#### **DIANA RUS**

# The Dark Side of Leadership

**Exploring the Psychology of Leader Self-serving Behavior** 



## The Dark Side of Leadership:

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## Exploring the Psychology of Leader Self-serving Behavior

De donkere kant van leiderschap: Een exploratie van de psychologie van leider zelfzuchtig gedrag

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> by **Diana Rus**

born in Medias, Romania

Zafus ERASMUS UNIVERSITEIT ROTTERDAM

#### Doctoral Committee:

Promotor: Prof.dr. D. L. van Knippenberg

Other members: Dr. D. van Dierendonck

Prof.dr. D. De Cremer Prof.dr. A. D. Galinsky

Copromotor: Dr. B. M. Wisse

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## **Chapter 1: Introduction**

Leaders are central causal agents within organizational contexts (Katz & Kahn, 1966), and given the discretion afforded to them by virtue of their role (e.g., Mumford & Connelly, 1991; Williamson, 1963), their actions can be relatively self or groupserving. While leadership has typically been a key issue in organizational behavior research, the core of leadership research has primarily addressed factors affecting leadership effectiveness, that is, what makes leaders able to influence and motivate followers (e.g., Bass, 1990; Chemers, 2001; van Knippenberg, van Knippenberg, De Cremer, & Hogg, 2004; Yukl, 2002). One of the findings consistently emerging from this research has been that leaders are more effective when they display group-serving behaviors, that is, engage in acts that show the leader's commitment to the collective and that are (perceived to be) in the interest of the group (Choi & Mai-Dalton, 1999; De Cremer & van Knippenberg, 2002, 2004; van Knippenberg & Hogg, 2003; van Knippenberg & van Knippenberg, 2005; Yorges, Weiss, & Strickland, 1999) as opposed to engaging in behaviors that appear to be self-serving. Similarly, it has been pointed out that excessively high executive compensation, even if apparently justified, can have negative repercussions by weakening follower loyalty and increasing dysfunctional behaviors (Bok, 1993). Moreover, increased wage dispersion in organizations has been linked to lowered productivity, decreased cooperation, and increased turnover (e.g., Pfeffer & Davis-Blake, 1992; Pfeffer & Langton, 1993) and it has been argued that the ensuing inequality detrimentally impacts the collective interest (Aquino & Reed, 1998).

Whereas empirical research has consistently attested to the value of leader group-serving behaviors as well as to the detrimental impact of leader self-serving behaviors in achieving leadership effectiveness, over the last few years, public reactions have been particularly vehement to the staggering reports of top executives pursuing personal gain at the expense of their organizations (Herszhenhorn, 2008). The business press has become replete with headlines decrying top executives' lofty bonuses and lavish spending of company money at a time when rank and file employees were losing their livelihoods and their companies were on the brink of bankruptcy (Dash, 2007; Hagan, 2009; Jones, 2009). Accounts of leaders' enjoyment of lavish perquisites, such as the personal use of company jets, gargantuan severance and pay packages, as well as extravagant company sponsored retreats – to name just a few – have come to permeate the major media outlets, whereas names such as Ken Lay, John Rigas, Bernie Ebbers, and Dennis Kozlowski have become almost synonymous to executive profligate behavior. More recently, executives of corporations at the root of the subprime mortgage crisis have met with scathing criticism for their buoyant compensation

packages after their companies lost billions in the US housing market, and John Thain, the ousted CEO of Merrill Lynch was publicly chastised for spending \$ 1.2 Million on redecorating his downtown Manhattan office while his company was firing employees. Whereas accounts of leader self-serving behaviors have consistently drawn the ire of the general public and the body politic, the popular media has also extolled the behaviors of those leaders who prioritized their group's interests over their own and, who, for example, forfeited pay increases or bonuses at times when their companies were floundering (e.g., Fabrikant, 2006; Glater, 2008).

Clearly, there seems to be ample empirical evidence as well as a more general popular belief that, in the ubiquitously interdependent organizational context, where leaders are expected to use their position in the service of the collective interest, groupserving leaders are effective because they are better able to motivate subordinates to exert themselves in the pursuit of organizational goals. In contrast, self-serving leader behaviors appear to have detrimental consequences for the organization at large, for subordinates' motivation and performance as well as for leaders' reputation and status. Given the specter of negative consequences carried by leader self-serving behaviors, the question begging for an answer is: what causes leaders to act self-servingly rather than group-servingly? Unfortunately, the leadership literature remains largely mute on determinants of leader self versus group-serving behaviors. Accordingly, there may be value in furthering our understanding of potential antecedents of leader self versus group-serving behaviors, especially given the host of potential downstream consequences in terms of leader effectiveness and subordinate performance. Therefore, the broad research question serving as the red thread for the empirical work in this dissertation is:

### Why do some leaders act self-servingly while others act to benefit their groups?

To date, only a dearth of empirical research has investigated determinants of leader behaviors as compared to the voluminous body of work on leadership effectiveness. Moreover, the scant work considering determinants of leader behaviors has largely focused on individual difference factors (e.g., Bono & Judge, 2004; Chan & Drasgow, 2001; Judge, Bono, Ilies, & Gerhardt, 2002) as well as on factors affecting leadership development (Day, 2001; Dvir & Shamir, 2003), rather than on social-psychological factors. Additionally, this previous work has not specifically zoomed in on factors influencing relatively group or self-serving leader behaviors.

In contrast, the present research aims to introduce a social-psychological perspective in the study of leader behaviors and to identify specific psychological processes that may affect leader self versus group-serving behaviors. In short, the ongoing theme in this dissertation represents a quest to uncover social-psychological factors that may play a role in influencing leaders to engage in relatively self or group-serving actions. Specifically, I took a two-pronged approach: In chapters two and three, I investigated the effects of self-definition and power on information processing and subsequent leader resource allocations, whereas in chapters four and five, I focused on how some of the potential negative effects associated with high leader power could be mitigated via organizational procedural justice systems, leader perspective-taking and leader accountability.

#### **Leader Self-serving Behaviors**

"The salary of the chief executive of the large corporation is not a market award for achievement.

It is frequently in the nature of a warm personal gesture by the individual to himself."

(John Kenneth Galbraith)

So far I have discussed leader self versus group-serving behaviors without delving into definitions of these concepts. Given that these terms tend to be relatively value-laden and that different people will assign different meanings to them, below I will shortly expand on how self versus group-serving leader behaviors have been conceptualized in this dissertation.

Whereas one could argue that the previously presented examples of leaders hubristically plundering company coffers are simply the result of untamed greed or power, in this dissertation I take a slightly more nuanced view of such leader allocations and argue, for reasons to be set forth below, that leader allocation decisions are often ambiguous in nature. Although undoubtedly, there will be cases where leaders pursue their own interests out of greed, I argue that, greed set aside, the ambiguity often accompanying such decisions can lead to relatively self versus group-serving behaviors.

Typically, leaders do not only expend time and energy towards ensuring their group's success, but also face the more mundane task of allocating scarce resources. These allocations may pertain to monetary assets such as promotions, pay increases, bonuses, and stock options, but they may also pertain to other types of assets such as office space, parking lots or company cars. In the quintessentially interdependent organizational context, these resources are limited, and the more of the shared resource (e.g., bonus budget) the leader claims for the self, the less will be available for subordinates' enjoyment. Thus, leader self and group-serving behaviors are defined relative to each other: the more of the resource the leader self-allocates the more self-

serving he/she acts, whereas the less of the resource the leader self-allocates the more group-serving he/she acts.

The central argument regarding how leaders come to engage in relatively self versus group-serving behaviors rests on the assumption that resource allocation situations, where the leader distributes resources between the self and members of the group, are often ambiguous in nature. For example, equity considerations would imply that leaders are entitled to higher outcomes than subordinates (e.g., De Cremer & van Dijk, 2005; Samuelson & Allison, 1994). However, given the often ambiguous nature of leader and employee performance, the question as to how much higher these outcomes can be while still remaining justifiable, remains open to interpretation, leaving, for example, room for salient self-definitions to determine the type of information incorporated into the decision-making process. Contingent on how leaders make sense of such ambiguous situations, relatively self or group-serving behaviors ensue (i.e., the more of the resource leaders claim, the more self-servingly they act, because less is left for subordinates). Moreover, even when performance information is available and relatively clear-cut, the psychological experience of power could, for instance, influence whether the leader integrates such information in the decision-making process or not. Additionally, the psychological experience of power could color the framing of the decision by focusing leaders' attention on specific types of information, at the expense of others. In short, I argue that the inherent ambiguity of such allocation decisions allows for psychological processes such as salient self-definitions or the psychological experience of power to significantly color the framing of the situation and to predictably influence the decision outcomes.

#### Leader Self-definition Processes and the Psychology of Leader Power

While several factors could influence how leaders frame ambiguous resource allocation situations, in this dissertation, I argue that two factors intimately tied to the leader role – *self-definition as a leader* and the *psychological experience of power* – fundamentally influence leaders' framing of allocation situations and their subsequent allocation behaviors.

Leader Self-definition. The self-concept provides a powerful sense-making frame (Leary & Tangney, 2003), and the notion that self-relevant cognitions serve as action guides has been a staple of social-cognitive research for decades. Leadership researchers have, however, only recently begun to direct their attention to the self-concept (Kramer, 2003; Lord, Brown & Freiberg, 1999; Lord & Emrich, 2001; Lord & Hall, 2003, 2005; Shamir, House, & Arthur, 1993; van Knippenberg, van Knippenberg, De Cremer, &

Hogg, 2004). Moreover, with a few exceptions (see Engle & Lord, 1997; Kramer, 2003; Lord & Hall, 2005), leadership scholars dealing with the self-concept have focused on the effects of leadership on followers' self-concepts, thus neglecting leaders' self-concept and the role it might play in guiding leader decisions and behaviors. For reasons to be set forth below, in this dissertation, I argue that self-definition processes uniquely tied to the leadership role are germane in explaining leader behaviors.

Previous research has shown that, the self-concept - all the knowledge, ideas, beliefs and views of the self (Banaji & Prentice, 1994) – links the individual to the environment and proximally influences behaviors (Leary & Tangney, 2003; Lord et al., 1999; Markus & Wurf, 1987). In short, what we do is to a large extent a function of who we think we are (Csikszentmihaliy & Rochberg-Halton, 1981; Shamir, 1991; Shamir et al., 1993). The self-concept is however a dynamic, flexible construct consisting of an aggregate of different self-schemas tied to specific social contexts and situations (Lord et al., 1999; van Knippenberg et al., 2004). Once a specific self-schema is activated by the social context, it will directly regulate and guide behavior (Brown & Smart, 1991) by moderating the use of social information (Johnson, Selenta, & Lord, 2006). Whereas one's self-concept can include various role-related selves which can differ in their centrality and importance (Markus & Wurf, 1987), I argue that the "self as leader" will be an important behavioral guide in work-related contexts, especially for those individuals for whom the "self as leader" has become a central, important defining part of their self-concept.

Self-defining as a leader implies self-categorizing as a leader, seeing oneself as similar to the category prototype (Lord et al., 1999), incorporating the leader role into the self-concept and developing a core self-view as a leader. Building on Kramer's (2003) and Lord and Hall's (2005) argument that self-definition as a leader serves as a meta-structure guiding information processing, I argue that self-definition as a leader influences self-serving acts via its impact on the social information used to make sense of ambiguous resource allocations. Specifically, I argue that the more leaders self-define as leaders the more likely they are to rely on information about what other leaders do or did as well as on their beliefs about what an effective leader should do. Contingent on whether this information suggests acting in favor of the self or in favor of the group, relatively self or group-serving behaviors will ensue.

The Psychology of Leader Power. Whereas there is an almost natural association between power and the leader role, the two are not synonymous (Goodwin, 2003). Unfortunately, despite the historical and functional link between power and leadership (French & Snyder, 1959), to date, their study has not been very well integrated (Hollander & Offerman, 1990). Power has often been considered to be a primal force

governing social relationships and has usually been defined as asymmetric control over valued resources (Fiske, 1993; French & Raven, 1959; Keltner, Gruenfeld, & Anderson, 2003; Thibaut & Kelly, 1959). Moreover, it has been argued that this structural difference in the control over critical resources directly translates into psychological experience. The notion that power has metamorphic effects on the individual has already been noted by Kipnis (1972, 1976) and has been substantiated in more recent work on power (e.g., Anderson & Galinsky, 2006; Galinsky, Gruenfeld, & Magee, 2003; Magee, Galinsky, & Gruenfeld, 2007) deriving from the power-approach theory (Keltner et al., 2003). It has been further argued that power and its effects can become a psychological property of the individual independent of the context where power was originally activated (e.g., Bargh, Raymond, Pryor, & Strack, 1995; Chen, Lee-Chai, & Bargh, 2001; Galinsky et al., 2003; Magee et al., 2007).

The leader role effectively places individuals in a position where, next to motivating, coordinating and directing group members' efforts (e.g., De Cremer & van Knippenberg, 2003; Farmer & Aquinis, 2005; Hollander, 1980; Yukl & van Fleet, 1992; Yukl, Wall, & Lepsinger, 1990), they have the authority to make decisions that affect individual and group-level outcomes. The leader role thus entails control over valuable resources, and consequently, it entails the possession of power. However, there will inevitably be some variation in the structural amount of power available within the leader role, and I argue that these structural differences translate directly into different psychological experiences of power. From an approach-theory of power perspective (Keltner et al., 2003) I propose that the foundation of the relationship between power and the leader role resides within these psychological effects of power (see also Galinsky, Jordan, & Sivanathan, 2008). Because I posit that the amount of power psychologically experienced by individuals in leadership positions is a proximal motivator of their actions, in this dissertation, I examine the effects of varying amounts of power within the leader role on resource distributions.

Contrary to the often-held notion that power is the root cause of leader corruption and derailment, in this dissertation, I will show that the effects of power on leader self versus group-serving behaviors are contingent on both features of the individual (i.e., internal belief systems) as well as on features of the situation (i.e., procedural justice systems and accountability constraints). I base my analysis of the effects of power on the power-approach theory (Keltner et al., 2003) as well as on more recent research directly deriving from it. In short, the theory suggests that power has wide-ranging psychological and behavioral consequences by fundamentally altering the way individuals perceive the world, others and themselves. According to this theory, the experience of power tips the balance of activation between the behavioral approach and inhibition systems, which in

turn drive behavior and cognition. Power triggers the behavioral approach system, which is posited to regulate behavior associated with rewards. That is, power triggers a general approach tendency, increases attention to rewards, frees the individual from the shackles of normative constraints and facilitates disinhibited behavior. In contrast, powerlessness activates the behavioral inhibition system, which is analogous to an alarm system triggering avoidance and response inhibition. That is, low power is associated with an avoidance tendency, an increased focus on threats and punishments and inhibited behaviors. Whereas a deluge of recent research based on the power-approach theory has documented a number of both functional as well as dysfunctional effects associated with elevated power (for reviews see Galinsky, Jordan, & Sivanathan, 2008; Magee & Galinsky, 2008), at this point, I will merely mention three broad effects of power that will receive their due attention in the upcoming chapters of this dissertation: (1) power reveals the person (Chen et al., 2001; Galinsky et al., 2008; Lammers & Galinsky, 2009; Keltner et al., 2003); (2) power increases action-tendencies and a focus on rewards (Galinsky et al., 2003; Keltner et al., 2003), and (3) power reduces social attention (Galinsky, Magee, Inesi, & Gruenfeld, 2006; Gruenfeld, Inesi, Magee, & Galinsky, 2008; Overbeck & Park, 2006).

In short, in the upcoming empirical chapters of this dissertation, I will show that elevated leader power can lead to either self or group-serving behaviors contingent on leaders' belief systems regarding effective leadership as well as contingent on features of the organizational environment, such as the existence of procedural justice systems or accountability systems.

#### Overview of the Dissertation

In addition to the current introductory chapter, this dissertation consists of four empirical chapters as well as a final chapter where I present the findings and general conclusions of the present research. Whereas all four empirical chapters address the more general question of identifying antecedents and moderators of leader self versus group-serving behaviors, they are in essence stand-alone research articles and, as such, can be read independent of each other. As a result, there will be some overlap across chapters in terms of the theoretical development of my ideas. Moreover, because the empirical chapters have been developed in collaboration with my dissertation supervisors, I will use "we" instead of "I" from this point on, whenever I refer to the author(s).

In chapter two, we took a self-definition perspective (Johnson et al., 2006; Lord & Brown, 2004; Lord et al., 1999) to understand leader self-serving behaviors. Specifically,

we considered the interactive effect of self-definition as a leader and social information processing (i.e., the reliance on descriptive and injunctive information) on leader selfserving actions. Building on the notion that self-definition as a leader provides a sensemaking frame (Kramer, 2003; Lord & Hall, 2005) we predicted that the more leaders self-define as leaders, the more likely they are to rely on information about what other leaders do (i.e., descriptive information) or on beliefs about what an ideal leader should do (i.e., injunctive information) when allocating resources to the self. We expected that leaders self-defining more strongly as leaders would rely more on information about other leaders' self-allocations and on their effective leadership beliefs when selfallocating resources than those self-defining less strongly as leaders. These hypotheses were tested in a series of six studies - two laboratory experiments, two scenario experiments, and two cross-sectional surveys. In short, in this chapter, we argued that leaders are more likely to use social reference information when their self-definition is deeply embedded in those references. The main aim of this chapter was three-fold: (1) to put the study of the determinants of leader self and group-serving behaviors on the research agenda; (2) to introduce self-definition as a leader as a concept to be reckoned with when studying leader behaviors; (3) to show that self-definition as a leader interacts with both descriptive and injunctive information in determining leader self-serving behaviors.

In chapter three we investigated the effects of power on leader self-serving behaviors. Following recent insights from the approach-theory of power (Keltner et al., 2003) suggesting that power has wide-ranging psychological and behavioral consequences, we posited that leader power would influence the type of information (i.e., situational, context-specific versus internal, context-free information) leaders rely on in their resource distributions. Specifically, we predicted that high power leaders' resource allocations would be impacted less by contextual cues such as performance information than low power leaders' allocations. In contrast, we posited that high power leaders' allocations would be more a reflection of their internal role-related schemas concerning effective leadership than low power leaders' allocations. In short, we argued that higher leader power would not inevitably result in higher leader self-servingness. Rather, we purported that the more power a leader holds, the more the leader's actions become contingent on internal belief states and the less they become contingent on situational, contextual cues. Whether this results in more or less self-serving behaviors depends on the nature of these belief states and contextual cues. We tested these hypotheses in a series of five studies - two laboratory experiments, two scenario experiments and one cross-sectional organizational survey. Our aim in this chapter was three-fold: 1) to contribute to an understanding of how power informs leader decisions

by integrating research on power and leadership; 2) to show that power diminishes the strength of the situation and increases the relevance of leaders' beliefs about effective leadership; 3) to outline and demonstrate that this offers a viable perspective to understand variations in leader self versus group-serving behaviors.

In chapter four we changed the focus of our attention from the influence of selfdefinition processes and power on the processing of social information to potential ways of mitigating leader self-serving behaviors. Because some leader self-interested allocations appear to stem from a power-induced myopia that narrows the focus of attention to one's own vantage point, one way to mitigate the occurrence of such behaviors would be to increase the extent to which powerful individuals consider others' perspectives and interests. To this end, we argued that (1) perspective-taking can serve to broaden powerful individuals' attention to incorporate consideration of others' interests, and that (2) procedural justice systems can lead to increased perspective-taking on the part of powerful leaders. Our take on how procedural justice systems and perspective-taking can counteract a power-induced egocentric focus can be broken down into two interrelated positions that we developed and tested in the three studies (one laboratory experiment, one scenario experiment, and one cross-sectional organizational survey) reported in this chapter. First, in Study 1 we argued that the presence of procedural justice systems (Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Leventhal, 1980) should lead to increased perspective-taking on the part of powerful leaders. This in turn, should facilitate powerful leaders' active consideration of subordinate interests, resulting in lower self-allocations in contrast to conditions where procedural justice systems are absent. Second, in Study 2 and 3, we proposed that the effect of procedural justice systems on leader resource self-allocations would be stronger for high than for low power leaders, but only under conditions of no perspective-taking. When perspective-taking is high, the effect of procedural justice systems on leader resource self-allocations should be weaker. Specifically, we hypothesized that under conditions of no perspective-taking, high power leaders should self-allocate less resources when procedural justice systems are present than when they are absent. However, high power leaders in the high perspective-taking conditions should selfallocate about the same (low) amount of resources regardless of the presence or absence of procedural justice systems. The aim of this chapter was two-fold: 1) to identify two important factors influencing powerful leaders' resource allocations: procedural justice systems and leader perspective-taking; (2) to outline both the theoretical and practical relevance of procedural justice systems and perspective-taking in mitigating the negative effects of power in the service of leadership.

#### Introduction

In chapter five we focused on accountability as a potential moderator of the effects of power on leader self-serving behaviors. Specifically, we posited that subjecting leaders to accountability constraints should serve to mitigate some of the potentially negative effects associated with high power. We expected that accountable high power leaders should act less self-servingly than non-accountable high power leaders, whereas low power leaders should act less self-servingly than high power-leaders regardless of whether they are held accountable or not. This hypothesis was tested in one laboratory experiment as well as in one cross-sectional survey. The primary aim of this chapter was to provide first empirical evidence of the moderating role of accountability in the relationship between leader power and leader resource allocations.

In chapter six, we summarized the findings of the empirical chapters and attempted to discuss the more general implications – both theoretical and practical – of these findings for leadership research in general, as well as for the study of leader self-serving behaviors in particular.

# Chapter 2:Leader Self-definition and Leader Self-serving Behavior

The present research investigated the relationship between leader self-definition processes and leader self-serving behaviors. We hypothesized that self-definition as a leader interacts with social reference information (descriptive and injunctive) in predicting leader self-serving actions. Six studies (i.e., two laboratory experiments, two scenario experiments, and two cross-sectional surveys) showed that self-definition as a leader affected the extent to which leader resource self-allocations were informed by descriptive information (i.e., other leaders' self-allocations) and injunctive information (i.e., effective leadership beliefs). Leaders self-defining more strongly as leaders relied more on other leaders' self-allocations and on effective leadership beliefs when allocating resources to the self than those self-defining less strongly as leaders. The data suggest that leaders are more likely to use social reference information when their self-definition is deeply embedded in those references.

#### Introduction

Leaders can wield the discretion afforded to them by virtue of their role (Mumford & Connelly, 1991) to engage in relatively group or self-serving actions. While a lot of leaders1 use their position admirably and pursue group interests, others do not. Accounts of leader enjoyment of lavish perquisites, such as the personal use of company jets and gargantuan severance and pay packages (e.g., Dash, 2007) have come to permeate the business press. Public reactions have been particularly vehement to reports of leaders pursuing personal gain while their companies were on the brink of collapse (Herszhenhorn, 2008). Thus, the Dutch media scathingly covered the case of a local IT company facing bankruptcy, where the managers had raised their own salaries while the employees had agreed to a 20% salary cut. Next to the popular outcry against leader corruption and the blatant misallocation of resources, it has been argued that leaders who distribute resources to their own advantage harm group interests (Aquino & Reed, 1998). Empirical research has consistently shown a positive relationship between leader group-serving (vs. self-serving) behaviors and leader effectiveness (e.g., Choi & Mai-Dalton, 1999; De Cremer & van Knippenberg, 2002, 2004; van Knippenberg & van Knippenberg, 2005; Yorges, Weiss, & Strickland, 1999). Moreover, excessively high executive compensation has been linked to weakened follower loyalty and increased dysfunctional behaviors (Bok, 1993), whereas increased wage dispersion in organizations has been associated with lowered productivity, decreased cooperation and increased turnover (e.g., Pfeffer & Davis-Blake, 1992; Pfeffer & Langton, 1993). Given that leader self-serving actions carry the specter of negative consequences for the organization, as well as for subordinates' motivation and performance, the question begging for an answer is: What causes leaders to act self-servingly? Surprisingly, the leadership literature remains largely mute on determinants of leader self-serving behaviors. Accordingly, especially given the host of negative consequences associated with leader self-serving acts, there may be value in investigating antecedents of leader self-serving behaviors.

In this research we investigate determinants of leader self-serving allocations. Leaders do not only expend time and energy towards ensuring their group's success, but also face the more mundane task of allocating scarce resources (e.g., stock options, bonuses, office space). However, the more of the shared resource (e.g., bonus budget) the leader claims for the self, the less will be available for subordinates. Leaders making such resource allocations may face an ambiguous situation that requires them to engage in a sense-making process. Equity considerations imply that leaders are entitled to higher outcomes than followers (e.g., De Cremer & van Dijk, 2005; Samuelson & Allison,

1994). But given the ambiguous nature of leader and follower performance how much higher can these outcomes be while still remaining justifiable? In addition to equity concerns, temptations to use the opportunity to ensure good outcomes for the self on the one hand, and feelings of responsibility to prioritize the group's interests on the other hand, may further add to leaders' uncertainty about what behavior would be appropriate. Contingent on how leaders make sense of such ambiguous decisions, relatively self or group-serving behaviors ensue (i.e., the more of the resource leaders claim, the more self-servingly they act, because less is left for followers).

In this research we take a self-definition perspective (Johnson, Selenta, & Lord, 2006; Lord & Brown, 2004; Lord, Brown, & Freiberg, 1999) to understand leader self-serving behaviors. Specifically, we consider the interactive effect of self-definition as a leader and social information processing (i.e., the reliance on descriptive and injunctive information) on leader resource allocations. Building on the notion that self-definition as a leader provides a sense-making frame (Kramer, 2003; Lord & Hall, 2005) we predict that the more leaders self-define as leaders, the more likely they are to rely on information about what other leaders do or on beliefs about what an ideal leader should do when making resource self-allocations. Our aim is thus three-fold: (1) to put the study of the determinants of leader self and group-serving behaviors on the research agenda; (2) to introduce self-definition as a leader as a concept to be reckoned with when studying leader behaviors; (3) to show that self-definition as a leader interacts with both descriptive and injunctive information in determining leader self-serving behaviors. In doing so, we provide a conceptual and empirical basis for the study of this important but largely neglected issue in leadership research.

#### Self-definition as a Leader

The self-concept provides a powerful sense-making frame (Leary & Tangney, 2003), and yet, the leader's self-concept has been largely ignored in the study of leadership processes (for some exceptions see Engle & Lord, 1997; Lord & Hall, 2005). In this research, we argue that self-definition processes uniquely tied to the leadership role are germane in explaining leader behaviors.

The self-concept is a knowledge structure that helps individuals organize and make sense of their memory and behavior (e.g., Lord & Brown, 2004; Markus & Wurf, 1987), and it has been shown to proximally influence behaviors (Leary & Tangney, 2003). It is however also a dynamic, flexible construct consisting of an aggregate of different self-schemas tied to specific social contexts and situations (Lord et al., 1999; van Knippenberg, van Knippenberg, De Cremer, & Hogg, 2004). Once a specific self-

schema is activated by the social context, it will directly regulate and guide behavior (Brown & Smart, 1991) by moderating the use of social information (Johnson et al., 2006). Thus, one's self-concept can include various role-related selves such as being a parent or a leader. The 'self as leader' is however more likely to be a relevant behavioral guide in a work-related context than at home, while the 'self as parent' is more likely to inform behavior at home. These various self-conceptions can also differ in terms of their centrality and importance, that is, they can be core or peripheral self-conceptions. Central self-conceptions are more elaborate and predict information processing and behavior more strongly than peripheral self-conceptions (Markus & Wurf, 1987). Thus, 'the self as leader' will be a central, important defining part of their self-concept for some individuals in leadership positions, but not for others. Individuals holding leadership roles will differ in the extent to which they self-define as leaders and incorporate the leader role into their self-concept.

Support for the argument that leaders vary in the degree to which they self-define as leaders comes from two different areas of leadership research: the leader development literature (Lord & Hall, 2005) and a social-identity inspired analysis of leadership (Kramer, 2003). Lord and Hall (2005) postulate that across time and with mounting experience leaders incorporate the leader role into their self-identity and develop a selfconcept as leaders. Key to developing a leader identity is self-categorizing as a leader and developing a self-view as a leader. Moreover, this categorization as a leader can be independent of how the leader construes the actual role (i.e., the scripts that would directly guide role-behavior). More importantly, Lord and Hall contend that, once activated, this leader self-definition serves as a meta-structure guiding information processing, goal setting, and behavior. Similarly, Kramer (2003) ascertains in a qualitative study that leader identities, i.e., the self-categorizations they use to define who they are as leaders and the way in which they construe their leadership role, are intimately linked to their decisions. Self-definition as a leader is proposed to influence how the decision situation is framed and made sense of by providing a framework against which the consequences of actions are evaluated (Kramer, 2003).

In sum, self-defining as a leader implies self-categorizing as a leader, seeing oneself as similar to the category prototype (Lord et al., 1999), incorporating the leader role into the self-concept and developing a core self-view as a leader. Building on Kramer's (2003) and Lord and Hall's (2005) argument that self-definition as a leader serves as a meta-structure guiding information processing, we argue that self-definition as a leader influences self-serving acts via its impact on the social information used to make sense of ambiguous resource allocations.

#### Social Information Processing

In novel or ambiguous decision making situations that require sense-making, individuals often look at *similar others* or search their beliefs about *ideal others* for information about an appropriate course of action (Parks, Sanna, & Berel, 2001; Wood, 1996). That is, when uncertain about how to act, individuals rely on some sort of normative information. This can be information of the descriptive variety (i.e., what others do) as well as of the injunctive variety (i.e., what should be done) (Kallgren, Reno, & Cialdini, 2000). Accordingly, leaders making sense of ambiguous resource allocations may base their decisions on information about what other leaders do or did as well as on their beliefs about what an effective leader should do.

Social comparison theory (Festinger, 1954) predicts that, to reduce uncertainty, people compare themselves to similar others (e.g., Greenberg, Ashton-James, & Ashkanasy, 2007; Kruglanski & Mayseless, 1990). The comparison source can refer to actual people as well as to generalized standards or self-standards (Greenberg et al., 2007). The choice of the reference target is determined by its availability and relevance (Kulik & Ambrose, 1992). Thus, information about the comparison target has to be both available and relevant to solving the focal person's current conundrum. More importantly, others (concrete persons or abstractions of ideal types) with whom one shares some type of category membership are particularly salient and important sources of comparison information (Miller, Turnbull, & McFarland, 1988). Consequently, we propose that leaders making sense of resource self-allocations choose other leaders' behaviors (i.e., comparison to concrete persons sharing membership in the leader category) or their beliefs about effective ideal leaders (i.e., comparison to a generalized standard of an effective ideal leader) as the referent standard for their own behavior.

### Leader Social Comparisons

The workplace is a social comparison arena par excellence, and yet, only a dearth of organizational behavior research has taken a social comparison perspective (Brown, Ferris, Heller, & Keeping, 2007). The few undertaken studies, have, however, demonstrated the ubiquity of social comparison processes pertaining to resource entitlement perceptions. Wage comparisons with similar others on dimensions such as job-level and gender have been shown to influence wage entitlement beliefs (e.g., Belliveau, O'Reilly, & Wade, 1996; Major & Forcey, 1985). Social comparison processes have also been shown to affect leader compensation decisions. O'Reilly, Main, and Crystal (1988) found, in a field study of 105 firms, a strong positive relationship between

CEO compensation and compensation committee members' remuneration. Specifically, they showed that CEOs whose compensation committee chair earned more than the focal CEO (i.e., the CEO whose salary had to be determined) on average received more pay, even after controlling for economic determinants. The authors argued that committee members (CEOs of similar companies) faced with an ambiguous decision (i.e., how much to pay the CEO) used their own pay as a standard for setting the focal CEO's compensation.

In sum, social comparisons seem to have cognitive and behavioral consequences (Wood, 1996). One such behavioral consequence could be the use of the comparison target's behavior as a standard for determining one's own behavior. Leaders deciding on the size of their own outcomes are likely to see others holding similar structural positions in organizations as the relevant comparison other (i.e., other leaders) (e.g., Shah, 1998), and use these other leaders' outcomes as the diagnostic comparison standard. However, not all leaders will rely on information about other leaders' benefits equally strongly. The more leaders self-define as leaders, the more likely they are to see information pertaining to the leader category as relevant and diagnostic. Therefore, leaders who self-define more strongly as leaders are more likely to use descriptions of other leaders' actions or outcomes as the relevant standard informing their own decisions.

#### Effective Leadership Beliefs

Information about other leaders' compensation (i.e., descriptive normative information) cannot always be expected to be available. As already stated, the comparison target can be a *similar* 'other' as well as a generalized standard or *belief about* an *ideal* 'other' (i.e., injunctive normative information). Thus, we argue that a qualitatively different type of information, namely one's beliefs about the behaviors of an ideal other can also serve as a behavioral standard.

While some progress in leadership research has been made in understanding followers' (perceivers') schemas of leaders, relatively little attention has been devoted to leaders' own role-related schemas. The published record offers, however, some clues suggesting that they influence leader actions. Leaders' behavioral schemas pertaining directly to the leader role (i.e., implicit leadership theories) have been posited to represent a foundation for the generation of behaviors (Lord & Maher, 1993; Meindl & Ehrlich, 1987). These schemas contain the attributes, features, images, and ideas that define the schema category (Wofford & Goodwin, 1994).

One such specific type of leader behavioral schema is an effective leadership schema. Previous studies on implicit leadership theories have shown that *perceivers* hold

different schemas for effective and ineffective leaders (e.g., Lord, Foti, & De Vader, 1984; Phillips & Lord, 1982). Although we are not aware of any research examining leaders' own effective leadership schemas, it seems safe to assume that most leaders strive toward being effective. Whereas there is no universally accepted definition of leadership effectiveness, leaders undoubtedly hold beliefs about how an effective leader ought to behave and these beliefs can serve as behavioral standards. Thus, we posit that leaders hold a schema of an effective leader that "provides a self-standard about how the leader should behave in a given situation" (Lord & Maher, 1993, p. 132). We also propose that the content of leaders' effective leadership schemas can vary along the self vs. group-serving dimension. Some leaders may think that effective leaders should fully take advantage of their status by enjoying the perks associated with the position, while others may think that they should renounce their status symbols by forfeiting perks. We therefore argue that the content of effective leadership beliefs (ELBs) (self vs. groupserving) determines the self or group-orientation of leader resource allocations. However, not all leaders will rely equally strongly on ELBs. The extent to which leaders rely on ELBs is contingent on their self-definition as leaders. The more they self-define as leaders, the more they see beliefs about effective leadership as applicable to themselves and the more likely they are to use them in guiding their allocation decisions.

#### Overview of the Present Research

In sum, we predict that self-definition as a leader interacts with both descriptive and injunctive information in determining leader resource self-allocations. Contingent on the content of the information used, these allocations will be more or less self-serving. That is, we do not propose that high leader self-definition will unequivocally lead to leader self-serving behaviors. Rather, we expect leaders who self-define more strongly as leaders to act more self-servingly when descriptive information suggests that other leaders' outcomes are high or when they endorse self-serving effective leadership beliefs. In contrast, we expect leaders who self-define more strongly as leaders to act less self-servingly when descriptive information suggests that other leaders' outcomes are low or when they endorse group-serving effective leadership beliefs.

To test our hypothesized relationships between leader self-definition, descriptive and injunctive information and leader self-serving behaviors, we opted for a multiple-study, multiple-method approach. The first set of three studies (Study 1a, 1b, and 1c) focused on the interactive effect of leader self-definition and descriptive information about leader behavior. The second set of studies (Study 2a, 2b, and 2c) focused on the interaction between leader self-definition and injunctive information about effective

leadership. By thus testing essentially the same hypothesis for descriptive and injunctive information, we aimed to provide convergent evidence for the more general hypothesis that self-definition as a leader renders leader self-serving behavior contingent on social comparisons with standards informative about leader appropriate behaviors. Each set of three studies applied three different methodologies: a laboratory experiment, a scenario experiment, and a cross-sectional survey. The laboratory experiments (Study 1a and 2a) allowed us to establish causality in a situation in which participants were immersed in the leadership role. While these studies are high in experimental realism (Ilgen, 1986; Mook, 1983), they could potentially be criticized for their artificiality. To alleviate this potential criticism, we tested the same hypotheses in two scenario experiments (Study 1b and 2b). The scenarios described hypothetical organizational situations, thus increasing the mundane realism of the studies, while maintaining the experimental nature of the test (van Knippenberg & van Knippenberg, 2005). To determine whether the predicted relationships may also be observed in organizational settings, we conducted two cross-sectional surveys (Study 1c and 2c) in two heterogeneous samples of British organizational leaders.

