additional impact on subordinates at all. The current results would furthermore suggest that, in times of crisis and change, displays of negative leader emotions are relatively more effective than displays of positive emotions. In more stable and prosperous times however, positive emotional displays of the leader may be relatively more effective than the displays of negative emotions. The awareness of this aspect of affective communication may be useful in training and/or education of (crisis) managers.

Along these lines, I would like to remark that charismatic leaders may be leaders that are more apt in displaying (both positive and negative) emotions with high activation levels (cf. Bryman, 1992; Yukl, 2002), although this dissertation does not give direct evidence for this assertion. If this is the case however, in crisis management -where employees need to work hard to overcome the crisis but simultaneously also might expect recognition from their leader for their hard work (i.e., need both positive and negative affective feedback from their leader at the same time)- charismatic leaders may be more effective than non-charismatic leaders. This could possibly imply that charismatic leaders are good interim managers (but maybe less good at long term, continuing management).

The finding that arousal plays an important part in the effect of leader positive affective states also has clear implications for practice beyond the field of leadership per se. More on an organizational level, my findings could imply that corporations such as service centers, that rely heavily on employees adhering to expression norms (i.e., norms that dictate which and how emotions may be expressed, cf. Hochschild, 1983; Kemper, 2000; Zapf, 2002), may exploit the finding that arousal -besides valence- is an important dimension of affect.

Especially employees' displays of high arousal positive emotions, such as enthusiasm, may lead (tranquil) customers to see the organizational representatives in a positive light, which in turn may result in employees being more effective in acting upon customers. If the customer is too aroused (e.g., the customer is very irritated about a product or service), it may be wise to calm the customer down first, before turning to obvious positive, active affective displays.

Strengths, Limitations and Future Research

The combination of scenario experimental, laboratory experimental and field data, is clearly a strong point because the strength of the one method may compensate for the weakness of the other (Dipboye, 1990; van Knippenberg & van Knippenberg, 2005). In general it can be concluded that the laboratory and scenario experiments allow for establishing causality, whereas the surveys allow for generalizability of the findings. Furthermore, the use of different methodologies yielded the same conclusions regarding the hypotheses, pointing to the consistency of the findings. Therefore, confidence in the results is bolstered not by this consistency in findings per se, but mainly by the fact that three different methodologies were used. Hence, the triangulation of the research methods used in this dissertation is considered as an important strength, and the use of three different methods (i.e., scenario experiment, laboratory experiment and cross-sectional survey) allows for robust steps toward further theory building regarding affect and leadership (cf. Dipboye, 1990). Moreover, the use of different samples in the studies (i.e., students and non-student employees of several organizations) and the different operationalizations of leader effectiveness (i.e., leader charisma, follower performance, perceived leader effectiveness and extra role behavior of followers) add to the robustness of the conclusions and eventually to theory building in the field of leadership and affect (cf. van Knippenberg & van Knippenberg, 2005).

Besides drawing conclusions on valence and arousal of (general) affect in leader-followers interaction, this dissertation also focused at the same time on four discrete leader affective states: enthusiasm, anger, relaxation and sadness. In other words, I gathered specific information regarding leaders displaying enthusiasm, anger, relaxation and sadness and the influence of these particular, discrete displays on effectiveness of the leader. Leader enthusiasm engendered positive performance effects contingent on follower PA and follower arousal and heightened the perceptions of charisma. Anger of the leader also elicited desired follower performance, depending on PA and arousal of the follower as well. Anger did not elicit higher perceptions of charisma, however. Relaxation and sadness both did not seem to

be vital leader affective states in explaining leader effectiveness or leader charisma, following this dissertation. It is important to note however, that leader's relaxation and sadness -unlike enthusiasm and anger- were not manipulated in all chapters of the dissertation. Hence, especially anger and enthusiasm of the leader were studied thoroughly in this dissertation and allows therefore for drawing specific conclusions regarding these leader emotions and their influence on leader effectiveness.

Following this dissertation, leadership can be approached as social interactions between the leader and his or her followers (cf. Hogg & van Knippenberg, 2003; Van Kleef et al., 2006). Hence, also the particular conclusions regarding affect and leadership may cautiously be drawn for affect in social interactions in a more general way. Conclusions of this dissertation are first and foremost formulated to give insights in leadership processes, but the conclusions reached also may shed some light on the role of affect in social interactions in general. Note, however, that I only sketched some rough outlines of the effects of affect in social interactions in this dissertation, next to the more elaborated findings that apply specifically to leadership.

As implied above, besides extra attention to leader displays of relaxation and sadness, other discrete emotions should be topic of further leadership research to provide us with more insights in the social functions of emotions in general and emotions in leadership in particular. Leader emotions that may be studied in the future include the six basic (universal) emotions according to Paul Ekman and colleagues: happiness, sadness, anger, fear, surprise, disgust (Ekman & Friesen, 1971; Ekman, Sorenson, & Friesen, 1969). I think the emotion fear is especially interesting. Fear is a very strong emotion, deeply rooted in our evolution, to the extent that the brain path by which fear comes to overt behavior is different -and quicker- than that of other emotions (LeDoux, 1996; Panksepp, 2000; Öhman, 1986; Öhman & Mineka, 2001). This behavior induced by fear is often strongly action driven (Archer, 1979; LeDoux, 1996) and may therefore have strong implications for the leader-follower interaction and the successfulness of the leader. Less interesting to research would perhaps be happiness (being quite similar to enthusiasm) and anger (already a strong point of focus in this dissertation and other work regarding leadership and affect; e.g., Glomb & Hulin, 1997; Lewis, 2000; Tiedens, 2001).

Since the study of affect in leadership has not come to full rise yet, it may be wise to focus first of all on the premises and contingencies of the effectiveness of general affect in leadership (i.e., in terms of valence and/or activation) before turning to scrutinize discrete emotions. Of course, studying the mentioned discrete emotions -amongst other powerful

emotions such as for instance pride, jealousy or guilt- can provide us with pivotal information regarding the function of emotions in social interactions in general and leadership in particular. Nevertheless, I think caution is needed not to fragmentize research of affect and leadership too much by studying only discrete emotions that are not used as operationalization of some underlying constructs (like for instance arousal and valence in this dissertation, cf. Larsen, Diener, & Lucas, 2002; Russell, 1980).

Of course, this dissertation is not without its flaws and limitations. Future research is therefore necessary to better understand the relation between leader affective displays and follower behavior and perceptions. Although the laboratory experiments were strong in showing causalities between leader affective displays and follower performance, the experiments may be enhanced in several ways. The deployment of a previously taped actor bolstered the confidence in the internal consistency of our laboratory findings (the manipulation was exactly the same for every participant within the same condition). Nevertheless, for reasons of (more) mundane realism, the use of a trained confederate would be desirable in future research. The confederate, appointed as the leader should then display several emotions among participants who are appointed as the followers. Again, the confederate could instruct them to perform well on a task (which is at the same time the effectiveness measure), with the advantage of face to face leader-follower interaction in this experimental set-up.

Furthermore the experiments could be enhanced by including stronger physiological arousal measures, such as galvanic skin response, heartbeat and blood pressure. Still, these are rather simple measurements to execute, which can however greatly improve our insights in leadership and affect. Future research should definitely address this point of critique, moreover because of the general lack of arousal measurement in leadership and affect research. Further improvement of experimental research would lie in the use of different tasks that measure leader effectiveness, perform the experiments with real life leaders and their subordinates, scrutinize the effects of leader emotions on teams instead of individual followers, study the effects of persisting leader affective displays, and -again regarding arousal- manipulate different levels of both leader and follower arousal.

However, also surveys were used to test the hypotheses. These surveys can be criticized for the small sample sizes, single sources and perceptual nature of the data. Indeed, the quality of the survey could further be enhanced by using larger sample sizes, using leaders as respondents and pursuing to collect performance data (such as sales or production data). This should eventually lead to multilevel analyses of the survey data. Other improvements would

involve the study of leader-follower interaction for a longer period of time (i.e., conducting a survey study on a longitudinal basis) and survey several organizations within several fields (e.g., production companies, military, public sector, consultancy sector, etcetera).

Nonetheless, although the data from the surveys are from modest samples of employees only, I was able to replicate experimental data with field data. Especially, if we bear in mind that we hardly know anything about the effects of affect and especially arousal in leadership, I do consider the here conducted surveys as a strong point that needs further optimization.

Since we know so little about the role of affect in leadership, the aim of this dissertation was to search mainly for contingencies of effective leader emotions. In other words, the search for effective emotional displays of leaders was mainly focused on moderating variables. An important exception was the mediation that was reported in Chapter 2 (i.e., enthusiastic leaders transfer more arousal and positive feeling to their followers and are therefore perceived as more charismatic). An imperative next step to make, however, is to look for more underlying processes of effective affective leadership. Hence, the focus in future research may lie more on mediators to be able to fully comprehend the effects of emotions and affect in leadership and address the question why leader affective displays turn out to be effective.

As mentioned, in Chapter 2 of this dissertation, evidence is given for underlying processes of effective use of leaders' affective displays. In that particular chapter, I found contagion-like principles of transfer of affect from leader to follower (Hatfield et al., 1992, 1994, see also Bono & Ilies, 2006). However, there are several other processes that could account for the effectiveness of leaders' emotions. For instance, Van Kleef et al. (2006) found that the relation between leader emotional displays and team performance was mediated by affect within the team (team sentiment) and the appraisal of team performance. This mediation of team sentiment resembles the emotional contagion route described above: the leader transfers affect to his or her team (and consequently team performance is influenced). The route via performance appraisal is more cognitive-orientated, based on appraisal theories of emotions (e.g., Arnold, 1960; Lazarus, 1966; Frijda, 1986) and may turn out to be fruitful to concentrate on in future research, as well. The main idea behind this process would then be that leader emotions may engender appraisals of these emotions among followers, or the information that this emotion conveys, and therefore subordinates' behavior may be influenced. However, more data, and therefore more research, on the appraisal process in effective affective leadership is needed.

Another line of literature to possibly pay more attention to in future leadership and affect

research, may be the affective route in attitude formation and persuasion (DeSteno, Petty, Rucker, Wegener, & Braverman, 2004; Petty & Cacioppo, 1986; Eagly & Chaiken, 1993; Mackie & Worth, 1989). It could be, for instance, that when the leader displays emotions, especially when the displays are strong (or high in arousal), followers tend to elaborate less on the underlying content of the message and are therefore influenced more directly by these leader emotions, as compared to weak, (or low-arousal) leader emotions that subordinates process less heuristically and with more elaboration (cf. Eagly & Chaiken, 1993; Petty & Cacioppo, 1986). Although affect has been given considerable attention in the late eighties and onwards in persuasion research in general (e.g., Bless, Bohner, Schwarz, & Strack, 1990; De Steno, Petty, Wegener, & Rucker, 2000; Worth & Mackie, 1987), surprisingly little is known about the use of affect and persuasive routes in *leadership* and it may therefore be interesting to focus on this possible mediating process in the nearby future.