To further establish the robustness of the predicted interactions, each set of three studies used different conceptualizations and thus different manipulations and measurements of the social information concept. Whereas at a higher level of abstraction other leaders' self-allocations and ELBs fall under the category of normative social information, at a lower level of abstraction these two types of information are conceptually different. Other leaders' self-allocations/outcomes provide descriptive information (i.e., what other leaders commonly do) without any claims as to the appropriateness of these actions, and thus without any intrinsic implications for leadership effectiveness. Effective leadership beliefs provide injunctive information (i.e., what an ideal leader should do) and thus inherently carry implications for 'good' leadership by sanctioning actions that are approved or disapproved of. Hence, Studies 2a, 2b, and 2c extend the findings of Studies 1a, 1b, and 1c by showing that self-definition as a leader does not only moderate reliance on information about others' actions, but also reliance on beliefs associated with 'good' leadership.

Self-definition as a leader implies self-categorizing as a member of the leader category as well as seeing the self as similar to the category prototype. Consequently, we operationalized self-definition as a leader by experimentally manipulating (1) the perceived similarity to typical leaders (Study 1a and 2a) and (2) self-categorization in terms of the leader category (Study 1b and 2b). In the two surveys (Study 1c and 2c) we measured self-definition as a leader via the self-definition manipulation checks used in our experiments. By manipulating the self-definition as a leader construct in two

different ways and by measuring it with the same items in the surveys, the confidence in our findings is bolstered.

Our dependent variable across our experimental studies is the amount of resources (e.g., points in Study 1a and 2a or money in Study 1b and 2b) leaders self-allocated out of a shared group resource. In the two surveys (Study 1c and 2c) we extended our dependent measure by tapping into leader behaviors, above and beyond simple monetary allocations. To this end, leaders reported how often they had engaged in certain behaviors during the past year (e.g., used their position to secure benefits for the self, claimed undue credit, did not invest time in a group project).

#### Study 1a, 1b, and 1c

Study 1a, 1b, and 1c tested the following hypothesis:

Hypothesis 1a: The effects of other leaders' self-allocations on leader self-allocations are stronger for leaders who self-define more strongly as leaders than for leaders who self-define less strongly as leaders.

In Study 1a participants were led to believe that they were the leader of a four-person group engaged in computer-mediated task performance. In reality, the group interaction was simulated via the experimental set-up. In Study 1b participants were presented with a hypothetical organizational scenario where they had to imagine being a leader and had to make a resource allocation decision. In Study 1c we measured self-definition as a leader, perceptions of other leaders' outcomes, and leader self-serving behaviors in a cross-sectional sample of organizational leaders.

#### Study 1a

#### Method

**Participants and design.** Eighty Dutch business administration students (32 females, 48 males) with a mean age of 20.53 years (SD = 2.45) participated voluntarily in the study in exchange for 10 euro (approximately 12 US dollars). Participants were randomly assigned to the conditions of a 2 (Self-definition as a leader: high vs. low) X 2 (Other leaders' self-allocations: high vs. low) between-subjects factorial design.

**Procedure.** Participants were invited in groups of four to participate in a computermediated study on "virtual group decision making" and were seated in individual cubicles, each equipped with a computer. All instructions and stimuli were presented on the computer screens and all dependent measures were recorded by the program software.

After being informed about random assignment to a four-person team, participants completed a purported cognitive style test. Cognitive styles were presented as individual differences and all styles were described as being equally desirable. Participants then learned that their team, similar to real-world teams, had a hierarchical team structure (i.e., a leader and three subordinates) and that the team members were to be rewarded for their work. The instructions also prompted participants to imagine that their team was an advertising firm trying to secure the campaign of at least one of three potential clients eager to introduce new products on the Dutch market. Their "firm" had to generate marketing names for three products (i.e., a perfume, a bicycle, and a cell-phone).

To ensure the credibility of the computer-mediated virtual group interaction space, we made participants wait for 2 minutes for the alleged establishment of a network connection between themselves and their teammates. After confirmation of the bogus connection, all participants were assigned the leader role ostensibly by comparing their test scores to those of other leaders in our study. The reasoning leading to participants' leader role assignment differed across conditions, and represented our self-definition as a leader manipulation. In the *high self-definition* condition, participants read that they had been chosen to be the leader because they were very similar to and representative of other leaders. Moreover, they had a lot in common with and exhibited qualities typical of these leaders. In the *low self-definition* condition, participants read that they were not very similar to and not representative of other leaders. They also had very little in common with and did not exhibit qualities typical of these leaders<sup>2</sup>.

The instructions stressed that, as leaders, they had to distribute tasks, motivate subordinates to perform well (via email), and synthesize the results of subordinates' idea-generation efforts. Leaders did not generate any ideas (under the pretext that they had to complete other tasks). All leaders took the opportunity to send emails to their 'subordinates'. They spent an average of 6 minutes composing the emails and wrote an average of 112 words. There were no significant differences among conditions in the amount of time spent writing emails or in the number of words used suggesting that all participants took the leader role seriously and believed to be working in a real team.

The team could earn a 450-point total for task-performance. Each subordinate earned a 60-point minimum with the possibility of accruing performance-contingent bonus points. The final number of points each subordinate earned was thus kept ambiguous. Participants read that, as leaders, they could self-award points out of the 450-point total (i.e., our main dependent measure). The more the leader self-allocated,

the less was left in the "team pool" for subordinates' bonuses. Participants were then presented with our other leaders' self-allocations manipulation. Participants in the *high* (vs. low) other leaders' self-allocations conditions read that other leaders had self-allocated on average 180 points (i.e., high self-allocations) or 90 points (i.e., low self-allocations).

**Dependent measures.** Our main dependent measure represented the number of points leaders self-awarded. To ensure that participants had a real incentive to self-allocate points, we informed them that at the end of the study everyone would enter a few 50 euro individual lotteries. The winners were to be determined by random drawing. Each compensation point counted as one lottery entry. Thus, the more points participants self-awarded, the higher were their chances of winning one of the 50 euro prizes. Finally, after answering our dependent measures, including some demographic indicators such as age, gender, and study major, participants were thanked for their participation, paid, and debriefed. At the end of the experiment we also randomly probed participants for suspicion regarding the reality of the virtual team. None of them indicated any suspicion. All dependent measures, unless otherwise stated, were measured on a 7-point scale ranging from strongly disagree (1) to strongly agree (7).

**Manipulation checks.** As a check of our self-definition manipulation participants answered a 7-item scale (adapted from van Knippenberg & van Knippenberg, 2005) (e.g., "I see myself as a leader."; "Being a leader is a central part of who I am."; "I am a typical leader."; "Being a leader is important to who I am."). All items were combined into an average self-definition score (Cronbach's  $\alpha = .88$ ). As a check of our other leaders' self-allocations manipulation, participants answered the following question: "Other leaders in this study have self-allocated on average (1) 90 points; (2) 180 points; (3) I did not receive any information on that".

#### Results

In all analyses of variance (ANOVAs) self-definition as a leader (high/low) and other leaders' self-allocations (high/low) were factors in the design.

**Manipulation checks.** A two-way ANOVA on the average self-definition score revealed only a significant main effect of self-definition, F(1, 76) = 39.14, p < .001,  $\eta^2_p = .34^3$ , indicating that leaders in the high self-definition condition (M = 4.73, SD = .93) self-defined more as leaders than those in the low self-definition condition (M = 3.35, SD = 1.08). As a testament to our other leaders' self-allocations manipulation, 78 out of 80 participants answered the multiple-choice question correctly. The two individuals answering incorrectly chose the "I did not receive any information on that" option, and they were distributed across two different conditions<sup>4</sup>. Thus, we may conclude that our manipulations were successful<sup>5</sup>.

**Leader allocation decision.** A two-way ANOVA on the number of points leaders self-awarded revealed a main effect of other leaders' self-allocations, F (1, 76) = 33.58, p < .001,  $\eta_p^2$  = .30. Participants presented with high other leaders' self-allocations self-awarded more points (M = 137.85, SD = 37.00) than those presented with low other leaders' self-allocations (M = 97.07, SD = 26.76). This main effect was however qualified by a Self-definition X Other leaders' self-allocations interaction, F (1, 76) = 5.11, p = .02,  $\eta_p^2$  = .06 (see Figure 2.1).

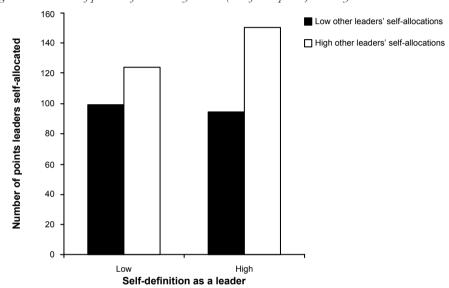


Figure 2.1 Number of points self-allocated by leaders (out of 450 points) in Study 1a

We had predicted that leaders self-defining more strongly as leaders would rely more on information about other leaders' self-allocations than leaders self-defining less strongly as leaders. A simple main effects analysis indicated that leaders in the high self-definition condition self-awarded more points when other leaders' self-allocations were high (M=150.65, SD=38.25) than when they were low (M=94.52, SD=18.96), F(1,76)=33.29, p<.001,  $\eta^2_p=.30$ , CI (diff) = between 36.75 and 75.50. Leaders in the low self-definition condition also self-awarded more points when other leaders' self-allocations were high (M=124.37, SD=31.16) than when they were low (M=99.75, SD=33.38), F(1,76)=6.09, p=.01,  $\eta^2_p=.07$ , CI (diff) = between 4.75 and 44.48. However, as the effect sizes indicate, this effect was weaker than the one found for leaders self-defining more strongly as leaders. Also in line with our hypothesis, we found that when other leaders' self-allocations were high, leaders in the high self-definition

condition self-allocated more points (M = 150.65, SD = 38.25) than those in the low self-definition condition (M = 124.37, SD = 31.16), F(1, 76) = 6.94, p = .01,  $\eta^2_p = .08$ , CI (diff) = between 6.41 and 46.14. Thus, leaders self-defining more strongly as leaders included high other leaders' self-allocations more readily into their decision than leaders self-defining less strongly as leaders. No such differences between the high and low self-definition conditions were found when other leaders' self-allocations were low.

#### Study 1b

Study 1a provides important first evidence for our hypothesis. However, replications generally bolster confidence in conclusions – especially replications with different manipulations of key independent variables. As already stated, two related factors feed into self-definition as a leader: (1) similarity to the category prototype and, (2) the actual self-categorization and incorporation of the category into the self-concept. In Study 1a our self-definition manipulation tapped primarily into the typicality/similarity dimension. In Study 1b we therefore manipulated self-definition as a leader more directly as self-categorization in terms of the leader category.

#### Method

**Participants and design.** Seventy-four Dutch economics students (29 females, 45 males) participated voluntarily in a series of unrelated studies in exchange for 10 euro (approximately 12 US dollars). Participants' mean age was 21.14 years (SD = 2.06) and they were randomly assigned to the conditions of a 2 (Self-definition as a leader: high vs. low) X 2 (Other leaders' self-allocations: high vs. low) between-subjects factorial design.

**Procedure.** Participants were invited individually to the laboratory and were seated in separate cubicles equipped with a computer. All instructions, manipulations and the recording of the dependent measures were administered via the computer. Participants were informed that they would read the description of an organizational situation and that they had to answer a few questions pertaining to it. The scenario text prompted participants to imagine that they were the R&D director of a pharmaceutical company directly leading a department of 31 employees.

Then we introduced our self-definition as a leader manipulation. In the *high self-definition* condition participants read that: "You are sitting at your desk thinking about your job. You realize that being a leader has become an important part of who you are. Only yesterday you were playing golf with a new member at your golf-club, and when he asked about your job, your answer was surprisingly simple: I lead other people!!! I am a leader." In the *low self-definition* condition participants read that: "You are sitting at your

desk thinking about your job. You realize that being a leader has not become an important part of who you are. Only yesterday you were playing golf with a new member at your golf-club, and when he asked about your job, your answer was surprisingly simple: I do not lead other people!!! I am not a leader."

The scenario text continued by having the director's secretary interrupt him/her by bringing an urgent matter to his/her attention: the department's salary budget for the year. The departmental salary budget was 2,450,000 euro. Based on company policy, each of the 31 employees earned, on average, a fixed salary of 57,200 euro, with the possibility of earning a bonus. Company policy did not dictate the directors' salaries and they could decide on how much they would earn out of the 2,450,000 euro allocated to the department. The remainder of the 2,450,000 (after subtracting the leader's self-assigned salary and the employees' fixed salaries) was to be used for employees' bonuses. The text stressed that leaders were not eligible for a bonus and that they would need to factor that into their salary self-allocation. Then we introduced our other leaders' self-allocations manipulation. Participants either read that other directors had self-allocated an average salary of 224,000 euro (i.e., high self-allocations) or 112,000 euro (i.e., low self-allocations).

**Dependent measures.** Our main dependent measure represented the amount of money participants self-awarded. After answering our dependent measures, participants were thanked, paid, and debriefed. All dependent measures, unless otherwise stated, were measured on a 7-point scale ranging from *strongly disagree* (1) to *strongly agree* (7).

**Manipulation checks.** As a check of our self-definition manipulation participants answered the same 7-item scale as in Study 1a (Cronbach's  $\alpha$  = .97). As a check of our other leaders' self-allocations manipulation, participants answered the following question: "Other leaders have self-allocated on average (1) 112,000 euro; (2) 224,000 euro; (3) I did not receive any information."

#### Results

In all analyses of variance (ANOVAs) self-definition as a leader (high/low) and other leaders' self-allocations (high/low) were factors in the design.

**Manipulation checks.** As expected, a two-way ANOVA on the average self-definition score revealed only a significant main effect of self-definition, F (1, 70) = 143.55, p < .001,  $\eta^2_p = .67$ , with participants in the high self-definition condition (M = 6.21, SD = .79) self-defining to a greater extent as leaders than participants in the low self-definition condition (M = 2.65, SD = 1.59). All participants answered our other leaders' self-allocations manipulation check question correctly, leading us to conclude that our manipulations were successful.

Leader allocation decision. Not surprisingly, a two-way ANOVA on the amount of money leaders self-awarded revealed a main effect of other leaders' self-allocations, F (1, 70) = 123.02, p < .001,  $\eta^2_p = .64$ . When other leaders' self-allocations were high participants self-allocated more money (M = 208,905.60, SD = 57,242.46) than when other leaders' self-allocations were low (M = 110,627.80, SD = 18,266.97). However, this main effect was qualified by our predicted Self-definition X Other leaders' self-allocations interaction, F(1,70) = 10.20, p = .002,  $\eta^2_p = .13$  (see Figure 2.2).

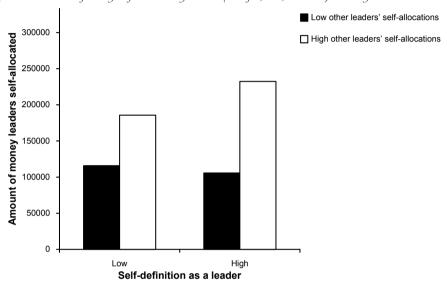


Figure 2.2 Amount of money self-allocated by leaders (out of 2,445,000 euro) in Study 1b

In line with Study 1a, a simple main effects analysis indicated that leaders in the high self-definition condition self-awarded more money when other leaders' self-allocations were high (M=231,866.67, SD=44,617.20) than when they were low (M=105,281.82, SD=13,238.81), F(1,70)=100.25, p<.001,  $\eta^2_p=.59$ , CI (diff) = between 101,370.87 and 151,798.82. Leaders in the low self-definition condition also self-awarded more money when other leaders' self-allocations were high (M=185,944.44, SD=59,275.25) than when they were low (M=115,973.68, SD=21,732.25), F(1,70)=31.74, p<.001,  $\eta^2_p=.31$ , CI (diff) = between 45,203.08 and 94,738.43. However, as the effect sizes indicate, this effect was weaker than the one found for leaders self-defining more strongly as leaders. Similar to Study 1a, when other leaders' self-allocations were high, leaders in the high self-definition condition (M=231,866.67, SD=44,617.20) self-awarded more money than those in the low self-definition condition (M=185,944.44, SD=59,275.25), F(1,70)=12.10, p=.001,  $\eta^2_p=.15$ , CI (diff) = between 19,596.97

and 72,247.47. No such differential information use between the high and low self-definition conditions was found when other leaders' self-allocations were low.

#### Study 1c

While Studies 1a and 1b yield consistent causal evidence in support of our hypothesis, they could be criticized for their reliance on student samples in tightly controlled, potentially artificial lab settings. Study 1c sought to bring the test of our hypothesis closer to real organizational settings and see whether leader self-definition moderates the effect of social reference information on self-serving behaviors in a sample of British leaders. Furthermore, the dependent measures in Study 1a and 1b tap exclusively into the allocation of monetary resources, whereas leader self-serving behaviors may extend to other domains. In Study 1c we expanded the scope of our dependent variable by scrutinizing a greater variety of leader self-serving behaviors which go beyond and above simple monetary allocations (e.g., time investment, credit allocated for jobs performed). Study 1c is thus not only an extension of our earlier findings to a field setting in a different country, but it also taps into a greater variety of leader self-serving acts.

#### Method

**Procedure.** The study was conducted online as a leadership survey. Respondents were recruited via a panel firm located in the United Kingdom. Emails with personalized survey links were sent to a panel of individuals in managerial or supervisory positions who had a minimum of 3 direct subordinates and a minimum of 3 years of work experience.

Importantly, the survey was conducted in line with recommendations given in the field (Birnbaum, 2004; Dillmann, 2007). By utilizing server-sided survey programming we avoided common technical selection biases, which generally exclude people who do not meet special browser requirements (e.g., Java Script). Moreover, prior to going live with the survey we pre-tested the layout on a number of different computers varying the browsers used as well as the screen resolutions to ensure that the survey would look the same on different systems. We also assigned each potential respondent a unique session ID, resulting in individualized survey links that made it impossible for any single respondent to participate in the survey more than once. To increase response rate respondents received a monetary incentive for their participation. On the first page of the survey we guaranteed the anonymity and confidentiality of individual surveys and emphasized that participation was voluntary. Respondents interested in our results were

given the opportunity to provide their email addresses in a different database so that names and email addresses could not be linked to individual responses. These measures taken to prevent common pitfalls of online research lead us to be at least as confident about the quality of our data as we would have been had we conducted a traditional paper and pencil survey.

**Sample.** One hundred and forty respondents meeting the study's requirements completed the survey out of a total of 209 emails sent out to potential respondents (66.9% response rate). The sample's age ranged from 25 to 62 years ( $M_{\rm age}$  = 40.54, SD = 10.24) and women made up 41.4% of the sample. Respondents' average fulltime work experience was 20.76 years (SD = 11.36), their average tenure in a managerial or supervisory position was 10.99 years (SD = 8.61), and their average tenure on the current job was 6.15 years (SD = 5.19). All respondents worked in private organizations and had on average 11.8 subordinates (SD = 15.36). Respondents with a higher education degree (i.e., Bachelor degree or higher) made up 56.4% of the sample. The majority of respondents (87.15%) held management or senior management positions.

**Measures.** Self-definition as a leader was measured with a 7-item, 5-point scale (1 = strongly disagree, 5 = strongly agree) identical to the manipulation checks used in Study 1a and 1b. All items were combined into one average leader self-definition score. Whereas in Study 1a and 1b we had manipulated information about other leaders' actions by varying the height of their self-allocations, in the survey we measured this reference information via a 3-item, 5-point scale (1 = significantly less than I, 5 = significantly more than I) designed to closely resemble our experimental manipulations ("Other leaders holding similar positions earn on a yearly basis"; "Other leaders holding similar positions have access to certain privileges (e.g. stock-options, company car, preferential parking space)"; "Other leaders holding similar positions make use of certain privileges (e.g. stock-options, company car, preferential parking space)") The items were combined into one average other leaders' outcomes score.

A 9-item scale, inspired by work by Choi and Mai-Dalton (1998, 1999) and van Knippenberg and van Knippenberg (2005) on self-sacrificial behavior comprised our measure of *leader self-serving behavior*. Arguably, leaders can act self-servingly by securing higher monetary benefits for themselves, but they can also act self-servingly by making self-serving causal attributions such as taking unwarranted credit for group accomplishments or by denying responsibility for failure on group projects (cf. Weary Bradley, 1978). While in Study 1a and 1b, our dependent measure tapped into the allocation of monetary resources, in the survey we also measured the allocation of other resources, such as time investment and credit allocated for jobs performed. Our self-serving behaviors measure in the survey is thus more encompassing than our measure in

Study 1a and 1b. For each of the 9 items of the scale, respondents had to indicate the number of times they had performed the described behavior during the past year (1 = never, 2 = rarely; 3 = sometimes; 4 = usually; 5 = always). The 9 items of our scale were the following: "I have negotiated a bonus for myself that was substantially higher than the bonus my subordinates received."; "I have used my leadership position to obtain benefits for myself."; "I have pursued my personal interests, even if those interests were not serving my group's interests."; "I did not put my own position at risk, even when I thought that this could have helped promote my group's goals."; "Instead of giving credit to my subordinates for jobs requiring a lot of time and effort, I took the credit myself."; "Although I was partly to be blamed, I did not take personal responsibility for my group's failure to meet a goal."; "I have shifted the blame for a mistake of mine onto one of my subordinates."; "I have left the office early although this meant that my subordinates had to finish some of my work."; "I did not work overtime, although this would have helped my group meet its goals."

#### Results

We first performed a principal component analysis with OBLIMIN rotation of our predictor variable items (i.e., self-definition as a leader and other leaders' outcomes). This analysis yielded a two-factor solution with all items loading .65 or higher on the intended scale and all cross-loadings below |.18|. Then we performed a principal component analysis of the items comprising our dependent variable (i.e., leader self-serving behaviors). This analysis yielded a one-factor solution with item loadings of .65 or higher. Means, standard deviations, and intercorrelations for the study variables are displayed in Table 2.1.

Table 2.1 Means, Standard Deviations, and Intercorrelations for Study 1c

	М	SD	(1)	(2)	(3)
(1) Leader self-definition	3.50	.67	(.87)		
(2) Other leaders' outcomes	3.22	.62	20*	(.84)	
(3) Leader self-serving behaviors	2.28	.47	12	.02	(.87)

*Note.* Cronbach's alphas are displayed on the diagonal. N = 140 (listwise).

<sup>\*</sup> p < .05.

To test our hypothesis we conducted a hierarchical regression analysis in which leader self-serving behaviors were predicted by main effect terms (self-definition as a leader and other leaders' outcomes) at Step 1 and the interaction term at Step 2 (see Table 2.2)<sup>6</sup>.

Table 2.2 Summary of Regression Analysis for Leader Self-definition and Other Leaders' Outcomes Predicting Leader Self-serving Behaviors in Study 1c

Variable	b	SE b	ß	t	Þ
Step 1					
Leader self-definition	09	.06	13	-1.48	.14
Other leaders' outcomes	00	.06	00	05	.95
Step 2					
Leader self-definition	06	.06	08	99	.32
Other leaders' outcomes	.11	.07	.15	1.53	.12
Leader self-definition x Other leaders' outcomes	.21	.07	.29	3.01	.003

*Note.* The explained variance of Step 1 was  $R^2 = .01$ . Step 2 explained an additional variance of  $R^2$  change = .06. N = 140 (listwise).

Following Aiken and West (1991), self-definition as a leader and other leaders' outcomes were centered by subtracting the mean from each score, and the interaction term as well as the main effects were based on the centered scores. Table 2.2 shows the regression results: Step 1 did not explain a significant proportion of variance in leader self-serving behaviors. However, Step 2 did and it revealed our predicted Self-definition as a leader X Other leaders' outcomes interaction. To further analyze the interaction, we conducted simple slopes analyses (Aiken & West, 1991). As predicted, other leaders' outcomes yielded a positive relationship to leader self-serving behaviors when leaders self-defined more strongly as leaders (1 SD above the mean;  $\beta = .33$ , p = .01), but it did not when they self-defined less strongly as leaders (1 SD below the mean;  $\beta = .03$ ,  $\beta = .07$ ) (see Figure 2.3). Thus, in line with the findings of Study 1a and 1b, we found that

other leaders' outcomes are more strongly related to leader self-serving behaviors, the more strongly leaders self-define as leaders.



Figure 2.3 Leader self-ratings of self-serving actions in Study 1c

## Discussion Study 1a, 1b, and 1c

In line with our hypothesis, the present data suggest that self-definition as a leader influences the extent to which leaders rely on their peers' behaviors when making allocation decisions. That is, self-definition as a leader moderates the relationship between descriptive normative information and self-serving behaviors. Leaders self-defining more strongly as leaders acted more self-servingly when other leaders' outcomes were high than when they were low, while those self-defining less strongly as leaders were less influenced by this type of information. Also, in Study 1a and 1b leaders who self-defined more strongly as leaders and had perceived other leaders to have self-allocated a large amount of resources acted more self-servingly than leaders who self-defined less strongly as leaders (and were privy to the same information about other leaders' self-allocations).

Studies 1a, 1b, and 1c used the same conceptualization of social information, that is, information about what similar others did. Hence, they remain mute as to whether self-definition as a leader also moderates the relationship between other types of information (e.g., beliefs about what one should do) and leader self-allocations. To investigate

whether self-definition as a leader also influences reliance on injunctive normative information, in Studies 2a, 2b, and 2c we tested our more general hypothesis by using a different conceptualization of social information, namely effective leadership beliefs.

# Study 2a, 2b, and 2c

In ambiguous resource allocation contexts, leaders are posited to not only use information about what other (real) leaders do, but to also use their beliefs about what ideal leaders should do. Therefore, in Studies 2a, 2b, and 2c we tested the following hypothesis:

Hypothesis 1b: The effects of effective leadership beliefs on leader resource allocations are stronger for leaders who self-define more strongly as leaders than for leaders who self-define less strongly as leaders.

## Study 2a

#### Method

**Participants and design.** Sixty-nine Dutch undergraduates (24 females, 45 males) with a mean age of 21.75 years (SD = 2.06) were invited to participate in a study on virtual groups and were paid 10 euro (approximately 12 US dollars) for their time. They were randomly assigned to the conditions of a 2 (Self-definition as a leader: high vs. low) X 2 (ELBs: self-serving vs. group-serving) between-subjects factorial design.

**Procedure.** We followed the paradigm developed for Study 1a with minor modifications. The main difference was the introduction of our ELBs (self-serving vs. group-serving) manipulation. Previous studies (e.g., Chiu, Hong, & Dweck, 1997) have successfully manipulated belief systems by providing participants with different reading passages claimed to represent research findings pertaining to the beliefs to be manipulated. Participants in the Chiu et al. (1997) studies were provided with a purported *Psychology Today* article persuading readers of one of two sets of beliefs.

In the present study, we used a similar set-up for our ELBs manipulation. Participants were presented with excerpts from a purported *Harvard Business Review* (HBR) article describing research findings concerning leader effectiveness. The *self-serving version* of the article claimed that research had found leaders pursuing their own goals, investing minimal resources in the group, and enjoying traditional leader perks to be most effective (e.g., "Dr. Hull's research team also found that leaders who maintained or increased traditional benefits such as a large office, an expensive company car, or

company stock option bonuses were in the long run more effective. In Dr. Hull's opinion: These leaders increased some of their status symbols and gained increased respect from their followers."). The *group-serving version* of the HBR article claimed that research had shown leaders pursuing group goals, investing a large amount of resources in the group, and giving up on traditional leader perks to be most effective (e.g., "Dr. Hull's research team also found that leaders who gave up traditional benefits such as a large office, an expensive company car, or company stock option bonuses were in the long run more effective. In Dr. Hull's opinion: These leaders gave up some of their status symbols and gained increased respect from their followers.").

The ELBs manipulation was introduced while participants were waiting for their cognitive style test results and thus before they were assigned the leader role. Participants were informed that while waiting for the results they could read an excerpt from a HBR article on leader effectiveness. All participants took the time to read the alleged article.

While the number of points the team could earn remained the same as in Study 1a (i.e., 450 points) we increased subordinates' base salary from 60 to 90 points, because in our previous study a number of participants had indicated that 60 points represented a low subordinate salary. Before the actual debriefing, participants answered some funneled debriefing questions testing for hypothesis guessing. None of our participants had correctly guessed our hypothesis. During debriefing participants were presented with both versions of the alleged HBR article, and after ensuring that they understood its entirely fabricated nature, they were thanked and paid.

**Dependent measures.** As in Study 1a our main dependent variable was the number of points leaders self-awarded. Participants also answered demographic questions pertaining to their age, gender and study major. All dependent measures, unless otherwise stated, were measured on a seven-point scale ranging from *strongly disagree* (1) to *strongly agree* (7).

**Manipulation checks.** To check for the success of our self-definition manipulation we used the same leader self-definition scale as in Studies 1a, 1b, and 1c (7 items; Cronbach's  $\alpha = .90$ ). To check the effectiveness of our ELBs manipulation, participants answered 10 questions (5 pertaining to the self and 5 to the group-serving ELBs) assessing their agreement with statements made in the HBR excerpt (e.g., "An effective leader is a leader who stresses group goals"; "An effective leader is a leader who stresses personal goals"). The five group-oriented items were reverse-scored and all items were combined into an average ELBs score (Cronbach's  $\alpha = .91$ ).

#### Results

In all analyses of variance (ANOVAs) self-definition as a leader (high/low) and effective leadership beliefs (self-serving/group-serving) were factors in the design.

**Manipulation checks.** Testifying to the success of our manipulations, a two-way ANOVA on the average self-definition score yielded only a significant main effect of self-definition, F(1, 65) = 24.39, p < .001,  $\eta^2_p = .27$ , with participants in the high self-definition condition (M = 4.81, SD = .84) self-defining more strongly as leaders than those in the low self-definition condition (M = 3.46, SD = 1.33). A two-way ANOVA on the average ELBs score revealed only a significant main effect of ELBs, F(1, 65) = 36.86, p < .001,  $\eta^2_p = .36$ , with participants in the self-serving ELBs condition (M = 4.64, SD = 1.16) being more likely to endorse self-serving ELBs than participants in the group-serving ELBs condition (M = 3.09, SD = .85).

**Leader allocation decision.** A two-way ANOVA on the number of points leaders self-awarded revealed a main effect of ELBs, F (1, 65) = 10.18, p = .002,  $\eta^2_p$  = .13, with participants in the self-serving ELBs condition (M = 123.00, SD = 24.24) self-allocating more points than participants in the group-serving ELBs condition (M = 105.50, SD = 22.46) (see Figure 2.4).

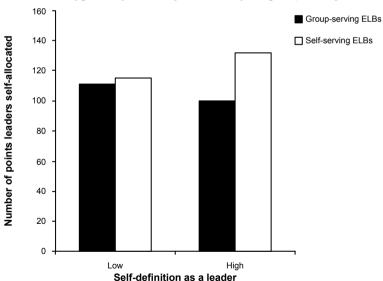


Figure 2.4 Number of points self-allocated by leaders (out of 450 points) in Study 2a

As predicted, the main effect of ELBs was qualified by a Self-definition X ELBs interaction, F (1, 65) = 6.28, p = .01,  $\eta^2_p$  = .09. Thus, participants in the high self-definition condition claimed more points when they endorsed self-serving ELBs (M = 131.25, SD = 23.97) than when they endorsed group-serving ELBs (M = 100.00, SD = 26.18), F (1, 65) = 16.14, p < .001,  $\eta^2_p$  = .19, CI (diff) = between 15.71 vs. 46.78. No such differential impact of ELBs on point allocations was shown by leaders in the low self-definition condition. The simple main effects analysis also indicated that in the self-serving ELBs condition, those self-defining more strongly as leaders (M = 131.25, SD = 23.97) self-allocated more points than those self-defining less strongly as leaders (M = 114.75, SD = 22.38), F (1, 65) = 4.72, p = .03,  $\eta^2_p$  = .07, CI (diff) = between 1.33 and 31.66. No such differences were found between leaders high and low in self-definition endorsing group-serving ELBs.

# Study 2b

#### Method

**Participants and design.** One hundred and seven Dutch students (53 females, 54 males), receiving payment of 3 euro (approximately 4 US Dollars) for their time, were randomly assigned to the conditions of a 2 (Self-definition as a leader: high vs. low) X 2 (ELBs: self-serving vs. group-serving) between-subjects factorial design. Participants' mean age was 20.81 years (SD = 2.73).

**Procedure.** Participants were approached in the student cafeterias of a Dutch University and asked whether they wanted to fill in a short paper and pencil questionnaire in exchange for 3 euro. The same scenario as in Study 1b was used, with the only difference being the replacement of our other leaders' self-allocations manipulation with our ELBs manipulation. Following the same self-definition as a leader manipulation as in Study 1b participants were asked to visualize themselves sitting in their office reminiscing about the things they had learned at an Executive Coaching Seminar on leadership effectiveness.

At this point we introduced our ELBs (self vs. group-serving) manipulation, which was similar to the ELBs manipulation used in Study 2a. Participants in the *self-serving ELBs* condition read: "You found out that effective leaders set their personal goals first; are driven by pursuing their own results, greatly benefit from having special privileges such as access to a company jet and stock-options and generally invest few of their resources and energy into their group.", while participants in the *group-serving ELBs* condition read: "You found out that effective leaders set their group's goals first; are driven by pursuing their group's results, greatly benefit from relinquishing special

privileges such as access to a company jet and stock-options and generally invest a lot of their resources and energy into their group." The rest of the text was identical to Study 1b.

**Dependent measures.** Identical to Study 1b, our main dependent measure represented the amount of money participants self-awarded out of the 2,445,000 euro budget. After answering our dependent measures, participants were thanked for their participation, paid, and debriefed.

**Manipulation checks.** All items comprising our manipulation checks were again measured on a seven-point scale ranging from *strongly disagree* (1) to *strongly agree* (7). To check the effectiveness of our self-definition manipulation we used the same leader self-definition scale as we did in Studies 1a, 1b, 1c, and 2a (7 items; Cronbach's  $\alpha$  = .93). To check the effectiveness of our ELBs manipulation, participants answered a shortened version of the 10-item scale used in Study 2a (6 items; Cronbach's  $\alpha$  = .84).

#### Results

In all analyses of variance (ANOVAs) self-definition as a leader (high/low) and effective leadership beliefs (self-serving/group-serving) were factors in the design.

**Manipulation checks.** As expected, a two-way ANOVA on the average self-definition score revealed only a significant main effect of self-definition, F (1, 103) = 20.68, p < .001,  $\eta^2_p = .17$ , with participants in the high self-definition condition (M = 4.72, SD = 1.00) self-defining more as leaders than those in the low self-definition condition (M = 3.56, SD = 1.57). A two-way ANOVA on the average ELBs score revealed only a significant main effect of ELBs, F (1, 103) = 18.34, p < .001,  $\eta^2_p = .15$ , indicating that participants in the self-serving ELBs condition (M = 4.20, SD = 1.39) were more likely to endorse self-serving ELBs than participants in the group-serving ELBs condition (M = 3.19, SD = 1.03).

Leader allocation decision. A two-way ANOVA on the amount of money leaders self-awarded revealed a main effect of ELBs, F(1, 103) = 7.18, p < .01,  $\eta^2_p = .07$ , with participants in the self-serving ELBs condition (M = 257,863.50, SD = 196,891.42) self-allocating more money than those in the group-serving ELBs condition (M = 167,916.30, SD = 162,362.55). The main effect of ELBs was qualified by our predicted Self-definition X ELBs interaction, F(1, 103) = 10.85, p < .01,  $\eta^2_p = .09$  (see Figure 2.5).

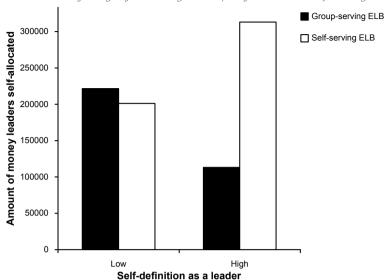


Figure 2.5 Amount of money self-allocated by leaders (out of 2,445,000 euro) in Study 2b

As predicted, leaders in the high self-definition condition self-allocated more money when endorsing self-serving ELBs (M=314,350.00, SD=238,691.44) than when endorsing group-serving ELBs (M=113,851.85, SD=74,146.93), F(1,103)=18.36, p<0.001,  $\eta^2_p=1.15$ , CI (diff) = between 107,717.51 and 293,278.78. No such differential reliance on ELBs was found for leaders in the low self-definition condition. We also found that in the self-serving ELBs condition, those self-defining more strongly as leaders (M=314,350.00, SD=238,691.44) self-allocated more money than those self-defining less strongly as leaders (M=201,376.92, SD=117,347.33), F(1,103)=5.72, p=0.01,  $\eta^2_p=0.05$ , CI (diff) = between 19,288.50 and 206,657.64. Additionally, we found that in the group-serving ELBs condition, those self-defining more strongly as leaders (M=113,851.90, SD=74,146.93) self-allocated less money than those self-defining less strongly as leaders (M=221,980.80, SD=207,171.33), F(1,103)=5.14, p=0.02,  $\eta^2_p=0.04$ , CI (diff) = between 13,612.71 and 202,645.12. Participants self-defining more strongly as leaders incorporated both self and group-serving ELBs to a greater extent into their decisions than those self-defining less strongly as leaders.