Along these lines, specifically positive and negative leader affect may influence the scope of attention and the psychological-behavioral repertoires of the subordinates (cf. Fredrickson, 2001). Work by Fredrickson proposes that negative emotions limit people's attention and "thought-action" repertoire, while positive emotions broaden this repertoire (Fredrickson, 2001; Fredrickson & Branigan, 2005; cf. Seligman & Csikszentmihalyi. 2000). This would imply that positive leader emotions could also broaden (and therefore influence) the behavior pattern of followers more than negative leader emotions. If this process indeed provokes more effective follower performance, it would be an interesting subject for further research on leadership and emotions.

Future Directions: Some Last Concerns

In addition to the above mentioned directions for future research, I would like to conclude this dissertation with some considerations for more general lingering issues in leadership and affect research that may generate some possible directions for research.

Emotional Intelligence

The role of emotional intelligence in organizational behavior research has been a topic of mainly popular interest (e.g., Goleman, Boyatzis, & McKee, 2002). However, only recently this has been picked up by organizational scientist (Côté, Lopes, & Salovey, 2006; Côté & Miners, 2006). Accordingly, emotional intelligence may prove to develop itself as a fruitful topic for research in the leadership arena. After all, the evidence that leader affective displays

and followers' affective responses to leadership may feed into leadership effectiveness gives rise to the question of whether leaders may differ in the extent to which they are able to use these processes to their advantage.

Emotional intelligence refers to a specific form of intelligence. The concept captures the ability to perceive emotions in self and others, to use emotions to facilitate performance, to understand emotions, and to regulate emotions in self and others (Mayer & Salovey, 1997). More emotional intelligent people could therefore emerge as leaders and be effective as leaders, perhaps mainly because they should be able to respond adequately to others' emotions, and to pro-actively instigate certain emotions in others (e.g., creating a positive affective climate in the group). While these and similar conceptual analyses have been advanced by several authors (e.g., Brown & Moshavi, 2005; George, 2000; Zhou & George, 2003), and the popular literature seems to take the relationship between emotional intelligence and effective leadership as a given, the actual empirical evidence for these propositions is very scarce (Côté et al., 2006) and therefore research in this direction is needed to shed more light on this issue (see also van Knippenberg, van Knippenberg, Van Kleef, and Damen, in press).

Other Differences: Personality, Teams, Cultures and Gender

Other researchers have focused on indicators of individuals' ability to respond adequately to own and others' emotions (which thus arguably should be related to the emotional intelligence concept). For instance, Rubin, Munz, and Bommer (2005) assessed leaders' ability to recognize emotions through a short test. They found that this ability for emotion recognition predicted follower ratings of transformational leadership. This relationship was only observed for leaders that were relatively extraverted, however, suggesting that there are factors that moderate the extent to which leaders act on their emotional abilities. These findings strongly imply that, besides extraversion, other personality factors may function as strong moderators in explaining effectiveness of leader affective displays.

It may therefore be interesting and fruitful to study personality factors, such as the big V factors (Costa & McCrae, 1988; Digman, 1990) and differences in emotion regulation (e.g. Gross, 1998), both in followers and in leaders to better understand the relationship between leader emotions and subordinates' performance.

On the other hand, beyond the study of individual differences in affective leadership, it may also be fruitful to study emotional leader behavior and its effects on follower performance in team settings (cf. George, 1990; Sy, Côté, & Saavedra, 2005; Van Kleef et al.,

2006), or even less individually orientated, in different cultural settings (cf. Den Hartog et al., 1999).

Furthermore, although there is already done some research on gender in affective leadership (e.g., Lewis, 2000; see also Chapter 4 of this dissertation on the affective match effect of both male and female leaders), much more research is needed to reach stable conclusions regarding the role of especially female leaders in affective leadership (since most studies focus -implicitly- on male leaders).

Leadership, Stress and Burn-out

The arousal dimension of emotions has been known for the close link to the concept of stress, although there are differences in emotional connotation (e.g., Hockey, 1979; Selye, 1956). Feelings of stress function as a response to stress appraisal (the so called stressor; e.g., demand, harm, loss and threat) and the stress response has a negative connotation, while arousal is the physiological dimension of both positive and negative affect (cf. Lazarus & Folkman, 1984; see also Mandler, 1975).

Nevertheless the relation between leader affective displays, stress and effectiveness may be an influential one, since the strong link of employee illness (or absenteeism), with (occupational) stress and the possible role of the leader in this process (e.g., Bakker, Demerouti, & Schaufeli, 2003; Ross & Altmaier, 1994; Smith & Cooper, 1994; van Dierendonck, Haynes, Borrill, & Stride, 2004; van Dierendonck, Le Blanc, & van Breukelen, 2002). Hence, leaders may influence the stress levels of their subordinates with their (persisting) emotions and therefore provoke related illnesses such as burn-out. Studying stress in leadership processes may be a direction for future research, which could include the manipulation of stress levels of both leaders and followers in order to study the effects of stress on follower behavior. However, the research on stress and leadership effectiveness might be a step that is not completely in line with the study of leader emotions anymore. Still, a very crucial step to make, albeit a bit outside the scope of the study of effectiveness of leader emotions per se.

Conclusion

Many effects of leader emotions and affect in explaining leader effectiveness are still unknown. Despite this striking lack of knowledge, the most fundamental issues have been initiated to be addressed and need further empirical evidence now to come to defendable theories on leadership and the role of emotions.

I hope that this dissertation was able to provide important new insights in affect and emotion use in leadership. Although there remain many questions still to be answered, I do believe that the results of this dissertation point to the importance of affect and emotions for understanding leadership effectiveness.

I considered the ability of motivating followers as one of the core competencies of effective leadership (see Chapter 1) and showed here that this ability is at least partially driven by leaders' displays of affect. More generally, it can be concluded that as emotions are increasingly being recognized as pervasive forces in organizations (among other social settings), researchers and practitioners alike should be aware of these mechanisms. Such awareness might well prove to be crucial to the successful management of emotions and organizational performance (see also Van Kleef et al., 2006).

In do hope that the study of emotions in leadership continues to flourish. In my opinion the affect revolution in leadership will turn out to be inevitable, since emotions are heavily intertwined with daily social life and have important interpersonal functions. Effective leadership is part of this social life and leaders, managers, educators, trainers, and scientist should therefore pay more attention to emotions in leadership.

References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage.
- Albarracín, D., & Kumkale, G. T. (2003). Affect as information in persuasion: A model of affect identification and discounting. *Journal of Personality and Social Psychology*, 44, 453-469.
- Amabile, T. M., Barsade, S. G., Mueller, J. S., & Staw, B. M. (2005). Affect and creativity at work, 50, 367-403. *Administrative Science Quarterly*, 50, 367-403.
- Anderson, C., & Thompson, L. L. (2004). Affect from the top down: How powerful individuals' positive affect shapes negotiations. Organizational Behavior and Human Decision Processes, 95, 125-139.
- Andreassi, J. L. (2000). *Psychophysiology human behavior and physiological response* (4th ed.). Mahwah, NJ: Erlbaum.
- Archer, J. (1979). Behavioural aspects of fear. In W. Sluckin (Ed.), *Fear in animals and man* (pp. 56-85). New York: Van Nostrand Reinhold.
- Arnold, M. B. (1960). Emotion and personality. New York: Columbia University Press.
- Ashford, S. J., Lee, C., & Bobko, P. (1989). Content, causes, and consequences of job insecurity: A theory-based measure and substantive test. *Academy of Management Journal*, 32, 803-829.
- Ashkanasy, N. M., & Daus, C. S. (2002). Emotion in the workplace: The new challenge for managers. *Academy of Management Executive*, 16, 76-86.
- Ashkanasy, N. M., & Tse, B. (2000). Transformational leadership as management of emotion: A conceptual review. In N. M. Ashkanasy, E. J. Härtel, & W. J. Zerbe (Eds.), *Emotions in the workplace: Research, theory and practice* (pp. 221-235). Westport, CT: Quorum Books.
- Avolio, B. J., Bass, B. M., & Jung, D. I. (1999). Re-examining the components of transformational and transactional leadership using the Multifactor Leadership Questionnaire. *Journal of Occupational and Organizational Psychology*, 72, 441-462.
- Awamleh, R., & Gardner, W. L. (1999). Perceptions of leader charisma and effectiveness: The effects of vision, content, delivery, and organizational performance. *The Leadership Quarterly*, 10, 345-373.

- Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2003). Dual processes at work in a call centre: An application of the job demands-resources model. European Journal of Work and Organizational Psychology, 12, 393-417.
- Bargh, J. A. (1984). Automatic and conscious processing of social information. In R. S. Wyer, & T. K. Srull (Eds.), *Handbook of social cognition* (Vol. 3, pp. 1-43) Hillsdale, NJ: Erlbaum.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Baron, R. S., Inman, M. L., Kao, C. F., & Logan, H. (1992). Negative emotion and superficial processing. *Motivation and Emotion*, *16*, 323-346.
- Baron, R. S., & Moore, D. J. (1987). The impact of exercise-induced arousal on the self reference memory affect. *Social Cognition*, *5*, 166-177.
- Barsade, S. G. (2002). The Ripple Effect: Emotional contagion and its influence on group behavior. *Administrative Science Quarterly*, 47, 644-675.
- Barsade, S. G., Ward, A. J., Turner, J. D. F., & Sonnenfeld, J. A. (2000). To your heart's content: A model of affective diversity in top management teams. *Administrative Science Quarterly*, 45, 802-836.
- Bartel, C. A., & Saavedra, R. (2000). The collective construction of work group moods. *Administrative Science Quarterly*, 45, 197-231.
- Bass, B. M. (1985). Leadership and performance beyond expectations. New York: Free Press.
- Bass, B. M. (1990). Bass and Stogdill's handbook of leadership: Theory, research and managerial applications. New York: Free Press.
- Bass, B. M. (1998). *Transformational leadership: Industrial, military, and educational impact.* Mahwah, NJ: Erlbaum.
- Bauer, T. N., & Green, S. G. (1996). Development of leader-member exchange: A longitudinal test. Academy of Management Journal, 39, 1538-1567.
- Berscheid, E., & Reis, H. T. (1998). Attraction and close relationships. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (4th ed., Vol. 2, pp. 193-281). New York: McGraw-Hill.
- Blaney, P. H. (1986). Affect and memory: A review. Psychological Bulletin, 99, 229-246.
- Bless, H., Bohner, G., Schwarz, N., & Strack, F. (1990). Mood and persuasion: A cognitive response analysis. *Personality and Social Psychology Bulletin*, 16, 331-345.
- Bono, J. E., & Ilies, R. (2006). Charisma, positive emotions and mood contagion. The

- Leadership Quarterly, 17, 317-334.
- Bordia, P., Hobman, E., Jones, E., Gallois, C., & Callan, V. J. (2004). Uncertainty during organizational change: Types, consequences, and management strategies. *Journal of Business and Psychology*, 18, 507-532.
- Bower, G. H. (1981). Mood and memory. American Psychologist, 36, 129-148.
- Brief, A. P., & Weiss, H. M. (2002). Organizational behavior: Affect in the workplace. *Annual Review of Psychology*, *53*, 279-307.
- Brown, D. J., & Lord, R. G. (1999). The utility of experimental research in the study of transformational/charismatic leadership. *The Leadership Quarterly*, 10, 531-539.
- Brown, F. W., & Moshavi, D. (2005). Transformational leadership and emotional intelligence: A potential pathway for an increased understanding of interpersonal influence. *Journal of Organizational Behavior*, 26, 867-871.
- Bryman, A. (1992). Charisma and leadership in organizations. London: Sage.
- Cacioppo, J. T., Berntson, G. G., Larsen, J. T., Poehlmann, K. M., & Ito, T. A. (2000). The psychophysiology of emotion. In M. Lewis, & J. M. Haviland-Jones (Eds.), *Handbook of emotions* (2nd ed., pp 173-191). New York: Guilford Press.
- Cacioppo, J. T., & Gardner, W. L. (1999). Emotion. *Annual Review of Psychology*, 50, 191-214.
- Callan, V. J., Terry, D. J., & Schweitzer, R. T. (1994). Coping resources, coping strategies and adjustment to organizational change: Direct or buffering effects? *Work & Stress*, 8, 372-383.
- Cannon, W. B. (1927). The James-Lange theory of emotion: A critical examination and an alternative theory. *American Journal of Psychology*, *39*, 106-124.
- Cannon, W. B. (1929). *Bodily changes in pain, hunger, fear and rage* (2nd ed.). New York: Appleton.
- Carlyle, T. (1841). Heroes and hero worship. Boston: Adams.
- Carnevale, P. J., & Isen, A. M. (1986). The influence of positive affect and visual access on the discovery of integrative solutions in bilateral negotiation. *Organizational Behavior and Human Decision Processes*, *37*, 1-13.
- Chang, E. C. (1997). Positive and negative affectivity for academic and interpersonal domains: Relations to general affectivity, extraversion, and neuroticism. *Personality and Individual Differences*, 22, 929-932.
- Chemers, M. M. (2000). Leadership research and theory: A functional integration. *Group Dynamics: Theory, Research, and Practice, 4,* 27-43.

- Chemers, M. M. (2001). Leadership effectiveness: An integrative review. In M.A. Hogg & S. Tindale (Eds.), *Blackwell handbook of social psychology: Group processes* (pp. 376-399). Oxford, UK: Blackwell.
- Chemers, M. M. (2003). Leadership effectiveness: Functional, constructivist and empirical perspectives. In D. van Knippenberg & M.A. Hogg (Eds.), *Leadership and power: Identity processes in groups and organizations* (pp. 5-17). London: Sage.
- Cherulnik, P. D., Donley, K. A., Wiewel, T. S. R., & Miller, S. R. (2001). Charisma is contagious: The effect of leaders' charisma on observers' affect. *Journal of Applied Social Psychology*, *31*, 2149-2159.
- Christianson, S., & Loftus, E. F. (1987). Memory for traumatic events. *Applied Cognitive Psychology*, 1, 225-239.
- Cohen, J., & Cohen, P. (1983). Applied multiple regression/correlation analysis for the behavioral sciences (2nd ed.). Hillsdale, NJ: Erlbaum.
- Conger, J. A., & Kanungo, R. N. (1987). Toward a behavioral theory of charismatic leadership in organizational settings. *Academy of Management Review*, 12, 637-647.
- Conger, J. A., & Kanungo, R. N. (1988). *Charismatic Leadership: The elusive factor in organizational effectiveness*. San Francisco: Jossey-Bass.
- Conger, J. A., & Kanungo, R. N. (1998). *Charismatic leadership in organizations*. Thousand Oaks, CA: Sage.
- Costa, P. T., Jr., & McCrae, R. R. (1988), From catalog to classification: Murray's needs and the five-factor model. *Journal of Personality and Social Psychology*, *55*, 258-265.
- Côté, S., Lopes, P. N., & Salovey, P. (2006, May). Emotional intelligence and leadership emergence. Paper presented at the Meeting of the Society for Industrial and Organizational Psychology, Dallas, TX.
- Côté, S., & Miners, C. T. H. (2006). Emotional intelligence, cognitive intelligence, and job performance. *Administrative Science Quarterly*, 51, 1-28.
- Cropanzano, R., James, K., & Konovsky, M. A. (1993). Dispositional affectivity as a predictor of work attitudes and job performance. *Journal of Organizational Behavior*, 14, 595-606.
- Damasio, A. R. (1994). *Descartes' error: Emotion, reason, and the human brain*. New York: Grosset/Putnam.
- Damen, F., van Knippenberg, B., & van Knippenberg, D. (2003, June). *Leadership and emotions: Transference of enthusiasm and perceptions of charisma*. Paper presented at the European Association of Experimental Social Psychology Small Group Meeting on New

- Directions in Leadership Research, Amsterdam.
- Damen, F., van Knippenberg, B., & van Knippenberg, D. (2004). Enthousiasme and charismatich leiderschap: Een scenario-experiment. [Enthusiasm and charismatic leadership: A scenario experiment]. *Gedrag & Organisatie*, 17, 272-288.
- Damen, F., van Knippenberg, B., & van Knippenberg, D. (in press). Affective Match: Leader Emotional Displays, Follower Positive Affect, and Follower Performance. *Journal of Applied Social Psychology*.
- Dasborough, M. T., & Ashkanasy, N. M. (2002). Emotion and attribution of intentionality in leader-member relationships. *The Leadership Quarterly*, *13*, 615-634.
- Day, D. V., & Crain, E. C. (1992). The role of affect and ability in initial exchange quality perceptions. Group and Organization Management, 17, 380-397.
- De Cremer, D., van Knippenberg, B., van Knippenberg, D., Mullenders, D., & Stinglhamber, F. (2005). Rewarding leadership and fair procedures as determinants of self-esteem. *Journal of Applied Psychology*, 90, 3-12.
- De Cremer, D., & van Knippenberg, D. (2002). How do leaders promote cooperation? The effects of charisma and procedural fairness. *Journal of Applied Psychology*, 87, 858-866.
- De Cremer, D., & van Knippenberg, D. (2004). Leader self-sacrifice and leadership effectiveness: The moderating role of leader self-confidence. *Organizational Behavior and Human Decision Processes*, 95, 140-155.
- Den Hartog, D. N., House, R. J., Hanges, P. J., Ruiz-Quintanilla, S. A., Dorfman, P. W., & GLOBE-Associates (1999). Culture specific and cross culturally generalizable implicit leadership theories: Are attributes of charismatic/transformational leadership universally endorsed? *The Leadership Quarterly*, 10, 219-256.
- Den Hartog, D. N., & Verburg, R. M. (1997). Charisma and rhetoric: Communicative techniques of international business leaders. *The Leadership Quarterly*, 8, 355-391.
- DeSteno, D., Petty, R. E., Rucker, D. D., Wegener, D. T., Braverman, J. (2004). Discrete emotions and persuasion: The role of emotion-induced expectancies. *Journal of Personality and Social Psychology*, 86, 43-56.
- DeSteno, D., Petty, R. E., Wegener, D. T., & Rucker, D. D. (2000). Beyond valence in the perception of likelihood: The role of emotion specificity. *Journal of Personality and Social Psychology*, 78, 397-416.
- Diener, E. (1999). Introduction to the special section on the structure of emotion. *Journal of Personality and Social Psychology*, 76, 803-804.

- Digman, J. M. (1990). Personality structure: The emergence of the Five-Factor Model. *Annual Review of Psychology*, *41*, 417-440.
- Dipboye, R. L. (1990). Laboratory vs. field research in industrial and organizational psychology.
 In C. L. Cooper & I. T. Robertson (Eds.), *International review of industrial and organizational psychology* (Vol. 5, pp. 1-34). Chichester, UK: Wiley.
- Duffy, M. K., Ganster, D. C., & Shaw, J. D. (1998). Positive affectivity and negative outcomes: The role of tenure and job satisfaction. *Journal of Applied Psychology*, 83, 950-959.
- Dvir, T., Eden, D., Avolio, B. J., & Shamir, B. (2002). Impact of transformational leadership on follower development and performance: A field experiment. *Academy of Management Journal*, 45, 735-744.
- Dvir, T., & Wenger, I. (2004, April). *Leadership, follower emotions, and performance: An experimental examination*. Study presented at the 19th Annual Meeting of the Society for Industrial and Organizational Psychology, Chicago.
- Eagly, A., & Chaiken, S. (1993). *The psychology of attitudes*. Fort Worth, TX: Harcourt Brace Jovanovich.
- Easterbrook, J. A. (1959). The effects of emotion on cue utilization and the organization of behavior. *Psychological Review*, *66*, 183-201.
- Ekman, P., & Friesen, W. V. (1971). Constants across cultures in the face and emotion. *Journal of Personality and Social Psychology 17*, 124-129.
- Ekman, P., Friesen, W. V., & Ancoli, S. (1980). Facial signs of emotional experience. *Journal of Personality and Social Psychology*, *39*, 1125-1134.
- Ekman, P., Sorenson, E. R., & Friesen, W. V. (1969). Pan-cultural elements in facial displays of emotions. *Science*, 164, 86-88.
- Emrich, C. G. (1999). Context effects in leadership perception. *Personality and Social Psychology Bulletin*, 25, 991-1006.
- Engle, E. M., & Lord, R. G. (1997). Implicit theories, self-schemas, and leader-member exchange. Academy of Management Journal, 40, 988-1010.
- Epitropaki, O., & Martin, R. (2005). From ideal to real: A longitudinal study of the role of implicit leadership theories on leader-member exchanges and employee outcomes. *Journal of Applied Psychology*, 90, 659-676.
- Eysenk, M. W. (1976). Arousal, learning, and memory. Psychological Bulletin, 83, 389-404.
- Eysenk, M. W. (1982). Attention and arousal. New York: Springer-Verlag.
- Fenigstein, A., & Carver, C. S. (1978). Self-focusing effects of heartbeat feedback. *Journal of*