# Study 2c

#### Method

**Procedure and sample.** We used exactly the same procedure as in Study 1c. The study was conducted online using panel respondents in the United Kingdom. Out of the 199 emails sent out, 143 respondents completed the survey (71.8% response rate). The sample's mean age was 41.76 years, (SD = 8.55) and women made up 36.4% of the sample. Respondents' fulltime work experience was on average 20.81 years (SD = 10.33), their average tenure in a managerial or supervisory position was 11.10 years (SD = 8.57), and their average tenure on the current job was about 5.66 years (SD = 4.79). Respondents had on average about 22.66 direct subordinates (SD = 39.55) and 53.14% of the sample had received a higher education degree (i.e., Bachelor degree or higher). All respondents worked in private sector organizations. Most respondents (83.22%) were managers or senior managers and the rest held supervisory positions.

**Measures.** All responses were measured on 5-point scales (1 = strongly disagree, 5 = strongly agree). Self-definition as a leader was measured with the same 7-item scale used in Study 1a, 1b, 1c, 2a, and 2b. ELBs were measured with 8 of the 10 items (4 self and 4 group-serving items) that served as our ELBs manipulation checks in Study 2a (e.g., "To be effective, a leader should always pursue group goals even if this would come at the expense of his or her personal goals"; "A leader concerned with group outcomes is effective."; "To be effective, a leader should pursue his or her own goals even if this would come at the expense of his or her group's goals"; "A leader concerned with his or her personal outcomes is effective"). Again, the group-serving items were reverse scored and all items were combined into one average ELBs score. Our measure of leader self-serving behavior consisted of the same 9-item scale used in Study 1c.

#### Results

We first performed a principal component analysis (PCA) with OBLIMIN rotation of the items of the predictor variables (i.e., self-definition as a leader and ELBs). This analysis yielded a two-factor solution with all items loading .57 or higher on the intended scale and all cross-loadings below |.15|. Then we performed a PCA of the items comprising our dependent variable (i.e., leader self-serving behaviors), which yielded a one-factor solution with item loadings of .58 or higher. Means, standard deviations, and intercorrelations for the study variables are displayed in Table 2.3.

Table 2.3 Means, Standard Deviations, and Intercorrelations for Study 2c

	M	SD	(1)	(2)	(3)
(1) Leader self-definition	3.50	.63	(.85)		
(2) Effective leadership beliefs	2.44	.50	.08	(.83)	
(3) Leader self-serving behaviors	1.83	.68	.12	.56**	(.87)

Note. Cronbach's alphas are displayed on the diagonal. N = 143 (listwise). \* p < .05. \*\* p < .01.

To test our hypothesis we performed a hierarchical regression analysis<sup>7</sup>. Following Aiken and West (1991), self-definition as a leader and ELBs were centered, and the interaction term as well as the main effects were based on the centered scores. In Step 1, we regressed leader self-serving behaviors on leader self-definition and ELBs. In Step 2, we added the Leader self-definition X ELBs interaction to the equation (see Table 2.4).

Table 2.4 Summary of Regression Analysis for Leader Self-definition and Effective Leadership Beliefs Predicting Leader Self-serving Behaviors in Study 2c

Variable	b	SE b	ß	t	Þ
Step 1					
Leader self-definition	.08	.07	.07	1.07	.28
Effective leadership beliefs	.75	.09	.55	7.97	.00
Step 2					
Leader self-definition	.03	.07	.03	.44	.66
Effective leadership beliefs	.73	.09	.54	7.86	.00
Leader self-definition x Effective leadership beliefs	.35	.13	.18	2.61	.01

*Note.* The explained variance of Step 1 was  $R^2 = .32$ . Step 2 explained an additional variance of  $R^2$  change = .03. N = 143 (listwise).

The first step explained a significant amount of variance and we found a positive relationship between ELBs and leader self-serving behaviors. More importantly, the second step explained an additional significant proportion of variance in leader self-serving behaviors. The positive relationship between ELBs and leader self-serving behaviors was qualified by our predicted self-definition as a leader by ELBs interaction. To further analyze the interaction, we conducted simple slopes analyses (Aiken & West, 1991). Although leader self-serving behaviors were positively related to ELBs both when leaders self-defined more strongly as leaders (1 SD above the mean;  $\beta = .70$ , p < .001), as well as when they self-defined less strongly as leaders (1 SD below the mean;  $\beta = .37$ , p < .001), the relationship was more pronounced when leaders self-defined more strongly as leaders (see Figure 2.6). In line with the findings of Study 2a and 2b, the results show that ELBs are more strongly related to leader self-serving behaviors, the more leaders self-define as leaders.

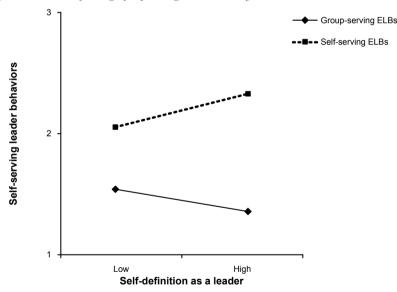


Figure 2.6 Leader self-ratings of self-serving actions in Study 2c

## Discussion Study 2a, 2b, and 2c

The results of Study 2a, 2b, and 2c corroborate and extend our findings in Study 1a, 1b, and 1c. In Study 2a, 2b, and 2c we found, in line with Hypothesis 1b, that the effects of ELBs on leader self-allocations were stronger for leaders self-defining more strongly

as leaders than for leaders self-defining less strongly as leaders. Contingent on the content of ELBs (group vs. self-serving) leaders who self-defined more strongly as leaders made either more group or more self-serving allocations. Our results also showed that leaders who self-defined more strongly in terms of the leader role and who endorsed self-serving ELBs acted more self-servingly than leaders self-defining less strongly as leaders who also endorsed self-serving ELBs. Additionally, in Study 2b we found that leaders who self-defined more strongly as leaders and endorsed group-serving ELBs acted more group-servingly than leaders self-defining less strongly as leaders who also endorsed group-serving ELBs. In Study 2a, 2b, and 2c we have thus extended the findings of Study 1a, 1b, and 1c by showing that leader self-definition does not only moderate the relationship between descriptive normative information and leader self-serving behaviors, but also the relationship between injunctive normative information and leader self-serving behaviors.

#### General Discussion

Leader self-serving behaviors have been proposed both in academic circles and within the forum of public opinion to be a particularly destructive class of leadership behaviors (e.g., Choi & Mai-Dalton, 1998; De Cremer & van Knippenberg, 2002, 2004) with negative consequences for the organization, as well as for followers' motivation and performance. We posited that self-definition as a leader would moderate the processing of social information in resource allocation contexts and that contingent on the information used leader self-allocations would be more or less self-serving. This more general prediction, derived from an integration of theorizing on leader self-definition (Kramer, 2003; Lord & Hall, 2005) and extensions of social comparison theory (Festinger, 1954), was tested in a series of four laboratory and scenario experiments and in two surveys.

We consistently showed that leader self-definition interacts with normative social information, of both the descriptive (i.e., information about other leaders' self-allocations) and the injunctive variety (i.e., effective leadership beliefs) in predicting leader self-serving allocations. The six studies showed that the effects of descriptive and injunctive social reference information on leader resource allocations were stronger for leaders who self-defined more strongly as leaders than for those who self-defined less strongly in terms of the leader category. When other leaders' self-allocations were high, or when they endorsed self-serving ELBs, leaders self-defining more strongly as leaders acted more self-servingly than when other leaders' self-allocations were low, or when they endorsed group-serving ELBs. These effects were far less pronounced for leaders who self-defined less strongly as leaders. In our experimental studies we also

consistently showed that leaders self-defining more strongly as leaders acted more self-servingly than leaders self-defining less strongly as leaders when other leaders' self-allocations were high or when they endorsed self-serving ELBs. Conversely, with the exception of Study 2b, we did not find leaders self-defining more strongly as leaders to act more group-servingly than leaders self-defining less strongly as leaders when others' allocations were low or when they endorsed group-serving ELBs. Thus in Studies 1a, 1b, and 2a high self-defining leaders were more likely to follow a self-interested than a group-oriented cue. The asymmetry in the effects of self and group-oriented information found in these studies could be due to the fact that in the high self-defining, high reference information conditions the effects of social information processing and of egocentric biases (e.g., Weary Bradley, 1978) converged. However, this asymmetry in the extent to which leaders relied on this social information was not found in the two surveys and in Study 2b.

In sum, we consistently found that self-serving leader behaviors are the result of an interaction between self-definition as a leader and social information processing. Confidence in our results is bolstered not only by replication across studies, but also by the fact that the studies used different methodologies (i.e., laboratory experiment, scenario experiment, cross-sectional survey), different samples from two different countries (i.e., Dutch students, managers and supervisors in the United Kingdom), different conceptualizations of the social information concept: descriptive information (i.e., information about what is commonly done) and injunctive information (i.e., information about what should be done), different manipulations of the self-definition as a leader construct as well as its measurement in the field.

## Implications for the Study of Leader Self-serving Behaviors

This research contributes first and necessary evidence that leaders' self-concept, more precisely leaders' self-definition as a leader, has a significant impact on leader self-serving behaviors. By focusing on determinants of leader actions we followed a call made by House and Aditya (1997) for more systematic scientific inquiry into the antecedents of leader behaviors and added a social-psychological perspective to the dearth of empirical research on determinants of leader actions. Surprisingly, as compared to the voluminous body of work on leadership effectiveness, research on antecedents of leader behaviors has been scant, and has largely focused on individual difference factors (Bono & Judge, 2004; Chan & Drasgow, 2001; Judge, Bono, Ilies, & Gerhardt, 2002) and on factors affecting leadership development (Day, 2001; Dvir, Eden, Avolio, & Shamir, 2002).

Our proposition that self-definition as a leader is a determinant of leader self-serving

behaviors builds upon, and conceptually extends, the self-concept stream of leadership research (Lord et al., 1999; Gardner & Avolio, 1998, Shamir, House, & Arthur, 1993; van Knippenberg et al., 2004). We broaden previous self-concept theorizing in the leadership domain by taking the limelight off followers' self-concept and by zooming in on leaders' self-concept. Last but not least, by combining theorizing on leader self-definition with concepts rooted in social comparison theory we extend the social comparison perspective to the study of leadership behaviors.

Our self-concept analysis of leader self-serving behaviors also feeds into research on transformational/charismatic leadership (e.g., De Cremer & van Knippenberg, 2002) as well as into work from a social identity theory of leadership perspective (e.g., Hogg & van Knippenberg, 2003). Both aforementioned research streams have identified leader self-sacrificial or group-serving behaviors as being important determinants of leader effectiveness (e.g., Bass, 1990; Burns, 1978; Shamir et al., 1993; van Knippenberg & Hogg, 2003; Yukl, 2002). For example, research on charismatic leadership has shown that leaders engaging in self-serving behaviors are perceived as being less effective and charismatic (Conger & Kanungo, 1987; De Cremer & van Knippenberg, 2002, 2004; Sashkin, 1988) than their counterparts who perform self-sacrificing acts. Similarly, research from a social identity model of leadership perspective proposes and shows that leader group-serving behavior is an important component of leader effectiveness (e.g., van Knippenberg & van Knippenberg, 2005; van Knippenberg et al., 2004). However, neither research on transformational leadership, nor work from a social identity analysis of leadership perspective has informed us on factors determining leader self versus group-serving behaviors. Our findings extend this previous research by highlighting factors that might influence the extent to which leaders engage in self or group-serving actions.

The current work also links to, and extends the identity-based developmental leadership stream of research (e.g., Day & Harrison, 2007; Lord & Hall, 2005) by proposing and showing that leader self-definition is as a critical step in understanding leader behaviors. Whereas identity-based developmental leadership theories have proposed leader self-definitions to be critical sense-making tools and proximal precursors to action, our research represents the first empirical test of the effects of leader self-definition on leader actions.

Additionally, our findings could inform certain facets of cross-cultural leadership research. Cross-cultural research has identified cultural differences in the societal and organizational-level implicit leadership theories that sanction leaders' pursuit of individual and group interests (e.g., House, Javidan, Hanges, & Dorfman, 2002; House, Hanges, Javidan, Dorfman, & Gupta, 2004). In this respect, we see investigations of the

effects of culture on the types of effective leadership beliefs endorsed by leaders as particularly pertinent avenues for future research.

As yet, our evidence is too modest to jump to far-reaching conclusions about the effects of leader self-definition, but we believe that it alludes to the concept's potential to advance our understanding of leader behaviors in general, and leader self-serving behaviors more specifically. In this respect, we propose six directions for future research that seem particularly worthwhile.

First, in this research we have focused on a specific aspect of the self-concept, namely leaders' self-definition as leaders. The self-concept is however a multidimensional construct consisting of a multitude of different identities (e.g., Lord et al., 1999; van Knippenberg et al., 2004). The function of the self-schema is to organize these various self-definitions and to direct attention to new self-relevant information corresponding to the specific salient or activated identity. Importantly, only one particular identity can be salient or activated at any point in time, and people can differ in terms of the strength of their identification (Markus & Wurf, 1987). Thus, leaders could reasonably be expected to also possess self-definitions as members of their work groups or as members of their professional groups. Under conditions where any of these alternative self-definitions are active, salient, and strong, we predict that they would shape leader behaviors differently than self-definition as a leader.

Our research has shown that leaders who self-define more strongly as leaders are more sensitive to information about what other leaders do as well as what an ideal leader should do. That is, we have shown that the salient self-definition (i.e., self-definition as a leader) directs attention towards information relevant to that specific identity. Following this logic, if professional affiliation (e.g., as a lawyer) would be the salient self-definition, then we would expect this identity to be used as the diagnostic sense-making tool in allocation contexts. The particular norms (i.e., descriptive and injunctive) associated with this professional affiliation would then shape those leaders' behaviors that strongly identify with their profession. Furthermore, from a social identity analysis of leadership perspective (Hogg & van Knippenberg, 2003), if leaders construed the self in terms of membership in their work group and identified strongly with this group, they should be more sensitive to group normative information when allocating resources. Thus, we propose that conceptually different self-definitions (e.g., as a leader, as a member of the professional group, as a group member) would affect leader behaviors differently by focusing their attention on the specific norms associated with the salient identity. Future research could extend our self-concept analysis of leader self vs. group-serving behaviors by investigating such alternative leader self-definitions as antecedents of leader actions.

Second, a self-concept-based analysis of leader behaviors inevitably raises a host of other intriguing questions to be addressed in future research. Two questions which we see as presenting especially promising avenues are (1) how are these various selfdefinitions interrelated, and (2) what factors influence the relative strengths of these identities? From a leader development perspective, self-definition as a leader represents a critical step in providing leaders with an understanding of their role, their goals, motivations and aspirations (e.g., Day & Harrison, 2007; Hall, 2004; Lord & Hall, 2005). Day and Harrison (2007) as well as Lord and Hall (2005) go further to propose that, over time and with more leadership experience, leaders' individual-level identities would be first transcended by relational identities and subsequently by collective identities. The developmental view on leaders' self-concept thus proposes a hierarchical relationship between self-definition as a leader, relational leader identities and collective leader identities. Moreover, this perspective also suggests that once these different selfdefinitions have been formed, leaders can switch between them contingent on the task at hand. This implies that various self-definitions can co-exist and that their relative strength in affecting behaviors would be determined by situational factors (e.g., task at hand, accountability, legitimacy, goals). We deem these to be interesting propositions that could be tested longitudinally. Whereas our work only allows us to draw conclusions as to the effects of self-definition as a leader on resource allocations, we can envision the explanatory potential afforded by a fuller model of leader self-definitions.

Third, a full model of the cognitive, motivational and temporal factors shaping the emergence of self-definition as a leader could be on the agenda of future research. Because in this research we focused on assessing effects of leader self-definition on leader behaviors, our work remains relatively mute as to potential factors facilitating the advent of self-definition as a leader. Our self-definition manipulations in the experimental studies do however allude to two important cognitive precursors to leader self-definition, namely self-categorizing as a leader, and seeing oneself as similar to a typical leader. Furthermore, motivational factors could play a role in the development of leader self-identities. First, leaders' motivation to lead could provide us with better insights into the different types of motivations leaders associate with the leader role. Chan and Drasgow's (2001) motivation to lead scale identifying affective-identity, noncalculative, and social-normative motivations could help shed some light on this issue. Second, one could argue that with increasing leader self-efficacy (e.g., Paglis & Green, 2002), self-definition as a leader would also increase. Third, different power motives, such as a personalized versus a socialized need for power (e.g., McClelland, 1975; McClelland & Burnham, 1976) could potentially have different effects on selfdefinition as a leader. Additionally, a longitudinal investigation of temporal influences on leader self-definitions could provide us with a richer understanding of how they arise and evolve. Lord and Hall (2005) proposed that with increased experience as a leader, leader self-identities will emerge. Whereas in our studies we did not find leadership experience to directly affect leader self-definition, it is possible that the relationship between leadership experience and leader self-definition is more complex than previously assumed. It could be that the effects of leadership experience on the development of a leader self-identity are moderated by other factors such as leaders' motivation to lead or active participation in a leader development program. Future research could explore a fuller model of precursors to self-definition as a leader by considering not only main effects but also potential interaction effects between cognitive, motivational and temporal factors.

Fourth, because our research addressed factors affecting high self-defining leaders' allocation behaviors, it appears valuable to understand how those who self-define less strongly as leaders make sense of ambiguous resource allocations. We have found that leaders who self-defined more strongly as leaders were more sensitive to information about what other leaders did as well as what an ideal leader should do. By relying on such descriptive and injunctive information related to the leader role, high self-defining leaders acted more self-servingly when presented with high other leaders' outcomes or when they endorsed self-serving leadership beliefs, and more group-servingly when presented with low other leaders' outcomes or when they endorsed group-serving beliefs. As expected from our identity-based social comparison perspective, low selfdefining leaders did not follow these cues related to the leader role as much as high selfdefining leaders. We argue that low self-defining leaders largely ignored these cues, because they did not perceive them to be relevant to the self. This is not to say that leaders who self-defined less strongly as leaders acted across the board less self-servingly than leaders who self-defined more strongly as leaders. They simply seem to have made sense of the ambiguous allocation decisions by relying on different cues. It is possible that other self-definitions were more important for these leaders (e.g., as a member of their profession) and that they based their actions on these alternative identities. Because our current data do not inform us on how these low self-defining leaders made sense of the situation, future research could investigate such alternative leader self-definitions as precursors to leader actions.

Fifth, the present findings can potentially be linked to research on the use and abuse of power. Power and leadership are naturally related. However, they are different in that powerful individuals are not necessarily leaders, but leadership implies and requires power (Goodwin, 2003). High power has generally been linked to a host of "negative" behaviors such as the devaluation and increased stereotyping of subordinates (Fiske &

Neuberg, 1990; Kipnis, 1972), as well as increased positive self-evaluations of the powerful (Georgesen & Harris, 1998). With some exceptions (Chen, Lee-Chai, & Bargh, 2001; Galinsky, Gruenfeld, & Magee, 2003; Overbeck & Park, 2001, 2006) power research has stressed its darker side without providing much evidence for its often-discussed "noblesse oblige" effects. We argue that power, similar to leadership, can raise, next to entitlement concerns, responsibility concerns on the part of the powerful (Tjosvold & Wisse, 2009).

Leaders can have varying amounts of power in organizations. Generally, the higher one moves in the organizational hierarchy, the more power one commands. Increased power has been linked to increased power distance from subordinates (Kipnis, 1972), which in turn could lead powerful leaders to identify less with their subordinates. Also, leadership positions of higher power are generally reached after years of climbing the corporate ladder, and from a leader development perspective (Lord & Hall, 2005) this would imply that the leader has reached a stage where self-definition as a leader has or could have become a central part of the self-concept. Hence, we propose that power and self-definition as a leader can be related in such a way, that the more power a leader has, the more he/she will self-define as a leader. Based on the findings of the present research and on the idea that high power individuals act more in tune with internal states and traits (Galinsky et al., 2003), we posit that high power leaders should rely more on their ELBs than low power leaders. This implies that high power leaders are expected to act self vs. group-servingly based on the content of their ELBs. This prediction can also be linked back to the Chen et al. (2001) study that showed that the effects of power depend on the power-holders' social relationship orientation. In a resource allocation task, communally-oriented high power participants acted more selflessly and exchangeoriented high power participants acted more selfishly than low power participants. While in the Chen et al. (2001) study high power participants acted more in line with internal traits, we propose that high power individuals should also act more in line with internal beliefs and values. This research area seems particularly exciting, given that theorizing and empirical research on power generally highlights power's corruptive effects and high power individuals' failure to exhibit group-serving behaviors. On the flipside, low power leaders (low in power distance to their subordinates) should perceive themselves to be more similar to their followers, and should therefore be more likely to use their followers as comparison targets in resource allocation contexts than high power leaders.

Last but not least, future research might consider other factors affecting leader self-serving behaviors in ambiguous resource allocation contexts. First, the incidence of leader self-serving behavior could be decreased if leaders were held accountable or if their actions were made transparent. Leaders whose actions are transparent to

subordinates might be motivated to maintain their followers' support, and might therefore be less likely to engage in self-serving behaviors. Second, one could argue that leaders would act less self-servingly if clear standards of fairness were in place. In this research we have conceptualized leader self-allocations as being the result of an ambiguous sense-making process where absolute standards regarding appropriate leader earnings are absent. From this sense-making perspective, high self-defining leaders rely on social information pertaining to the leader role because the situation is ambiguous and it is unclear how much more than followers a leader is entitled to earn. We expect however, that, with the advent of clear standards of fairness for the distribution of resources, the effects of social information on leader allocations would become weaker. Thus, the clearer the company, group or societal standards are regarding how much a leader should earn, the more likely it is that these standards will be used in the distribution of resources. In short, we expect that the more the situation loses its ambiguity, the less there will be a need for leaders to rely on social information pertaining to the leader role.

#### Caveats and Limitations

Naturally, this research is not without limitations. Each paradigm we employed suffers from certain drawbacks in terms of generalizability, causality, manipulation or measurement. The experiments used student samples in laboratory settings which could raise external validity concerns. We did however consciously choose for this experimental set-up, high in internal validity, because our aim was to establish causality (Berkowitz & Donnerstein, 1982) in the relationship between self-definition as a leader, the use of social information, and leader resource allocations. To alleviate some concerns regarding the artificiality of the minimal group set-up in Studies 1a and 2a, we complemented these studies with two scenario experiments, which generally score higher on levels of mundane realism. Previous research has also shown that there is no reason to suspect that students behave differently than other populations (Brown & Lord, 1999; Dipboye, 1990) and experimental findings using similar paradigms have been replicated in survey-based organizational research (De Cremer & van Knippenberg, 2002, 2004; van Knippenberg & van Knippenberg, 2005). More important, the fact that Studies 1c and 2c, for which concerns about external validity pose less of a problem, also yielded support for our hypotheses and replicated the findings of our experimental studies, should serve as a counter-argument for the external validity criticism.

Whereas our narrow focus on the allocation of monetary resources as a dependent measure can be considered a limitation of our experimental studies, we extended the scope of our dependent variable in the surveys by also measuring leaders' time investment in group projects as well as their attributions of credit for jobs performed. Although we believe that the present results provide useful insights into leader self-serving behaviors, the nature and scope of our dependent variable should be borne in mind when generalizing conclusions. Future investigations might benefit from extending the scope of our dependent variable to other domains such as the relational domain (i.e., leaders' treatment of subordinates in terms of showing respect or allowing for voice behaviors).

Conversely, Studies 1c and 2c might be criticized for being correlational in nature (i.e., rendering them mute in matters of causality). Another potential criticism of Studies 1c and 2c could be our measurement of undesirable behaviors via self-reports rather than via behavioral measures. There is however evidence suggesting that, when measuring undesirable behaviors, self-reports are as accurate as more 'objective' measures such as police reports or lie detector tests (Clark & Tifft, 1966; Hindelang, Hirschi, & Weiss, 1979). Nonetheless, we do not want to be presumptuous and assume that our self-reported measure of self-serving behaviors is necessarily accurate, just because similar research has found a correlation between self-reports of undesirable behaviors and their 'objective' measurement. Ultimately, this remains a question to be answered in future research and we wholeheartedly endorse future tests of our hypotheses in field settings with both follower and leader ratings of self-serving behaviors as well as more 'objective' measures. A third potential weakness of Studies 1c and 2c could be that all variables were measured in a single questionnaire (i.e., making common source and common method variance a potential problem). This type of design could lead to an inflation of the relationships between variables. The main effect of ELBs in Study 1c may thus be overestimated. Therefore, even though we also obtained experimental evidence for this main effect, it would be valuable if a future field study tested this relationship with a design that does not suffer from this problem. It is also important to note that common source or method bias cannot account for statistical interactions. Because it may inflate the main effects it may lead to an underestimation of the effect sizes for interactions (Evans, 1985; McClelland & Judd, 1993). As such, common source or method bias does not pose a threat to the validity of our conclusions regarding the self-definition as a leader by other leaders' outcomes and ELBs interactions. All in all, the combination of the experimental designs of Studies 1a, 1b, 2a, and 2b, with the survey design of Studies 1c and 2c, leads us to see these concerns as less of a threat to the overall conclusions of the present study, given that the strengths of the one methodology may compensate for the weaknesses of the other.

# **Practical Implications**

Although conclusions regarding practical implications are to be regarded as tentative and as requiring further inquiry and clarification, we see potential for our findings to be used in applied settings, i.e., in organizations trying to curb leader self-serving behaviors. First, Lord and Hall (2005) provided a compelling argument for the desirability of developing leaders' self-definitions as leaders. Taking this proposition as a starting point, there seems to be some value in promoting the development of group-serving ELBs. The leader development (London, 2002) and coaching literature (Smither & Reilly, 2001) suggest that interventions directed at improving leadership generally work because they aim at creating new self-schemas. Some value might therefore be drawn from promoting group-serving ELBs as ideal leadership self-schemas. This could be done via leadership training and executive seminars as well as via teaching in MBA programs, where future leaders are formed. Second, if more leaders would endorse group-serving ELBs this could lead to a more general downward compensation spiral. As we have shown in Study 1a, 1b, and 1c, leaders self-defining strongly as leaders are more likely to use information about other leaders' outcomes. If a high number of leaders endorses group-serving ELBs this could influence other leaders to claim lower outcomes for the self.

#### To Conclude

Leader self-serving actions are a particularly pernicious class of leadership behaviors carrying the specter of negative consequences for subordinates as well as for the organization at large. From this perspective, it is somewhat surprising that leadership research to date seems to have hardly concerned itself with factors causing leader self-serving behaviors. As such, the present research hopes to have opened a new avenue for exploring factors causing leaders to act self-servingly by pointing at the value of a leader self-concept analysis.

## Notes

- Definitions of leaders and leadership are almost as numerous as the researchers studying them. In this research, we endorse the following definition of a leader: The leader is an individual holding a structural position of power which provides him/her with control over valuable resources and the ability to administer rewards and punishments (French & Raven, 1959); and who also influences others to act towards the achievement of group goals (Hollander, 1980; Yukl & van Fleet, 1992). Whereas the power associated with the structural position reflects influence potential, a leader enacts that potential (Farmer & Aquinis, 2005).
- <sup>2</sup> The instructions informing participants of their assignment to the leader role made it clear that no value connotations were associated with being or not being similar to other leaders. Before debriefing, participants answered an open-ended question as to why they thought they had been selected as a leader. Most participants in the low self-definition condition thought they had been selected because they were somehow different from other leaders. None of the responses seemed to indicate a negative connotation with being different from or similar to others. We also assessed participants' feelings of self-efficacy and power in the leader role. Two-way ANOVAs on the leader self-efficacy score and on the power score revealed no significant effects of our manipulations (all F's < 1). This suggests that self-definition as a leader did not affect participants' feelings of leader self-efficacy or of power. The same measure of leader self-efficacy and power in Studies 1b, 2a, and 2b yielded the same pattern of results.
- <sup>3</sup> We report  $\eta_p^2$  in our studies which refers to the partial  $\eta^2$  values as reported in SPSS 15.
- <sup>4</sup> We also conducted the analyses by excluding these two participants. Because neither the significance nor the pattern of our results changed, the analyses reported in the paper are based on the full sample of 80 participants.
- <sup>5</sup> Conceptually self-definition as a leader is independent from leaders' team identification. To show that our effects were driven by differential levels of self-definition as a leader and not by differential levels of team identification, we assessed leaders' identification with their team. Participants answered three questions adapted from van Knippenberg and van Knippenberg (2005) which were combined into an average team identification score (Cronbach's  $\alpha = .90$ ). A two-way ANOVA on the team identification score revealed that as expected, our manipulations did not affect participants' team identification. Thus, the relationship between our manipulations and leader self-allocations cannot be attributed to their team identification. The same measure of team identification was used in Study 1b, 1c, 2a, 2b, and 2c and yielded the same pattern of results.
- <sup>6</sup> We did not control in our analyses for any covariates because rather often especially with survey data controls serve the purpose of getting something significant that was not significant before. Becker (2005) refers to this practice as problematic and cautions against potential Type II errors. Moreover, we hypothesized an interaction. Thus merely controlling for covariates would not be the best option if we want to exclude them as alternative explanations for our moderated findings. Including controls, however, does not change the significance or pattern of our interactions (i.e., with controls: age, gender, number of subordinates, years of fulltime work experience, overall tenure in leadership position, tenure in current leadership position team identification). Because none of the control variables were related to our independent or dependent variables and we wanted to keep the survey studies as similar as possible to our experimental studies, we do not report regression results with covariates.
- <sup>7</sup> Including the same control variables as in Study 1c does not change the significance or pattern of our interaction.

# Chapter 3:Leader Power and Self-serving versus Group-serving Behavior

We present five studies that examined the effects of power on leader resource self-allocations. From an approach-theory of power perspective, we argue that the more power a leader holds, the more the leader's resource allocations become contingent on internal belief states (e.g., effective leadership beliefs) and the less they become contingent on contextual cues (e.g., performance information). First, two experimental studies indicated that performance information impacted high power leaders' self-allocations less than low power leaders' self-allocations. Second, data from two additional experiments showed that high power leaders' self-allocations were more a reflection of their effective leadership beliefs than low power leaders' self-allocations, causing them to act either more self or more group-servingly than low power leaders. Finally, we replicated both sets of findings in an organizational survey. We focus explicitly on how our findings explain why some leaders use their power to benefit the collective while others act self-servingly.

#### Introduction

Leaders often have considerable control over the distribution of scarce resources within their organizations or groups (Kelley & Thibaut, 1978; Yukl, 2002). In the quintessentially interdependent organizational context these resources are typically needed to reach collective goals, and yet, some leaders choose to enrich themselves at the expense of the group. Recently, accounts of leader hubris coupled with the enjoyment of lavish perquisites, such as the personal use of company jets or gargantuan pay packages have permeated the business press. Next to the popular outcry against leader corruption and the blatant misallocation of resources, it has been argued that leaders who distribute resources to their own advantage harm group interests (Aquino & Reed, 1998) and are less effective than those who prioritize their group's well-being (Choi & Mai-Dalton, 1999; De Cremer & van Knippenberg, 2004). The question that thus arises is: Why do some leaders act self-servingly and fill their own coffers while others act to benefit their groups?

Power has often been proclaimed to be the root cause of leader corruption and derailment. Whether in the halls of academia or in popular lore, the dictum that power corrupts has become almost a truism. In short, this notion intimates that it is the power associated with the leader role that causes leader self-serving behavior, and that greater leader power results in greater leader corruption. There are however indications that the link between leader power and leader corruption is not as straightforward as one might think. Recent insights in the psychology of power, as advanced in the power-approach theory (Galinsky, Gruenfeld, & Magee, 2003; Keltner, Gruenfeld, & Anderson, 2003), suggest that power does not so much corrupt as it reveals the actual person by psychologically freeing the individual from normative constraints. Specifically, the theory proposes that power has wide-ranging psychological and behavioral consequences by fundamentally affecting the way individuals perceive the world, others, and themselves. Power is posited to alter the processing of information, such that elevated power will render individuals less sensitive to situational constraints and more sensitive to internal cues as compared to low power. Translating these insights to a leader resource allocation context, we propose that leader power will influence the type of information (i.e., situational, context-specific versus internal, context-free information) leaders rely on in their resource distributions.

Interestingly, leadership research has also identified situational cues, such as performance information (De Cremer, 2003; De Cremer & Van Dijk, 2005), as well as internal belief states, such as effective leadership beliefs (Lord & Maher, 1993), as being

vital influences on leader allocation behaviors. However, despite indications of its potential impact, the role that leader power may play in the relationship between contextual cues and leader allocation decisions on the one hand, and internal cues and leader allocation decisions on the other hand has not yet been clarified.

Based on the power-approach theory, we propose that high power leaders' allocations will be influenced less by contextual cues such as performance information than those of low power leaders. Conversely, we predict that high power leaders' allocations will be more a reflection of their internal role-related schemas concerning effective leadership than low power leaders' allocations. We thus argue that higher leader power will not inevitably result in higher leader self-servingness. Rather, we purport that the more power a leader holds, the more the leader's actions become contingent on internal belief states and the less they become contingent on situational, contextual cues. Whether this results in more or less self-serving behaviors depends on the nature of these belief states and contextual cues.

Our aim is thus three-fold: 1) to contribute to an understanding of how power informs leader decisions by integrating research on power and leadership; 2) to show that power diminishes the strength of the situation and increases the relevance of leaders' beliefs about effective leadership; 3) to outline and demonstrate that this offers a viable perspective to understand variations in leader self versus group-serving behaviors.

# The Psychology of Leader Power

There is an almost natural association between power and the leader role, and yet, the two are not the same (Goodwin, 2003). Power is often defined as asymmetric control over valued resources in social relations (Fiske, 1993; Keltner et al., 2003; Magee & Galinsky, 2008; Thibaut & Kelly, 1959). This conceptualization of power implies control over critical resources in any type of social relationship, and therefore suggests that, while power is relevant to the leader role, it is not limited to it. The leader role effectively places individuals in a position where, next to motivating, coordinating and directing group members' efforts (e.g., De Cremer & van Knippenberg, 2003; Farmer & Aquinis, 2005; Hollander, 1980; Yukl & van Fleet, 1992; Yukl, Wall, & Lepsinger, 1990), they have the authority to make decisions that affect individual and group level outcomes. The leader role thus entails control over valuable resources, and consequently it entails the possession of power. However, while typically leaders have more power than their subordinates, not all leaders will have the same amount of power at their disposal. Inevitably, some leaders will command more power than others. Based on the

power-approach theory, we propose that these power differences within the leader role can have sweeping consequences on leader actions. Therefore, we will examine the effects of varying amounts of power within the leader role on leader resource distributions.

Research and everyday experience suggest that power can have a variety of effects on those who possess it. Although power can be used to the benefit of others, traditionally, research has emphasized power's dire effects on behavior, perceptions and attitudes (for a recent review see Fiske & Berdahl, 2007). The metamorphic effects of power have been demonstrated by Kipnis (1972, 1976) who showed that high power individuals were more likely to make influence attempts, to devalue others, to feel increased psychological distance from their subordinates, and to exhibit inflated self-perceptions (e.g., O'Neal, Kipnis, & Craig, 1994; Rind & Kipnis, 1999). Additionally, power has been linked to increased subordinate stereotyping and decreased social attention (Ebenbach & Keltner, 1998; Fiske, 1993; Goodwin, Operario, & Fiske, 1998; Keltner & Robinson, 1997), as well as to self-enhancement and subordinate derogation (Georgesen & Harris, 1998).

More recently the power approach-theory (Keltner et al., 2003) has offered a lens to the study of power that paints a more balanced picture of its transformational effects. In essence, the theory suggests that power does not so much transform and corrupt, as it frees the individual from external constraints and reveals the 'actual' person.

Indeed, one of the major arguments put forward by the authors is that the norms traditionally governing individuals' thoughts and behaviors do not seem to hold for those in power. The theory proposes that elevated power entails freedom and reward-abundant environments. This gives rise to a general approach tendency, increased attention to rewards and results in disinhibited behavior. That is, elevated power frees the individual from potential behavior-inhibiting constraints. In contrast, low power individuals have less access to material and social resources and are more subject to social threats and punishments. Therefore, they are more sensitive to evaluations as well as to potential external constraints (Fiske, 1993; Steele & Aronson, 1995), which in turn, may direct their attention to multiple aspects of the situation and lead them to devote more attention to others. Low power is associated with an avoidance tendency and an increased focus on threats and punishments, which results in behaviors constrained by situational forces (Keltner et al., 2003).