- Personality and Social Psychology, 36, 1241-1250.
- Fiedler, F. E. (1958). Leader attitudes and group effectiveness. New York: McGraw-Hill.
- Fiedler, F. E. (1964). A contingency model of leadership effectiveness. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 1, pp. 149-190). New York: Academic Press.
- Fiedler, F. E. (1967). A theory of leadership effectiveness. New York: McGraw-Hill.
- Fiske, S. T., & Taylor, S. E. (1991). Social Cognition (2nd ed.). New York: McGraw-Hill.
- Fitness, J. (2000). Anger in the workplace: An emotion script approach to anger episodes between workers and their superiors, co-workers and subordinates. *Journal of Organizational Behavior*, 21, 147-162.
- Forgas, J. P. (1992). Affect in social judgments and decisions: A multi process model. In M. P. Zanna (Ed.), Advances in experimental social psychology (pp. 227-275). Orlando, FL: Academic Press.
- Forgas, J. P. (1994). The role of emotion in social judgments: An introductory review and an affect infusion model (AIM). *European Journal of Social Psychology*, 24, 1-24.
- Forgas, J. P. (1995). Mood and judgment: The affect infusion model (AIM). *Psychological Bulletin*, 117, 39-66.
- Forgas, J. P. (Ed.). (2001). Handbook of affect and social cognition. Mahwah, NJ: Erlbaum.
- Forgas, J. P. (in press). When sad is better than happy: Negative affect can improve the quality and effectiveness of persuasive messages and social influence strategies. *Journal of Experimental Social Psychology*.
- Forgas, J. P., & George, J. M. (2001). Affective influences on judgments and behavior in organizations: An information processing perspective. *Organizational Behavior and Human Decision Processes*, 86, 3-34.
- Fortunato, V. J., & Stone-Romero, E. F. (2001). Positive affectivity as a moderator of the objective-task characteristics/perceived-task characteristics relationship. *Journal of Applied Social Psychology*, 31, 1248-1278.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broadenand-build theory of positive emotions. *American Psychologist*, *56*, 218-226.
- Fredrickson, B. L., & Branigan, C. (2005). Positive emotions broaden the scope of attention and thought-action repertoires. *Cognition and Emotion*, 19, 313-332.
- Fridlund, A. J. (1992). The behavioral ecology and sociality of human faces. In M. S. Clark (Ed.), *Review of personality and social psychology* (Vol. 13, pp. 90-121). Thousand Oakes, CA: Sage.

- Frijda, N. H. (1986). The emotions. New York: Cambridge University Press.
- Frijda, N. H. (1988). The laws of emotion. American Psychologist, 43, 349-358.
- Frijda, N. H. (1993). Moods, emotion episodes, and emotions. In M. Lewis & J. M. Haviland (Eds.), *Handbook of emotions* (pp. 381-403). New York: Guilford.
- Frijda, N. H. (1994). Varieties of affect: Emotions and episodes, moods, and sentiments. In P. Ekman & R. J. Davidson (Eds.), *The nature of emotion: Fundamental questions* (pp. 59-67). New York: Oxford University Press.
- Frijda, N. H., Kuipers, P., & ter Schure, E. (1989). Relations among emotion, appraisal, and emotional action readiness. *Journal of Personality and Social Psychology*, *57*, 212-228.
- Frijda, N. H., & Mesquita, B. (1994). The social roles and functions of emotions. In S. Kitayama & H. S. Markus (Eds.), *Emotion and culture: Empirical studies of mutual influence* (pp. 51-87). Washington, DC: American Psychological Association.
- Gaddis, B., Connelly, S., & Mumford, M. D. (2004). Failure feedback as an affective event: Influence of leader affect on subordinate attitudes and performance. *The Leadership Quarterly*, 15, 663-686.
- Garst, H., Frese, M., & Molenaar, P. C. M. (2002). The temporal factor of change in stressor-strain relationships: A growth curve model on a longitudinal study in East Germany. *Journal of Applied Psychology*, 85, 417-438.
- Gazzaniga, M. S., & Heatherton, T. F. (2003). *Psychological science: Mind, brain and behavior*. New York: Norton.
- George, J. M. (1990). Personality, affect, and behavior in groups. *Journal of Applied Psychology*, 75, 107-116.
- George, J. M. (1991). State or trait: Effects of positive mood on prosocial behaviors at work. *Journal of Applied Psychology*, 76, 299-307.
- George, J. M. (1995). Leader positive mood and group performance: The case of customer service. *Journal of Applied and Social Psychology*, 25, 778-794.
- George, J. M. (1996). Group affective tone. In M. A. West (Ed.), *Handbook of work group psychology* (pp. 77-93). Chichester, UK: Wiley.
- George, J. M. (2000). Emotions and leadership: The role of emotional intelligence. *Human Relations*, *53*, 1027-1055.
- George, J. M., & Bettenhausen, K. (1990). Understanding prosocial behavior, sales performance, and turnover: A group-level analysis in a service context. *Journal of Applied Psychology*, 75, 698-709.

- George, J. M., & Brief, A. P. (1992). Feeling good-doing good: A conceptual analysis of the mood at work-organizational spontaneity relationship. *Psychological Bulletin*, 112, 310-329.
- George, J. M., & Brief, A. P. (1996). Motivational agendas in the workplace: The effects of feelings on focus of attention and work motivation. In B. M. Staw & L. L. Cummings (Eds.), Research in organizational behavior (Vol. 18, pp. 75-109). Greenwich, CT: JAI Press.
- George, J. M., & Zhou, J. (2002). Understanding when bad moods foster creativity and good one's don't: The role of context and clarity of feelings. *Journal of Applied Psychology*, 87, 687-697.
- Glomb, T. M., & Hulin, C. L. (1997). Anger and gender effects in observed supervisorsubordinate dyadic interactions. *Organizational Behavior and Human Decision Processes*, 72, 281-307.
- Goleman, D., Boyatzis, R., & McKee, A (2002). *Primal leadership: Realizing the power of emotional intelligence*. Boston: Harvard Business School Press.
- Grandey, A. A., Fisk, G. M., Mattila, A. S., Jansen, K. J., & Sideman, L. A. (2005). Is "service with a smile" enough? Authenticity of positive displays during service encounters. *Organizational Behavior and Human Decision Processes*, 96, 38-55.
- Gray, J. A. (1971). The psychophysiological basis of introversion extraversion. *Behavior Research and Therapy*, 8, 249-266.
- Gray, J. A. (1981). *A critique of Eysenck's theory of personality*. In H. J. Eysenck (Ed.), A model for personality (pp. 246–276). New York: Springer.
- Gray, J. A. (1987). Perspectives on anxiety and impulsivity: A commentary. *Journal of Research in Personality*, 21, 493-509.
- Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology*, *2*, 271-299.
- Hansen, R. D., Hansen, C. H., & Crano, W. D. (1989). Sympathetic arousal and self-attention: The accessibility of interoceptive and exteroceptive arousal cues. *Journal of Experimental Social Psychology*, 25, 437-449.
- Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1992). Primitive emotional contagion. In M. S. Clark (Ed.), *Emotion and social behavior* (pp. 151-175). Newbury Park, CA: Sage.
- Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1994). *Emotional contagion*. New York: Cambridge University Press.
- Hertel, G., Deter, C., & Konradt, U. (2003). Motivation gains in computer-supported groups.

- Journal of Applied Social Psychology, 33, 2080-2105.
- Hess, U., Banse, R., & Kappas, A. (1995). The intensity of facial expression is determined by underlying affective state and social situation. *Journal of Personality and Social Psychology*, 69, 280-288.
- Heuer, F., & Reisberg, D. (1990). Vivid memories of emotional events: The accuracy of remembered minutiae. *Memory and Cognition*, 18, 496-506.
- Hochschild, A. R. (1983). *The managed heart: The commercialization of human feeling*. Berkeley, CA: University of California Press.
- Hochwarter, W. A., Kiewitz, C., Castro, S. L., Perrewé, P. L., & Ferris, G. R. (2003). Positive affectivity and collective efficacy as moderators of the relationship between perceived politics and job satisfaction. *Journal of Applied Social Psychology*, 33, 1009-1035.
- Hockey, R. (1979). Stress and the cognitive components of skilled performance. In V. Hamilton & D. M. Warburton (Eds.), *Human stress and cognition: An information processing approach* (pp.141-177). Chichester, UK: John Wiley.
- Hogg, M. A., & van Knippenberg, D. (2003). Social identity and leadership processes in groups. In M. P. Zanna (Ed.), Advances in experimental social psychology (pp. 2-55). New York: Academic Press.
- Hollander, E. P. (1964). Leaders, groups, and influence. New York: Oxford University Press.
- House, R. J., Hanges, P. J., Ruiz-Quintanilla, S. A., Dorfman, P. W., Javidan, M., Dickson, M., et al. (1999). Cultural influences on leadership and organizations: Project GLOBE. In W. H. Mobley, M. J. Gessner, & V. Arnold (Eds.), *Advances in global leadership* (pp. 171-233). Stamford, CT: JAI Press.
- House, R. J., Spangler, W. D., & Woycke, J. (1991). Personality and charisma in the U.S. presidency: A psychological theory of leader effectiveness. *Administrative Science Quarterly*, 36, 364-396.
- Howell, J. M., & Frost, P. J. (1989). A laboratory study of charismatic leadership. Organizational Behavior and Human Decision Processes, 43, 243-269.
- Howell, J. M., & Shamir, B. (2005). The role of followers in the charismatic leadership process: Relationships and their consequences. *Academy of Management Review*, 30, 96-112.
- Hui, C., Law, K. S., & Chen, Z. X. (1999). A structural equation model of the effects of negative affectivity, leader-member exchange, and perceived job mobility on in-role and extra-role performance: A Chinese case. *Organizational Behavior and Human Decision Processes*, 77, 3-21.

- Humphrey, R. H. (2002). The many faces of emotional leadership. *The Leadership Quarterly*, 13, 493-504.
- Iverson, R. D., & Deery, S. J. (2001). Understanding the "personological" basis of employee withdrawal: The influence of affective disposition on employee tardiness, early departure, and absenteeism. *Journal of Applied Psychology*, 86, 856-866.
- Jacobson, C., & House, R. J. (2001). Dynamics of charismatic leadership: A process theory, simulation model, and tests. *The Leadership Quarterly*, 12, 75-112.
- James, W. (1884). What is an emotion? Mind, 9, 188-205.
- James, W. (1890). Principles of psychology. New York: Dover
- Johnson, E. J., & Tversky, A. (1983). Affect, generalization, and the perception of risk. Journal of Personality and Social Psychology, 45, 20-31.
- Johnson-Laird, P. N., & Oatley, K. (1992). Basic emotions, rationality, and folk theory. Cognition and Emotion, 6, 201-223.
- Johnson-Laird, P. N., & Oatley, K. (2000). Cognitive and social construction in emotions. In M. Lewis, & J. M. Haviland-Jones (Eds.), *Handbook of emotions* (2nd ed., pp. 458-475). New York: Guilford Press.
- Johnstone, T., & Scherer, K. R. (2000). Vocal communication of emotion. In M. Lewis, & J. M. Haviland-Jones (Eds.), *Handbook of emotions* (2nd ed., pp. 220-235). New York: Guilford Press.
- Jones, R. G., & Rittman, A. L. (2002). A model of emotional and motivational components of interpersonal interactions in organizations. In N. M. Ashkanasy, W. J. Zerbe, & C. E. J. Härtel (Eds.), *Managing emotions in the workplace* (pp. 98-111). New York: M.E. Sharpe.
- Judge, T. A., & Bono, J. E. (2000). Five factor model of personality and transformational leadership. *Journal of Applied Psychology*, 85, 751-765.
- Judge, T. A., Bono, J. E., Ilies, R., & Gerhardt, M. W. (2002). Personality and leadership: A qualitative and quantitative review. *Journal of Applied Psychology*, 87, 765-780.
- Judge, T. A., & Ilies, R. (2004). Affect and job satisfaction: A study of their relationship at work and at home. *Journal of Applied Psychology*, 89, 661-673.
- Kahneman, D. (1973). Attention and effort. Englewood Cliffs, NJ: Prentice-Hall.
- Kelly, J. R., & Barsade, S. G. (2001). Mood and emotions in small groups and work teams. Organizational Behavior and Human Decision Processes, 86, 99-130.
- Keltner, D., & Gross, J. J. (1999). Functional accounts of emotions. *Cognition and Emotion*, 13, 467-480.

- Keltner, D., & Haidt, J. (1999). Social function of emotions at four levels of analysis. Cognition and Emotion, 13, 505-521.
- Kemper, T. D. (2000). Social models in the explanation of emotions. In M. Lewis & J. M. Haviland-Jones (Eds.), *Handbook of emotions* (2 ed., pp. 45-58). New York: Guilford Press.
- Kim, H., & Baron, R. S. (1988). Exercise and the illusory correlation: Does arousal heighten stereotypic processing? *Journal of Experimental Social Psychology*, *24*, 366-380.
- Knutson, B. (1996). Facial expressions of emotion influence interpersonal trait inferences. Journal of Nonverbal Behavior, 20, 165-182.
- Lang, P. J. (1994). The varieties of emotional experience: A meditation on James-Lange theory. *Psychological Review*, 101, 211-221.
- Larsen, R. J., Diener, E., & Lucas, R. E. (2002). Emotion: Models, measures, and individual differences. In R. G. Lord, R. J. Klimoski, & R. Kanfer (Eds.), *Emotions in the workplace: Understanding the structure and role of emotions in organizational behavior* (pp. 64-106). San Francisco: Jossey-Bass.
- Larsen, R. J., & Ketelaar, T. (1991). Personality and susceptibility to positive and negative emotional states. *Journal of Personality and Social Psychology*, 61, 132-140.
- Lazarus, R. S. (1966). Psychological stress and the coping process. New York: McGraw-Hill.
- Lazarus, R. S. (1991). Emotion and adaptation. New York: Oxford University Press.
- Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal and coping. New York: Springer.
- LeDoux, J. (1996). The emotional brain: The mysterious underpinnings of emotional life. New York: Simon & Schuchter
- Levenson, R. W. (1994). Human emotion: A functional view. In P. Ekman & R. J. Davidson (Eds.), The nature of emotion: Fundamental questions (pp. 123-126). New York: Oxford University Press.
- Lewis, K. M. (2000). When leaders display emotion: How followers respond to negative emotional expression of male and female leaders. *Journal of Organizational Behavior*, 21, 221-234.
- Lewis, M., & Haviland-Jones, J. M. (Eds.). (2000). *Handbook of emotions* (2nd ed.). New York: Guilford Press.
- Locke, E. A., Kirkpatrick, S., Wheeler, J. K., Schneider, J., Niles, K., Goldstein, H. et al. (1991). *The essence of leadership: The four keys to leading successfully*. New York: Lexington.
- Lord, R. G., & Brown, D. J. (2004). Leadership processes and follower self-identity.

- Mahwah, NJ: Erlbaum.
- Lord, R. G., DeVader, C. L., & Alliger, G. M. (1986). A meta-analysis of the relation between personality traits and leadership perceptions: An application of validity generalization procedures. *Journal of Applied Psychology*, 71, 402-410.
- Lord, R. G., Foti, R. J., & De Vader, C. L. (1984). A theory of leadership categorization theory: Internal structure, information processing, and leadership perceptions. *Organizational Behavior and Human Performance*, 34, 343-378.
- Lord, R. G., Foti, R. J., & Philips, J. S. (1982). A theory of leadership categorization. In J. G. Hunt, U. Sekaran & C. Schriesheim (Eds.), *Leadership: Beyond establishment views* (pp. 104-121). Carbondale, IL: Southern Illinois University Press.
- Lord, R. G, Klimoski, R. J., & Kanfer, R. (Eds.). (2002). *Emotions in the workplace: Understanding the structure and role of emotions in organizational behavior*. San Francisco: Jossey-Bass.
- Lord, R. G., & Maher, K. J. (1991). *Leadership and information processing*. Boston: Routledge.
- Lowe, K. B., Kroeck, K. G., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformational and transactional leadership: A meta-analytic review of the MLQ literature. *The Leadership Quarterly*, 7, 385-425.
- Mackie, D. M., & Worth, L. T. (1989). Processing deficits and the mediation of positive affect in persuasion. *Journal of Personality and Social Psychology*, 57, 27-40.
- Mandler, G. (1975). Mind and Emotion. New York: John Wiley.
- Mano, H. (1997). Affect and persuasion: The influence of pleasantness and arousal on attitude formation and message elaboration. *Psychology and Marketing*, *14*, 315-335.
- Martin, L. L., & Stoner, P. (1996). Mood as input: What we think about how we feel determines how we think. In L. L. Martin & A. Tesser (Eds.), *Striving and feeling: Interactions among goals, affect, and self-regulation* (pp. 279–301). Mahwah, NJ: Erlbaum.
- Martin, L. L., Ward, D. W., Achee, J. W, & Wyer, R. S. (1993). Mood as input: People have to interpret the motivational implications of their moods. *Journal of Personality and Social Psychology*, 64, 317-326.
- Matsumoto, M., & Smith, J. C. (2001). Progressive muscle relaxation, breathing exercises, and abc relaxation theory. *Journal of Clinical Psychology*, *57*, 1551-1557.
- Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. J. Sluyter (Eds.), *Emotional development and emotional intelligence* (pp. 3-31). New York:

- Basic Books.
- McClelland, G. H., & Judd, C. M. (1993). Statistical difficulties of detecting interactions and moderator effects. *Psychological Bulletin*, *114*, 376-390.
- McColl-Kennedy, J. R., & Anderson, R. D. (2002). Impact of leadership style and emotions on subordinate performance. *The Leadership Quarterly*, 13, 545-559.
- Meindl, J. R. (1995). The romance of leadership as a follower-centric theory: A social constructionist approach. *The Leadership Quarterly*, *6*, 329-341.
- Meindl, J. R., & Ehrlich, S. B. (1987). The romance of leadership and the evaluation of organizational performance. *Academy of Management Journal*, *30*, 91-109.
- Meindl, J. R., Ehrlich, S. B., & Dukerich, J. M. (1985). The romance of leadership. *Administrative Science Quarterly*, 30, 78-102.
- Miller, D. T. (2001). Disrespect and the experience of injustice. *Annual Review of Psychology*, 52, 527-553.
- Miller, R. S., & Leary, M. R. (1992). Social sources and interactive functions of emotion: The case of embarrassment. In M. S. Clark (Ed.), *Emotion and social behavior* (pp. 202-222). Newbury Park, CA: Sage.
- Mintzberg, H. (1973). The nature of managerial work. New York: Harper & Row.
- Mischel, W. (1973). Toward a cognitive social learning conceptualization of personality. *Psychological Review*, 80, 252-283.
- Mook, D. G. (1983). In defense of external invalidity. American Psychologist, 38, 379–387.
- Motowidlo, S. J., Borman, W. C., & Schmit, M. J. (1997). A theory of individual differences in task and contextual performance. *Human Performance*, 10, 71-83.
- Muchinsky, P. M. (2000). Emotions in the workplace: The neglect of organizational behavior. *Journal of Organizational Behavior*, 21, 801-805.
- Nemanick, R. C., & Munz, D. C. (1997). Extraversion and neuroticism, trait mood, and state affect: A hierarchical relationship? *Journal of Social Behavior and Personality*, 12, 1079-1092.
- Newcombe, M. J., & Ashkanasy, N. M. (2002). The role of affect and affective congruence in perceptions of leaders: An experimental study. *The Leadership Quarterly*, 13, 601-614.
- Newell, S. J., Henderson, K. V., & Wu, B. T. (2001). The effects of pleasure and arousal on recall of advertisements during the super bowl. *Psychology and Marketing*, 18, 1135-1153.
- Niedenthal, P. M., & Showers, C. (1991). The perception and processing of affective information and its influences on social judgment. In J. P. Forgas (Ed.), *Emotion and*

- Social Judgments (pp. 125-143). Oxford: Pergamon Press.
- Oatley, K., & Jenkins, J. M. (1992). Human emotions: Functions and dysfunctions. *Annual Review of Psychology*, 43, 55-85.
- Oatley, K., & Jenkins, J. M. (1996). Understanding emotions. Cambridge, MA: Blackwell.
- Oatley, K., & Johnson-Laird, P. N. (1987). Towards a cognitive theory of emotions. *Cognition and Emotion*, *1*, 29-50.
- Öhman, A. (1986). Face the beast and fear the face: Animal and social fears as prototypes for evolutionary analyses of emotion. *Psychophysiology*, *23*, 123-145.
- Öhman, A., & Mineka, S. (2001). Fears, phobias, and preparedness: Toward an evolved module of fear and fear learning. *Psychological Review*, 108, 483-522.
- Organ, D. W. (1990). The motivational basis of organizational citizenship behavior. *Research* in *Organizational Behavior 12*, 43-72.
- Panksepp, J. (2000). Emotions as natural kinds within the mammalian brain. In M. Lewis, & J. M. Haviland-Jones (Eds.), *Handbook of emotions* (2nd ed., pp 137-156). New York: Guilford Press.
- Parkinson, B. (1996). Emotions are social. British Journal of Psychology, 87, 663-683.
- Pavelchak, M. A., Antil, J. H., & Munch, J. M. (1988). The super bowl: An investigation into relationship among program context, emotional experience, and ad recall. *Journal of Consumer Research*, 15, 360-367.
- Perrewé, P. L., Zellars, K. L., Ferris, G. R., Rossi, A. M., Kacmar, C. J., & Ralston, D. A. (2004). Neutralizing job stressors: Political skill as an antidote to the dysfunctional consequences of role conflict. *Academy of Management Journal*, 47, 141-152.
- Petty, R. E., & Cacioppo, J. T. (1986). *Communication and persuasion: Central and peripheral routes to attitude change*. New York: Springer.
- Pfeffer, J. (1977). The ambiguity of leadership. Academy of Management Review, 2, 104-112.
- Pham, M. T. (1996). Cue representation and selection effects of arousal on persuasion. *Journal of Consumer Research*, 22, 373-387.
- Pillai, R., & Meindl, J. R. (1998). Context and charisma: A "meso" level examination of the relationship of organic structure, collectivism, and crisis to charismatic leadership. *Journal of Management*, 24, 643-671.
- Plutchik, R. (1980). Emotion: A psychoevolutionary synthesis. New York: Harper & Row.
- Rauch, C. F., & Behling, O. (1984). Functionalism: Basis for an alternate approach to the study of leadership. In J. G. Hunt, D. M. Hosking, C. A. Schriesheim, & R. Stewart (Eds.), Leaders and managers: International perspectives on managerial behavior and