A fair number of recent studies have provided support for the idea that high power individuals may feel less constrained by social norms, others' evaluations and contextual cues than low power individuals. Thus, high power individuals have been shown to act more at will (Galinsky et al., 2003), to engage in more goal-directed behavior (Anderson,

Keltner, & John, 2003; Chen, Lee-Chai, & Bargh, 2001; Galinsky et al., 2003; Guinote, 2007a, 2007b) and to act in more variable ways (Guinote, Judd, & Brauer, 2002) than their low power counterparts. High power, as opposed to low power, has also been linked to increased optimism, confidence and risk-taking behavior (Anderson & Galinsky, 2006). Moreover, in negotiations, high power parties were more likely to initiate the negotiation, to make a first offer (Magee, Galinsky, & Gruenfeld, 2007) and to respond less to their opponents' emotional displays of anger than low power parties (Van Kleef, De Dreu, Pietroni, & Manstead, 2006). High power persons have also been shown to be less concerned with how others see them or judge their actions (Galinsky, Magee, Gruenfeld, Whitson, & Liljenquist, 2008), to speak more and to speak out of turn (DePaulo & Friedman, 1998), to express their true attitudes and to be less likely to fall prey to influence attempts than low power individuals (Anderson & Berdahl, 2002; Berdahl & Martorana, 2006; Galinsky et al., 2008). Importantly, Galinsky, Magee, Inesi, and Gruenfeld (2006) also demonstrated that the powerful were less likely than the powerless to spontaneously take the perspective of others and to take others' background knowledge into account. That is, the powerful anchored more heavily on their own points of view and were less accurate than low power individuals in assessing others' thoughts and feelings (Galinsky et al., 2006). Although power holders can be careful information processors (Overbeck & Park, 2001, 2006), especially when they have the explicit goal to process information about subordinates thoroughly or when they see subordinates as instrumental to reaching a goal (Gruenfeld, Inesi, Magee, & Galinsky, 2008), power will have a negative effect on the tendency to understand what others see, think and feel. Evidently thus, power may guard the individual from the influence of situational forces (Galinsky et al., 2008; Overbeck, Tiedens, & Brion, 2006).

But if the powerful are relatively shielded from external constraints on their thoughts and behaviors, what does influence them? The power-approach theory (Keltner et al., 2003) suggests that power deflects attention away from situational cues and toward internal states, goals, attitudes, and beliefs, which in turn, would lead to high power individuals' actions being guided by their internal preferences. That is, the behaviors of the powerful are purported to be more in line with their intra-psychic states, traits, attitudes and beliefs than the behaviors of the less powerful.

Some recent research provides evidence supporting this line of reasoning. In three studies, Chen et al. (2001) found that power-primed communally-oriented participants acted more selflessly and power-primed exchange-oriented participants acted more selfishly than participants exposed to neutral primes. The authors argued that power activated social responsibility goals in communals and self-interest goals in exchangers, thus leading to different behavioral outcomes. Similarly, Bargh, Raymond, Pryor, and

Strack (1995) showed that the activation of the concept of power in men who had a predisposition towards sexual harassment led to an automatic triggering of sex-related concepts and consequently to viewing female discussion partners as sexual objects. More recently, Galinsky et al. (2008) demonstrated that in a negotiation task, high power participants' social value orientations were better predictors of their negotiation behaviors than their partners' reputations. In these studies, the relationship between internal states, such as existing dispositions, and subsequent actions seemed to be stronger for high than for low power individuals.

In sum, both theory as well as existing empirical evidence suggests that high power individuals, in contrast to low power individuals, are more immune to the influence of situational cues and more open to the influence of internal belief states.

#### Leader Resource Allocations

Importantly, none of the aforementioned research on the psychology of power focuses directly on the core issue at stake here – the influence of power on leader self-serving behaviors. Given that the manner in which organizational resources are distributed can influence employee motivation and performance (De Cremer & van Knippenberg, 2004) it is surprising that our understanding of how leaders make allocation decisions in general, or decide on making self-serving allocations in particular, is rather limited and has thus far not been informed by research on the psychology of power. Yet, we believe that insights derived from this research may help us understand leaders' decision making in the distribution of resources.

Specifically, we anchor our argument on the suggestion that high power individuals process information differently than low power individuals. While leaders are typically more powerful than their subordinates, we argue that the relative power differences within the leader role will have similar effects on information processing as they would have in more traditional conceptualizations of high and low power. Therefore, we posit that leader power will influence the type of information leaders rely on when distributing resources. We argue that high power leaders, in contrast to low power leaders, will be more immune to the influence of situational cues and more open to the influence of internal belief states when deciding on resource allocations. From a leadership perspective, two instantiations of situational and internal cues are particularly promising candidates for further investigation, namely leaders' and subordinates' performance within the group, and role-related schemas pertaining to effective leadership. In the following we will discuss performance information and effective leadership beliefs as they relate to power and leader allocation decisions.

## Leader Allocation Decisions and Performance Information

Leaders are generally expected to make allocation decisions based on their own and their subordinates' performance. These allocations may pertain to monetary assets such as promotions, pay increases and bonuses, but they may also pertain to other types of assets such as office space, parking lots, praise, and recognition. Prior research has already indicated that power may affect the way that leaders evaluate subordinate performance (Georgesen & Harris, 1998), particularly when there is room for leaders' subjective interpretations of subordinates' accomplishments. However, performance information can be relatively clear cut, and it can provide insights into how the leader performed as compared to his or her subordinates. In such instances, how will a leader decide upon resource allocations, and what role can we expect power to play? This question is crucial because most resources are not unlimited. As a consequence, the more of the organizational resource the leader allocates to one person (for instance him or herself), the less is left over for the others.

One possible way for leaders to distribute resources within their groups would be to follow equity considerations. Everyday experience as well as research (e.g., Adams, 1965; Walster, Walster, & Berscheid, 1978) suggests that, in resource allocation contexts, individuals are more likely to perceive their outcomes to be fair if they are a reflection of their relative performance. From an equity theory perspective (Adams, 1965), performance per se is not as important in determining the fairness of one's outcomes, as is the comparison of one's own performance and outcomes with those of relevant others. Importantly, applications of equity theory in the arena of leadership suggest that leaders follow equity rules (as opposed to equality rules) to decide on resource distributions between themselves and their followers (De Cremer, 2003; De Cremer & Van Dijk, 2005, 2008; Samuelson & Allison, 1994; Van Dijk & De Cremer, 2006). In principle thus, one would expect leaders to distribute resources between the self and their subordinates by comparing their and their underlings' performance. That is, one would expect information about leaders' and followers' performance to affect leader resource allocation decisions. In this respect, two performance situations appear to be especially interesting: (1) where the leader outperforms the subordinates, and (2) where the subordinates outperform the leader. The basic prediction derived from notions of equity theory would be that leaders who outperform their subordinates should claim more resources for the self, while leaders who perform worse than their subordinates should claim fewer resources for the self.

However, from an approach-theory of power perspective, we expect leader power to moderate the effects of performance information on leader allocation decisions. Because performance information is inherently contextual and situation-specific and high power shields the individual from the effects of situational forces, we expect high power leaders to rely less on performance information when allocating resources than low power leaders. As a consequence, we predict that low power leaders are more likely to rely on performance information in their allocation decisions than high power leaders, and that they will self-allocate more resources when they performed better than their subordinates than when they performed worse than their subordinates.

## Leader Allocation Decisions and Effective Leadership Beliefs

But if we expect high power leaders to rely less on performance information in their allocation decisions than low power leaders, what type of information could they be expected to make use of? As already stated, we predict that high power leaders are more sensitive to internal cues than low power leaders. From a leader categorization theory perspective (Lord & Maher, 1993) role-related schemas seem to be especially likely candidates to serve as internal behavioral guides. Leader categorization theory suggests that leaders have behavioral schemas that pertain directly to the leader role (i.e., implicit leadership theories) and that these schemas represent a foundation for the generation of behaviors (Lord & Maher, 1993; Meindl & Ehrlich, 1987). These schemas contain the attributes, features, images and ideas that define the schema category (Wofford & Goodwin, 1994) and they can be related to tasks, goals, roles or any other work-related situation.

One such specific type of leader behavioral schema is an effective leadership schema. Although typically, leader categorization theory has been invoked to show that perceivers hold different schemas for, and associate different behavioral categories with, effective and ineffective leaders (e.g., Lord, Foti, & De Vader, 1984; Phillips & Lord, 1982), the theory also includes propositions more relevant to the current analysis, namely that leaders also hold effective leadership schemas. Thus, we argue that leaders hold a schema of an effective leader that "provides a self-standard about how the leader should behave in a given situation" (Lord & Maher, 1993, p. 132). Needless to say, definitions of leadership effectiveness may vary widely, and leaders may differ in how they envision their role and their relationship to their subordinates. In this respect, most social relationship models suggest that individuals implicitly understand their interactions with others as functioning along a particular dimension: self vs. otherorientation (e.g., Fiske, 1992; Mills & Clark, 1984; MacCrimmon & Messick, 1976). Thus, leaders can either see their role as primarily being in the service of the self or of the group. Consequently, we argue that leaders' effective leadership schemas can vary along the self vs. group-serving dimension. Some leaders may think that effective leaders should fully take advantage of their status by enjoying the perks associated with the position, while others may think that they should renounce their status symbols by forfeiting perks. We therefore argue that the content of effective leadership beliefs (ELBs) (self vs. group-serving) will determine the extent to which leader resource allocations may reflect a self or group-orientation.

However, from an approach-theory of power perspective, we argue that high power leaders should be more likely to attend to their own beliefs regarding effective leadership when allocating resources, than low power leaders. As a consequence, high power leaders endorsing self-serving effective leadership beliefs should make more self-serving allocations than high power leaders endorsing group-serving effective leadership beliefs.

#### Overview of the Present Research

In sum, we predict that low power leaders' allocation decisions are influenced more by performance feedback information, while high power leaders' allocations are more in line with their effective leadership beliefs. Specifically, we test two different hypotheses:

Hypothesis 1: Performance feedback will influence low power leaders' self-allocations more than high power leaders' self-allocations. Low power leaders' self-allocations will be higher (vs. lower) when the leaders' performance feedback is high (vs. low).

Hypothesis 2: High power leaders' self-allocations are influenced more by effective leadership beliefs than low power leaders' self-allocations. High power leaders' self-allocations will be higher (vs. lower) when the leaders endorse self-serving (vs. group-serving) effective leadership beliefs.

To test our proposed relationships we opted for a multiple-study, multiple-method approach. To allow us to draw causal conclusions we first tested our hypotheses separately in two sets of two studies each. We tested Hypothesis 1 in Study 1a and 1b and Hypothesis 2 in Study 2a and 2b by using two different types of experimental methods: laboratory experiments (Study 1a and 2a) and scenario experiments (Study 1b and 2b). To determine whether our predicted relationships may also be observed in organizational settings, we tested both hypotheses simultaneously in a survey (Study 3) where we measured leader power, performance feedback, effective leadership beliefs, and self-serving behaviors in a cross-sectional sample of organizational leaders.

In Study 1a and 2a participants were led to believe that they were the leader of a four-person group engaged in computer-mediated task performance. In reality, the group interaction was simulated via the experimental set-up. In Study 1b and 2b participants were asked to imagine being a leader facing an organizational resource

allocation problem, thus increasing the mundane realism of the studies, while at the same time maintaining the experimental nature of the test.

Our main dependent variable across our experimental studies was the amount of resources (points in Study 1a, 2a or money in Study 1b, 2b) leaders self-allocated out of a shared group resource. In the survey (Study 3) we measured self-serving behaviors by having leaders report how often they had engaged in certain self-serving behaviors during the past year (e.g., used their position to secure benefits for the self).

# Study 1a

#### Method

**Participants and design.** Eighty Dutch business administration students (33 females, 47 males) with a mean age of 20.53 years (SD = 2.00) participated in exchange for € 10 (approximately 14 US dollars). Participants were randomly assigned to the conditions of a 2 (Power: high vs. low) X 2 (Performance feedback: high vs. low) between-subjects factorial design.

**Procedure.** Participants arrived in groups of twelve to participate in a computermediated study on "virtual group decision making" and were seated in individual cubicles, each equipped with a computer. All instructions and stimuli were presented on the computer screens and all dependent measures were recorded by the program software.

After being informed about random assignment to a four-person team, participants learned that their team had a hierarchical team structure (i.e., a leader and three subordinates) and that team members were to be rewarded for their work. To ensure the credibility of the computer-mediated virtual group interaction space, participants had to wait for two minutes for the establishment of a bogus "network connection" between the team members. Next, they completed a purported cognitive style test and *all* participants were assigned the leader role allegedly based on their test results.

Participants then learned that their group would work on a number of different tasks and that, as leaders, they were to ensure their team's optimal performance. Leaders had to decide on how the tasks should be implemented and assign specific tasks to subordinates. The power manipulation was embedded in the leader role description. Although all our participants were leaders - and thus, one could argue, were in higher power positions - some had more reward and coercive power than others. In the *low power condition*, leaders learned that they only had the power to evaluate subordinates' work for feedback purposes, and *could not* use these evaluations to fire, reprimand or reward subordinates. Conversely, in the *high power condition*, leaders learned that they

could evaluate subordinates' work, and use these evaluations to fire, reprimand and reward subordinates.

Participants then learned that their team had to perform two different tasks: a contrast-sensitivity task (see van Knippenberg, van Knippenberg, & De Cremer, 2007) and a desert survival task (see Lafferty & Pond, 1974). The contrast sensitivity task was introduced as a cover story for our performance feedback manipulation. The instructions stressed that the task was designed to measure the degree to which individual team members were contrast-sensitive. Contrast-sensitivity was presented as a trainable ability unrelated to intelligence or mathematical acumen. Participants also read that they would receive privileged feedback information regarding their and their teammates' performance.

In the contrast-sensitivity task participants had to estimate as accurately as possible the number of black squares in a checkerboard grid containing 180 randomly arranged black and white squares. Participants did not know that each grid always consisted of 90 black and 90 white squares. Each grid was presented for 5 seconds. After two practice rounds, participants estimated the number of black squares in a total of 10 grids. Next, leaders were presented with bogus performance feedback, regarding their and their subordinates' performance. This represented our performance feedback manipulation. In the *high performance feedback* condition, participants read that they had scored 88 points on a scale ranging from 0 to 100, while their subordinates had scored 55, 53 and 51 points respectively. In the *low performance feedback* condition, leaders read that they had scored 53 points, while their subordinates had scored 86, 88 and 84 points respectively. Participants were also presented with a rank ordering of their and their subordinates' performance, thus stressing the performance differences within the group. In the high performance condition, the leader was ranked first, while in the low performance condition, he/she was ranked last.

Subsequently, the desert survival task started. Leaders learned that their team could earn 500 points for successful task completion and that the allotted time for the task was 10 minutes. The task consisted of ranking 12 utensils found after a plane crashed in the desert. The leader's task was to delegate 4 of the utensils to each subordinate for ranking purposes, to decide on the point distribution (out of the total of 500 points) to the self and the other team members, and to create the final item ranking. Moreover, it was the leaders' job to motivate their subordinates to perform well (via emails). All leaders took the opportunity to send emails to their subordinates. They spent an average of 7 minutes composing the emails and wrote an average of 123 words. There were no significant differences between conditions in the amount of time spent writing the emails or in the

number of words used. In combination, this suggests that participants took the leader role seriously and believed to be working in a real team.

Participants never got to the last stage of the task, namely, the final rank-ordering. After having sent emails to their subordinates and having delegated the utensils, leaders were asked to divide the 500 points the team could earn between themselves and their subordinates. Finally, after answering our dependent measures, including demographic indicators such as age, gender, and study major, participants answered some funneled debriefing questions probing for hypothesis guessing. None had correctly guessed our hypothesis. We also randomly probed participants for suspicion regarding the reality of the virtual team environment. None of the probed participants indicated any suspicion. Finally participants were thoroughly debriefed, thanked for their participation and paid.

**Dependent measures.** Our main dependent measure represented the number of points leaders self-awarded. Each compensation point counted as one lottery entry for several 50 euro prizes, meaning that the more points they self-awarded, the more lottery entries they had and the higher the chances of winning one of the prizes. All manipulation check measures were recorded on a 7-point scale ranging from *strongly disagree* (1) to *strongly agree* (7). As a check of our power manipulation, participants responded to a 6-item scale (e.g., "I have significant power in administering negative consequences to my followers."). These items were averaged into one power score (Cronbach's  $\alpha = .83$ ). As a check of our performance feedback manipulation, participants answered three questions ("My score on the contrast sensitivity task was better than that of my team members."; "My score on the contrast-sensitivity task was worse than that of my team members." (R); "I performed better than my team members on the contrast sensitivity task."). The reverse-scored item was recoded and all items were averaged into a performance feedback score (Cronbach's  $\alpha = .95$ )<sup>1</sup>.

#### Results

In all analyses of variance (ANOVAs) power (high/low) and performance feedback (high/low) were factors in the design.

**Manipulation checks.** A two-way ANOVA on the power score yielded only a significant main effect of power, F (1, 76) = 77.64, p < .001,  $\eta^2_p$  = .50, indicating that participants in the high power condition (M = 5.69, SD = .79) felt more powerful than participants in the low power condition (M = 4.06, SD = .84). A two-way ANOVA on the performance feedback score revealed only a significant main effect of feedback, F (1, 76) = 983.19, p < .001,  $\eta^2_p$  = .92, with participants in the high feedback condition perceiving that they had performed better (M = 6.39, SD = .76) than participants in the low feedback condition (M = 1.57, SD = .60).

**Leader allocation decision.** A two-way ANOVA on the number of points leaders self-awarded revealed a main effect of performance feedback, F(1, 76) = 8.05, p = .006,  $\eta^2_p = .10$ , with participants who believed that they had outperformed their subordinates (M = 186.47, SD = 34.45) self-allocating more points than participants who believed that their subordinates had outperformed them (M = 162.79, SD = 45.53). As predicted, this main effect was qualified by a Power X Performance feedback interaction, F(1, 76) = 11.27, p = .001,  $\eta^2_p = .13$  (see Figure 3.1).

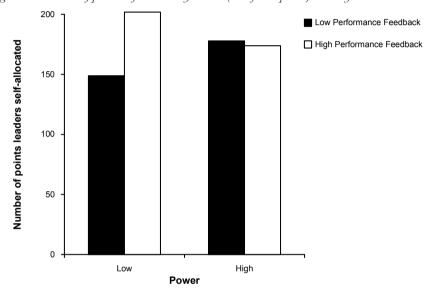


Figure 3.1 Number of points self-allocated by leaders (out of 500 points) in Study 1a

A simple main effects analysis indicated that low power leaders self-awarded more points when they thought they had outperformed their subordinates (M=201.38, SD=22.73) than when they thought their subordinates had outperformed them (M=148.05, SD=31.29), F(1,76)=18.68, p<.001,  $\eta^2_p=.20$ , CI (diff) = between 28.76 vs. 77.92. No such differential impact of performance evaluations on the point allocation decision was shown by high power leaders ( $M_{HPF}=173.05$ , SD=38.06 versus  $M_{LPF}=177.52$ , SD=53.04), F(1,76)<1. The simple main effects analysis also revealed that, when they perceived to have outperformed their subordinates, low power leaders (M=201.38, SD=22.73) self-allocated more points than high power leaders (M=173.05, SD=38.06), F(1,76)=5.15, p=.02,  $\eta^2_p=.06$ , CI (diff) = between 3.47 and 53.20. Conversely, when they thought their subordinates had outperformed them, low power leaders (M=148.05, SD=31.29) self-allocated less points than high power leaders (M

= 177.52, SD = 53.04), F (1, 76) = 6.18, p = .01,  $\eta^2_p$  = .07, CI (diff) = between -53.09 and -5.86. In line with Hypothesis 1, this suggests that, while high power leaders were relatively unaffected by situational contingencies in their self-allocations (i.e., performance feedback), low power leaders were more likely to factor such external influences into their decisions. In the next study we aim to replicate the findings of our laboratory experiment in a scenario experiment.

# Study 1b

#### Method

**Participants and design.** One hundred and seventeen undergraduates (41 females, 76 males), receiving payment of € 3 (approximately 4 US Dollars) for their voluntary participation, were randomly assigned to the conditions of a 2 (Power: high vs. low) X 2 (Performance feedback: high vs. low) between-subjects factorial design.

**Procedure.** Participants were approached in the cafeterias of a Dutch University and asked whether they wanted to fill in a short paper and pencil questionnaire in exchange for 3 euro.

Participants were informed that they would read the description of an organizational situation and that they had to answer a few questions pertaining to it. The scenario text prompted participants to imagine being the R&D director of a pharmaceutical company directly leading a department of 31 employees. At this point we introduced our power manipulation, which was similar to the power manipulation used in Study 1a. In the high power condition participants read that: "As Head of R&D you have the following powermeans at your disposal. You have the power to evaluate your subordinates' performance and to use these evaluations in deciding whether subordinates will get a promotion or not. You can also withhold bonuses or freeze salaries if subordinates' performance is not satisfactory. Furthermore, you have the power to fire subordinates whose performance is not satisfactory." In the low power condition, participants read that: "As Head of R&D you have the following power-means at your disposal. You have the power to evaluate your subordinates' performance and to use these evaluations for feedback purposes. However, you cannot withhold bonuses or freeze salaries if subordinates' performance is not satisfactory. Furthermore, you do not have the power to fire subordinates whose performance is not satisfactory."

Following the power manipulation we introduced our performance feedback manipulation. Participants read that their company had a public performance evaluation system, where everyone's performance feedback scores were available on the firm's intranet. In the *high performance feedback condition*, participants read that: "You are checking

your and your subordinates' performance feedback scores and are surprised to find out that you widely outperformed your subordinates. You scored 6.12 points out of 7 while the average score of your subordinates was approximately 3.85 points out of 7." In the *low performance feedback condition*, participants read that: "You are checking your and your subordinates' performance feedback scores and are surprised to find out that you widely underperformed your subordinates. You scored 3.85 points out of 7 while the average score of your subordinates was approximately 6.12 points out of 7."

The text continued by having the director's secretary bring an urgent matter to his/her attention: the department's salary budget for the year which was € 2,450,000. Based on company policy, each of the 31 employees earned, on average, a fixed salary of € 57,200, with the possibility of earning a bonus. Company policy did not dictate the directors' salaries and they could decide on how much they would earn out of the € 2,450,000 allocated to the department. The remainder of the € 2,450,000 (after subtracting the leader's self-assigned salary and the employees' fixed salaries) was to be used for employees' bonuses. The text stressed that leaders were not eligible for a bonus, above and beyond their salary self-allocation. Finally, participants answered our dependent measures, were thanked for their participation, paid and debriefed.

**Dependent measures.** Our main dependent measure represented the amount of money participants self-awarded out of the & 2,445,000 available to their department. All responses to our manipulation checks were measured on a 7-point scale ranging from *strongly disagree* (1) to *strongly agree* (7). As a check of our power manipulation participants answered the same 6-item scale (Cronbach's  $\alpha = .81$ ) as in Study 1a. As a check of our performance feedback manipulation, participants answered the same 3-item scale (Cronbach's  $\alpha = .81$ ) as in Study 1a.

#### Results

In all analyses of variance (ANOVAs) power (high/low) and performance feedback (high/low) were factors in the design.

**Manipulation checks.** A two-way ANOVA on the average power score revealed that participants in the high power condition (M = 5.38, SD = .82) felt more powerful than participants in the low power condition (M = 3.79, SD = .82), F (1, 113) = 108.81, p < .001,  $\eta^2_p = .49$ . A two-way ANOVA on the average performance feedback score revealed only a significant main effect of performance feedback, F (1, 113) = 367.40, p < .001,  $\eta^2_p = .76$ , with participants in the high performance feedback condition perceiving themselves to have performed better (M = 6.27, SD = 1.30) than participants in the low performance feedback condition (M = 1.70, SD = 1.23). No other effects reached significance, which leads us to conclude that our manipulations were successful.

**Leader allocation decision.** A two-way ANOVA on the amount of money leaders self-awarded revealed a main effect of performance feedback, F (1, 113) = 4.42, p = .04,  $\eta^2_p$  = .04, with participants in the high performance feedback condition (M = 179,930.20, SD = 158,639.10) self-allocating more money than participants in the low performance feedback condition (M = 128,549.20, SD = 104,893.31). As predicted, this main effect was qualified by a Power X Performance feedback interaction, F (1, 113) = 8.40, p = .005,  $\eta^2_p$  = .07 (see Figure 3.2).

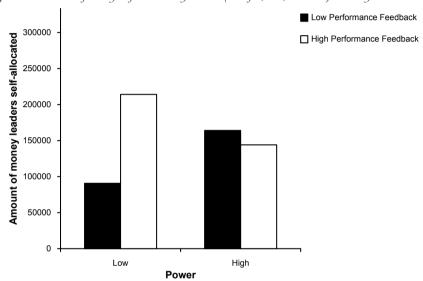


Figure 3.2 Amount of money self-allocated by leaders (out of 2,445,000 euro) in Study 1b

In line with Study 1a, a simple main effects analysis showed that participants in the low power condition self-awarded more money when they had outperformed their subordinates (M=214,777.78, SD=197,720.14) than when their subordinates had outperformed them (M=92,550.00, SD=55,684.82), F(1,113)=11.43, p=.001,  $\eta^2_p=.09$ , CI (diff) = between 50,615.70 and 193,839.85. No such differential impact of performance feedback on the salary allocation decision was shown by leaders in the high power conditions ( $M_{HPF}=145,082.58$ , SD=111,279.22 versus  $M_{LPF}=164,548.39$ , SD=124,542.58), F(1,113)<1. The simple main effects analysis also indicated that, when they had outperformed their subordinates, low power leaders (M=214,777.78, SD=197,720.14) self-allocated more money than high power leaders (M=145.082.58, SD=111,279.22), F(1,113)=4.17, p=.04,  $\eta^2_p=.04$ , CI (diff) = between 2,062.98 and 137,327.42. Conversely, when their subordinates had outperformed them, low power leaders (M=92,550.00, SD=55,684.82) self-allocated less money than high power

leaders (M=164,548.39, SD=124,542.58), F(1,113)=4.23, p=.04,  $\eta^2_p=.04$ , CI (diff) = between -141,306.93 and -2,689.84. Thus, similar to Study 1a, low power leaders' self-allocations were influenced by performance feedback, while high power leaders' self-allocations did not reflect an incorporation of performance feedback.

# Discussion Study 1a and 1b

In line with our theoretical framework, the present data suggest that high power leaders are relatively unaffected by situational contingencies in their self-allocations, as compared to low power leaders. In two studies, we confirmed Hypothesis 1 and showed that performance feedback impacted high power leaders' allocations less than low power leaders' allocations. Low power leaders who thought they had outperformed their subordinates claimed more resources than low power leaders who thought they underperformed their subordinates. Interestingly, and contrary to the popular perception that high power inevitably leads to self-servingness, we found that low power leaders who thought they had outperformed their subordinates self-allocated more resources than high power leaders.

Studies 1a and 1b did however only test Hypothesis 1 and therefore remain mute as to possible influences on high power leaders' allocations. As already stated in Hypothesis 2, from an approach-theory of power perspective, high power leaders are expected to act more in line with their internal belief states than low power leaders. Therefore, in Study 2a and 2b we set out to test Hypothesis 2 aiming to show that effective leadership beliefs (ELBs) affect high power leaders' allocations more than low power leaders' allocations.

## Study 2a

# Method

**Participants and design.** Ninety eight business administration students (27 females, 71 males) with a mean age of 20.22 years (SD = 2.13) participated voluntarily in the study in exchange for  $\in 10$  (approximately US \$14). Participants were randomly assigned to the conditions of a 2 (Power: high vs. low) X 2 (Effective leadership beliefs: self vs. group-serving) between-subjects factorial design.

**Procedure.** We followed the paradigm developed for Study 1a with a few modifications. The main difference was the introduction of our ELBs (self vs. groupserving) manipulation. Previous studies (Chiu, Hong, & Dweck, 1997) have successfully manipulated belief systems by providing participants with different reading passages claiming to represent research findings pertaining to the beliefs to be manipulated.

Participants in the Chiu et al. (1997) studies were presented with an alleged *Psychology Today* article persuading readers of one of two sets of beliefs.

In the present study, we used a similar set-up for our ELBs manipulation (see also Rus, van Knippenberg, & van Knippenberg, 2007). The ELBs manipulation was introduced while participants were waiting for their cognitive style test results and thus before they were assigned the leader role. Participants were informed that while waiting for their score they could read an excerpt from a Harvard Business Review (HBR) article on leader effectiveness. All participants took the time to read the alleged HBR excerpt. The self-serving version of the article claimed that research had found leaders pursuing their own goals, investing minimal resources in the group, and enjoying traditional leader perks to be most effective (e.g., "Dr. Hull's research team also found that leaders who maintained or increased traditional benefits such as a large office, an expensive company car, or company stock option bonuses were in the long run more effective. In Dr. Hull's opinion: These leaders increased some of their status symbols and gained increased respect from their followers."). The group-serving version of the HBR article claimed that research had shown leaders pursuing group goals, investing a large amount of resources in the group, and giving up on traditional leader perks to be most effective (e.g., "Dr. Hull's research team also found that leaders who gave up traditional benefits such as a large office, an expensive company car, or company stock option bonuses were in the long run more effective. In Dr. Hull's opinion: These leaders gave up some of their status symbols and gained increased respect from their followers.").

The rest of the experimental set-up was identical to Study 1a, with the omission of the contrast-sensitivity task and the performance feedback manipulation. Thus, after reading the HBR article, being assigned the leader role and being exposed to our power manipulation, participants proceeded to give subordinates instructions for the group task, and to make the point allocation. After answering our dependent measures and demographic questions pertaining to their age, gender and study major, participants answered some funneled debriefing questions to test for hypothesis guessing. None of our participants had correctly guessed our hypothesis. We also randomly probed participants for suspicion regarding the reality of their team. None of the probed participants indicated any suspicions. Finally participants were thoroughly debriefed and were presented with both versions of the alleged HBR article. After ensuring that they understood the entirely fabricated nature of the article they were thanked for their participation and paid.

**Dependent measures.** As in Study 1a our main dependent variable was the number of points leaders self-awarded. All manipulation check measures were recorded on a 7-point scale ranging from *strongly disagree* (1) to *strongly agree* (7). To check for the success

of our power manipulation we used the same power scale as in Studies 1a and 1b (6 items; Cronbach's  $\alpha$  = .83). As a check of our ELBs manipulation, participants answered four questions (Rus, van Knippenberg, & van Knippenberg, 2007) assessing their agreement with statements made in the HBR article. Two questions pertained to the self-serving and two to the group-serving ELBs (e.g., "An effective leader is a leader who stresses group goals"). The two group-oriented items were reverse-scored and all items were combined into an average ELBs score (Cronbach's  $\alpha$  = .85).

#### Results

In all analyses of variance (ANOVAs), effective leadership beliefs (self-serving/group-serving) and power (high/low) were factors in the design.

**Manipulation checks.** A two-way ANOVA on the average power score revealed only a significant main effect of power, F(1, 94) = 9.83, p = .002,  $\eta^2_p = .10$ , indicating that leaders in the high power conditions (M = 5.18, SD = .93) felt more powerful than leaders in the low power conditions (M = 4.61, SD = .81). A two-way ANOVA on the average ELBs score revealed only a significant main effect of ELBs, F(1, 94) = 35.92, p < .001,  $\eta^2_p = .27$ , indicating that leaders in the self-serving ELBs conditions (M = 4.48, SD = 1.29) were more likely to endorse self-serving ELBs than leaders in the group-serving conditions (M = 3.01, SD = 1.10).

**Leader allocation decision.** A two-way ANOVA on the number of points leaders self-awarded revealed a main effect of ELBs, F (1, 94) = 8.86, p = .004,  $\eta^2_p$  = .08. Leaders endorsing self-serving ELBs claimed more points for themselves (M = 182.48, SD = 40.61) than those endorsing group-serving ELBs (M = 159.32, SD = 38.32). As predicted, the main effect of ELBs was qualified by a Power X ELBs interaction, F (1, 94) = 18.15, p < .001,  $\eta^2_p$  = .16 (see Figure 3.3).

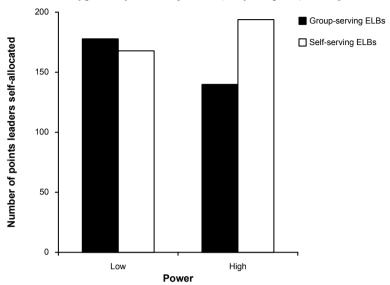


Figure 3.3 Number of points self-allocated by leaders (out of 500 points) in Study 2a

We had predicted that high power leaders would rely more on their ELBs in making resource self-allocations than low power leaders. A simple main effects analysis indicated that high power leaders self-awarded more points when they endorsed selfserving ELBs (M = 194.28, SD = 34.71) than when they endorsed group-serving ELBs  $(M = 141.08, SD = 36.88), F(1, 94) = 27.30, p < .001, \eta_p^2 = .22, CI (diff) = between$ 32.98 and 73.41. No such differential reliance on ELBs was found for low power leaders  $(M_{SELB} = 169.65, SD = 43.34 \text{ vs. } M_{GELB} = 179.08, SD = 29.44)$ . In addition, the simple main effects analysis also showed that high power leaders endorsing self-serving ELBs (M = 194.28, SD = 34.71) self-allocated more points than low power leaders endorsing self-serving ELBs (M = 169.65, SD = 43.34), F(1, 94) = 5.50, p = .021,  $\eta_p^2 = .05$ , CI (diff) = between 3.77 and 45.47. Interestingly, high power leaders endorsing groupserving ELBs (M = 141.08, SD = 36.88) claimed less points for themselves than low power leaders endorsing group-serving ELBs (M = 179.08, SD = 29.44), F(1, 94) =13.64, p < .001,  $\eta^2_p = .12$ , CI (diff) = between -58.43 and -17.57. This suggests that high power leaders' self-allocations were significantly influenced by their endorsed ELBs, while low power leaders' were not. More importantly, contingent on the nature of the endorsed ELBs (i.e., whether they were self or group-serving), high power leaders' selfallocations were more self or more group-serving than low power leaders' selfallocations.

# Study 2b

#### Method

**Participants and design.** One hundred and two Dutch undergraduates (48 females, 54 males) participated voluntarily in the study in exchange for € 3 (approximately US \$4). Participants' mean age was 22.12 years (SD = 3.11) and they were randomly assigned to the conditions of a 2 (Power: high vs. low) X 2 (ELBs: self vs. groupserving) between-subjects factorial design.

**Procedure.** Participants were approached in the student cafeterias of a Dutch University and asked whether they wanted to fill in a short paper and pencil questionnaire in exchange for € 3. The same scenario as in Study 1b was used, with the only difference being the replacement of our performance feedback manipulation with our ELBs manipulation. Following the same power manipulation as in Study 1b participants were asked to visualize sitting in their office reminiscing about things they had learned at an Executive Coaching Seminar on leadership effectiveness.

At this point we introduced our ELBs (self vs. group-serving) manipulation, which was similar to the ELBs manipulation used in Study 2a. Participants in the *self-serving ELBs condition* read: "You found out that effective leaders set their personal goals first; are driven by pursuing their own results, greatly benefit from having special privileges such as access to a company jet and stock-options and generally invest few of their resources and energy into their group.", while participants in the *group-serving ELBs condition* read: "You found out that effective leaders set their group's goals first; are driven by pursuing their group's results, greatly benefit from relinquishing special privileges such as access to a company jet and stock-options and generally invest a lot of their resources and energy into their group." The rest of the text was identical to Study 1b. After answering our dependent measures, participants were thanked, paid, and debriefed.

**Dependent measures.** Identical to Study 1b, our main dependent measure represented the amount of money participants self-awarded out of the  $\[ \in \]$  2,445,000 budget. All items comprising our manipulation checks were measured on a 7-point scale ranging from *strongly disagree* (1) to *strongly agree* (7). To check the effectiveness of our power manipulation we used the same power scale as we did in Studies 1a, 1b, and 2a (6 items; Cronbach's  $\alpha = .86$ ). To check the effectiveness of our ELBs manipulation, participants answered the same ELBs scale as in Study 2a (4 items; Cronbach's  $\alpha = .87$ ).

#### Results

In all analyses of variance (ANOVAs) power (high/low) and ELBs (self/group-serving) were factors in the design.

**Manipulation checks.** As expected, a two-way ANOVA on the average power score revealed only a significant main effect of power, F (1, 98) = 97.66, p < .001,  $\eta^2_p$  = .50, with participants in the high power conditions (M = 5.47, SD = 1.03) feeling more powerful than participants in the low power conditions (M = 3.26, SD = 1.20). A two-way ANOVA on the average ELBs score revealed only a significant main effect of ELBs, F (1, 98) = 34.37, p < .001,  $\eta^2_p$  = .26, indicating that leaders in the self-serving ELBs conditions (M = 4.19, SD = 1.45) were more likely to endorse self-serving ELBs than leaders in the group-serving conditions (M = 2.73, SD = 1.03).

**Leader allocation decision.** A two-way ANOVA on the amount of money leaders self-awarded revealed a main effect of ELBs, F (1, 98) = 5.79, p = .01,  $\eta^2_p$  = .05. Participants endorsing self-serving ELBs (M = 207,736.17, SD = 168,565.32) self-allocated more money than participants endorsing group-serving ELBs (M = 144,976.25, SD = 99,230.16). As predicted, the main effect of ELBs was qualified by a Power X ELBs interaction, F (1, 98) = 9.84, p = .002,  $\eta^2_p$  = .09 (see Figure 3.4).

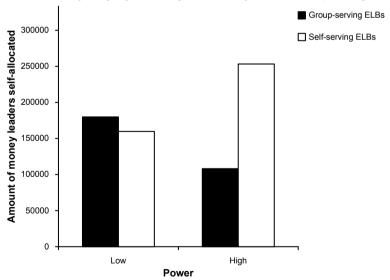


Figure 3.4 Amount of money self-allocated by leaders (out of 2,445,000 euro) in Study 2b

In line with Study 2a, a simple main effects analysis indicated that high power leaders self-allocated more money when they endorsed self-serving ELBs (M = 252,583.33, SD

= 201,550.92) than when they endorsed group-serving ELBs (M = 108,761.56, SD =37,146.63), F(1, 98) = 15.41, p < .001,  $\eta_p^2 = .14$ , CI (diff) = between 71,133.91 and 216,509.64. As predicted, no such ELBs contingent differences in self-allocations were found for low power leaders ( $M_{SELB} = 160,939.13 \ SD = 111,618.85 \ vs. \ M_{GELB} =$ 179,897.57 SD = 125,651.55). The simple main effects analysis also showed that high power leaders endorsing self-serving ELBs (M = 252,583.33, SD = 201,550.92) claimed more money for themselves, than low power leaders endorsing self-serving ELBs (M =160,939.13 SD = 111,618.85), F(1, 98) = 5.78, p = .01,  $\eta_p^2 = .06$ , CI (diff) = between 16,040.39 and 167,248.01. More interestingly, high power leaders endorsing groupserving ELBs (M = 108,761.56, SD = 37,146.63) self-allocated less money than low power leaders endorsing group-serving ELBs (M = 179,897.57 SD = 125,651.55), F(1, 1)98) = 4.08, p = .04,  $\eta_p^2 = .04$ , CI (diff) = between -141,021.14 and -1250.88. In sum, the results of our simple main effects analyses suggest that high power leaders' allocation decisions are more or less self-serving contingent on the endorsed ELBs (self vs. groupserving), while low power leaders' decisions do not seem to be affected by endorsed ELBs.

# Discussion Study 2a and 2b

In line with Hypothesis 2, in Studies 2a and 2b we found that effective leadership beliefs impacted high power leaders' self-allocations more than low power leaders' self-allocations. More importantly, contingent on the endorsed ELBs, high power leaders' self-allocations were more or less self-serving. High power leaders endorsing self-serving ELBs acted more self-servingly than high power leaders endorsing group-serving ELBs. Interestingly, high power leaders endorsing group-serving ELBs acted more group-servingly than low power leaders endorsing group-serving ELBs.

#### Study 3

In this study we measured leader power, performance feedback, effective leadership beliefs, and self-serving leader behaviors in an organizational context. The survey was designed to further elucidate some potential questions that may have arisen from our previous studies. First, while our experimental studies yielded consistent causal evidence in support of our hypotheses, they do not speak to whether we can find support for our theoretical framework in a field context in a sample of organizational leaders. Second, because we tested our two hypotheses in independent studies, one may wonder whether performance information and effective leadership beliefs are independent concepts or

whether they are related. Third, although we have no reason to believe that relying on Dutch samples in our experimental studies poses a limitation to the generalizability of our conclusions, we nevertheless used the opportunity for a replication with a sample from a different country, namely the United Kingdom. To address these potential open questions we tested both hypotheses simultaneously in a sample of organizational leaders.

#### Method

**Procedure.** The study was conducted online as a leadership survey. Respondents were recruited via a panel firm located in the United Kingdom. Emails with personalized survey links were sent to a panel of individuals in managerial or supervisory positions who had a minimum of 3 direct subordinates and a minimum of 5 years of work experience.

Importantly, the survey was conducted in line with recommendations given in the field (Birnbaum, 2004; Dillmann, 2007). By utilizing server-sided survey programming we avoided common technical selection biases, which generally exclude people who do not meet special browser requirements (e.g., Java Script). Moreover, prior to going live with the survey we pre-tested the layout on a number of different computers varying the browsers used as well as the screen resolutions to ensure that the survey would look the same on different systems. We also assigned each potential respondent a unique session ID, resulting in individualized survey links. This made it impossible for any respondent to participate in the survey more than once. To increase response rate, respondents received a monetary incentive for their participation. On the first page of the survey we guaranteed the anonymity and confidentiality of individual surveys and emphasized that participation was voluntary. Respondents interested in our results were given the opportunity to provide their email addresses in a different database so that names and email addresses could not be linked to individual responses. These measures taken to prevent common pitfalls of online research lead us to be at least as confident about the quality of our data as we would have been had we conducted a traditional paper and pencil survey.

**Sample.** Two hundred and twenty eight respondents meeting the study's requirements completed the survey out of a total of 340 emails sent out to potential respondents (67 % response rate). The sample's mean age was 42.99 years, (SD = 9.76) and women made up 39 % of the sample. Respondents' average fulltime work experience was 23.21 years (SD = 10.31), their average tenure in a managerial or supervisory position was 12.28 years (SD = 7.96), and their average tenure on the current job was 6.95 years (SD = 5.17). All respondents worked in private organizations

and had on average 13.29 subordinates (SD = 14.30). Respondents with a higher education degree (i.e., Bachelor degree or higher) made up 71.1% of the sample and the majority (84.12%) held management or senior management positions.

Measures. All responses were assessed on 5-point scales (1 = strongly disagree, 5 = strongly agree). Leader power was measured with 9 items of the Yukl and Falbe (1991) position power scale (i.e., three of the position power subscales: coercive, reward, and legitimate power). We used the original items and only adapted the instructions given to respondents (i.e., "My supervisor can..." was changed to "As a supervisor I can..."). All items were averaged into one leader power score<sup>2</sup>. Leader performance was measured with one item, which was designed to be similar to the performance feedback leaders had received in Study 1a and 1b ("On average, compared to my subordinates, my performance last year was 1 = much better, 5 = much worse). The item was reverse-scored prior to using it in any analyses. ELBs were measured with eight items (4 self and 4 group-serving) similar to our ELBs manipulation checks in Studies 2a and 2b (e.g., "To be effective, a leader should always pursue group goals even if this would come at the expense of his or her personal goals."; "A leader concerned with group outcomes is effective."; "To be effective, a leader should pursue his or her own goals even if this would come at the expense of his or her group's goals."; "A leader concerned with his or her personal outcomes is effective."). The group-serving items were reverse-scored and all items were combined into an average ELBs score.

An 8-item scale, inspired by work by Choi and Mai-Dalton (1998) and van Knippenberg and van Knippenberg (2005) comprised our measure of leader self-serving behavior. Arguably, leaders can act self-servingly by securing higher monetary benefits for themselves, but they can also act self-servingly by making self-serving causal attributions such as taking unwarranted credit for group accomplishments or by denying responsibility for failure on group projects (cf. Weary Bradley, 1978). While in Study 1a, 1b, 2a, and 2b, our dependent measure tapped into the allocation of monetary resources, in the survey we also measured the allocation of other resources, such as time and credit for jobs performed. Our self-serving behaviors measure in the survey is thus more encompassing than our measure in the experimental studies. For each of the 8 items of the scale, respondents had to indicate the number of times they had performed the described behavior during the past year (1 = never, 2 = rarely; 3 = sometimes; 4 = usually; 5)= always). Items included: "I have negotiated a bonus for myself that was substantially higher than the bonus my subordinates received."; "Instead of giving credit to my subordinates for jobs requiring a lot of time and effort, I took the credit myself."; "I have used my leadership position to obtain benefits for myself."; "Although I was partly to be blamed, I did not take personal responsibility for my group's failure to meet a goal."; "I have pursued my personal interests, even if those interests were not serving my group's interests".

#### Results

We first performed a principal components analysis (PCA) with OBLIMIN rotation of our predictor variable items (i.e., leader power, performance feedback, and ELBs) which yielded a three-factor solution with all items loading .64 or higher on the intended scale and all cross-loadings below |.30|. Then we performed a PCA of our dependent variable items (i.e., leader self-serving behaviors) which yielded a one-factor solution with item loadings of .68 or higher. Means, standard deviations, and intercorrelations for the study variables are shown in Table 3.1.

Table 3.1 Means, Standard Deviations and Intercorrelations for Study 3

	M	SD	(1)	(2)	(3)	(4)
(1) Leader power	3.16	.77	(.82)			
(2) Performance feedback	2.32	.70	09	n/a		
(3) Effective leadership beliefs	2.18	.48	.11	.05	(.82)	
(4) Leader self-serving behaviors	2.40	.43	.08	.06	.34**	(.85)

*Note.* Cronbach's alphas are displayed on the diagonal. All constructs were measured by Likert scales ranging from 1 to 5. N = 228 (listwise). \*\* p < .01.

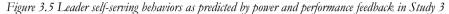
Leader self-serving behaviors. To test our hypotheses that high power leaders' actions are influenced less by performance feedback and are more in line with their effective leadership beliefs than low power leaders' actions, we conducted a hierarchical regression analysis in which leader self-serving behaviors were predicted by main effect terms (leader power, performance feedback, and ELBs) at Step 1 and the interaction terms (Leader power X Performance feedback and Leader power X ELBs) at Step 2 <sup>3</sup>. Following Aiken and West (1991), leader power, performance feedback, and ELBs were centered by subtracting the mean from each score, and the interaction terms as well as the main effects were based on the centered scores.

Table 3.2 Summary of Regression Analysis for Leader Power, Performance Feedback and Effective Leadership Beliefs Predicting Leader Self-serving Behaviors in Study 3

Variable	b	SE b	ß	t	Þ
Step 1					
Leader power	.03	.03	.05	.82	.41
Performance feedback	.03	.04	.05	.86	.38
Effective leadership beliefs	.30	.05	.34	5.40	<.001
Step 2					
Leader power	.04	.03	.07	1.20	.23
Performance feedback	.04	.04	.07	1.15	.25
Effective leadership beliefs	.31	.05	.35	5.71	<.001
Leader power x Performance feedback	15	.05	19	-3.11	.002
Leader power x Effective leadership beliefs	.21	.07	.19	2.96	.003

*Note.* The explained variance of Step 1 was  $R^2 = .13$ . Step 2 explained an additional variance of  $R^2$  change = .05. N = 228 (listwise).

Table 3.2 shows the regression results: Step 1 explained a significant proportion of variance in leader self-serving behaviors and we found a positive relationship between ELBs and leader self-serving behaviors. More importantly, Step 2<sup>4</sup> explained an additional significant proportion of variance in leader self-serving behaviors and it revealed our predicted Leader power X Performance feedback (see Figure 3.5) and Leader power X ELBs (see Figure 3.6) interactions.



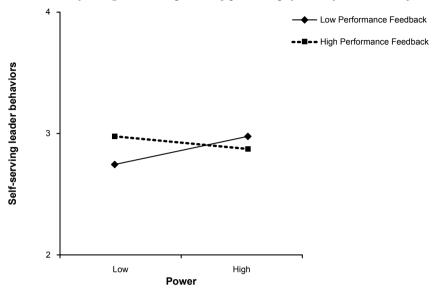
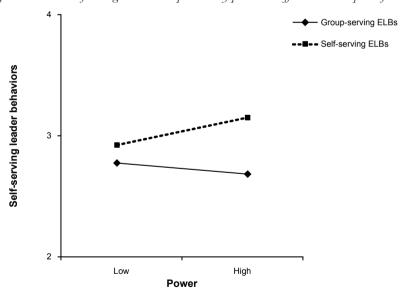


Figure 3.6 Leader self-serving behaviors as predicted by power and effective leadership beliefs in Study 3



To further analyze the interactions, we conducted simple slopes analyses (Aiken & West, 1991) and determined the simple slopes for high and low power leaders separately. As predicted, performance feedback yielded a positive relationship to leader

self-serving behaviors for low power leaders (1 SD below the mean;  $\beta$  = .26, p = .004), but not for high power leaders (1 SD above the mean;  $\beta$  = -.11, p = .161). Also as predicted, ELBs yielded a strong positive relationship to leader self-serving behaviors for high power leaders (1 SD above the mean;  $\beta$  = .53, p < .001) but a much weaker relationship for low power leaders (1 SD below the mean;  $\beta$  = .16, p = .046). Thus, in line with the findings of Study 1a and 1b we found that performance feedback is related to leader self-serving behaviors for low power, but not for high power leaders. Moreover, in line with the findings of Study 2a and 2b, the current data suggest that ELBs are more strongly related to leader self-serving behaviors for high than for low power leaders.

# Discussion Study 3

In line with our theoretical framework, we replicated the results of Studies 1a, 1b, 2a, and 2b in a field setting, and showed that low power leaders' actions were influenced more by performance information than high power leaders' actions, while high power leaders' behaviors were more in line with their effective leadership beliefs than low power leaders' behaviors. The current study is thus not only an extension of our earlier findings to a field setting in a different country, but it also scrutinizes a greater variety of leader self-serving behaviors which go above and beyond simple monetary allocations. Moreover, by testing both our hypotheses simultaneously, the current study also established that our proposed Power X Performance feedback and Power X Effective leadership beliefs interactions are independent from each other.

#### General Discussion

Leader self-serving behaviors have been proposed both in academic circles and within the forum of public opinion to be a particularly destructive class of leadership behaviors (e.g., De Cremer & van Knippenberg, 2004) with negative consequences for the organization, as well as for followers' motivation and performance. We posited that power would moderate leaders' sensitivity to different cues that may inform leader behavior in resource allocation contexts. Specifically, we predicted that high power leaders' resource allocations would be impacted less by contextual cues and would be more representative of leaders' internal beliefs as compared to low power leaders' allocations. These predictions, derived from an integration of the power-approach theory (Keltner et al., 2003), equity theory (Adams, 1965), and leader categorization theory (Lord & Maher, 1993), were tested in a series of four laboratory and scenario experiments as well as in an organizational survey.

We consistently showed that leader power interacted with situational information (i.e., performance feedback) and internal belief states (i.e., effective leadership beliefs) in predicting leader self-serving allocations. Thus, we found that the allocation decisions of high power leaders were not influenced by performance feedback information, but rather by their effective leadership beliefs. Confidence in our results is bolstered not only by replication across studies, but also by the fact that we employed different methodologies (i.e., laboratory experiment, scenario experiment, cross-sectional survey) and tapped into different samples from two different countries (i.e., Dutch students, managers and supervisors in the United Kingdom).

# Implications for the Study of Leader Self-serving Behaviors

This research provides first evidence that leader power has a significant impact on leader self-serving behaviors. More precisely, contrary to popular opinion, we showed that high power leaders need not necessarily be corrupt. By virtue of their power, these leaders are free to act at will, unencumbered by social norms and rules. This freedom can however result in either self or group-serving actions, depending on the beliefs these leaders have regarding effective leadership. As such, our research bridges recent developments in social psychological research on power and leadership research. Specifically, we have shown that different power levels, even within a role traditionally considered to be a high power role, lead to different decisions and behaviors. This suggests that from a leadership perspective it is important to consider not only the effects of power differences between leaders and subordinates, but also the effects of power differentials within the leadership role on decision making and behavior. Our findings are also congruent with some earlier research on the power motive by Winter (e.g., 1973, 1998) who showed that those US presidents scoring high on power motivation exhibited both more pro and more antisocial behaviors than those presidents scoring low in power motivation.

By focusing on power as a determinant of leader actions we followed a call made by House and Aditya (1997) for more systematic scientific inquiry into the antecedents of leader behaviors and added a social-psychological perspective to the dearth of empirical research on determinants of leader actions. Surprisingly, as compared to the voluminous body of work on leadership effectiveness, research on antecedents of leader behaviors has been scant, and has largely focused on individual difference factors (Bono & Judge, 2004; Chan & Drasgow, 2001; Judge, Bono, Ilies, & Gerhardt, 2002) and on factors affecting leadership development (Day, 2001; Dvir, Eden, Avolio, & Shamir, 2002).

Our finding that leader power moderates the effects of contextual and internal cues on leader self-allocations has a number of implications for the study of leader behaviors in general, and leader allocation decisions in particular. First, it seems that high power leaders do indeed follow their internal radar more than situational cues when making allocation decisions. While in this research we zoomed in on leaders' beliefs regarding leadership effectiveness, future studies trying to elucidate leaders' decision making processes in resource allocation contexts could take into consideration leaders' dispositional attributes, such as their social values (MacCrimmon & Messick, 1976) or social relationship orientation (Mills & Clark, 1984). In line with our current argument, we would expect high power leaders, in contrast to low power leaders, to allocate resources by relying on these dispositional attributes.

Second, the fact that power has been shown to anchor individuals more heavily on their own points of view (Galinsky et al., 2006) can raise particular problems in a leadership context, where leaders are expected to prioritize responsibilities towards the group over personal predilections and desires. Previous research has amply demonstrated that a lack of perspective-taking, that is, the inability to see the world from another person's perspective, can lead to stereotyping and subordinate derogation (e.g., Fiske, 1993; Galinsky, Wang, & Ku, 2008). Therefore, we see leader perspectivetaking as a moderator of the potential negative effects of leader power as a particularly promising avenue for research on leader self-serving behaviors. Perspective-taking, as an individual difference variable or as a trainable ability, could serve to direct high power leaders' attention towards their subordinates' thoughts and feelings, and by doing so, prompt them to act according to their employees' interests. Thus, we expect that leader power and perspective-taking would interact such that high power leaders who are also high in perspective-taking should act more group-servingly than high power leaders who are low in perspective-taking. Moreover, we see perspective-taking as potentially playing an important role in the study of leadership effectiveness. Leaders are generally expected to motivate their subordinates toward the achievement of group goals (e.g., Hollander, 1980). But leaders can only be effective motivators if they understand their audience, and we suggest that this understanding relies largely on leaders' capacity to see the world from their subordinates' perspective. Therefore, we argue that leader perspective-taking, especially when coupled with the action-orientation and optimism that comes with high leader power can be an important precursor of leader effectiveness.

#### Caveats and Limitations

Naturally, this research has limitations that deserve comment. Each paradigm we employed suffers from certain drawbacks in terms of generalizability, causality, manipulation or measurement. First, the use of student samples in the laboratory experiments could raise external validity concerns. However, because our aim was to

establish causality (Berkowitz & Donnerstein, 1982) in the relationship between power, the use of information, and leader resource allocations, we consciously chose for this experimental set-up, high in internal validity (Ilgen, 1986; Mook, 1983). Moreover, to increase the mundane realism of our studies, we complemented our laboratory experiments (Study 1a and 2a) with two scenario experiments (Study 1b and 2b). Previous research has also shown that there is no reason to suspect that students behave differently than other populations (Brown & Lord, 1999; Dipboye, 1990) and experimental findings using similar paradigms have been replicated in survey-based organizational research (De Cremer & van Knippenberg, 2004; van Knippenberg & van Knippenberg, 2005). More important, the fact that Study 3, for which concerns about external validity pose less of a problem, also yielded support for our theoretical framework and replicated the findings of our experimental studies, should serve as a counter-argument for the external validity criticism. Conversely, Study 3 might be criticized for being correlational in nature (i.e., rendering it mute in matters of causality) and for the measurement of undesirable behaviors via self-reports rather than via behavioral measures. There is however evidence suggesting that, when assessing undesirable behaviors, self-reports are as accurate as more 'objective' measures such as police reports or lie detector tests (Clark & Tifft, 1966; Hindelang, Hirschi, & Weiss, 1979). Prior research has also argued that the use of self-reports for undesirable behaviors is not as problematic as the use of self-reports for desirable behaviors, as they might be more prone to under- than to over-reporting (Aquino & Douglas, 2003). Furthermore, it is also more probable that if undesirable behaviors are self-reported, they are actually quite accurate renditions of behavior. Ultimately however, this remains a question to be answered by future research and we wholeheartedly endorse future tests of our hypotheses in field settings with both follower and leader ratings of self-serving behaviors as well as more 'objective' measures. Another potential weakness of Study 3 could be that all variables were measured in a single questionnaire (i.e., making common source and common method variance a potential problem). This type of design could lead to an inflation of the relationships between variables, and therefore, the main effect of ELBs in Study 3 might be overestimated. It is however important to note that common source or method bias cannot account for statistical interactions. Because it may inflate the main effects it may lead to an underestimation of the effect sizes for interactions (Evans, 1985; McClelland & Judd, 1993). As such, common source or method bias does not pose a threat to the validity of our conclusions regarding the Power X Performance feedback and Power X ELBs interactions. All in all, the combination of the experimental designs of Studies 1a, 1b, 2a, and 2b, with the survey design of Study 3, leads us to see these concerns as less of a threat to the overall

conclusions of the present study, given that the strengths of the one methodology may compensate for the weaknesses of the other.

# **Practical Implications**

Although conclusions regarding practical implications are to be regarded as tentative and as requiring further inquiry and clarification, we see potential for our findings to be used in applied settings, i.e., in organizations trying to curb leader self-serving behaviors. First, there seems to be some value in promoting the development of group-serving ELBs. The leader development (London, 2002) and coaching literature (Smither & Reilly, 2001) suggest that interventions directed at improving leadership generally work because they aim at creating new self-schemas. Some value might therefore be drawn from promoting group-serving ELBs as ideal leadership self-schemas. This could be done via leadership training and executive seminars as well as via teaching in MBA programs, where future leaders are formed. Second, we showed that high power leaders are less likely to rely on situational cues in their allocation decisions and are more likely to rely on their internal belief states. Although it might seem that these findings do not bode well for organizations trying to curb self-interested leader behaviors, we argue that this could be good news. For instance, organizations could select individuals into leadership roles who score high on integrity or perspective-taking measures. Moreover, organizations could invest in training programs that teach leaders to take others' perspective. The simple act of trying to see the world through their subordinates' eyes could make leaders aware of their employees' interests and act accordingly.

#### To Conclude

Leader self-serving actions are a particularly pernicious class of leadership behaviors carrying the specter of negative consequences for subordinates as well as for the organization at large. From this perspective, it is somewhat surprising that leadership research to date seems to have hardly concerned itself with factors causing leader self-serving behaviors. As such, the present research hopes to have opened a new avenue for exploring factors causing leaders to act self-servingly by pointing at the value of a power analysis.

#### Notes

- <sup>1</sup> We found no differences between conditions in terms of mood or self-efficacy. We also did not find any differences between conditions in actual performance on the contrast sensitivity task. Introducing these actual performance scores as covariates in our analyses does not change the significance or pattern of our results.
- <sup>2</sup> All items loaded on a single factor. We also measured respondents' subjective sense of power via the 8-item sense of power scale developed by Anderson and Galinsky (2006). Substituting the sense of power score for the position power score does not change the significance or pattern of our predicted interactions. For the sake of consistency with our experimental studies we report the results of the analyses based on the position power scale.
- <sup>3</sup> We did not control for any covariates because rather often especially with survey data controls serve the purpose of getting something significant that was not significant before. Becker (2005) refers to this practice as problematic and cautions against potential Type II errors. Moreover, we hypothesized two interactions and controlling for covariates would not be the best option if we want to exclude them as alternative explanations for our moderated findings. However, including controls (i.e., age, gender, number of subordinates, years of fulltime work experience, overall tenure in managerial or supervisory position, tenure in current managerial or supervisory position, educational level, team identification), does not change the significance or pattern of our interactions. Because we wanted to keep the survey study as similar as possible to our experimental studies, we do not report regression results with covariates.
- <sup>4</sup> Although not part of our predictions, we also tested a third step in the hierarchical regression model where we included the Performance feedback X ELBs interaction and the Power X Performance feedback X ELBs interaction. None of these additional two interactions reached significance and the significance and pattern of our two predicted interactions did not change.

# Chapter 4:Myopia of Power: Procedural Justice Systems, Perspective-taking and Self-serving Behavior

The present research investigated the relationship between power and leader self-serving behaviors. Specifically, we hypothesized and showed in two experiments and an organizational survey that procedural justice systems and leader perspective-taking influence the relationship between leader power and self-serving allocations. In Experiment 1, the presence of procedural justice systems increased high power leaders' perspective-taking and resulted in lower self-allocations in contrast to conditions where procedural justice systems were absent. In Experiment 2, we manipulated leader power, perspective-taking, and procedural justice systems and found that high power leaders in the no perspective-taking conditions, self-allocated less money when procedural justice systems were present than when they were absent, replicating the results of Experiment 1. However, high power leaders in the high perspective-taking conditions, self-allocated about the same (low) amount of money regardless of the presence or absence of procedural justice systems. Finally, we replicated our findings in an organizational survey. Across these studies, procedural justice systems and leader perspective-taking mitigated the effects of a power-induced egocentric focus on leader resource allocations.

#### Introduction

In 2008, John Thain, the ousted CEO of Merrill Lynch, spent \$ 1.2 Million on redecorating his downtown Manhattan office, as the company was firing employees and was on the brink of bankruptcy. Needless to say, this lavish spending of company money at a time when rank and file employees were losing their livelihoods drew the ire of the general public and the body politic. Perhaps not surprisingly, it has been suggested that it is *power* that drives leaders to divest scarce organizational resources away from collective purposes and toward endeavors that benefit themselves (e.g., Kipnis, 1972, 1976). Indeed, a growing body of research suggests that *powerful* individuals seem to disproportionately anchor on their own vantage points, to be poor assessors of others' perspectives and interests, and to be primarily concerned with their own desires and well-being (e.g., Ebenbach & Keltner, 1998; Fiske, 1993; Galinsky, Gruenfeld, & Magee, 2003; Galinsky, Magee, Inesi, Gruenfeld, 2006; Keltner, Gruenfeld, & Anderson, 2003).

In the quintessentially interdependent organizational context, leaders are however expected to employ their power in the pursuit of collective interests (Aquino & Reed, 1998; Hollander, 1980), and a failure to do so has been associated with decreased leader effectiveness (e.g., Choi & Mai-Dalton, 1999; De Cremer & van Knippenberg, 2002, 2004; van Knippenberg & van Knippenberg, 2005). Not only can self-interested leader behaviors promote decreased follower motivation and performance, but they can also result in public relations debacles for the organization, as well as in the leader's loss of power and status. Because leader self-serving behaviors can lead to such a variety of negative consequences it seems essential to identify factors that could dampen the tendencies of those in power to act in self-interested ways.

In order to develop our understanding of how power affects leader self-serving behaviors, in this research, we develop and extend recent insights in the psychology of power (e.g., Galinsky et al., 2006; Keltner et al., 2003) by identifying factors that may attenuate a power-induced egocentric focus: procedural justice systems and perspective-taking. Because leader self-interested allocations appear to stem from a power-induced myopia that narrows the focus of attention to one's own vantage point, one way to mitigate the occurrence of such behaviors would be to increase the extent to which powerful individuals consider others' perspectives and interests. To this end, we argue that (1) perspective-taking can serve to broaden powerful individuals' attention to incorporate consideration of others' interests, and that (2) procedural justice systems can lead to increased perspective-taking on the part of powerful leaders.

Our take on how procedural justice systems and perspective-taking can counteract a power-induced egocentric focus breaks down into two interrelated positions that we develop and test in the three studies reported in this research. First, we argue and show that the presence of procedural justice systems (Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Leventhal, 1980) leads to increased perspective-taking on the part of powerful leaders. This in turn, facilitates powerful leaders' active consideration of subordinate interests, resulting in lower self-allocations in contrast to conditions where procedural justice systems (PJS) are absent (Study 1). Second, we argue and show that, under conditions where high power leaders are directly induced to take their subordinates' perspectives (Study 2), or score high on an individual difference measure of perspectivetaking (Study 3), the effect of procedural justice systems on leader resource selfallocations will be weaker, than under conditions where high power leaders do not take their subordinates' perspectives. In short, we argue that powerful leaders' selfish resource allocations can be reduced by either directly increasing their perspective-taking or by indirectly inducing them to take their subordinates' perspectives via the presence of procedural justice systems.

The aim of the present research is thus three-fold: 1) to contribute to an understanding of how power informs leader decisions by integrating research on power and leadership; 2) to identify two important factors influencing powerful leaders' resource allocations: procedural justice systems and leader perspective-taking; (3) to outline both the theoretical and practical relevance of procedural justice systems and perspective-taking in mitigating the negative effects of power in the service of leadership.

## The Psychology of Leader Power

There is an almost natural association between power and the leader role, and yet, the two are not the same (Goodwin, 2003). Power has often been considered to be a fundamental force governing social relationships and has usually been defined as asymmetric control over valued resources (Fiske, 1993; French & Raven, 1959; Keltner et al., 2003). Moreover, it has been argued that this structural difference in the control over critical resources directly translates into psychological experience. That is, power and its effects can become a psychological property of the individual (e.g., Galinsky et al., 2003; Magee, Galinsky, & Gruenfeld, 2007).

The leader role effectively places individuals in a position where, next to motivating, coordinating and directing group members' efforts (e.g., De Cremer & van Knippenberg, 2003; Farmer & Aquinis, 2005; Hollander, 1980; Yukl & van Fleet, 1992; Yukl, Wall, & Lepsinger, 1990), they have the authority to make decisions that affect

individual and group level outcomes. The leader role thus entails control over valuable resources, and consequently, it entails the possession of power. However, there will inevitably be some variation in the structural amount of power available within the leader role, and we argue that these structural differences translate directly into different psychological experiences of power. From an approach-theory of power perspective (Keltner et al., 2003), we propose that the foundation of the relationship between power and the leader role resides within these psychological effects of power (see also Galinsky, Jordan, & Sivanathan, 2008). Because we posit that the amount of power psychologically experienced by individuals in leadership positions is a proximal motivator of their actions, in this research, we examine the effects of varying amounts of power within the leader role on resource distributions.

The power-approach theory (Keltner et al., 2003) suggests that power has wideranging psychological and behavioral consequences by fundamentally altering the way individuals perceive the world, others and themselves. Although a deluge of recent research based on this theory has documented a number of both positive and negative effects associated with elevated power (for a review see Galinsky, Jordan, & Sivanathan, 2008), in this research, we will primarily focus on two broad effects of power relevant to explaining leader resource allocations: (1) power increases a focus on rewards, and (2) power reduces social attention.

First, a growing body of research has provided support for the notion that power increases a focus on rewards. High power individuals have been shown to be more attentive to, and to more assertively pursue rewards (Galinsky et al., 2003) than their low power counterparts. Moreover, elevated power, as opposed to low power has been associated with an increased focus on, and relentless pursuit of personally rewarding goals (Chen, Lee-Chai, & Bargh, 2001; Galinsky et al., 2003; Guinote, 2007a; Smith, Jostmann, Galinsky, & van Dijk, 2008).

Second, power does not only increase a general focus on rewards, but it also decreases social attentiveness by deflecting attention away from others and toward the self. Thus, powerful individuals seem to disproportionately anchor on their own vantage points, to be poor assessors of others' perspectives and interests, and to generally view the world through a lens of self-interest by being primarily concerned with their own desires and well-being (e.g., Ebenbach & Keltner, 1998; Fiske, 1993; Galinsky et al., 2003; Galinsky et al., 2006; Gruenfeld, Inesi, Magee, & Galinsky, 2008; Keltner et al., 2003; Kipnis, 1972). Elevated power has been associated with feelings of increased psychological distance from subordinates, subordinate devaluation and derogation (e.g., Georgesen & Harris, 1998; Kipnis, 1972; O'Neal, Kipnis, & Craig, 1994; Rind & Kipnis,

1999), as well as increased stereotyping (Fiske, 1993; Goodwin, Operario, & Fiske, 1998).

Notably, power influences both how much attention as well as what kind of attention is directed at others. On the one hand, Galinsky et al. (2006) demonstrated that possessing power seems to impair the ability to take others' perspectives and to consider their interests. In their studies, the powerful were less likely than the powerless to spontaneously take the visual perspective of others, to take others' background knowledge into account, and to correctly identify others' emotional expressions. That is, the powerful anchored more heavily on their own points of view and were less accurate than low power individuals in understanding how others experience the world. On the other hand, Gruenfeld and colleagues (2008) showed that power tends to increase objectification, or the tendency to view others as tools for one's own purposes. Their studies suggest that the powerful, as opposed to the powerless, tend to view others in instrumental terms and therefore, approach and attend to individuals who are perceived to help them achieve their goals. This tendency toward instrumental attention exhibited by the power-wielders was also found by Overbeck and Park (2001, 2006). In their studies, the powerful paid increased attention to subordinates as long as individuating their followers was in line with their goals. All in all power seems to be associated with (1) reduced social attention and an inability to step into others' shoes, as well as with (2) instrumental attention where others are seen through a lens of self-interest.

We argue that this dual focus on pursuing personally satisfying rewards and a lack of attention to others' unique points of view and interests creates a predisposition for powerful leaders to act more selfishly in resource allocation contexts than their less powerful counterparts.

# Procedural Justice Systems, Perspective-taking and Leader Self-serving Behaviors

Our previous analysis of the effects of power suggests that high power leaders are more likely than low power leaders to allocate resources self-servingly. These allocation decisions are however made within a larger social or organizational context, and an extensive body of research suggests that organizational members' behaviors tend to be influenced not only by their individual attributes and characteristics, but also by elements of social structure (e.g., Katz & Kahn, 1966; Lawrence & Lorsch, 1967; Pfeffer, 1991). By integrating ideas from both the procedural justice and power literatures, we posit that characteristics of formally institutionalized structures regarding the process of making allocation decisions - procedural justice systems - moderate the effects of power on leader allocations, by either facilitating power-induced allocation

tendencies or by constraining them. For reasons to be set forth below, we argue that the presence of PJS constrains high power leaders' selfish resource allocations by increasing the extent to which they consider their subordinates' perspectives, in contrast to conditions where PJS are absent.

PJS are formalized sets of policies, practices and procedures that determine the rules to be used in making decisions about employee outcomes (Colquitt, 2001; Colquitt et al., 2001; Leventhal, 1980; Leventhal, Karuza, & Fry, 1980; Thibaut & Walker, 1975), such as for example resource allocations. To be considered fair, such systems would generate procedures that are consistent, bias-free, accurate, correctable, representative of all concerned (a criterion related to voice) and based on prevailing ethical standards (Leventhal, 1980; Leventhal et al., 1980; Thibaut & Walker, 1975). Moreover, PJS are institutional-level variables that can influence the attitudes and behaviors of leaders as well as subordinates. To date, most procedural justice research has treated PJS as formal institutional policies that influence employee perceptions of procedural justice, which, in turn, positively affect work-related employee attitudes and behaviors (for reviews see Cohen-Charash & Spector, 2001; Colquitt et al., 2001; Cropanzano, Rupp, Mohler, & Schminke, 2001; Greenberg, 1990; Konovsky, 2000). However, much less attention has been devoted to understanding the effects of PJS on the behaviors of leaders.

We argue that PJS do not only influence employee perceptions and behaviors, but also impact leader allocation decisions by providing the features of the decision architecture. Specifically, they provide a decision-making frame that directs allocators' attention toward their recipients' perspectives. We posit that the presence (vs. absence) of such a structural system increases the likelihood that high power leaders take their subordinates' perspectives into account by rendering the allocation decision's recipients with their distinct interests more salient. In turn, we expect that this increased perspective-taking on the part of high power leaders in the presence of PJS, will directly translate into less self-serving leader allocations, in contrast to conditions where PJS are absent.

We argue that in the absence of PJS, high power leaders are more likely than low power leaders to approach the allocation decision from an egocentric vantage point and to ignore the perspectives and interests of their decision's recipients. This egocentric focus should render high power leaders more likely to allocate resources in a way that favors satisfying their own desires. When present, PJS communicate system norms, that is, explicit system-sanctioned behaviors that are expected and considered to be appropriate for members of the system (e.g., Katz & Kahn, 1966). Because PJS signal to employees that the organization respects their dignity (Brockner & Wiesenfeld, 1996; Lind & Tyler, 1988), and that their interests will be considered (Chen, Brockner, &

Greenberg, 2003), they should also communicate to leaders that (1) the organization values its employees, and (2) that the prevalent norm within the organization requires the employment of fair procedures in the allocation of resources. Whereas these procedural rules do not require that allocation decisions ensure outcome favorability for employees, they do stress the need to treat recipients with dignity and respect. Additionally, procedural justice rules such as voice, consistency, ethicality and bias-suppression should highlight the fact that the recipients of the allocation decision may have unique expectations, interests and desires. This, in turn, should elicit a more detailed contemplation of alternative viewpoints on the part of high power leaders. In sum, we argue that PJS render the recipients of allocation decisions more salient which should broaden powerful leaders' focus of attention to include a consideration of their perspectives in the resource-allocation process.