- leadership (pp. 45-62). Elmsford, NY: Pergamon Press.
- Richards, D., & Engle, S. (1986). After the vision: Suggestions to corporate visionaries and vision champions. In J. D. Adams (Ed.), Transforming leadership (pp. 199-214). Alexandria, VA: Miles River Press.
- Ross, R. R., & Altmaier, E. M. (1994). Intervention in occupational stress. London: Sage.
- Rubin, R. S., Munz, D. C., & Bommer, W. H. (2005). Leading from within: The effects of emotion recognition and personality on transformational leadership behavior. *Academy of Management Journal*, 48, 845-858.
- Russell, J. A. (1980). A circumplex model of affect. *Journal of Personality and Social Psychology*, 39, 1161-1178.
- Russell, J. A., & Feldman Barrett, L. (1999). Core affect, prototypical emotional episodes, and other things called emotion: Dissecting the elephant. *Journal of Personality and Social Psychology*, 76, 805-819.
- Rusting, C. L., & Larsen, R. J. (1997). Extraversion, neuroticism, and susceptibility to positive and negative affect: A test of two theoretical models. *Personality and Individual Differences*, 22, 607-612.
- Rusting, C. L., & Larsen, R. J. (1998). Personality and cognitive processing of affective information. *Personality and Social Psychology Bulletin*, 24, 200-213.
- Sanbonmatsu, D. M, & Kardes, F. R. (1988). The effects of physiological arousal on information processing and persuasion. *Journal of Consumer Research*, *15*, 379-385.
- Scherer, K. R. (1986). Vocal affect expression: A review and a model for future research. Psychological Bulletin, 99, 143-165.
- Schmader, T., & Lickel, B. (2006). The approach and avoidance function of guilt and shame emotions: Comparing reactions to self-caused and other-caused wrongdoing. *Motivation* and Emotion, 30, 43-56.
- Schmulke, S. C., Egloff, B., & Burns, L. R. (2002) The relationship between positive and negative affect in the Positive and Negative Affect Schedule. *Journal of Research in Personality*, 36, 463-475.
- Schubert, T. W. (2005). Your Highness: Vertical Positions as Perceptual Symbols of Power. *Journal of Personality and Social Psychology*, 89, 1-21.
- Schultz, J. H. (1932). *Das autogene training* [The autogenic training]. Stuttgart: Georg Thieme.
- Schwarz, N., & Clore, G. L. (1983). Mood, misattribution, and judgment of well being: Informative and directive functions of affective states. *Journal of Personality and Social*

- Psychology, 45, 513-523.
- Schwarz, N., & Clore, G. L. (1988). How do I feel about it? The information function of affective states. In K. Fiedler & J. Forgas (Eds.), *Affect, cognition and social behavior* (pp. 44-62). Lewinston, NY: Hogrefe.
- Seligman, M. E. P, & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5-14.
- Selye, H. (1956). The stress of life. New York: McGraw-Hill.
- Shamir, B., Arthur, M. B., & House, R. J. (1994). The rhetoric of charismatic leadership: A theoretical extension, a case study, and implications for research. *The Leadership Quarterly*, 5, 25-42.
- Shamir, B., House, R. J., & Arthur, M. B. (1993). The motivational effects of charismatic leadership: A self-concept based theory. *Organization Science*, *4*, 577-594.
- Shamir, B., & Howell, J. M. (1999). Organizational and contextual influence on the emergence and effectiveness of charismatic leadership. *The Leadership Quarterly*, 10, 257-283
- Sinaceur, M., & Tiedens, L. Z (2006). Get mad and get more than even: When and why anger expression is effective in negotiations. *Journal of Experimental Social Psychology*, 42, 314-322.
- Singer, J. A., & Salovey, P. (1988). Mood and Memory: Evaluating the network theory of affect. Clinical Psychology Review, 8, 211-251.
- Smith, M., & Cooper, C. (1994). Leadership and stress. Leadership and Organization Development Journal, 15, 3-7.
- Smither, R. D. (1994). *The Psychology of work and human performance*. New York: HarperCollins.
- Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equations models. In S. Leinhardt (Ed.), *Sociological Methodology* 1982 (Vol 13, pp. 290-312). San Francisco: Jossey-Bass.
- Stang, D. J. (1973). Effect of interaction rate on ratings of leadership and liking. *Journal of Personality and Social Psychology*, 27, 405-408.
- Stangor, C., & McMillan, D. (1992). Memory for expectancy-congruent and expectancy-incongruent information: A review of the social and social developmental literatures. Psychological Bulletin, 111, 42-61.
- Staw, B. M., & Barsade, S. G. (1993). Affect and managerial performance: A test of the sadder-but-wiser vs. happier-and-smarter hypotheses. *Administrative Science Quarterly*,

- 38. 304-331.
- Staw, B. M., Sutton, R. I., & Pelled, L. H. (1994). Employee positive emotion and favorable outcomes at the workplace. *Organization Science*, *5*, 51-71.
- Stogdill, R. M. (1948). Personal factors associated with leadership: A survey of the literature. *Journal of Psychology*, 25, 35-71.
- Sutton, R. I., & Rafaeli, A. (1988). Untangling the relationship between displayed emotions and organizational sales: The case of convenience stores. *Academy of Management Journal*, *31*, 461-487.
- Sy, T., Côté, S., & Saavedra, R. (2005). The contagious leader: Impact of the leader's mood on the mood of group members, group affective tone, and group processes. *Journal of Applied Psychology*, 90, 295-305.
- Terry, D. J., Callan, V. J., & Sartori, G. (1996). Employee adjustment to an organizational merger: Stress, coping and intergroup differences. *Stress Medicine*, 12, 105-122.
- Thayer, R. E. (1989). *The biopsychology of mood and arousal*. New York: Oxford University Press.
- Thomas, A. B. (1988). Does leadership make a difference to organizational performance? *Administrative Science Quarterly*, *33*, 388-400.
- Tiedens, L. Z. (2001). Anger and advancement versus sadness and subjugation: The effect of negative emotion expressions on social status conferral. *Journal of Personality and Social Psychology*, 80, 86-94.
- Totterdell, P. (2000). Catching moods and hitting runs: Mood linkage and subjective performance in professional sport teams. *Journal of Applied Psychology*, 85, 848-859.
- Tsui, A. S., & O'Reilly, C. A. (1989). Beyond simple demographic effects: The importance of relational demography in superior-subordinate dyads. *Academy of Management Journal*, *32*, 402-423.
- Tsui, A. S., Porter, L. W., & Egan, T. D. (2002). When both similarities and dissimilarities matter: Extending the concept of relational demography. *Human Relations*, *55*, 899-929.
- van Dierendonck, D., Hayes, C., Borrill, C., & Stride, C. (2004). Leadership behavior and subordinate well-being. *Journal of Occupational Health Psychology*, *9*, 165-175.
- van Dierendonck, D., Le Blanc, P. M., & van Breukelen, W. (2002). Supervisory behavior, reciprocity and subordinate absenteeism. *Leadership and Organization Development Journal*, 23, 84-92.
- Van Kleef, G. A., De Dreu, C. K. W., & Manstead, A. S. R. (2004a). The interpersonal effects of anger and happiness in negotiations. *Journal of Personality and Social Psychology*, 86,

- 57-76.
- Van Kleef, G. A., De Dreu, C. K. W., & Manstead, A. S. R. (2004b). The interpersonal effects of emotions in negotiations: A motivated information processing approach. *Journal of Personality and Social Psychology*, 87, 510-528.
- Van Kleef, G. A., De Dreu, C. K. W., & Manstead, A. S. R. (2006). Supplication and appearsement in conflict and negotiation: The interpersonal effects of disappointment, worry, guilt, and regret. *Journal of Personality and Social Psychology*, 91, 124-142.
- Van Kleef, G. A., Homan, A. C., Beersma, B., van Knippenberg, D, van Knippenberg, B., & Damen, F. (2006, August). Leader emotion and team performance: The effectiveness of angry versus happy leaders depends on followers' epistemic motivation. Study presented at the Annual Meeting of the Academy of Management, Atlanta, GA.
- van Knippenberg, B., Martin, L., & Tyler, T. (2006). Process-orientation versus outcomeorientation during organizational change: The role of organizational identification. *Journal of Organizational Behavior*, 27, 685-704.
- van Knippenberg, B., & van Knippenberg, D. (2005). Leader self-sacrifice and leadership effectiveness: The moderating role of leader prototypicality. *Journal of Applied Psychology*, 90, 25-37.
- van Knippenberg, D., & Hogg, M. A. (2003). A social identity model of leadership effectiveness in organizations. In R. M. Kramer & B. M. Staw (Eds.), *Research in organizational behavior* (Vol. 25, pp. 245-297). Amsterdam: Elsevier
- van Knippenberg, D., van Knippenberg, B., De Cremer, D., & Hogg, M. A. (2004). Leadership, self, and identity: A review and research agenda. *The Leadership Quarterly*, 15, 825-856.
- van Knippenberg, D., van Knippenberg, B., Van Kleef, G. A., & Damen, F. (in press). To appear in C. L. Cooper & N. M. Ashkanasy (Eds.), *Research companion to emotion in organizations*. London: Edward Elgar.
- Vroom, V. H. & Yetton, P. W. (1973). Leadership and decision-making. Pittsburgh, PA: University of Pittsburgh Press.
- Watson, D., & Clark, L. A. (1984). Negative affectivity: The disposition to experience aversive emotional states. *Psychological Bulletin*, *96*, 465-490.
- Watson, D. & Clark, L. A. (1992). On traits and temperament: General and specific factors of emotional experience and their relation to the five-factor model. *Journal of Personality*, 60, 441-476.
- Watson, D., Clark, L. A., McIntyre, C. W., & Hamaker, S. (1992). Affect, personality, and

- social activity. Journal of Personality and Social Psychology, 63, 1011-1025.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063-1070.
- Watson, D., & Tellegen, A. (1985). Toward a consensual structure of mood. *Psychological Bulletin*, 98, 219-235.
- Watson, D., Wiese, D., Vaidya, J., & Tellegen, A. (1999). The two general activation systems of affect: Structural findings, evolutionary considerations, and psychobiological evidence. *Journal of Personality and Social Psychology*, 76, 820-838.
- Wegner, D. M., & Giuliano, T. (1980). Arousal-induced attention to self. *Journal of Personality and Social Psychology*, 38, 719-726.
- Weiss, H. M., & Cropanzano, R. (1996). Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior* (Vol. 18, pp. 1-74). Greenwich, CT: JAI Press.
- Wild, B., Erb, M., & Bartels, M. (2001). Are emotions contagious?: Evoked emotions while viewing emotionally expressive faces: quality, quantity, time course and gender differences. *Psychiatry Research*, 102, 109-124.
- Williams, J. M. G., Watts, F. N., MacLeod, C., & Mathews, A. (1999). *Cognitive psychology and emotional disorders* (2nd ed.). Chichester, UK: Wiley.
- Worth, L. T., & Mackie, D. M. (1987). Cognitive mediation of positive affect in persuasion. *Social Cognition*, *5*, 76-94.
- Wright, P. M., George, J. M., Farnsworth, S. R., & McMahan, G. C. (1993). Productivity and extra-role behavior: The effects of goals and incentives on spontaneous helping. *Journal* of Applied Psychology, 78, 374-381.
- Yoon, J., & Thye, S. (2000). Supervisor in the work place: Legitimacy and positive affectivity. *Journal of Social Psychology*, 140, 295-316.
- Yukl, G. (2002). Leadership in organizations (5th ed.). Upper Saddle River, NJ: Prentice Hall.
- Zapf, D. (2002). Emotion work and psychological well-being: A review of the literature and some conceptual considerations. *Human Resource Management Review*, 12, 237-268.
- Zelenski, J. M., & Larsen R. J. (1999). Susceptibility to affect: A comparison of three personality taxonomies. *Journal of Personality*, 67, 761-791.
- Zhou, J., & George, J. M. (2003). Awakening employee creativity: The role of leader emotional intelligence. *The Leadership Quarterly*, 14, 545-568.