Based on this logic, PJS should increase high power leaders' perspective-taking by rendering them more aware of their employees' unique interests and perspectives. Perspective-taking is often defined as the cognitive ability to step outside of one's own experience and to actively consider the viewpoint of another person (e.g., Davis, 1980, 1983; Galinsky & Ku, 2004; Galinsky, Ku, & Wang, 2005), and has been both theoretically and empirically distinguished from affective empathy (Coke, Batson, & McDavis, 1978; Davis, 1980, 1983; Epley Caruso, & Bazerman, 2006; Hogan, 1969; Oswald, 1996). Whereas perspective-taking can be a relatively stable trait or general ability (Davis, 1980, 1983), it can also be directly induced (e.g., Batson, 1991; Galinsky & Ku, 2004; Galinsky et al., 2005; Galinsky & Moskowitz, 2000), as well as shaped by situational factors (Parker & Axtell, 2001) such as, for example, accountability (Tetlock, Skitka, & Boettger, 1989) or systemic procedural justice.

Perspective-taking has been related to smoother social functioning (Davis, 1980; Mead, 1934; Piaget, 1932), increased helping and cooperative behaviors in organizational settings (Parker & Axtell, 2001), reduced stereotyping (Galinsky & Moskowitz, 2000), increased empathic feeling (Betancourt, 1990; Coke et al., 1978) and altruistic motivation (Batson, 1991), as well as to a reduction in a number of egocentric biases in judgment (Galper, 1976; Regan & Totten, 1975; Wade-Benzoni, Tenbrunsel, & Bazerman, 1996).

We believe perspective-taking may affect high power leaders' allocation decisions, because the act of taking another person's viewpoint can serve as a corrective lens for the myopic egocentric focus induced by high power. Individuals who fail to see others' vantage points and remain locked in their own perspective are more likely to react based on immediate self-interest (Arriaga & Rusbult, 1998). Perspective-takers however are more likely to engage in increased self-other merging (Davis, Conklin, Smith, & Luce, 1996; Galinsky & Moskowitz, 2000), which implies both seeing more of oneself in the

other and more of the other in oneself (see Galinsky et al., 2005; Galinsky, Wang, & Ku, 2008). This increased self-other overlap combined with perspective-takers' relatively accurate perceptions of others' interests (Eisenberg, Murphy, & Shepard, 1997) may stimulate showing greater concern for others' needs, interests and desires (Arriaga & Rusbult, 1998). Thus, high power leaders who, in the presence of PJS, take their subordinates' perspectives should self-allocate lower amounts of resources than high power leaders who, in the absence of PJS, remain blindly locked in their own perspectives.

In sum, we predict that in the presence of PJS high power leaders' self-allocations will be lower than in the absence of PJS. Specifically, we argue that PJS constrain high power leaders' egocentric allocation tendencies by increasing the extent to which they take their subordinates' perspectives. Moreover, we expect this effect of PJS on leader allocations to be stronger for high than for low power leaders. Because low power leaders are inherently more likely to spontaneously take their subordinates' perspectives (Galinsky et al., 2006) than their high power counterparts, a system that would direct their attention toward their subordinates' interests should have less of an impact on their actions than on the actions of high power leaders.

# Study 1

In a first test of our predictions we conducted a computer-mediated experiment, specifically, testing the following moderation and mediated moderation hypotheses:

- Hypothesis 1: PJS will influence high power leaders' resource self-allocations more than low power leaders' self-allocations. High power leaders' self-allocations will be lower (vs. higher) when PJS are present (vs. absent). Low power leaders' self-allocations will vary less in the presence or absence of PJS than high power leaders' self-allocations.
- Hypothesis 2: The interaction between PJS and leader power on leader resource allocations is mediated by leader perspective-taking. The presence of PJS increases high power leaders' perspective-taking and leads to lower self-allocations in contrast to conditions where PJS are absent. The presence (vs. absence) of PJS should have less of an effect on low power leaders' perspective-taking than on high power leaders' perspective-taking.

In Study 1, participants were led to believe that they were the leaders of a fourperson group engaged in computer-mediated task performance. In reality, the group interaction was simulated via the experimental set-up and participants proceeded through the experiment individually. Whereas we acknowledge that this simulated group interaction may seem artificial when compared to real organizations, previous leadership research using similar paradigms has successfully shown that the experimental environment seems real to participants (e.g., van Knippenberg & van Knippenberg, 2005) (cf. experimental vs. mundane realism; Ilgen, 1986; Mook, 1983).

In line with previous experimental work on procedural justice, we employed the most accepted and most frequently used manipulation of procedural justice, namely a voice manipulation (e.g., Brockner, et al., 1998; De Cremer & van Knippenberg, 2003; Lind, Kanfer, & Early, 1990). The concept of voice introduced by Thibaut and Walker (1975) is related to the Leventhal criterion of representativeness and it emphasizes the extent of opportunity recipients of allocation decisions have in controlling the process or outcome of allocation decisions. As such, voice can be related to the leader (i.e., the leader allows employees voice) or it can be a formalized, structural aspect of procedures. In this study, in line with our theoretical argument, we manipulated voice as a structural, systemic property of the procedural arrangements for making allocation decisions.

#### Method

**Participants and design.** One hundred and one Dutch business administration students (39 females, 62 males) with a mean age of 18.70 years (SD = 1.27) participated voluntarily in the study in exchange for € 10 (approximately US \$ 12). Participants were randomly assigned to the conditions of a 2 (Power: high vs. low) X 2 (Systemic voice: voice vs. no voice) between-subjects factorial design.

**Procedure.** Participants arrived in groups of twelve to participate in a computermediated study on "virtual group decision making" and were seated in individual cubicles, each equipped with a computer. All instructions and stimuli were presented on the computer screens and all dependent measures were recorded by the program software.

After being informed about random assignment to a four-person team, participants learned that their team had a hierarchical structure (i.e., a leader and three subordinates) and that team members would be rewarded for their work. To ensure the credibility of the computer-mediated virtual group interaction space, participants had to wait for two minutes for the establishment of a bogus network connection between the team members. Next, they completed a purported cognitive style test and *all* participants were assigned the leader role allegedly based on their test results.

Participants then learned that their group would work on a number of different tasks and that, as leaders, they were to ensure their team's optimal performance. Leaders had to decide on *how* the tasks should be implemented and *assign* specific tasks to subordinates. The power manipulation was embedded in the leader role description.

Although all our participants were leaders - and thus, one could argue, were in higher power positions - some had more reward and coercive power than others. In the *low power condition*, leaders learned that they only had the power to evaluate subordinates' work for feedback purposes, and *could not* use these evaluations to fire, reprimand or reward subordinates by assigning them easier or more fun tasks. Conversely, in the *high power* condition, leaders learned that they could evaluate subordinates' work, and *use* these evaluations to fire, reprimand and reward subordinates by assigning them easier or more fun tasks.

Subsequently, participants read the instructions for their first group task, namely the desert survival task (see Lafferty & Pond, 1974). Leaders learned that their team could earn 500 points for successful task completion and that the allotted time for the task was 10 minutes. The task consisted of ranking 12 utensils found after a plane crashed in the desert. The leader's task was to delegate 4 of the utensils to each subordinate for ranking purposes, to decide on the point distribution (out of the total of 500 points) to the self and the other team members, and to create the final item ranking. Moreover, it was the leaders' job to motivate their subordinates to perform well (via emails). All leaders took the opportunity to send emails to their subordinates. They spent an average of 8 minutes composing the emails and wrote an average of 116 words. There were no significant differences between conditions in the amount of time spent writing emails or in the number of words used. In combination, this suggests that participants took the leader role seriously and believed to be working in a real team.

Participants never reached the last stage of the task, the final rank-ordering. After having sent emails to their subordinates and having delegated the utensils, leaders were told that they would engage in a number of decision making tasks. One of these tasks was the distribution of the 500 points between themselves and their subordinates. Before participants could engage in the actual point distribution they were exposed to our systemic voice manipulation. The voice manipulation was inspired by previous work (e.g., De Cremer & van Knippenberg, 2002) and was couched in terms of 'simulation' rules established for proper team functioning. In the systemic voice condition leaders were informed that in this game the simulation rules allow subordinates to voice their opinions regarding decisions that affect them. That is, the game rules allow subordinates to voice their opinions and to directly express their satisfaction or dissatisfaction with the final point distribution, and with the tasks they have been assigned during the simulation. Conversely, in the no systemic voice condition leaders were informed that in this game the simulation rules do not allow subordinates to voice their opinions regarding decisions that affect them. That is, the game rules do not allow subordinates to voice their opinions and to directly express their satisfaction or dissatisfaction with the final

point distribution and with the tasks they have been assigned during the simulation. It is important to note, that this systemic voice manipulation suggested to participants - prior to making their allocation decisions - that subordinates did (systemic voice) or did not (no systemic voice) have the *potential* to express their opinions. In fact, subordinates never expressed their opinions regarding the point distribution.

Finally, after answering our dependent measures, including demographic indicators such as age, gender, and study major, participants answered some funneled debriefing questions probing for hypothesis guessing. None had correctly guessed our hypothesis. We also randomly probed participants for suspicion regarding the reality of the virtual team environment. None of the probed participants indicated any suspicion. Finally participants were thoroughly debriefed, thanked for their participation and paid.

Dependent measures. Our main dependent measure represented the number of points leaders self-awarded. Each compensation point counted as one lottery entry for several 50 euro prizes, meaning that the more points they self-awarded, the more lottery entries they had and the higher the chances of winning one of the prizes. All other measures were recorded on a 7-point scale ranging from strongly disagree (1) to strongly agree (7). Leader perspective-taking was measured with a 3-item scale ("I tried to imagine my subordinates' interests before making a decision."; "I tried to put myself in my subordinates' shoes before making a decision."; "I did not try to look at my subordinates' point of view before making a decision." (R)). The reverse-scored item was recoded and all items were averaged into one perspective-taking score (Cronbach's  $\alpha = .77$ ). As a check of our power manipulation, participants responded to a 5-item scale (e.g., "I have significant power in administering negative consequences to my subordinates."). These items were averaged into one power score (Cronbach's  $\alpha = .91$ ). As a check of our systemic voice manipulation, participants answered nine questions adapted from De Cremer and van Knippenberg (2002) (e.g., "My subordinates were not given voice in the point allocation decision." (R); "My subordinates can complain about the final point distribution."). The negative items were reverse-scored and all items were combined into an average voice score (Cronbach's  $\alpha = .92$ ).

#### Results

In all analyses of variance (ANOVAs), power (high/low) and systemic voice (voice/no voice) were factors in the design.

**Manipulation checks.** A two-way analysis of variance on our average power score revealed a significant main effect of power, F(1, 97) = 183.11, p < .001,  $\eta_p^2 = .65$ , indicating that leaders in the high power condition (M = 5.95, SD = .92) perceived themselves to have more power than leaders in the low power condition (M = 2.82, SD

= 1.34). A two-way analysis of variance on the average voice score revealed only a significant main effect of voice, F(1, 97) = 178.74, p < .001,  $\eta^2_P = .65$ , indicating that leaders in the voice conditions (M = 4.68, SD = 1.24) perceived the system to allow their subordinates more voice than participants in the no voice conditions (M = 2.03, SD = .69). No other effects reached significance. Thus, we may conclude that our manipulations were successful.

**Leader allocation decision.** A two-way ANOVA on the number of points leaders self-awarded revealed a main effect of voice, F(1, 97) = 11.11, p = .001,  $\eta^2_p = .10$ , with participants in the no voice conditions (M = 192.78, SD = 41.47) self-allocating more points than participants in the voice conditions (M = 167.62, SD = 34.43). As predicted, this main effect was qualified by our predicted Power X Voice interaction, F(1, 97) = 5.77, p = .02,  $\eta^2_p = .06$  (see Figure 4.1).

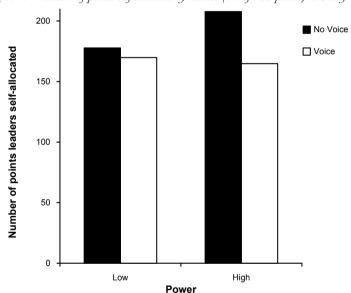


Figure 4.1 Number of points self-allocated by leaders (out of 500 points) in Study 1

We had predicted that systemic voice would moderate the effects of power on leader self-allocations. Specifically, we expected high power leaders to claim more points in the no voice condition than in the voice condition. A simple effects analysis indicated that high power leaders self-awarded more points in the no voice (M = 207.14, SD = 43.27) than in the voice condition (M = 164.70, SD = 29.20), F(1, 97) = 16.55, p < .001,  $\eta^2_{p} = .14$ , CI (diff) = between 21.73 and 63.15. No such differential voice effects on leader self-allocations were found for low power leaders ( $M_{Voice} = 170.42$ ,  $SD_{Voice} = 39.22$  vs.

 $M_{No\ Voice}$  = 177.31,  $SD_{No\ Voice}$  = 33.83). In addition, the simple effects analysis also revealed that high power leaders in the no voice condition (M = 207.14, SD = 43.27) self-allocated more points than low power leaders in the no voice condition (M = 177.31, SD = 33.83), F (1, 97) = 8.72, p = .004,  $\eta^2_p$  = .08, CI (diff) = between 9.79 and 49.87. Thus, it appears that the presence of voice (i.e., PJS) can mitigate high power leaders' tendency to claim more resources for the self.

Mediation analyses. The second set of analyses examined the hypothesized relationships of mediated moderation. We predicted that perspective-taking would mediate the relationship between the interaction of systemic voice and leader power on leader self-allocations. We tested moderation for each path of the mediated model using the procedures for moderated regression analysis and path analysis recommended by Edwards and Lambert (2007) to integrate moderation and mediation. We centered the continuous variable (perspective-taking) to reduce multicollinearity (Aiken & West, 1991). Expressions involving products of coefficients (indirect effects, total effects, and differences across levels of the moderator variable) were tested with bias-corrected confidence intervals (Efron & Tibshirani. 1993; Stine, 1989) using coefficients estimated from 1,000 bootstrap samples (Shrout & Bolger, 2002). In this approach, mediation is framed as a path model, and relationships among variables are expressed using regression equations. Moderation is incorporated by supplementing these equations with the moderator variable, its product with the independent variable, and its product with the mediator variable (Baron & Kenny, 1986). The equations are integrated through reduced-form equations by substituting the regression equation for the mediator variable into the equation for the dependent variable. This approach produces tests for direct, indirect, and total effects for different values of the moderator variable. It offers the advantage of pinpointing which paths of a mediated model are moderated and provides statistical tests of moderation for each path (Edwards & Lambert, 2007). Regression results are reported in Table 4.1. Simple effects for each path of the mediated model, as well as the indirect and total effects, are shown in Table 4.2.

Table 4.1 Results for the Moderated Path Analysis Approach in Study 1

	X Systemic voice	M Perspective- taking	Z Power	XZ	MZ	R <sup>2</sup>
Perspective taking	1.05**		0.40*	1.06**		.32**
Leader allocations	-8.92	-10.23**	16.97*	-4.98	-18.71*	.27**

Note. N = 101. Entries in columns X, M, Z, XZ, and MZ are unstandardized regression coefficients. In the perspective-taking row, the regression equation used systemic voice, power and the interaction term between systemic voice and power as predictors for leader perspective-taking. In the leader allocation decision row, the regression equation used systemic voice, perspective-taking, power, and the interaction terms between systemic voice and power, and perspective-taking and power to predict leader allocation decisions. \* p < .05. \*\*  $p \le .01$ .

Table 4.2 Analysis of Simple Effects Moderation by Power in Study 1

Moderator	St	Stage		Effect				
variable	First	Second	Direct	Indirect	Total			
Power								
Low	0.52*	-0.88	-6.43	-0.46	-6.90			
High	1.58**	-19.59**	-11.41	-31.04**	-42.45			
Differences	1.06**	-18.71**	-4.98	-30.58**	-35.55**			

Note. N=101. For rows labeled low and high, table entries are simple effects computed by using coefficient estimates from Table 4.1. Zs=-0.5 and 0.5 for low and high power, respectively. Differences in simple effects were computed by subtracting the effects for low power from the effects for high power. Tests of differences for the first stage, second stage, and direct effect are equivalent to tests of systemic voice by power on perspective-taking, perspective-taking by power on leader allocations, and systemic voice by power on leader allocations respectively as reported in Table 4.1. Effects involving products of coefficients (indirect effect, total effect) were tested using bias-corrected confidence intervals derived from bootstrap estimates. \* p < .05. \*\* p < .01.

For leader self-allocations, regression analyses in Table 4.1 indicate that leader power moderated the path from systemic voice to perspective-taking ( $XZ_{on\ perspective-taking}=1.06, p$  < .01) as well as the path from perspective-taking to leader self-allocations ( $MZ_{on\ leader}$  = -18.71, p < .05). Expressed as simple effects in Table 4.2, systemic voice

increased perspective-taking significantly more for high power leaders (first stage indirect effect equals 1.58, p < .01) than for low power leaders (first stage indirect effect equals 0.52, p < .05). This significant difference between high and low power leaders on perspective-taking as a function of systemic voice is in line with our prediction that whereas high power leaders need systemic voice to activate their perspective-taking, low power leaders are more likely to automatically take their subordinates' perspective. In Table 4.2, the simple effects also suggest that at the second stage (the path from perspective-taking to leader self-allocations), the indirect effect of systemic voice on leader self-allocations is significant for high power leaders (second stage indirect effect equals -19.59, p < .01) but not for low power leaders (second stage indirect effect equals -0.88, p = ns). Differences in the effects for low and high power leaders indicate that the first stage of the indirect effect was stronger for high power leaders (1.58 - 0.52 = 1.06,p < .01), and similarly, the second stage of the indirect effect was also stronger for high power leaders [-19.59 - (-0.88) = -18.71, p < .01]. These differences contributed to a significantly stronger total indirect effect for high power leaders [-31.04 - (-0.46)] = -30.58, p < .01]. Taken together, the results of Table 4.2 suggest that perspective-taking mediated the relationship between systemic voice and leader self-allocations only under conditions of high leader power (an indirect effect computed as the product of the first and second stages that equals -31.04, p < .01). This pattern of results indicates both first-stage and second stage moderation or mediated moderation for leader selfallocations.

# Discussion Study 1

We had proposed that systemic voice would interact with leader power in predicting leader self-allocations. Specifically, we have argued that in the presence of voice, high power leaders would claim lower amounts of resources than in the absence of voice. Moreover, we have posited that this inverse relationship between high power leaders' self-allocations and the presence of voice would be due to increased perspective-taking on the part of high power leaders. In line with our predictions, the results of Study 1 suggest that in the presence of voice, high power leaders' self-allocations were lower than in the absence of voice. Additionally, the results of the mediation analyses corroborate the idea that the effects of voice on high power leaders' allocation behaviors are due to an increase in perspective-taking. Thus, it seems that one possible way to reduce high power leaders' tendency to engage in selfish allocation behaviors would be to lead them to consider their subordinates' perspectives and interests via the presence of systemic procedural justice.

Whereas the results of this study do provide first evidence suggesting that the interaction between power and systemic procedural justice is mediated by leader perspective-taking, the current study also suffers from potential shortcomings. First, from a methodological standpoint, the fact that our mediator variable (i.e., perspectivetaking) is measured and not manipulated weakens the causal inferences we could make regarding the association between perspective-taking and leader allocations (e.g., Sigall & Mills, 1998; Spencer, Zanna, & Fong, 2005; Stone-Romero & Rosopa, 2008). Second, because we measured perspective-taking after our participants made their allocation decisions, questions could be raised regarding our proposed causal chain. Whereas we consciously chose this post-hoc measure of perspective-taking to avoid priming all of our participants (regardless of condition) with perspective-taking prior to their decisions (for a similar argument see Jacoby & Sassenberg, 2008; Sigall & Mills, 1998), we do acknowledge that it constitutes a flaw in our study design. One way to potentially circumvent the weaknesses associated with (1) measuring mediating processes under conditions where the actual measurement may in fact be problematic, as well as with (2) inferring causal relations based on correlational evidence, would be to test underlying processes by means of moderation (e.g., Kenny, 2008; Jacoby & Sassenberg, 2008; MacKinnon & Fairchild, 2009; Sigall & Mills, 1998; Sobel, 2008; Spencer et al., 2005; Stone-Romero & Rosopa, 2008). In other words, one can reformulate mediation hypotheses as moderation hypotheses and orthogonally manipulate in an experimental design the independent and the 'mediator' variables (e.g., Jacoby & Sassenberg, 2008; MacKinnon & Fairchild, 2009; Sigall & Mills, 1998).

In Study 2 we decided to employ this alternative way of testing our proposed relationship between power, PJS, perspective-taking and leader allocations. To this end, we reformulated our mediated moderation hypothesis as a moderation hypothesis and orthogonally manipulated leader power, PJS, and perspective-taking. Specifically, we predicted a three-way interaction between leader power, PJS and perspective-taking on leader resource allocations. We expected that under conditions of no perspective-taking, high power leaders should act more selfishly when PJS are absent than when they are present. In other words, under conditions of no perspective-taking we expect to replicate the two-way interaction between power and systemic procedural justice. However, under conditions of high perspective-taking, we expect smaller differences in the self-allocations of high and low power leaders, regardless of the presence or absence of PJS. That is, we expect that, under conditions of high perspective-taking, the interaction between power and systemic procedural justice should be weakened, because high power leaders who are directly induced to take their subordinates' perspectives do no longer need procedural justice systems to indirectly trigger perspective-taking.

# Study 2

In this study, we aimed to (1) further develop our understanding of the relationship between power, PJS, perspective-taking and leader allocation behaviors by conceptually replicating and extending the results of Study 1, as well as to (2) ameliorate some of the aforementioned concerns potentially associated with our mediation test in Study 1. In Study 2, we therefore investigated the interactive effect of systemic procedural justice, perspective-taking, and power on leader self-serving behaviors in a scenario experiment. Participants were presented with a hypothetical organizational situation describing a resource allocation problem faced by a leader. They had to imagine being the leader in the scenario and had to make the resource allocation decision. Specifically, Study 2 tested the following hypothesis:

Hypothesis 3: The effect of PJS on leader resource self-allocations is stronger for high than for low power leaders, but only under conditions of no perspective-taking. When perspective-taking is high, the effect of PJS on leader resource self-allocations will be weaker.

## Method

**Participants and design.** Two hundred and three Dutch business administration students (97 females, 106 males) participated voluntarily in exchange for course credit. Participants' mean age was 19.36 years (SD = 1.81) and they were randomly assigned to the conditions of a 2 (Power: high vs. low) X 2 (Systemic voice: voice vs. no voice) X 2 Perspective-taking (high vs. none) between-subjects design.

**Procedure.** Upon arrival to the lab, participants were seated in individual cubicles, each equipped with a computer. Once seated, participants could neither see one another, nor could they communicate with each other. All instructions and stimuli were presented on the computer screens and all dependent measures were recorded by the program software.

Participants were informed that they would read the description of an organizational situation and were asked to imagine that they were the leader in that particular scenario. The instructions also stressed that after reading the text, participants were expected to answer a few questions pertaining to it. The vignette prompted participants to imagine that they were the R&D director of a large pharmaceutical company, and that they were directly leading a department of thirty-one employees. They also read that, as Head of R&D, their goal was to ensure that their department reached or even exceeded its

performance goals. Moreover, it was their responsibility to motivate their subordinates to be creative and to give their best in performing their jobs.

At this point we introduced our power manipulation, which was similar to the power manipulation used in Study 1. In the high (*low*) *power* condition participants read that:

"As Head of R&D you also have the following power-means at your disposal. You have the power to evaluate your subordinates' performance and to use these evaluations to decide whether subordinates will get a promotion or not (for feedback purposes only). You can also (cannot) withhold bonuses or freeze salaries if subordinates' performance is not satisfactory. Furthermore, you have (do not have) the power to fire subordinates whose performance is not satisfactory."

The scenario text continued with the department head's secretary bringing an urgent matter to his/her attention: the department's salary budget for the year. The new budget for the department consisting of 31 employees and the department head was 2,450,000 euro. Based on company policy, each of the employees earned, on average, a fixed salary of 57,200 euro, with the possibility of earning a year-end bonus, contingent on good performance. Moreover, there was no company policy dictating the department head's salary and he/she could decide on the size of the salary he/she would earn. The leader's salary was included in the 2,450,000 euro allocated to the department and the remainder of the 2,450,000 (after subtracting the leader's self-assigned salary and the employees' fixed salaries) was to be used for employees' end-of-year bonuses. It was also stressed that the leader was not eligible for an end-of-year bonus and that he/she would need to factor that into the salary self-allocation.

Before the leader could make the actual resource allocation decision, we introduced our systemic voice manipulation, which was similar to the voice manipulation used in Study 1. Participants in the voice (no voice) condition read:

"Your company has (does not have) a system of rules in place that allows for fair procedures. That is why subordinates in your department are allowed (are not allowed) voice regarding decisions that affect them. That means subordinates have (do not have) the opportunity to state their opinion regarding the size of the salary budget left over for their bonuses. The rules also allow (do not allow) subordinates to express their (dis)satisfaction with the bonus pot left over for them, after you have made your salary decision."

Finally we introduced our perspective-taking manipulation, which was adapted from Batson et al. (2003). All participants read that: "We know that this is a lot of information. To be sure that you understand the salary allocation decision you will make, we would like for you to engage in a brief thought exercise. This exercise is meant

to improve your understanding of the task." In the *perspective-taking condition*, participants were then instructed that:

"In this exercise we would like you to imagine yourself in your subordinates' place. In preparing for the salary allocation decision and while making the allocation decision take your subordinates' viewpoint. That is, try to imagine what your subordinates are thinking while waiting for your decision. Take one minute for this thought exercise, getting as clear a sense as possible of your subordinates' perspective. Then, at the end of the minute, write down in the space at the top of the next page what you imagined. Research has found that carefully following this procedure can ensure understanding of the task."

In the *no perspective-taking condition*, participants read:

"In this exercise we would like that you think about the salary allocation decision you are about to make. In preparing for the salary allocation decision and while making the allocation decision think about the decision itself. Take one minute for this thought exercise, getting as clear a sense as possible of the upcoming decision. Then, at the end of the minute, write down in the space at the top of the next page what you imagined. Research has found that carefully following this procedure can ensure understanding of the task."

Before participants could make the allocation decision they were asked to write what they had imagined and were presented with the equivalent of five lines to enter their answers. We included the writing part of the exercise to ensure that participants imagined as instructed. Moreover, we couched the thought exercise as an understanding exercise in order to provide participants with some plausible rationale for engaging in it, as well as to reduce potential experimental demand issues (see Batson et al., 2003).

**Dependent measures.** Our main dependent measure represented the amount of money participants self-awarded. After answering our dependent measures, including demographic indicators, participants were thanked for their participation, paid, and debriefed.

**Manipulation checks.** All dependent measures, unless otherwise stated, were assessed on a seven-point scale ranging from *strongly disagree* (1) to *strongly agree* (7). As a check of our power manipulation participants answered the same 5-item scale used in Study 1. These five items were combined to form one average power score (Cronbach's  $\alpha = .93$ ). As a check of our voice manipulation, participants answered the same nine-item scale used in Study 1. The nine items were combined to form one average voice score (Cronbach's  $\alpha = .95$ ). As a check of our perspective-taking manipulation, participants answered the following multiple-choice question: "During the thought exercise I was asked to (1) Take the perspective of my subordinates; (2) Take my own

perspective; (3) Think about the decision itself; (4) I did not receive any information on that".

### Results

In all analyses of variance power (high/low); systemic voice (voice/no voice) and perspective-taking (high/none) were factors in the design.

**Manipulation checks.** As expected, a three-way analysis of variance on the average power score revealed only a significant main effect of power, F(1, 195) = 1101.71, p < .001,  $\eta^2_p = .85$ , indicating that participants in the high power condition (M = 5.94, SD = .75) felt more powerful than participants in the low power condition (M = 2.02, SD = .93). No other effects reached significance. A three-way analysis of variance on the average voice score revealed only a significant main effect of voice, F(1, 195) = 1329.45, p < .001,  $\eta^2_p = .87$ , indicating that participants in the voice condition (M = 5.24, SD = .60) perceived the system to allow their followers more voice than participants in the no voice condition (M = 1.95, SD = .67). No other effects reached significance. As a testament to our perspective-taking manipulation, 198 out of 203 participants answered the multiple-choice question correctly. The five individuals answering incorrectly chose the "I did not receive any information on that" option, and they were distributed across four different conditions<sup>1</sup>. The results of our manipulation checks lead us to conclude that our manipulations were successful.

**Leader allocation decision.** A three-way analysis of variance on the amount of euro leaders self-awarded revealed a main effect of perspective-taking, F(1, 195) = 4.11, p = .04,  $\eta^2_p = .02$ . Participants in the perspective-taking conditions (M = 114,408.82, SD = 66,452.22) self-allocated less money than participants in the no perspective-taking conditions (M = 141,670.30, SD = 115,185.98). Furthermore, the two-way Power X Voice interaction was significant, F(1, 195) = 4.48, p = .03,  $\eta^2_p = .02$ , replicating the results of Study 1. However, more interestingly and in line with our prediction, the main effect of perspective-taking and the two-way power by voice interaction were qualified by a significant Perspective-taking X Power X Voice interaction, F(1, 195) = 4.42, p = .03,  $\eta^2_p = .02$ .

We had predicted a significant Power X Voice interaction on leader self-serving behaviors in the no perspective-taking condition (a replication of Study 1), but not in the perspective-taking condition. In other words, we had predicted that perspective-taking would reduce the effects of power on leader self-serving behaviors, regardless of the presence or absence of a procedural justice system. Simple interaction analyses were conducted within the perspective-taking conditions (i.e., no perspective-taking and perspective-taking). As predicted, we found a significant simple interaction effect within

the no perspective-taking condition, F (1, 195) = 8.83, p = .003,  $\eta^2_p$  = .04 (see Figure 4.2).

The pattern of this simple interaction supports our hypothesis and replicates the results of Study 1. High power leaders in the no voice condition (M=204,071.43, SD=168,758.19) claimed more money than high power leaders in the voice condition (M=109,386.21, SD=73,537.31), F(1,195)=15.44, p<.001,  $\eta^2_p=.07$ . Moreover, high power leaders in the no voice condition (M=204,071.43, SD=168,758.19) self-allocated more money than low power leaders in the no voice condition (M=116,336.36, SD=83,361.09), F(1,195)=11.46, p=.001,  $\eta^2_p=.05$ . Also as predicted, we found no simple interaction effect within the perspective-taking conditions, F(1,195)=.00, p=.99,  $\eta^2_p=.00$  (see Figure 4.3).

In line with our hypothesis, within the perspective-taking conditions, both high and low power leaders claimed similar (low) amounts of money regardless of the presence or absence of systemic voice.

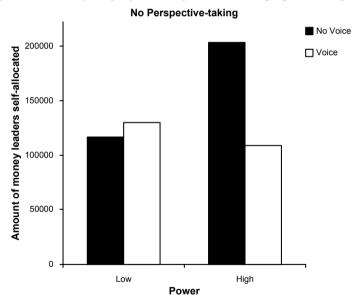


Figure 4.2 Amount of money self-allocated by leaders in the no perspective-taking conditions in Study 2

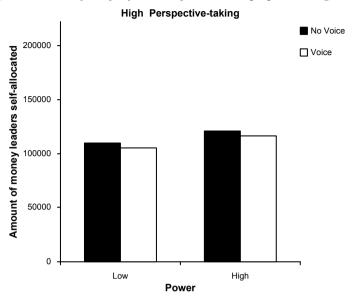


Figure 4.3 Amount of money self-allocated by leaders in the perspective-taking conditions in Study 2

## Study 3

In this study we measured leader power, systemic procedural justice, perspectivetaking, and self-serving leader behaviors in an organizational context. The survey was designed to further elucidate some potential questions that may have arisen from our previous studies. First, while our experimental studies yielded consistent causal evidence in support of our hypotheses, they do not speak to whether we can find support for our theoretical framework in a field context in a sample of organizational leaders. Second, we expanded our conceptualization of procedural justice as well as of leader self-serving behaviors. Whereas in our experimental studies we had manipulated systemic voice as an instantiation of systemic procedural justice, in the survey we used a broader measure of PJS (Colquitt, 2001) – thus showing that our effects are not only unique to voice. The dependent measures in Study 1 and 2 tap exclusively into the allocation of monetary resources, whereas leader self-serving behaviors may extend to other domains. In Study 3 we therefore expanded the scope of our dependent variable by scrutinizing a greater variety of leader self-serving behaviors which go above and beyond simple monetary allocations (e.g., time investment, credit allocated for jobs performed). Study 3 thus taps into a greater variety of leader self-serving acts. Third, in line with previous research conceptualizing perspective-taking as both a trait measure (Davis, 1980, 1983), as well as a more general ability that can be situationally induced (e.g., Batson, 1991; Galinsky &

Ku, 2004; Parker & Axtell, 2001), in this study, we aim to extend the findings of our experimental studies, where we treated perspective-taking as a situationally-induced variable, by considering the effects of perspective-taking as a trait measure. Last but not least, although we have no reason to believe that relying on Dutch samples in our experimental studies poses a limitation to the generalizability of our conclusions, we nevertheless used the opportunity for a replication with a sample from a different country, namely the United Kingdom. To address these potential open questions we tested Hypothesis 3 in a sample of organizational leaders.

## Method

**Procedure.** The study was conducted online as a leadership survey. Respondents were recruited via a panel firm located in the United Kingdom. Emails with personalized survey links were sent to a panel of individuals in managerial or supervisory positions who had a minimum of 3 direct subordinates and a minimum of 3 years of work experience.

We conducted the survey in line with recommendations given in the field (Birnbaum, 2004; Dillmann, 2007). Prior to going live with the survey we pre-tested the layout on a number of different computers varying the browsers used as well as the screen resolutions to ensure that the survey would look the same on different systems. We also assigned each potential respondent a unique session ID, resulting in individualized survey links that made it impossible for any single respondent to participate in the survey more than once. To increase response rate respondents received a monetary incentive for their participation. On the first page of the survey we guaranteed the anonymity and confidentiality of individual surveys and emphasized that participation was voluntary. Respondents interested in our results were given the opportunity to provide their email addresses in a different database so that names and email addresses could not be linked to individual responses. These measures taken to prevent common pitfalls of online research lead us to be at least as confident about the quality of our data as we would have been had we conducted a traditional paper and pencil survey.

**Sample.** Three hundred and forty respondents meeting the study's requirements completed the survey out of a total of 500 emails sent out to potential respondents (68% response rate). The sample's mean age was 41.46 years (SD = 9.62) and women made up 52.9% of the sample. Respondents' average fulltime work experience was 21.18 years (SD = 9.74), their average tenure in a managerial or supervisory position was 11.94 years (SD = 7.99), and their average tenure on the current job was 6.64 years (SD = 5.56). All respondents worked in private organizations and had on average 10.96

subordinates (SD = 8.80). Respondents with a higher education degree (i.e., Bachelor degree or higher) made up 74.1% of the sample and the majority (81.23 %) held management or senior management positions.

Measures. All responses were assessed on 5-point scales (1 = strongly disagree, 5 = strongly agree). Leader power was measured with 9 items of the Yukl and Falbe (1991) position power scale (i.e., three of the position power subscales: coercive, reward, and legitimate power). We used the original items and only adapted the instructions given to respondents (i.e., "My supervisor can..." was changed to "As a supervisor I can..."). All items were averaged into one leader power score <sup>2</sup>. Systemic procedural justice was measured with the seven items of the Colquitt (2001) procedural justice scale which was adapted such that the items were phrased to reflect systemic procedural justice (e.g., "To what extent do employees have influence over the outcomes arrived at by these procedures?"). The seven items were combined to form one average procedural justice score. Perspective-taking was measured with the perspective-taking subscale of the Davis (1983) Interpersonal Reactivity Index. The subscale consisted of seven items, which were combined to form one average perspective-taking score.

An 8-item scale, inspired by work by Choi and Mai-Dalton (1998) and van Knippenberg and van Knippenberg (2005) comprised our measure of leader self-serving behavior. Arguably, leaders can act self-servingly by securing higher monetary benefits for themselves, but they can also act self-servingly by making self-serving causal attributions such as taking unwarranted credit for group accomplishments or by denying responsibility for failure on group projects (cf. Weary Bradley, 1978). While in Study 1 and 2 our dependent measure tapped into the allocation of monetary resources, in the survey we also measured the allocation of other resources, such as time and credit for jobs performed. Our self-serving behaviors measure in the survey is thus more encompassing than our measure in the experimental studies. For each of the 8 items of the scale, respondents had to indicate the number of times they had performed the described behavior during the past year (1 = never, 2 = rarely, 3 = sometimes; 4 = usually, 5= always). The 8 items of our scale were the following: "I have negotiated a bonus for myself that was substantially higher than the bonus my subordinates received."; "I have used my leadership position to obtain benefits for myself."; "I have pursued my personal interests, even if those interests were not serving my group's interests."; "I did not put my own position at risk, even when I thought that this could have helped promote my group's goals."; "Instead of giving credit to my subordinates for jobs requiring a lot of time and effort, I took the credit myself."; "Although I was partly to be blamed, I did not take personal responsibility for my group's failure to meet a goal."; "I have shifted the blame for a mistake of mine onto one of my subordinates."; "I did not work overtime, although this would have helped my group meet its goals."