Samenvatting (Summary in Dutch)

Leiderschap heeft een grote invloed op het presteren van organisaties. Voor goed leiderschap is voornamelijk een motiverende aansturing nodig van medewerkers. Immers, uiteindelijk bepalen de medewerkers het resultaat (meestal in de vorm van het behalen van werkdoelen). In dit motiveringsproces zijn gedragingen van de leider essentieel. Deze gedragingen zijn tot voor kort voornamelijk vanuit een cognitieve hoek bestudeerd (zie bv. Hogg & van Knippenberg, 2003; Lord & Brown, 2004). Echter, recentelijk maken leiderschapsstudies een kentering naar een meer affectieve benadering (bv. Bono & Ilies, 2006; Sy, Côté, & Saavedra, 2005). Gezien de belangrijke rol van emoties en affect in sociale interacties in het algemeen (Keltner & Haidt, 1999; Oatley & Jenkins, 1996; Parkinson, 1996), lijkt het vruchtbaar om ook specifiek leider-volger interacties vanuit een affectieve hoek te benaderen. De centrale vraag die ten grondslag ligt aan deze dissertatie luidt dan ook: Wat is het effect van affectieve uitingen van leiders op leiderschapseffectiviteit?

De studie naar de rol van affect in leiderschap staat nog relatief in de kinderschoenen. Zo weten we nog niet precies wanneer positieve en wanneer negatieve leider emoties effectief kunnen zijn. Veel onderzoek heeft zich namelijk met name gericht op positieve leider emoties, zonder dit af te zetten tegen negatief leider affect (bv. Bono & Ilies, 2006; Gaddis, Connely, & Mumford, 2004; Newcombe & Ashkanasy, 2002). Zowel positief als negatief leider affect werd bestudeerd in dit proefschrift, om zo meer duidelijkheid te kunnen scheppen omtrent de effectiviteit van positief *en* negatief leider affect.

Affect kan worden beschreven als positief, danwel negatief (de zogenaamde valentie of hedonische waarde dimensie van affect), maar heeft nog een andere belangrijke component, namelijk de arousal (of activering) dimensie van affect (Russell, 1980). Een positieve/actieve staat uit zich in enthousiasme, een negatieve/actieve staat in boosheid, een positieve/inactieve staat in ontspanning en negatieve/inactieve staat in triestheid (zie Larsen, Diener, & Lucas,

2002). Voor de algemene onafhankelijke variabele in deze dissertatie, namelijk *affectieve uitingen van de leider*, werden deze emoties gebruikt. Deze vier leider emoties dienden dus als operationalisatie van de arousal en valentie dimensie van leider affect. Deze tweedeling van emoties (of affect)¹ was nodig, om meer inzicht te krijgen in de arousal dimensie naast de valentie dimensie. Deze arousal dimensie is namelijk nogal onderbelicht gebleven in leiderschap en affect studies en ik betoog juist dat deze arousal dimensie cruciaal is in het verklaren van de centrale afhankelijke variabele: *leiderschapseffectiviteit*.

Naast de nodige aandacht voor positieve en negatieve, hoge arousal en lage arousal leider emoties, werd in deze dissertatie specifiek gekeken naar de *rol van de volger* in het verklaren van leiderschapseffectiviteit. Ook hier bevindt zich namelijk een hiaat in de kennis. Hoewel leiderschapsonderzoek zich zeker richt op de belangrijke rol van de volger (Hogg & van Knippenberg, 2003; Howell & Shamir, 2005), is hier in affectief leiderschapsonderzoek nauwelijks aandacht aan besteed, terwijl vanuit de cognitieve hoek juist belangrijke mediërende en modererende effecten worden gevonden van volger eigenschappen (zie bv. Lord & Brown, 2004). Het lag derhalve in de lijn der verwachtingen dat ook specifiek in affectief leiderschap volger karakteristieken een belangrijke rol zouden kunnen spelen en de volger werd dus een bijzonder punt van aandacht in dit proefschrift.

Om de bovenstaande geformuleerde centrale vraag (gedeeltelijk) te kunnen beantwoorden, heb ik in totaal zes empirische studies uitgevoerd. Deze studies richtten zich daarbij op de geformuleerde problematiek: de rol van valentie, arousal en de volger in het verklaren van de effecten van leider emoties op leiderschapseffectiviteit. Deze zes studies (1 scenariostudie, 2 veldstudies en 3 laboratoriumstudies) zijn beschreven in drie hoofdstukken voorafgegaan door een algemene inleiding en afgesloten met een algemene discussie.

Hoofdstuk 1 schetste de centrale vraagstelling en onderwerpen van aandacht behorende bij dit proefschrift. Ook werd hier een algemeen overzicht van de relevante literatuur gegeven.

Hoofdstuk 2 beschreef de effecten van de leider zijn enthousiasme, boosheid, ontspanning en triestheid op charisma percepties van volgers. Er werd gevonden dat leiders die enthousiast zijn als meer charismatisch worden gezien dan leiders die de andere drie emoties uitten. Dit kwam doordat enthousiaste leiders het vermogen hebben om naast positieve hedonische

¹ Ik gebruik de term emoties voor discrete, kortdurende staten van gevoel, terwijl affect een algemene term is die zowel (kortdurende) emoties, (langdurende) stemmingen en zelfs (levenslang durende) karaktertrekken beschrijft (Frijda, 1986; Oatley & Jenkins, 1996). Deze termen lopen weliswaar door elkaar in dit proefschrift, maar strikt genomen beschrijven ze dus verschillende constructen.

waarde, ook activering over te brengen op hun volgers. In Studie 1 van dit hoofdstuk manipuleerde ik in een scenario-experiment affectieve uitingen van de leider door middel van een toespraak gericht aan de volgers. De toespraak varieerde in arousal (hoog/laag) en valentie (positief/negatief). De leider uitte zich derhalve enthousiast, boos, ontspannen, danwel triest over de jaarcijfers van een (fictief) bedrijf. Vervolgens werd aan de participanten gevraagd om zich in te leven dat ze voor deze leider zouden werken en om een aantal vragen beantwoorden. Uit deze vragen bleek dat de enthousiaste leider een positieve valentie en hoge arousal overbracht. Deze valentie en arousal overdracht medieerde de relatie tussen de leider zijn enthousiasme en percepties van charisma. De andere drie emoties van de leider vertoonden dit verband niet. In Studie 2 van dit hoofdstuk vond ik ditzelfde verband, maar dan in een bestaande organisatie setting. Managers van 2 verschillende bedrijven werden als charismatisch gezien wanneer ze hoge arousal, positieve emoties uitten (enthousiasme) en dit werd wederom verklaard door hun vermogen arousal en positieve valentie over te brengen op hun medewerkers. De andere drie emoties (boos, ontspannen, triest) vertoonden dit patroon niet. Dit hoofdstuk liet dus zien dat positieve affectieve uitingen van de leider, die daarbij ook hoog in arousal zijn, een positief effect hebben op relevante percepties van de volger. Hierin was de rol van arousal zeker zo groot als de rol van valentie.

In Hoofdstuk 3 werd meer specifiek gekeken naar de rol van de volger en de activering dimensie van affect. In Studie 1 van dit hoofdstuk werd door middel van een laboratorium experiment gekeken naar het verband tussen positief, actief leider affect en volger arousal op leiderschapseffectiviteit. In dit experiment spreidde een getrainde acteur positieve, actieve affectieve uitingen (enthousiasme) tentoon, of uitte zich op een positieve, inactieve manier (ontspanning) in een vooraf opgenomen filmpje. Deze affectieve uitingen waren gebaseerd op taakprestaties van een vorige groep mensen die de leider had aangestuurd in het verleden. De taakprestaties werden in beide condities als 'goed' bestempeld door de leider en dat maakte hem vervolgens ontspannen of enthousiast om met de huidige volgers weer met deze taak te zullen werken. Echter, in de ene conditie uitte de acteur zich erg ontspannen over deze taakprestaties (bescheiden glimlach, onderuit gezakt zitten, spelen met een potlood), terwijl in de andere conditie hij zich ronduit enthousiast uitte (rechtop zitten, drukke gebaren, brede glimlach). Vervolgens gaf hij de participanten de instructies om hun best te doen op deze taak. Daarna kregen de deelnemers deze taak voorgelegd, die bestond uit zoveel mogelijk orders verwerken (zie Hertel, Deter, & Konradt, 2003 voor meer informatie omtrent de taak). De prestatie van de volgers op deze taak duidt vervolgens leiderschapseffectiviteit. In deze studie werd naast positief, actief leider affect, ook arousal van de volger gemanipuleerd door middel van fysieke inspanning (opdrukken en kniebuigingen maken).

Vervolgens vond ik dat de activeringscomponent van positieve leider emoties verantwoordelijk was voor effectief volger gedrag (en dus een positieve invloed had op leiderschapseffectiviteit). Echter, dit bleek alleen het geval te zijn als de volgers rustig waren (laag in arousal waren). Als de volgers onrustig waren (dus hoog in arousal), hadden affectieve uitingen van de leider geen invloed op het gedrag van de volger. Ook werd er een zelfde verband gevonden op actiebereidheid van de volger (zie Frijda, 1986). Kortom, mits volgers kalm waren, vertaalden positieve, actieve affectieve uitingen van de leider zich niet alleen in daadwerkelijk meer actief gedrag, maar ook in de *bereidheid* van de volgers om in actie te komen voor deze leider. Als de volgers te onrustig waren, werd dit patroon teniet gedaan en werden er dus geen effecten meer gevonden voor affectieve uitingen van de leider.

In Studie 2, repliceerde ik deze bevindingen in een veldstudie en vond tevens dat negatieve, actieve uitingen van de leider hetzelfde patroon lieten zien. Door middel van enquêtes werden medewerkers gevraagd naar de affectieve uitingen van hun directe chef. Daarnaast werd het arousal niveau in het dagelijkse werk van de medewerkers gepeild (by.: "Ik was de laatste week actief aangaande het werk"). Ik vond hier wederom een interactie tussen actieve positieve uitingen (enthousiasme) van de leider met arousal van de volger op gepercipieerde effectiviteit van de leider: positieve, actieve uitingen van de leider hadden een hogere attributie van effectiviteit tot gevolg dan positieve, inactieve uitingen, mits de volgers rustig waren. Als men te actief was, werd de werking van de affectieve uitingen van de leider wederom teniet gedaan. Dit vond ik in deze veldstudie ook voor negatieve uitingen van actief affect (boosheid). Ik liet derhalve zien dat boze leiders effectiever waren dan minder boze leiders, mits de volgers rustig waren (niet aroused). Als de medewerkers onrustig waren (aroused), dan maakte het niet uit of de leider nu meer of minder boos was; ze vonden hun directe baas dan even effectief. Dit hoofdstuk benadrukt daarom de sterke invloed van volger karakteristieken en de activering dimensie van leider affect in het verklaren van effectiviteit van zowel negatief, als positief leider affect.

Hoofdstuk 4 richtte zich sterk op de valentie van leider emoties (positief versus negatief) en de rol van de volger in het verklaren van leiderschapseffectiviteit. In Studie 1 van dit hoofdstuk manipuleerde ik in het laboratorium een positieve, actieve en een negatieve, actieve uiting van leider affect (enthousiasme tegenover boosheid). De opzet en taak waren hetzelfde als in Hoofdstuk 3; Studie 1, maar in deze studie was de leider een vrouw en de manipulatie varieerde nu in de valentie component van affect in plaats van de activering dimensie van affect. De actrice uitte zich nu dan ook boos over voorgaande taakprestaties, danwel

enthousiast. Daarnaast werd Positief Affect (PA; een meting van positieve stemming) van de volger als post-hoc variabele in het experimenteel design opgenomen. De prestaties van de volgers op de order verwerkingstaak werd wederom als maat voor leiderschapseffectiviteit gehanteerd (zie tevens Hoofdstuk 3; Studie 1). Ik vond dat wanneer er een *affectieve match* tussen leider en volger was, de prestaties op de taak significant beter waren dan wanneer er sprake was van een *affectieve mismatch*. Dit betekent dat volgers die hoog scoren op PA (dus positief gestemd waren), relatief beter presteren voor een enthousiaste leider dan voor een boze leider en volgers die laag op PA scoren (dus weinig positief gestemd waren), relatief effectiever werken voor een boze dan voor een enthousiaste leider.

In Studie 2 werd in een tweede laboratorium experiment aangetoond dat dit affectieve match effect ook voor mannelijke leiders opgaat. In deze studie spreidde namelijk een mannelijke acteur eveneens enthousiasme en boosheid tentoon. In deze studie werd daarnaast aangetoond dat het effect daadwerkelijk te verklaren is door de 'match' in affect tussen leider en volger en niet door de onderliggende, inhoudelijke boodschap van de leider (positieve of negatieve inhoudelijke feedback richting de volger). Ik had in deze tweede studie namelijk twee condities toegevoegd: een neutrale leider die inhoudelijk negatief was over voorgaande taakprestaties en een neutrale leider die positieve feedback gaf over voorgaande taakprestaties. In deze condities uitte de leider dus geen emoties, maar hij zei alleen op een zakelijke manier dat de taak door anderen slecht of goed was gedaan en vervolgens dat de deelnemers hun best moesten doen op de taak. Op deze manier kon ik derhalve controleren voor de inhoud van de boodschap, waarbij ik nog steeds vond dat de emoties van de leider verantwoordelijk waren voor zijn effectiviteit en niet zozeer de inhoudelijke boodschap die onder het affect van de leider eveneens aanwezig was (immers als men boos is heeft men vaak ook een negatieve inhoudelijke boodschap en als men enthousiast is een positieve inhoudelijke boodschap, zie bv. Miller & Leary, 1992; Oatley & Jenkins, 1996). Ik liet hier dus de grote kracht van leider affect, maar tegelijkertijd ook van volger affect zien in de bepaling van effectiviteit van de leider. Affectieve communicatie in leiderschap lijkt daarbij meer motiverend dan inhoudelijk communicatie en dit hangt voor een belangrijk deel af van de (affectieve) stemming van de volger. De cruciale rol van de volger wordt hier dus wederom belicht, evenals het feit dat zowel negatieve als positieve leider emoties effectief kunnen zijn.

Uit dit proefschrift kan dan ook worden geconcludeerd dat in het motiverend aansturen van medewerkers, leidinggevenden gebruik kunnen maken van hun emoties en, sterker nog: afhankelijk van de context haast wel *moeten*. In Hoofdstuk 5 zijn de factoren beschreven die

de effectiviteit van negatieve en positieve leider emoties voor een belangrijk deel bepalen. De volger heeft een belangrijk aandeel in het verklaren van effectiviteit van de emotionele uitingen van de leidinggevende: positieve emoties lijken goed te werken, mits de volger ook goed gemutst is. Echter, wanneer de volger slecht gestemd is, zijn negatieve leider emoties veel effectiever voor de productieve output van de medewerker dan positieve emoties. Actieve leider emoties (zowel positieve als negatieve) werken ook goed, mits de volger zelf kalm is. Als de medewerkers onrustig zijn (aroused), dan lijken ze zich niet echt iets aan te trekken van de emoties van de leidinggevende of deze affectieve uitingen wellicht niet goed op te merken. Ook kan het zijn dat ze de emotionele uitingen van hun leider wel meekrijgen, maar op dat moment (cognitief) niet in staat zijn om deze affectieve informatie verder te verwerken. Hoe het ook zij, deze bevindingen wijzen op een tweede belangrijk punt in dit proefschrift: de arousal dimensie. Positieve én negatieve, actieve emoties van de leider (m.n. enthousiasme en boosheid) kunnen dus effectief zijn en daarnaast werd het uiten van positieve, actieve emoties (bv. enthousiasme) als charismatisch gedrag gezien, doordat de leider dan arousal en valentie wist over te brengen op de medewerkers. Dit werd blijkbaar opgepikt door de volgers, zodat ze de leider charisma attribueerden.

Er kan dus worden geconcludeerd dat zowel positieve als negatieve leider emoties effectief kunnen zijn, afhankelijk van de volger en de arousal dimensie. In meer algemene zin heeft dit proefschrift laten zien dat emoties in leidinggeven ertoe doen. Het gebruik van emoties in het aansturen van mensen is niet 'zwak' of ineffectief. Integendeel: het is zeer sterk en effectief gebleken, mits men als leidinggevende de (affectieve) beleving van de volger maar goed aanvoelt.

Dit proefschrift heeft een aantal implicaties voor de praktijk die eveneens in hoofdstuk 5 zijn besproken. Er kunnen vooral aanbevelingen betreffende crisis- en interim management worden gedaan. Wanneer er sprake is van crises, fusies of reorganisaties, waarin een crisis- of interim manager in korte tijd alles weer draaiend moet krijgen, kunnen hevige emoties vaker aanwezig zijn dan wanneer een organisatie zich in rustiger vaarwater begeeft. Ik betoog hier dat deze emoties er vaak niet voor niets zijn en juist een belangrijke functie hebben op de werkvloer, evenals in de meeste sociale settings (zie daarvoor bv. Keltner & Haidt, 1999; Parkinson, 1996). In zo'n crisis situatie zullen medewerkers eerder negatief gestemd zijn, hetgeen betekent dat de (interim) manager zeker ook negatieve emoties mag laten zien (met name kwaadheid) om een gevoel van actiebereidheid te initiëren onder de medewerkers en ze dus tot actie aan te sporen. De leidinggevende moet daarbij wel opletten of de medewerkers niet te aroused zijn (bv. erg onrustig of gestresst zijn), aangezien dan de (affectieve)

aansturing minder beklijft. In zulke gevallen zal de manager eerst de volgers moeten kalmeren, om daarna aan te sturen door middel van zijn of haar affectieve gedrag. Het proefschrift impliceert daarbij verder dat dit niet betekent dat de manager alleen een bullebak moet zijn die enkel negatief is in zijn of haar emoties, maar wanneer successen worden geboekt binnen de crisis, is een positief affectief geluid van de manager waarschijnlijk effectief. De medewerkers lijken dan haast wel te verwachten dat hun leidinggevende zich enthousiast opstelt over het behaalde (tussentijdse) succes en negatief leider affect zou dan juist averechts kunnen werken.

Emoties in leiderschap zijn dus van groot belang. In het aansturen van mensen, leggen emoties meer gewicht in de schaal dan men wellicht aanvankelijk zou bevroeden. Ik denk dan ook dat wetenschappers, trainers, opleiders, consultants, managers en leiders over het algemeen meer rekening zouden moeten houden met de rol van emoties.

"When the effective leader is finished with his work, the people say it happened naturally." Lao Tse

Biography Frederic Damen



Frederic Damen was born on January 31, 1976 in Eindhoven. He received his secondary education diploma from the 'Rythovius College' in Eersel in 1994. He studied Psychology from 1994-1999 in Utrecht and graduated in Social Psychology. After his studies he worked as a management trainee for the Dutch government (Economic Affairs & Financial Affairs), lived and worked for two years in Italy and started his PhD-project on the role of emotions in leadership in 2003. The present research was conducted at the Rotterdam School of Management (RSM) of the Erasmus University Rotterdam between January 2003 and December 2006. Frederic currently works as a business consultant for Atos Consulting.

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Taking the lead

The role of affect in leadership effectiveness

Good leadership is of great importance for the survival and growth of organizations. It is therefore crucial to understand what makes a leader effective. From a psychological point of view, effective leadership can be seen as a social process in which the essence may well be to motivate followers to perform well. In this process, affect – both of the leader and the follower – may play a pivotal role. This role, however, is still poorly understood and important topics that lack attention in scientific literature, are: valence of affect, the activation dimension of affect, and – surprisingly – the follower's role in determining effective leadership.

In this dissertation, emotions are seen as socially functional. Affect and emotions are therefore regarded as very influential in interactions between leaders and followers. In studying displays of leader affect and the affective characteristics of followers, I focused on positive and negative affect and high and low activation accompanying this affect. In six empirical studies, I report the effects of valence and activation on leader charisma and leader effectiveness from the perspective of the leader and the follower.

This dissertation thus gives central attention to affect and emotions in leadership processes and adds to the understanding of effective leadership. Since emotions are omnipresent in the workplace and in the leader-follower interactions, the results of the present research also have strong practical implications. Especially the implications for crisis- and interim management, and the management of significant changes in organizations have been given extra attention in this dissertation.

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