### Results

We first performed a principal-component analysis with OBLIMIN rotation of the items comprising our independent variables (i.e., power, procedural justice and perspective-taking). This analysis yielded a three-factor solution with all items loading |.72| or higher on the intended scale and all cross-loadings below |.20|. Second we performed a principal-component analysis of the items comprising our dependent variable (i.e., leader self-serving behaviors). This analysis yielded a one-factor solution with item loadings of |.69| or higher. Means, standard deviations, and intercorrelations for the study variables are displayed in Table 4.3.

Table 4.3 Means, Standard Deviations and Intercorrelations for Study 3

	M	SD	(1)	(2)	(3)	(4)
(1) Leader power	3.81	.53	(.79)			
(2) Procedural justice	3.42	.84	.26**	(.90)		
(3) Perspective-taking	3.83	.61	.16**	.25**	(.78)	
(4) Leader self-serving behaviours	1.61	.51	.04	24**	24**	(.83)

*Note.* Cronbach's alphas are displayed on the diagonal. All constructs were measured by Likert scales ranging from 1 to 5. N = 340 (listwise). \*\* p < .01.

**Leader self-serving behaviors.** To test our hypothesis we conducted a hierarchical regression analysis<sup>3</sup> in which leader self-serving behaviors were predicted by main effect terms (leader power, procedural justice and perspective-taking) at Step 1, the interaction terms for the two-way interactions at Step 2, and the interaction term for the three-way interaction at Step 3 (see Table 4.4).

Table 4.4 Summary of Regression Analysis for Leader Power, Procedural Justice, and Perspectivetaking Predicting Leader Self-serving Behaviors in Study 3

	Step 1	1		Step 2	61		Step 3	3	
Variable	q	SE b	ß	q	SE b	В	q	SE b	В
Power	.13	.05	13**	.12	.05	.12**	.07	.05	.07
Procedural justice	14	.03	22***	14	.03	23***	15	.03	24***
Perspective-taking	17	.04	20***	18	.04	20***	19	.04	23***
Power x Procedural justice				19	.05	19***	13	90.	13*
Power x Perspective-taking				.15	.04	.17***	.14	.04	.16*
Power x Procedural justice x Perspective-taking							.16	90.	.15*
$\Delta \mathrm{R}^2$					90.			.01	
$\mathbb{R}^2$		.11			.17		·	.18	
F	13.8	13.853***		11.2	11.248***		10.	10.66***	
Df		336		(,)	333		(,)	332	

Note. N=340 (listwise). \* p<.05. \*\*  $p\leq.01$ . \*\*\*  $p\leq.001$ .

Following Aiken & West (1991), power, procedural justice and perspective-taking scores were centered (i.e., by subtracting the mean from each score), and the interaction terms as well as the main effects were based on the centered scores. Table 4.4 shows the regression results. Step 1 explained a significant proportion of variance in leader self-serving behaviors and we found a positive relationship between power and leader self-serving behaviors, as well as a negative relationship between procedural justice, perspective-taking and leader self-serving behaviors. Step 2 explained an additional significant proportion of the variance in leader self-serving behaviors, and it revealed our predicted significant Power X Procedural justice interaction, thus replicating the results of Study 1 and 2. More importantly however, Step 3 explained an additional significant proportion of variance in leader self-serving behaviors and it revealed our predicted Power X Procedural justice X Perspective-taking interaction, replicating the three-way interaction found in Study 2. Figure 4.4 and Figure 4.5 show that the pattern of the interaction essentially replicates the pattern of results found in Study 2.

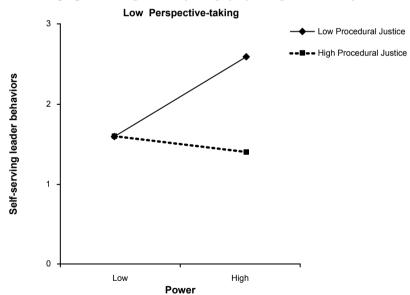


Figure 4.4 Low perspective-taking leaders' self-ratings of self-serving actions in Study 3

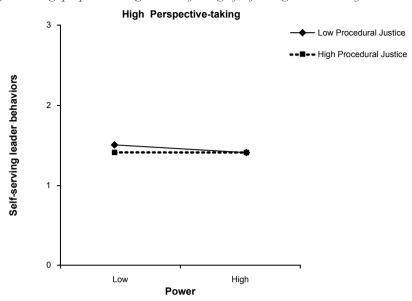


Figure 4.5 High perspective-taking leaders' self-ratings of self-serving actions in Study 3

To further analyze the 3-way interaction we calculated the simple slopes (Aiken & West, 1991) at different levels of our predictor variable (i.e., leader power). We had predicted that the effects of power on leader self-serving behaviors would be stronger when procedural justice was low rather than high under conditions of low perspective-taking, but that these effects would be weaker under conditions of high perspective-taking. In essence, this implies that we expect the slope for low perspective-taking/low procedural justice to be steeper than the slopes for low perspective-taking/high procedural justice, high perspective-taking/high procedural justice, and high perspective-taking/low procedural justice. Indeed, in line with our predictions, we found that only the slope for low perspective-taking/low procedural justice (t (332) = 4.78, p < .001) reached significance, whereas the slopes for low perspective-taking/high procedural justice (t (332) = -.62, p = .53), high perspective-taking/high procedural justice (t (332) = -.17, t = .87), and high perspective-taking/low procedural justice (t (332) = -.17, t = .87), and high perspective-taking/low procedural justice (t (332) = -.17, t = .87), and high perspective-taking/low procedural justice (t (332) = .28, t = .77) did not.

## General Discussion

Organizations headed by leaders who hubristically plunder the company coffers to satisfy their own whims and desires face not only public scorn and anger, but also losses in wealth and standing as well as decreases in employee performance and satisfaction. We predicted that the interplay between systemic procedural justice and leader

perspective-taking would mitigate the myopic self-centered focus induced among leaders by the experience of elevated power. These predictions, derived from an integration of the power-approach theory (Keltner et al., 2003), procedural justice research (Colquitt, 2001; Colquitt et al., 2001; Leventhal, 1980; Thibaut & Walker, 1975), and insights from work on perspective-taking (Davis, 1980, 1983; Galinsky & Ku, 2004; Galinsky et al., 2005), were tested in a series of two laboratory and scenario experiments as well as in an organizational survey. In Study 1, we argued that systemic procedural justice would facilitate perspective-taking among high power leaders, which should, in turn, directly translate into lower self-allocations as compared to conditions where PJS are absent. In line with our prediction, we found that high power leaders self-allocated a lower amount of points when subordinates were afforded voice than when they were not. Moreover, we showed that these effects of procedural justice and power on leader self-allocations were mediated by leader perspective-taking. In Study 2, we further extended our reasoning from Study 1 by reformulating our mediation hypothesis as a moderation hypothesis. Therefore, in Study 2 we tested the three-way interaction between power, PJS and perspective-taking on leader allocations, predicting that under conditions of no (or low) perspective-taking, high power leaders should self-allocate fewer resources when PJS are present than when they are absent. However, under conditions of high perspective-taking, this interaction between power and procedural justice systems should be weakened, and we expected high power leaders to exercise restraint in their self-allocations across the board, regardless of the presence or absence of PJS. As expected, we found that PJS and power interacted in their prediction of leader selfallocations in the no perspective-taking conditions, whereas in the perspective-taking conditions, high power leaders made other-oriented allocations across the board, independent of the presence or absence of procedural justice systems. In Study 3, we replicated and extended these findings to an organizational context, with a broader conceptualization of procedural justice systems, an individual difference measure of perspective-taking and a broader dependent variable as compared to our experimental studies. We demonstrated these effects across methodologies (i.e., laboratory experiment, scenario experiment, cross-sectional survey), across different samples from two different countries (i.e., Dutch students, managers and supervisors in the United Kingdom), with multiple instantiations of procedural justice systems, multiple measures of leader self-serving behaviors and both manipulations and measures of perspectivetaking.

# Implications for the Study of Leader Self-serving Behaviors

This research provides first evidence that the interplay between procedural justice systems and leader perspective-taking can serve to mitigate some of the negative effects of power on leader self-allocations. The present findings contribute to the study of leader allocation behaviors specifically, and leader behaviors more generally in a number of important ways.

First, by focusing on power as a determinant of leader actions we followed a call made by House and Aditya (1997) for more systematic scientific inquiry into the antecedents of leader behaviors and added a social-psychological perspective to the dearth of empirical research on determinants of leader actions. Surprisingly, as compared to the voluminous body of work on leadership effectiveness, research on antecedents of leader behaviors has been scant, and has largely focused on individual difference factors (Bono & Judge, 2004; Chan & Drasgow, 2001; Judge, Bono, Ilies, & Gerhardt, 2002), and on factors affecting leadership development (Day, 2001; Dvir, Eden, Avolio, & Shamir, 2002).

Second, our finding that systemic procedural justice moderates the effects of power on leader allocations contributes to the procedural justice literature in two different ways. First, we showed that, at least in a context where leader self-serving behaviors occur at the expense of followers' outcomes, systemic procedural justice can lead to higher subordinate outcome favorability. Typically, procedural justice research has studied the interactive effect of procedural justice and outcome favorability on employee fairness perceptions and attitudinal and behavioral reactions (see Brockner & Wiesenfeld, 1996, for a review). However, by studying systemic procedural justice as an antecedent of leader allocation behaviors, we found that higher procedural justice at the system level can result in fairer resource distributions on the part of the leader. Of course this particular finding is bound by the specific context under investigation in our research, where the more the leader self-allocated the less was left over for followers. Whether these results can be generalized to different contexts remains an intriguing question to be answered by future research. Second, in the present research we treated procedural justice as an exogenous variable influencing leader behaviors. Typically, procedural justice research has studied procedural justice as an exogenous variable influencing employee perceptions and behaviors. Much less attention has been devoted to understanding when, why and how leaders might in fact act in accordance with procedural justice rules (see also Scott, Colquitt, & Zapata-Phelan, 2007). By shifting the focus from the employee, as the recipient of procedural justice, to the leader, as the enactor of procedural justice, we opened a new research avenue that could provide us with valuable insights into how systems of procedural justice can influence leader

behaviors. For example, one could envision systemic procedural justice having a positive effect on leader implementation of procedural justice as well as on leader expressions of interactional justice. From a theoretical standpoint, examining factors that influence leader expressions of justice can provide us with new directions for building organizational justice models. From a practical standpoint, understanding the conditions that would facilitate leader engagement in distributive justice as well as leader expressions of procedural and interactional justice, could aid organizations in preventing injustice.

Third, we have shown in Study 3 that perspective-taking as an individual difference variable is a potent mitigator of the effects of power on leader self-serving behavior. This finding is in line with previous power research suggesting that the personalities of high power individuals are better predictors of their behaviors than the personalities of low power individuals (e.g., Bargh, Raymond, Pryor, & Strack, 1995; Chen et al., 2001; Galinsky, Magee, Gruenfeld, Whitson, & Liljenquist, 2008). For example, Chen and colleagues found that power-primed communally-oriented participants acted more selflessly and power-primed exchange-oriented participants acted more selfishly than participants exposed to neutral primes. Similarly, Galinsky and colleagues (2008) demonstrated that in a negotiation task, high power participants' social value orientations (MacCrimmon & Messick, 1976) were better predictors of their negotiation behaviors than their partners' reputations. This suggests that future studies, trying to elucidate leaders' decision making processes in resource allocation contexts, may benefit from considering other dispositional attributes that could attenuate some of the potentially negative effects associated with high power. For example, research might consider the effects of justice orientation (Rupp, Byrne, & Wadlington, 2003) on leader allocation behaviors. In line with our current argument, we would expect high power leaders to rely more on these dispositional attributes in their resource allocations, in contrast to low power leaders.

Fourth, because perspective-taking can be activated by situational contingencies such as procedural justice systems, future research may investigate other situational factors that could feed into perspective-taking and thereby serve as moderators of the more pernicious effects of power. To this end, leader accountability emerges as one obvious contender, given that accountability concerns would also increase perspective-taking (Tetlock et al., 1989). This would suggest that accountable leaders should act less self-servingly than leaders who are not held accountable for their actions. Whereas this idea has been advanced in previous theorizing (Keltner et al., 2003; Magee, Gruenfeld, Keltner, & Galinsky, 2005), to our knowledge, it has not yet been tested empirically.

Fifth, we argue that perspective-taking can be a powerful moderator of the effects of power on a multitude of organizationally relevant variables, above and beyond leader resource allocations. In fact we would propose that perspective-taking is part and parcel of effective leadership. Leaders are generally expected to motivate their subordinates toward the achievement of group goals (e.g., Hollander, 1980). But leaders can only be effective motivators if they understand their audience, and we suggest that this understanding relies largely on leaders' capacity to see the world from their subordinates' perspective. Therefore, we argue that leader perspective-taking, especially when coupled with the action-orientation and optimism that comes with high leader power can be an important precursor of leader effectiveness. For example, previous research has found that employees, who perceive that their leaders do not treat them with dignity and respect (i.e., interactional justice), are more likely to trust these leaders less (e.g., Folger & Cropanzano, 1998), to exhibit worse performance (e.g., Masterson, Lewis, Goldman, & Taylor, 2000), and to engage in more retaliatory behaviors (e.g., Skarlicki & Folger, 1997) than employees who perceive that their supervisors are treating them fairly. We argue that leader perspective-taking could serve to mitigate some of these negative effects by increasing the extent to which high power leaders engage in expressions of interactional justice.

### Caveats and Limitations

Of course, the present work also has a number of limitations and shortcomings that deserve comment. Each paradigm we employed suffers from certain drawbacks in terms of generalizability, causality, manipulation or measurement. First, the use of student samples in the laboratory experiments could raise external validity concerns. However, because our aim was to establish causality (Berkowitz & Donnerstein, 1982) in the relationship between power, systemic procedural justice, perspective-taking and leader resource allocations, we consciously chose for this experimental set-up, high in internal validity (Ilgen, 1986; Mook, 1983). Previous research has also shown that there is no reason to suspect that students behave differently than other populations (Brown & Lord, 1999; Dipboye, 1990) and experimental findings using similar paradigms have been replicated in survey-based organizational research (De Cremer & van Knippenberg, 2004; van Knippenberg & van Knippenberg, 2005). More important, the fact that Study 3, for which concerns about external validity pose less of a problem, also yielded support for our theoretical framework and replicated the findings of our experimental studies, should serve as a counter-argument for the external validity criticism. Conversely, Study 3 might be criticized for being correlational in nature (i.e., rendering it mute in matters of causality) and for the measurement of undesirable

behaviors via self-reports rather than via behavioral measures. There is however evidence suggesting that, when assessing undesirable behaviors, self-reports are as accurate as more 'objective' measures such as police reports or lie detector tests (Clark & Tifft, 1966; Hindelang, Hirschi, & Weiss, 1979). Prior research has also argued that the use of self-reports for undesirable behaviors is not as problematic as the use of selfreports for desirable behaviors, as they might be more prone to under- than to overreporting (Aquino & Douglas, 2003). Furthermore, it is also more probable that if undesirable behaviors are self-reported, they are actually quite accurate renditions of behavior. Ultimately however, this remains a question to be answered by future research and we wholeheartedly endorse future tests of our hypotheses in field settings with both follower and leader ratings of self-serving behaviors as well as more 'objective' measures. Another potential weakness of Study 3 could be that all variables were measured in a single questionnaire (i.e., making common source and common method variance a potential problem). This type of design could lead to an inflation of the relationships between variables, and therefore, the main effects of PJS and perspectivetaking in Study 3 might be overestimated. It is however important to note that common source or method bias cannot account for statistical interactions. Because it may inflate the main effects it may lead to an underestimation of the effect sizes for interactions (Evans, 1985; McClelland & Judd, 1993). As such, common source or method bias does not pose a threat to the validity of our conclusions regarding the Power X Procedural justice and Power X Procedural justice X Perspective-taking interactions. All in all, the combination of the experimental designs of Studies 1 and 2 with the survey design of Study 3, leads us to see these concerns as less of a threat to the overall conclusions of the present study, given that the strengths of the one methodology may compensate for the weaknesses of the other.

# **Practical Implications**

Although inferences for practice should be seen as tentative and as requiring further inquiry and clarification, we see potential for our findings to be used in applied settings, i.e., in organizations trying to ensure that leaders subordinate their personal goals to those of the organization. First, there seems to be value in the institution of procedural justice systems that goes above and beyond the positive effects documented in the procedural justice literature. While procedural justice research has typically shown that procedural justice systems increase employee satisfaction, well-being, performance, and organizational citizenship behaviors (for a review see Colquitt et al. 2001), our research suggests that the simple presence of procedural justice systems can serve to temper leader resource self-allocations. Moreover, institutionalized procedural justice systems

can also lead to increased leader perspective-taking. Second, in situations where procedural justice systems are absent, leader perspective-taking can also act as a damper on self-serving leader allocations. This finding has two different practical implications. First, because power increases the correspondence between traits and behavior (Bargh et al., 1995; Chen et al., 2001), the personalities of high power individuals are better predictors of their behaviors than the personalities of low power individuals. Consequently, organizations could select individuals into leadership roles who score high on perspective-taking measures. Second, because perspective-taking is a highly trainable ability (Parker & Axtell, 2001), organizations could invest in training programs that provide leaders with an appreciation of as well as the skills necessary to engage in perspective-taking. The simple act of trying to see the world through their subordinates' eyes could make leaders aware of their employees' interests and act accordingly. This could be done via leadership training and executive seminars as well as via teaching in MBA programs, where future leaders are formed.

## To Conclude

Leader self-serving actions are a particularly nefarious class of leader behaviors carrying the specter of negative consequences for subordinates as well as for the organization at large. From this perspective, it is somewhat surprising that leadership research to date seems to have hardly concerned itself with factors that could mitigate the occurrence of leader self-serving actions. As such, the present research hopes to have opened a new avenue for exploring potential ways to mitigate some of the more pernicious effects of power on leader behaviors.

## Notes

- <sup>1</sup> We also conducted the analyses by excluding these five participants. Because neither the significance nor the pattern of our results changed, the analyses reported in the paper are based on the full sample of 203 participants.
- <sup>2</sup> All items loaded on a single factor. We also measured respondents' subjective sense of power via the 8-item sense of power scale developed by Anderson and Galinsky (2006). Substituting the sense of power score for the position power score does not change the significance or pattern of our predicted interactions. For the sake of consistency with our experimental studies we report the results of the analyses based on the position power scale.
- <sup>3</sup> We did not control in our analyses for any covariates because rather often especially with survey data controls serve the purpose of getting something significant that was not significant before. Becker (2005) refers to this practice as problematic and cautions against potential Type II errors. Moreover, we hypothesized an interaction. Thus merely controlling for covariates would not be the best option if we want to exclude them as alternative explanations for our moderated findings. Including controls, however, does not change the significance or pattern of our interactions (i.e., with controls: age, gender, number of subordinates, years of fulltime work experience, overall tenure in leadership position, tenure in current leadership position). Because none of the control variables were related to our independent or dependent variables and we wanted to keep the survey study as similar as possible to our experimental studies, we do not report regression results with covariates.

# Chapter 5:Leader Power, Accountability, and Self-serving Behavior

Leaders sometimes use their power to engage in self-serving behaviors that have the potential to harm group interests. The present research investigated the relationship between power and leader self-serving behaviors. We hypothesized that the effects of power on leader self-serving actions are moderated by leader accountability. Specifically, we examined the interactive effect of accountability and leader power on self-serving behaviors in one experiment and one organizational survey. In the laboratory experiment, high power leaders self-allocated more points when they were not held accountable than when they were held accountable. Subsequently, we replicated these findings in a cross-sectional survey of organizational leaders by using measures of a subjective sense of power, perceived accountability, and self-serving behaviors. We focus explicitly on the theoretical and practical implications of our findings for the study of leader self versus group-serving behaviors.

### Introduction

Recently the popular media has become replete with headlines decrying top executives' lofty bonuses and profligate spending at a time when their companies are relying on taxpayer money to save them from bankruptcy. For example, executives of corporations at the root of the subprime mortgage crisis have met with scathing criticism for their buoyant compensation packages after their companies lost billions in the US housing market. In the ubiquitously interdependent organizational context, where leaders are expected to exert their power in the service of the collective interest, engaging in such profligate behaviors can lead to disastrous consequences, ranging from public embarrassment to decreased leader effectiveness (Aquino & Reed, 1998; Choi & Mai-Dalton, 1999; De Cremer, 2002; De Cremer & van Knippenberg, 2004; van Knippenberg & van Knippenberg, 2005), and even to organizational collapse. Although self-serving leader behaviors can beget such a wide variety of negative consequences, to date, unfortunately, we know preciously little why they occur and how they can eventually be reigned in. Therefore, an understanding of why such behaviors occur and how they can be mitigated appears to be of paramount importance.

Perhaps not astonishingly, it has been suggested that it is *power left unchecked* that drives leaders to divest scarce organizational resources away from collective purposes and toward endeavors that benefit themselves (e.g., Kipnis, 1972). Indeed, a growing body of research suggests that power psychologically frees the individual from the shackles of normative constraints, directs attention toward the self, and results in disinhibited behaviors in the pursuit of personally satisfying goals (e.g., Galinsky, Gruenfeld, & Magee, 2003; Keltner, Gruenfeld, & Anderson, 2003). One way to potentially dampen such egocentric action tendencies would be to impose constraints on the behaviors of the powerful. In this vein, previous theorizing (Keltner et al., 2003; Magee, Gruenfeld, Keltner, & Galinsky, 2005) has suggested that organizational systems of checks and balances could counteract some of the more pernicious effects of power. According to this insight, leader accountability should serve as a moderator of the effects of power on leader actions.

In this research we therefore investigate the interactive effect of power and accountability on leader self-serving behaviors. In line with previous thinking (Keltner et al., 2003; Magee et al., 2005), we argue that accountability may heighten the pressure to justify one's decisions, and therefore, it should increase the extent to which individuals consider possible consequences of their actions. Consequently, we predict that accountability can counteract a power-induced egocentric pursuit of personally satisfying

rewards. Specifically, we argue that in resource allocation contexts, high power leaders who are held accountable should self-allocate a lower amount of resources in comparison to high power leaders who are not held accountable. Moreover, we argue that accountability should have less of an effect on the actions of low power leaders, because they are implicitly more likely to consider the consequences of their actions.

The aim of the current research is two-fold: 1) to contribute to an understanding of how power informs leader decisions by integrating research on power and leadership, and 2) to provide first empirical evidence of the moderating role of accountability in the relationship between power and leader resource allocations.

# The Psychology of Leader Power

The leader role places individuals in a position where, next to motivating, coordinating and directing group members' efforts (e.g., Farmer & Aquinis, 2005; Hollander, 1980; Yukl & van Fleet, 1992), they are also licensed to make decisions that affect individual and group outcomes. Therefore, the leader role entails control over valuable resources, and thereby, it implies the possession of power. Indeed, power has usually been defined as asymmetric control over valued resources (Fiske, 1993; French & Raven, 1959; Keltner et al., 2003). However, typically there is some variation in the structural amount of power available within the leader role, and we argue that these structural differences translate directly into different psychological experiences of power. In this research, we therefore examine the effects of varying amounts of power within the leader role on leader self-allocations.

The power-approach theory (Keltner et al., 2003) suggests that, although power typically emerges in a specific social context, the mere possession of power fundamentally transforms individual psychological states and processes. That is, power and its effects can become a psychological property of the individual (e.g., Bargh, Raymond, Pryor, & Strack, 1995; Chen, Lee-Chai, & Bargh, 2001; Galinsky et al., 2003; Magee, Galinsky, & Gruenfeld, 2007). According to this theory, the experience of power tips the balance of activation between the behavioral approach and inhibition systems, which in turn drive behavior and cognition. Power triggers the behavioral approach system, which is posited to regulate behavior associated with rewards. That is, power triggers a general approach tendency, increases attention to rewards, frees the individual from the shackles of normative constraints and facilitates disinhibited behavior. In contrast, powerlessness activates the behavioral inhibition system, which is analogous to an alarm system triggering avoidance and response inhibition. That is, low power is associated with an avoidance tendency, an increased focus on threats and punishments and inhibited behaviors.

Although a deluge of recent research based on the power-approach theory has documented a number of both constructive as well as dysfunctional effects associated with elevated power (for a review see Galinsky, Jordan, & Sivanathan, 2008), in this article, we will primarily focus on two effects of power potentially relevant to explaining leader resource allocations: (1) power increases a general approach tendency and a focus on rewards, and (2) power affects social attention.

First, the possession or experience of power has been shown to lead to assertive action in a variety of contexts. Thus, powerful individuals have been shown to be more attentive to, and to more assertively pursue rewarding outcomes (Galinsky et al., 2003) than their low power counterparts. Additionally, high power, as opposed to low power has been associated with an increased focus on, and relentless pursuit of personally rewarding goals (Chen et al., 2001; Galinsky et al., 2003; Guinote, 2007a).

Second, power decreases attentiveness to others' internal experiences. Notably, power influences both how much attention as well as what kind of attention is directed at others. For example, Galinsky, Magee, Inesi, and Gruenfeld (2006) demonstrated that power seems to impair the ability to take others' perspectives and to consider their interests. In their studies, the powerful were less likely than the powerless to spontaneously take the visual perspective of others, to take others' background knowledge into account, and to correctly identify others' emotional expressions. Because the power-wielders anchored more heavily on their own vantage points they were less accurate than their low power counterparts in understanding how others experience the world. Furthermore, Gruenfeld, Inesi, Magee, and Galinsky (2008) showed that power increases objectification - the tendency to view others as tools for one's own purposes - and focuses one's attention on those aspects of others that serve one's salient interests or goals. Their research suggests that the powerful, as opposed to the powerless, view others through an instrumental lens and therefore, approach and attend to those who are perceived to aid them achieve their goals (cf. Overbeck & Park, 2001, 2006). Thus, the powerful disproportionately anchor on their own vantage points, are poor assessors of others' perspectives and interests, and view the world through a lens of self-interest by being primarily concerned with their own desires and well-being

Because power (1) reduces attention to others' internal experiences and increases instrumental attention, as well as (2) exacerbates a focus on rewards, we argue that powerful leaders should be more likely to act more self-servingly in resource allocation contexts than their less powerful counterparts.

# Accountability as a Moderator of the Effects of Power

Given that power processes are typically embedded in a larger societal context, social institutions often find themselves faced with the difficult but important task of trying to mitigate the potential negative effects arising from elevated power. Likewise, one of the major challenges of contemporary organizations is to find a way to balance the positive and negative forces stemming from the power associated with the leader role. One of the more common strategies in this respect seems to be that organizations often hold leaders accountable for their actions, as well as for the success or failure of their groups (e.g., Meindl, Ehrlich, & Dukerich, 1985). However, whereas organizations can, and typically do, institute systems of checks and balances aimed at reigning in the behaviors of leaders, to date, it is unclear whether such accountability systems do in fact dampen the effects of power on leader allocations. Below we will outline several converging reasons supporting the proposition that accountability should moderate the effects of power on leader allocations.

First, we define accountability as "the implicit or explicit expectation that one may be called on to justify one's beliefs, feelings, and actions to others" (Lerner & Tetlock, 1999, p. 255). It has previously been argued that accountability can serve as an enforcer of societal or organizational norms (see Keltner et al., 2003; Magee et al., 2005). That is, accountability 1, as a social structure, or an element of a social situation, can constrain the effects of power by inducing accountability pressures (Schlenker, Weigold, & Doherty, 1991). These accountability pressures have been shown to increase judgmental accuracy (Rozelle & Baxter, 1981; Siegel-Jacobs & Yates, 1996), to lower susceptibility to judgmental biases (Simonson & Nye, 1992), to increase the thoroughness of information processing (Siegel-Jacobs & Yates, 1996; Tetlock, 1983; Tetlock & Boettger, 1989), and to favor the use of more complex and analytic modes of processing (Ashton, 1992; Chaiken, 1980; McAllister, Mitchell, & Beach, 1979; Tetlock & Kim, 1987; Tetlock, Skitka, & Boettger, 1989). Moreover, if the opinions of the evaluators are unknown and the decision situation is ambiguous, accountable individuals will try to find the most defensible course of action available. This in turn, would require that they process information more carefully or more "vigilantly" (e.g., Tetlock, 1985). Additionally, they are more likely to engage in pre-emptive self-criticism. That is, they are more likely to engage in self-critical integratively complex information processing by considering multiple perspectives on the issue at hand, and by trying to anticipate the objections that others might raise regarding their decisions (e.g., Lerner & Tetlock, 1999; Tetlock, 1983; Tetlock & Boettger, 1989; Tetlock & Kim, 1987; Tetlock et al., 1989). In short, holding individuals accountable should lead them to engage in more thorough information

processing, as well as to consider potential decision alternatives in order to be able to justify their chosen courses of action. As a consequence, accountability may in fact enhance normative compliance.

In the context of leader resource allocations, we expect that accountable high power leaders, feeling pressure to justify their actions, will be more likely to carefully weigh decision alternatives prior to making their allocation decisions, in contrast to non-accountable high power leaders. This in turn, should result in lower self-allocations for accountable high power leaders as compared to high power leaders who are not held accountable. Additionally, we expect that low power leaders' allocation decisions will not be affected as strongly by the explicit presence of accountability constraints, because accountability concerns are implicit in the psychology of low power individuals (Keltner et al., 2003). Therefore, low power leaders are more likely to be implicitly predisposed to feel normative constraints and to carefully consider how their actions influence others.

In sum, we propose that accountability should moderate the effects of power on leader resource self-allocations. Specifically, we will test the following hypothesis in a laboratory experiment as well as in an organizational survey:

Hypothesis 1: The effect of accountability on leader self-serving behaviors is stronger for high than for low power leaders. High power leaders' self-allocations are lower (vs. higher) when leaders are accountable (vs. not accountable). Low power leaders' self-allocations are less contingent on being held accountable than high power leaders' self-allocations.

# Study 1

Because we wanted to be able to draw causal conclusions we first tested our hypothesis in a laboratory experiment. Participants were led to believe that they were the leader of a four-person group engaged in computer-mediated task performance. In fact, the group interaction was simulated via the experimental set-up. We manipulated power within the leader role, that is, some leaders had more power than others. Our primary dependent variable was the amount of points leaders self-allocated out of a shared resource pool.

## Method

**Participants and design.** Eighty-two business administration students (19 females, 63 males) participated voluntarily in the study and were paid 10 euro (approximately 12 US dollars) for their time. Participants' mean age was 20 years (SD = 1.81) and more than half were employed either part or full-time at the time of participation in our study.

Participants were randomly assigned to the conditions of a 2 (Power: high vs. low) X 2 (Accountability: high vs. none) between-subjects factorial design.

**Procedure.** Participants arrived in groups of twelve to participate in a computermediated study on "virtual group decision making" and were seated in individual cubicles, each equipped with a computer. All instructions and stimuli were presented on the computer screens and all dependent measures were recorded by the program software.

After being informed about random assignment to a four-person team, participants learned that their team had a hierarchical structure (i.e., a leader and three subordinates) and that individual team members would be rewarded for their work. To ensure the credibility of the computer-mediated virtual group interaction space, participants had to wait for two minutes for the establishment of a bogus "network connection" between the team members. Next, they completed a purported cognitive style test and *all* participants were assigned the leader role allegedly based on their test results.

Participants then learned that their group would work on a number of different tasks and that, as leaders, they had to ensure their team's optimal performance. Leaders had to decide on how the tasks should be implemented and assign specific tasks to subordinates. The *power manipulation* was embedded in the leader role description. Although all our participants were leaders - and thus, one could argue, were in higher power positions - some had more coercive power than others. In the *low power condition*, leaders learned that they only had the power to evaluate subordinates' work for feedback purposes, and *could not* use these evaluations to fire or reprimand subordinates. Conversely, in the *high power condition*, leaders learned that they could evaluate subordinates' work, and *use* these evaluations to fire or reprimand subordinates.

Subsequently, the "team game" started, namely, the desert survival task (see Lafferty & Pond, 1974). Leaders learned that their team could earn 420 points for successful task completion and that the allotted time for the task was 10 minutes. The task consisted of ranking 12 utensils found after a plane crashed in the desert. The leader's task was to delegate 4 of the utensils to each subordinate for ranking purposes, to decide on the point distribution (out of the total of 420 points) to the self and the other team members, and to create the final item ranking. Moreover, it was the leaders' job to motivate their subordinates to perform well (via emails). All leaders took the opportunity to send emails to their subordinates. They spent an average of 4 minutes composing the emails and wrote an average of 96 words. There were no significant differences between conditions in the amount of time spent writing the emails or in the number of words used. In combination, this suggests that participants took the leader role seriously and believed to be working in a real team.

Participants never reached the last stage of the task, the final rank-ordering. After having sent emails to their subordinates and having delegated the utensils, leaders were asked to divide the 420 points the team could earn between themselves and their subordinates. At this point we introduced our *accountability* manipulation adapted from De Dreu and van Knippenberg (2005). In the *high accountability* condition, participants read that:

"Before you decide on how to distribute the 420 points between yourself and your subordinates please keep in mind why you are doing so. At the end of the study, the experimenter will interview you in detail about the reasons and considerations you had for the particular point distribution you chose. We are not so much interested in the actual distribution of points you choose, but more in the underlying reasons you had for distributing the points the way you did. We want to know the procedures you followed in making your point distribution decision and the way in which you arrived at your decision. Again, the actual distribution of points is of no interest to us. If you want, you can make some notes using the scrap paper placed beside your computer and you can bring these notes to the interview."

In the *no accountability* condition, these instructions were absent. Participants did however also find a sheet of scrap paper placed next to their computer, without any further instructions as to its relevance.

Finally, after answering our dependent measures, including demographic indicators such as age, gender, and study major, participants answered some funneled debriefing questions probing for hypothesis guessing. None had correctly guessed our hypothesis. We also randomly probed participants for suspicion regarding the reality of the virtual team environment. None of the probed participants indicated any suspicion. Finally participants were thoroughly debriefed, thanked for their participation and paid.

**Dependent measures.** Our main dependent measure represented the number of points leaders self-awarded. Each compensation point counted as one lottery entry for several 50 euro prizes, meaning that the more points they self-awarded, the more lottery entries they had and the higher the chances of winning one of the prizes. All manipulation check measures were recorded on a 7-point scale ranging from *strongly disagree* (1) to *strongly agree* (7). As a check of our power manipulation, participants responded to a 6-item scale (e.g., "I have significant power in administering negative consequences to my followers."). These items were averaged into one power score (Cronbach's  $\alpha = .87$ ). As a check of our accountability manipulation, participants answered four questions adapted from Lerner, Goldberg, and Tetlock (1998) (e.g., "When making the point distribution decision, I concentrated on the process of assigning points to my subordinates and myself."; "I believed that I would have to

explain the process of distributing points to the researcher." ). These items were combined into an average accountability score (Cronbach's  $\alpha = .79$ ).

### Results

In all analyses of variance (ANOVAs), power (high/low) and accountability (high/none) were factors in the design.

**Manipulation checks.** A two-way analysis of variance on the average power score revealed only a significant main effect of power, F(1, 78) = 75.64, p < .001,  $\eta^2_p = .49$ , indicating that leaders in the high power condition (M = 5.73, SD = .73) felt more powerful than leaders in the low power condition (M = 4.47, SD = .57). A two-way analysis of variance on the average accountability score revealed only a significant main effect of accountability, F(1, 78) = 60.14, p < .001,  $\eta^2_p = .43$ , indicating that participants in the high accountability conditions (M = 5.17, SD = .78) felt more accountable than participants in the no accountability conditions (M = 3.89, SD = .73). Thus, we may conclude that our manipulations were successful.

**Leader allocation decision.** A two-way ANOVA on the number of points leaders self-awarded revealed a main effect of accountability, F(1, 78) = 6.61, p = .01,  $\eta^2_p = .08$ . Non-accountable leaders claimed more points for themselves (M = 137.32, SD = 32.08) than accountable leaders (M = 122.63, SD = 19.88). As predicted, the main effect of accountability was qualified by a Power X Accountability interaction, F(1, 78) = 5.75, p = .02 (see Figure 5.1).

We had predicted that the effects of accountability would be stronger for high than for low power leaders. Specifically, we had predicted that accountable high power leaders would claim fewer resources for themselves than non-accountable high power leaders. A simple effects analysis indicated that high power accountable leaders (M = 121.00, SD = 23.42) self-awarded less points than non-accountable high power leaders (M = 149.14, SD = 35.19), F(1, 78) = 11.77, p = .001,  $\eta^2_p = .13$ , CI (diff) = between -44.47 and -11.81. No such differential accountability effects on leader self-allocations were found for low power leaders ( $M_{A\alpha} = 123.91$ ,  $SD_{A\alpha} = 17.05$  vs.  $M_{Non-A\alpha} = 124.90$ ,  $SD_{Non-A\alpha} = 23.36$ ). In addition, the simple effects analysis also revealed that non-accountable high power leaders (M = 149.14, SD = 35.19) self-allocated more points than non-accountable low power leaders (M = 124.90, SD = 23.36), F(1, 78) = 9.23, p = .003,  $\eta^2_p = .10$ , CI (diff) = between 8.35 and 40.12.

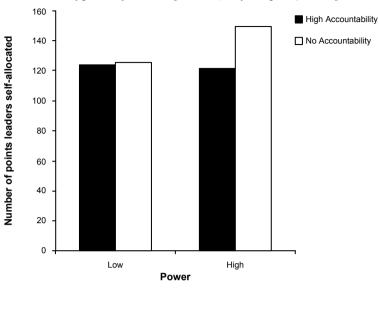


Figure 5.1 Number of points self-allocated by leaders (out of 420 points) in Study 1

Study 2

In Study 1 we had predicted that accountability should serve to constrain high power leaders' self-serving behaviors in a resource allocation task. In line with our predictions, we found that high power leaders who were held accountable claimed less resources than high power leaders who were not held accountable. Additionally, and also in line with our predictions, the allocations of low power leaders were not contingent upon explicit accountability constraints.

Study 2 was designed to further elucidate some potential questions that may have arisen from Study 1. In this study we measured leaders' sense of power, perceived accountability, and self-serving leader behaviors in an organizational context. First, while the experimental study yielded causal evidence in support of our hypothesis, it does not speak to whether we can find support for our theoretical framework in a field context in a sample of organizational leaders. Second, whereas in the experiment we manipulated leaders' relative power, in the cross-sectional survey we measured leaders' perceived sense of power as a psychological state. Third, whereas in our experimental study, our accountability manipulation featured primarily elements typically associated with process accountability, in the current study, we employed a measure of perceived accountability that captures features of both outcome and process accountability. In line with previous research showing that the measure has a unidimensional factor structure (Hall et al.,

2006; Hochwarter, Perrewé, Hall, & Ferris, 2005) we treated it as an overall measure of perceived accountability. Fourth, the dependent measure in Study 1 taps exclusively into the allocation of monetary resources, whereas leader self-serving behaviors may extend to other domains. In Study 2, we therefore expanded the scope of our dependent variable by scrutinizing a greater variety of leader self-serving behaviors which go beyond and above simple monetary allocations (e.g., time investment, credit allocated for jobs performed). Fifth, although we have no reason to believe that relying on Dutch samples in our experimental study poses a limitation to the generalizability of our conclusions, we nevertheless used the opportunity for a replication with a sample from a different country, namely the United Kingdom. To address these potential open questions we tested our hypothesis in a sample of organizational leaders.

### Method

**Procedure.** The study was conducted online as a leadership survey. Respondents were recruited via a panel firm located in the United Kingdom. Emails with personalized survey links were sent to a panel of individuals in managerial or supervisory positions who had a minimum of 3 direct subordinates and a minimum of 5 years of work experience.

The survey was conducted in line with recommendations given in the field (Birnbaum, 2004; Dillmann, 2007). By utilizing server-sided survey programming we avoided common technical selection biases, which generally exclude people who do not meet special browser requirements (e.g., Java Script). Moreover, prior to going live with the survey we pre-tested the layout on a number of different computers varying the browsers used as well as the screen resolutions to ensure that the survey would look the same on different systems. We also assigned each potential respondent a unique session ID, resulting in individualized survey links. This made it impossible for any respondent to participate in the survey more than once. To increase response rate respondents received a monetary incentive for their participation. On the first page of the survey we guaranteed the anonymity and confidentiality of individual surveys and emphasized that participation was voluntary. Respondents interested in our results were given the opportunity to provide their email addresses in a different database so that names and email addresses could not be linked to individual responses. These measures taken to prevent common pitfalls of online research lead us to be at least as confident about the quality of our data as we would have been had we conducted a traditional paper and pencil survey.

Sample. One hundred and sixty six respondents meeting the study's requirements completed the survey out of a total of 250 emails sent out to potential respondents (66

% response rate). The sample's mean age was 40 years, (SD = 9.63) and women made up 51.2 % of the sample. Respondents' average fulltime work experience was 17.94 years (SD = 10.73), their average tenure in a managerial or supervisory position was 9.30 years (SD = 6.87), and their average tenure on the current job was 5.75 years (SD = 4.75). All respondents worked in private organizations and had on average 9.43 subordinates (SD = 9.42). Respondents with a higher education degree (i.e., Bachelor degree or higher) made up 75.4 % of the sample and the majority (87.12 %) held management or senior management positions.

*Measures.* All responses were assessed on 5-point scales (1 = strongly disagree, 5 = strongly agree). Leaders' sense of power was measured with the 8-item Anderson and Galinsky (2006) sense of power scale tailored to the respondents' work environment (e.g., "In my relationships with my subordinates I can get them to listen to what I have to say."). These 8 items were combined to form one average sense of power score. Leaders' perceived accountability was measured with 4 items adapted from Hochwarter et al. (2005) (i.e., "I am held accountable for my actions at work."; "I often have to explain why I do certain things at work."; "Co-workers, subordinates, and bosses closely scrutinize my efforts at work."; "I am held accountable for my decisions."). The four items were combined to form one average accountability score.

An 8-item scale, inspired by work by Choi and Mai-Dalton (1998) and van Knippenberg and van Knippenberg (2005) comprised our measure of leader self-serving behavior. Arguably, leaders can act self-servingly by securing higher monetary benefits for themselves, but they can also act self-servingly by making self-serving causal attributions such as taking unwarranted credit for group accomplishments or by denying responsibility for failure on group projects (cf. Weary Bradley, 1978). While in Study 1 our dependent measure tapped into the allocation of monetary resources, in the survey we also measured the allocation of other resources, such as time and credit for jobs performed. Our self-serving behaviors measure in the survey is thus more encompassing than our measure in the experimental studies. For each of the 8 items of the scale, respondents had to indicate the number of times they had performed the described behavior during the past year (1 = never, 2 = rarely, 3 = sometimes, 4 = usually, 5 = always). The 8 items of our scale were the following: "I have negotiated a bonus for myself that was substantially higher than the bonus my subordinates received."; "I have used my leadership position to obtain benefits for myself."; "I have pursued my personal interests, even if those interests were not serving my group's interests."; "I did not put my own position at risk, even when I thought that this could have helped promote my group's goals."; "Instead of giving credit to my subordinates for jobs requiring a lot of time and effort, I took the credit myself."; "Although I was partly to be blamed, I did

not take personal responsibility for my group's failure to meet a goal."; "I have shifted the blame for a mistake of mine onto one of my subordinates."; "I did not work overtime, although this would have helped my group meet its goals."

### Results

We first performed a principal component analysis with OBLIMIN rotation of our predictor variable items (i.e., sense of power and accountability). This analysis yielded a two-factor solution with all items loading .69 or higher on the intended scale and all cross-loadings below |.14|. Then we performed a principal component analysis of the items comprising our dependent variable (i.e., leader self-serving behaviors). This analysis yielded a one-factor solution with item loadings of .75 or higher. Means, standard deviations, and intercorrelations for the study variables are displayed in Table 5.1.

Table 5.1 Means, Standard Deviations and Intercorrelations for Study 2

	М	SD	(1)	(2)	(3)
(1) Sense of Power	3.51	.63	(.81)		
(2) Perceived accountability	3.33	.78	.44**	(.88)	
(4) Leader self-serving behaviors	2.14	.86	.02	13	(.93)

*Note.* Cronbach's alphas are displayed on the diagonal. All constructs were measured by Likert scales ranging from 1 to 5. N = 166 (listwise). \* p < .05. \*\* p < .01.

**Leader self-serving behaviors.** To test our hypothesis we conducted a hierarchical regression analysis in which leader self-serving behaviors were predicted by main effect terms (sense of power and perceived accountability) at Step 1 and the interaction term<sup>2</sup> at Step 2 (see Table 5.2).

Table 5.2 Summary of Regression Analysis for Sense of Power and Perceived Accountability Predicting

Leader Self-serving Behaviors in Study 2

Variable	b	SE b	ß	t	Þ
Step 1					
Sense of power	.13	.12	.09	1.09	.27
Perceived accountability	19	.09	17	-2.03	.04
Step 2					
Sense of power	.02	.12	.01	.16	.86
Perceived accountability	14	.09	13	-1.5	.13
Sense of power x Perceived accountability	27	.09	23	-2.8	.004

*Note.* The explained variance of Step 1 was  $R^2 = .03$ . Step 2 explained an additional variance of  $R^2$  change = .05. N = 166 (listwise).

Following Aiken and West (1991), leader sense of power and perceived accountability were centered by subtracting the mean from each score, and the interaction term as well as the main effects were based on the centered scores. Table 5.2 shows the regression results: Step 1 explained a significant proportion of variance in leader self-serving behaviors and we found a negative relationship between perceived accountability and leader self-serving behaviors. More importantly, Step 2 explained a significant proportion of variance in leader self-serving behaviors and it revealed our predicted Sense of Power X Accountability interaction. To further analyze the interaction, we conducted simple slopes analyses (Aiken & West, 1991) and determined the simple slopes for leaders with a high and low sense of power separately. As predicted, accountability yielded a negative relationship to leader self-serving behaviors for leaders with a high sense of power (1 *SD* above the mean;  $\beta = -.28$ , p = .002), but not for leaders with a low sense of power (1 *SD* below the mean;  $\beta = -.03$ , p = .77). Thus, in line with the findings of Study 1 we found that accountability moderates the effects of power on leader self-serving behaviors (See Figure 5.2).

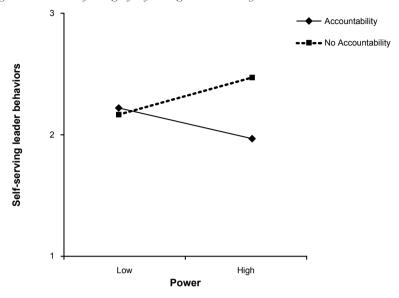


Figure 5.2 Leader self-ratings of self-serving actions in Study 2

In line with our theoretical framework, we replicated the results of Study 1 in a field setting, and showed that perceived leader accountability is indeed related to diminished leader self-serving behaviors for leaders with a high sense of power. The current study is thus not only an extension of our earlier findings to a field setting in a different country, but it also scrutinizes a greater variety of leader self-serving behaviors which go above and beyond simple monetary allocations.

## **General Discussion**

Organizational leaders, who ostentatiously pursue the fulfillment of their own whims and desires at the cost of the collective, not only face the contempt and fury of the public and the body politic, but also the potential loss of status and wealth. Additionally, self-serving leader behaviors have been associated with negative consequences at the organizational level as well as decreases in subordinate motivation and performance (e.g., De Cremer & van Knippenberg, 2004). In this research, we predicted that accountability would moderate the effects of power on leader self-serving behaviors. Specifically, we proposed that powerful accountable leaders would exercise restraint and act less self-servingly (e.g., self-allocate a lower amount of resources) than non-accountable high power leaders. This prediction rooted in insights from the power-approach theory (Keltner et al., 2003), as well as from research on accountability (Lerner

& Tetlock, 1999) was tested in a laboratory experiment as well as in an organizational survey.

Across both studies we found that leader power interacted with accountability in predicting leader behaviors. In Study 1 we showed that high power leaders who were held accountable self-allocated a lower amount of points than high power leaders who were not held accountable. In Study 2 we extended and replicated these findings in a cross-sectional survey of organizational leaders by demonstrating that powerful accountable leaders engaged in less self-serving behaviors than powerful leaders who did not feel accountable. Confidence in our results is bolstered because we replicated our findings across two studies, employing different methodologies (i.e., laboratory experiment, cross-sectional survey), and tapping into different samples from two different countries (i.e., Dutch students, managers and supervisors in the United Kingdom). Moreover, our findings held regardless of whether we manipulated power (Study 1) or measured supervisors' subjective sense of power (Study 2), manipulated accountability (Study 1) or measured perceived accountability (Study 2), measured leaders' allocation of resources (Study 1) or measured their engagement in a wider variety of self-serving behaviors, such as securing benefits for the self or taking undue credit for group efforts.

# Implications for the Study of Leader Self-serving Behaviors

This research provides first empirical evidence that accountability moderates the effects of power on leader self-serving behaviors. Whereas accountability has previously been suggested to be a potential moderator of the more pernicious effects of power (Keltner et al., 2003; Magee et al., 2005), to our knowledge, this is the first empirical test of this contention. Our current findings are also congruent with some earlier research hinting at a possible interaction between power and accountability. For example, Tetlock (1981) showed that U.S. presidents exhibited greater integrative complexity in their thinking after they were elected and became accountable to a wide variety of constituents, than prior to election. Because they had to justify their decisions and policies to a wide array of different interest groups, the elected Presidents were more likely to consider the perspectives of these various groups, as well as to ponder on the consequences of their decisions. Similarly, Winter and Barenbaum (1985) found that individuals high in need for power typically engaged in self-serving profligate behaviors such as gambling. However, these high-need-for-power individuals acted in socially responsible ways when they faced certain life events that increased their accountability – having younger siblings and becoming parents.

The current research contributes to the study of leader allocation behaviors specifically and leader behaviors more generally in a number of important ways. First, it directly builds upon and extends work by Rus, van Knippenberg, and Wisse (2009) showing that procedural justice systems and leader perspective-taking mitigate the effects of power on leader self-serving behaviors. By showing that accountability, which has been linked to increases in perspective-taking (Tetlock et al., 1989), also moderates the effects of power on leader resource allocations, we have identified an additional strategy that could render powerful leaders more attentive to their subordinates' interests. In doing so, we have taken another step toward integrating research on power and leadership whose study has historically not been very well integrated (Hollander & Offerman, 1990).

Second, whereas we have argued and found that accountability moderates the effects of power on leader self-serving behaviors, we contend that accountability should not be seen as a panacea for all evils. First, in our research, we have treated accountability as a relatively unitary construct, having argued that the different accountability sub-types should have similar effects on leader self-serving behaviors. However, some caution should be exercised in generalizing our findings across types of accountability and across dependent variables. Specifically, we would argue that subjecting leaders to outcome accountability devoid of any process accountability could in fact entail negative effects for subordinates. We base this contention on research showing that pure outcome accountability can lead to a number of detrimental side effects, such as engagement in more politically motivated behaviors (Fandt & Ferris, 1990), a reduced ability to compromise and reach satisfactory agreements in negotiation contexts (Klimoski, 1972; Klimoski & Asch, 1974), and an increased likelihood to fall prey to the escalation of commitment bias (Simonson & Staw, 1992). It has been argued that the observed negative effects of outcome accountability stem from the fact that it focuses individuals disproportionately on the outcome to the detriment of the process of reaching the outcome, potentially leading them to take "shortcuts" in reaching their goals (e.g., Davis, Mero, & Goodman, 2007). Because outcome accountability seems to facilitate thinking and action predicated on a "means justify the ends" philosophy, holding high power individuals solely accountable for the final outcome of their actions, could exacerbate their tendency to treat others as means towards an end, and thereby fuel already existing predispositions to objectify others and ignore their internal experiences. For example, if high power individuals are solely accountable for the performance of their group, they may in fact institute draconian work policies that deny subordinates' their human dignity. This, in turn, could have a negative impact on the overall performance of the group. Thus, outcome accountability may paradoxically lower exactly those outcomes its

implementation was intended to increase. On the other hand, because process accountability can lead to increased perspective-taking and more thorough information processing, a combination of process and outcome accountability appears to carry the most promise in terms of mitigating some of the negative effects of power.

Third, it has frequently been argued that accountability increases felt responsibility (e.g., Hall et al., 2006). The notion that one could render those who are accountable to feel more responsible is very appealing from a leadership perspective, where leaders are expected to take responsibility for their group's well-being. To date, there is no compelling evidence to suggest that responsibility is indeed part and parcel of felt accountability. However, we would speculate that accountability may lead to increased responsibility because it could render subordinates and their distinct interests more salient. This is of course an intriguing question that could be answered in future research.

#### Caveats and Limitations

Of course this research has its limitations that deserve comment. Both paradigms we employed suffer from certain drawbacks. First, our use of a student sample in the laboratory experiment could raise external validity concerns. Nonetheless, we purposefully chose for this experimental set-up high in internal validity (Mook, 1983) because our aim was to establish causality (Berkowitz & Donnerstein, 1982) in the relationship between power, accountability and leader resource allocations. Additionally, previous research has shown that there is no reason to suspect that students behave differently than other populations (Brown & Lord, 1999; Dipboye, 1990). Moreover, experimental findings using similar paradigms have been replicated in survey-based organizational research (e.g., De Cremer & van Knippenberg, 2004). More importantly we replicated our findings in an organizational survey in Study 2, which could serve as a counter-argument for the external validity criticism.

Whereas our narrow focus on the allocation of monetary resources as a dependent measure can be considered a limitation of our experimental study, we extended the scope of our dependent variable in the survey by also measuring leaders' time investment in group projects as well as their attributions of credit for jobs performed. Although we believe that the present results provide useful insights into leader self-serving behaviors, the nature and scope of our dependent variable should be borne in mind when generalizing conclusions. Future investigations might benefit from extending the scope of our dependent variable to other domains such as the relational domain (i.e., leaders' treatment of subordinates in terms of showing respect or allowing for voice behaviors).

Conversely, Study 2 could be criticized for being correlational in nature (i.e., rendering it mute in matters of causality) and for the measurement of undesirable behaviors via self-reports rather than via behavioral measures. Whereas we wholeheartedly endorse future tests of our hypotheses in field settings with more objective measures of self-serving behaviors, there is some evidence to suggest that in the assessment of undesirable behaviors, self-reports can be as accurate as more 'objective' measures such as police reports or lie detector tests (Clark & Tifft, 1966; Hindelang, Hirschi, & Weiss, 1979). Previous findings also intimate that the use of selfreports for undesirable behaviors is not as problematic as the use of self-reports for desirable behaviors, as they might be more prone to under- than to over-reporting (Aquino & Douglas, 2003). Another potential criticism of Study 2 could be that all variables were measured in a single questionnaire (i.e., making common source and common method variance a potential problem). This type of design could lead to an inflation of the relationships between variables, however, common source or method bias cannot account for statistical interactions. Because it may inflate the main effects it may lead to an underestimation of the effect sizes for interactions (Evans, 1985; McClelland & Judd, 1993). Therefore, common source or method bias does not pose a threat to the validity of our conclusions regarding the Power X Accountability interaction. The combination of the experimental design of Study 1 with the survey design of Study 2 leads us to see these concerns as less of a threat to the overall conclusions of this research, given that the strengths of the one methodology may compensate for the weaknesses of the other.

#### Practical Implications

Although inferences for practice should be seen as tentative and as requiring further inquiry and clarification, we see potential for our findings to be used in applied settings, i.e., in organizations trying to curb leader self-serving behaviors. First, there seems to be some value in instituting organizational systems of checks and balances in order to keep potential leader self-serving behaviors in check. Because it is often difficult to clearly disentangle outcome from process accountability in an organizational context, we would suggest that organizations may best be able to reap the benefits of the constraining power of accountability with systems of checks and balances that combine outcome and process accountability concerns. Second, if the context precludes the creation of formal accountability systems, organizations could try to create flatter hierarchies. By creating more democratic decision making systems, accountability implicitly becomes part and parcel of the decision making process, because each individual can expect to have to justify his/her position to the rest of the group.

#### To Conclude

Leader self-serving behaviors carry the specter of negative consequences for subordinates' well-being and motivation as well as for the organization at large. Given that such leader behaviors can have a wide variety of pernicious effects it is somewhat unfortunate that leadership research seems to have hardly concerned itself with understanding why leaders engage in such behaviors and how they could be mitigated. As such, the present research hopes to have opened an avenue for exploring these questions by pointing at the value of a power analysis.

#### Notes

In this research we treat accountability as an umbrella concept in line with our definition. Previous research has sometimes distinguished between process and outcome accountability (Lerner & Tetlock, 1999; Siegel-Jacobs & Yates, 1996; Simonson & Staw, 1992). Whereas process accountability (PA) implies that the individual is evaluated based solely on the quality of the procedures used to reach a decision, under conditions of outcome accountability (OA) the individual is judged based exclusively on the quality of the outcome of the decision (Lerner & Tetlock, 1999; Siegel-Jacobs & Yates, 1996). However, we argue that in the context of leader resource allocations, differentiating between accountability types provides little extra added value for reasons to be set forth below. First, the complexities of organizational settings most likely preclude clear-cut distinctions between PA and OA, and instead probably blend aspects of both (see also Hochwarter, Perrewé, Hall, & Ferris, 2005; Seidenfeld, 2002). Second, although PA and OA may have different underlying mechanisms, we argue that both sub-types of accountability should serve to constrain high-power leaders' self-allocations because they merely emphasize different aspects of the more general process of being held accountable.

<sup>2</sup>We did not control in our analyses for any covariates because rather often – especially with survey data – controls serve the purpose of getting something significant that was not significant before. Becker (2005) refers to this practice as problematic and cautions against potential Type II errors. Moreover, we hypothesized an interaction. Thus merely controlling for covariates would not be the best option if we want to exclude them as alternative explanations for our moderated findings. Including controls, however, does not change the significance or pattern of our interaction (i.e., with controls: age, gender, number of subordinates, years of fulltime work experience, overall tenure in leadership position, tenure in current leadership position). Because none of the control variables were related to our independent or dependent variables and we wanted to keep the survey study as similar as possible to our experimental study, we do not report regression results with covariates.

# Chapter 6: General Discussion

Organizations headed by leaders who hubristically plunder the company coffers to satisfy their own whims and desires face not only public scorn and anger, but also potential losses in wealth and standing. Whereas leader self-serving behaviors have been proposed, both in academic circles and within the forum of public opinion, to be a particularly destructive class of leader behaviors (e.g., Choi & Mai-Dalton, 1998; De Cremer & van Knippenberg, 2002, 2004) with negative consequences for the organization, as well as for followers' motivation and performance, leader group-serving behaviors have consistently been linked to increased leader effectiveness (e.g., Choi & Mai-Dalton, 1999; De Cremer & van Knippenberg, 2002, 2004; van Knippenberg & van Knippenberg, 2005; Yorges, Weiss, & Strickland, 1999). Despite the considerable downstream consequences associated with leader self versus group-serving behaviors, our understanding of when and why leaders engage in relatively self or group-serving actions has so far been limited. We argue that, furthering our understanding of why some leaders as opposed to others may be more likely to engage in behaviors that are harmful to the group's interests represents a first step towards finding potential ways to mitigate the occurrence of such behaviors. This dissertation aimed to address these questions by pointing to the value of (1) a self-concept-based analysis, as well as (2) a power-based analysis of leader behaviors. In four empirical chapters we (1) have attempted to outline how self-definition processes intimately tied to the leader role as well as power-related processes influence leaders' framing of allocation situations and their subsequent behaviors, and (2) we have identified potential ways to mitigate some of the negative tendencies associated with elevated leader power that could result in relatively self-serving behaviors. Below we will first summarize the main findings of our empirical chapters. Second, we will engage in a discussion of the implications of our findings for the study of leader behaviors in general, and leader self versus group-serving behaviors in particular, as well as outline some potentially fruitful directions for future research. Third, we will touch upon some of the strengths and limitations of this dissertation. Fourth, we will discuss potential practical implications of our research for organizations trying to curb leader self-serving behaviors before turning to a general conclusive statement.

### Summary of Main Findings

In chapter two we hypothesized that self-definition as a leader would moderate the processing of social information in resource allocation contexts and that, contingent on the information used, leader self-allocations would be more or less self-serving. We

tested this more general prediction, derived from an integration of theorizing on leader self-definition (Kramer, 2003; Lord & Hall, 2005) and extensions of social comparison theory (Festinger, 1954), in a series of four laboratory and scenario experiments as well as in two organizational surveys. We consistently showed that leader self-definition interacts with normative social information, of both the descriptive (i.e., information about other leaders' self-allocations) and the injunctive variety (i.e., effective leadership beliefs) in predicting leader self-serving allocations. The six studies showed that the effects of descriptive and injunctive social reference information on leader resource allocations were stronger for leaders who self-defined more strongly as leaders than for those who self-defined less strongly in terms of the leader category. When other leaders' self-allocations were high, or when they endorsed self-serving ELBs, leaders selfdefining more strongly as leaders acted more self-servingly than when other leaders' selfallocations were low, or when they endorsed group-serving ELBs. These effects were far less pronounced for leaders who self-defined less strongly as leaders. In sum, we consistently found that self-serving leader behaviors are the result of an interaction between self-definition as a leader and social information processing. In other words, the present data suggest that leaders are more likely to use social reference information when their self-definition is deeply embedded in those references. This research contributes first and necessary evidence that leaders' self-concept, more precisely leaders' self-definition as a leader, has a significant impact on leader self-serving behaviors. As such, we hope to have put the study of determinants of leader self and group-serving behaviors on the research agenda and to have introduced self-definition as a leader as a concept to be reckoned with when studying leader behaviors.

In chapter three we hypothesized that power would moderate leaders' sensitivity to different cues that may inform leader behavior in resource allocation contexts. We proposed that higher leader power would not inevitably result in higher leader self-servingness. Rather, we posited that the more power a leader holds, the more the leader's actions would become contingent on internal belief states (e.g., effective leadership beliefs) and the less they would be contingent on situational, contextual cues (e.g., performance information). Whether this would result in more or less self-serving behaviors would depend on the nature of these belief states and contextual cues. We tested these predictions, derived from an integration of the power-approach theory (Keltner, Gruenfeld, & Anderson, 2003), equity theory (Adams, 1965), and leader categorization theory (Lord & Maher, 1993), in a series of four laboratory and scenario experiments as well as in an organizational survey. We consistently showed that leader power interacted with situational information (i.e., performance feedback) and internal belief states (i.e., effective leadership beliefs) in predicting leader self-serving allocations.

First, two experimental studies indicated that performance information impacted high power leaders' self-allocations less than low power leaders' self-allocations. Low power leaders relied more on performance information in making resource self-allocations than high power leaders. Moreover, low power leaders claimed more or less resources than high power leaders, contingent on their performance vis-à-vis followers. Second, data from two additional experiments showed that high power leaders' self-allocations were more a reflection of their effective leadership beliefs than low power leaders' selfallocations. We found that high power leaders acted either more self or more groupservingly than low power leaders, contingent on the content of their effective leadership beliefs. Finally, we replicated our experimental findings in a cross-sectional organizational survey. First, the research reported in this chapter provides compelling evidence that leader power has a significant impact on leader self-serving behaviors. However, contrary to popular opinion, we showed that high power leaders need not necessarily be corrupt. Importantly, high power leaders' allocations seem to be contingent on the content of their beliefs regarding effective leadership. Those high power leaders who believe that being an effective leader implies serving the group's interests, first and foremost, are more likely to engage in group-serving actions than those leaders who believe that being an effective leader entails favoring one's own interests. Second, this research bridges recent developments in social psychological research on power and leadership research. Specifically, we have shown that different power levels, even within a role traditionally considered to be a high power role, lead to different decisions and behaviors. This suggests that, from a leadership perspective, it is important to consider not only the effects of power differences between leaders and subordinates, but also the effects of power differentials within the leadership role on decision making and behavior.

In chapter four we predicted that the interplay between systemic procedural justice and leader perspective-taking would mitigate the myopic self-centered focus induced among leaders by the experience of elevated power. These predictions were derived from an integration of the power-approach theory (Keltner et al., 2003), procedural justice research (Colquitt, 2001; Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Leventhal, 1980; Thibaut & Walker, 1975), and insights from work on perspective-taking (Davis, 1980, 1983; Galinsky & Ku, 2004; Galinsky, Ku, & Wang, 2005), and were tested in a series of two laboratory and scenario experiments as well as in an organizational survey. In our first experiment, we argued that systemic procedural justice would facilitate perspective-taking among high power leaders which should, in turn, directly translate into lower self-allocations as compared to conditions where procedural justice systems are absent. In line with our predictions, we found that high power

leaders self-allocated a lower amount of points when subordinates were afforded voice than when they were not. Moreover, we showed that these effects of procedural justice and power on leader self-allocations were mediated by leader perspective-taking. In the next two studies we further extended our reasoning by reformulating our mediation hypothesis as a moderation hypothesis. Therefore, in the second and third study, we tested the three-way interaction between power, procedural justice systems and perspective-taking on leader allocations, predicting that under conditions of no (or low) perspective-taking, high power leaders should allocate less resources when procedural justice systems are present than when they are absent. However, under conditions of high perspective-taking, this interaction between power and procedural justice systems should be weaker, and we expected high power leaders to exercise restraint in their selfallocations across the board, regardless of the presence or absence of procedural justice systems. In line with our predictions, in Study 2 we showed that procedural justice systems and leader power interacted in their prediction of leader self-allocations in the no perspective-taking conditions, whereas in the perspective-taking conditions, high power leaders made other-oriented allocations across the board, independent of the presence or absence of procedural justice systems. In Study 3 we replicated and extended these findings to an organizational context, with a broader conceptualization of procedural justice systems, an individual difference measure of perspective-taking and a broader dependent variable as compared to our experimental studies. The research reported in this chapter provides first evidence that the interplay between procedural justice systems and leader perspective-taking can serve to mitigate some of the negative effects of power on leader resource allocations.

In chapter five we hypothesized that accountability would moderate the effects of leader power on leader self-serving behaviors. Specifically we proposed that powerful accountable leaders would exercise restraint and act less self-servingly (e.g., self-allocate a lower amount of resources) than non-accountable high power leaders. This prediction rooted in insights from the power-approach theory (Keltner et al., 2003) as well as from research on accountability (Lerner & Tetlock, 1999) was tested in a laboratory experiment as well as in an organizational survey. In both studies we found that leader power interacted with accountability in predicting leader behaviors. In Study 1 we showed that high power leaders who were held accountable self-allocated a lower amount of points than high power leaders who were not held accountable. Moreover, low power leaders' self-allocations were less contingent on accountability constraints than high power leaders' allocations. In Study 2 we extended and replicated these findings in a cross-sectional survey of organizational leaders by demonstrating that powerful accountable leaders engaged in less self-serving behaviors than powerful

leaders who did not feel accountable. The research reported in this chapter is consistent with previous theorizing suggesting that holding powerful individuals accountable for their actions could harness some of the more pernicious effects associated with elevated power.

A short explanatory note is due at this point regarding the three empirical chapters (chapters 3, 4, and 5) of this dissertation specifically focusing on the effects of power on leader self-serving behaviors. In chapter three, we showed, in line with previous research (Galinsky, Magee, Gruenfeld, Whitson, & Liljenquist, 2008; Keltner et al., 2003, but see Guinote, 2008) that power alters the processing of information, such that elevated power will render individuals less sensitive to situational constraints and more sensitive to internal cues as compared to low power. In chapters four and five, we showed that organizational procedural justice systems and accountability constraints mitigated high power leaders' tendency to allocate more resources to the self. At first blush, it may therefore seem that the findings of chapters four and five directly challenge our findings in chapter three, because procedural justice systems and accountability constraints are in fact exogenous to the leader. We argue that this apparent conflict is more superficial than substantive.

First, we want to highlight that currently held goals are important moderators of high power individuals' attention to situational contingencies (e.g., Bargh, Raymond, Pryor, & Strack, 1995; Chen, Lee-Chai, & Bargh, 2001; Galinsky, Jordan, & Sivanathan, 2008). One of the major goals that high power individuals may have is to maintain their status position. In the Galinsky, Magee et al., (2008) research as well as in the research reported in chapter three, contextual cues did not directly pertain to powerful individuals' goal related to the preservation of their status position, whereas in chapters four and five, we contend that the focal contextual cues may have made powerful individuals' goal to maintain their position in the hierarchy more salient. This, in turn, may have triggered the motivation to avoid engaging in actions that might result in the loss of power and status. Therefore, we contend that high power individuals will take situational cues (i.e., procedural justice systems and accountability demands) into account to the extent that they are deemed to be related to goal attainment. Second, and relatedly, powerful individuals have been shown to be more flexible in their focus of attention than low power individuals (e.g., Guinote, 2007b, Gruenfeld, Inesi, Magee, & Galinsky, 2008). That is, they may or may not pay attention to situational cues depending on the extent to which these cues are deemed to be relevant. In chapter 3 we would argue that performance information relative to followers may be deemed as less relevant for high power leaders than for low power leaders, because their subordinates may simply not be the relevant comparison other. Third, an argument could be made

that procedural justice systems and organizational systems of checks serve to embed the leader in the larger organizational context. As such, these institutionalized systems provide leaders with the prevailing organizational norms, which in fact could become internalized. More specifically, the presence of procedural justice systems and accountability systems can lead to the internalization of norms of fairness and the need to justify one's decisions. Thus, we argue that contextual cues may trigger cognitive intrapersonal processes leading to the development of internal attributes that may serve as cues in subsequent cognitive processing and behavior.

## Theoretical Implications and Directions for Future Research

The research reported in this dissertation spans across a number of different theories that are either more closely or more distally related to leadership research. The common denominator across all our empirical chapters has been our attempt at explaining when and why leaders would engage in actions that are either relatively self or group-serving. Therefore, we would argue that our findings have a number of distinct implications for leadership research in general, as well as for the study of leader self-serving behavior in particular. For the sake of brevity, below we will highlight only those areas which we deem to have the highest potential in terms of informing future research.

The role of a self-concept-based analysis of leader behaviors. This dissertation provides first evidence that leaders' self-concept, more precisely leaders' self-definition as a leader, has a significant impact on leader self-serving behaviors. First, the present work builds upon, and conceptually extends, the self-concept stream of leadership research (Lord, Brown, & Freiberg, 1999; Gardner & Avolio, 1998; Shamir, House, & Arthur, 1993; van Knippenberg, van Knippenberg, De Cremer, & Hogg, 2004) by taking the limelight off followers' self-concept and by zooming in on leaders' self-concept. Second, our self-concept analysis of leader self-serving behaviors also feeds into charismatic leadership research (e.g., De Cremer & van Knippenberg, 2002) as well as into work from a social identity theory of leadership perspective (e.g., Hogg & van Knippenberg, 2003). Whereas both aforementioned research streams have identified leader self-sacrificial or group-serving behaviors as being central precursors of leader effectiveness (e.g., Bass, 1990; Burns, 1978; Shamir et al., 1993; van Knippenberg & Hogg, 2003; Yukl, 2002), neither one of them has informed us on factors determining leader self versus group-serving behaviors. Our findings extend this work by highlighting factors that might influence the extent to which leaders engage in self or group-serving actions.

Admittedly, the present evidence is still too modest to allow us to draw far-reaching conclusions about the effects of leader self-definition, but we believe that it alludes to

the concept's potential to advance our understanding of leader behaviors in general, and leader self-serving behaviors more specifically. In this respect, we propose two directions for future research that seem particularly worthwhile. First, we have focused only on one specific aspect of the self-concept, namely leaders' self-definition as leaders. Because the self-concept is a multidimensional construct consisting of a multitude of different identities (e.g., Lord et al., 1999; van Knippenberg et al., 2004), leaders could reasonably be expected to also possess self-definitions as members of their work groups or as members of their professional groups. Therefore, future research could extend our self-concept analysis of leader self vs. group-serving behaviors by investigating such alternative leader self-definitions as antecedents of leader actions. For example, from a social identity analysis of leadership perspective (Hogg & van Knippenberg, 2003), if leaders construed the self in terms of membership in their work group and identified strongly with this group, they should be more sensitive to group normative information when allocating resources. Thus, we propose that conceptually different self-definitions (e.g., as a leader, as a member of the professional group, as a group member) would affect leader behaviors differently by focusing their attention on the specific norms associated with the salient identity.

Second, a self-concept-based analysis of leader behaviors inevitably raises a host of other intriguing questions. Two questions which we see as presenting especially promising avenues are (1) how are these various self-definitions interrelated, and (2) what factors influence the relative strengths of these identities? From a leader development perspective, self-definition as a leader represents a critical step in providing leaders with an understanding of their role, their goals, motivations and aspirations (e.g., Day & Harrison, 2007; Hall, 2004; Lord & Hall, 2005). Day and Harrison (2007) as well as Lord and Hall (2005) go further to propose that, over time and with more leadership experience, leaders' individual-level identities would be first transcended by relational identities and subsequently by collective identities. The developmental view on leaders' self-concept thus proposes a hierarchical relationship between self-definition as a leader, relational leader identities and collective leader identities. Moreover, this perspective also suggests that once these different self-definitions have been formed, leaders can switch between them contingent on the task at hand. This implies that various self-definitions can co-exist and that their relative strength in affecting behaviors would be determined by situational factors (e.g., task at hand, accountability, legitimacy, goals). We deem these to be interesting propositions that could be tested longitudinally. Whereas our work only allows us to draw conclusions as to the effects of self-definition as a leader on resource allocations, we can envision the explanatory potential afforded by a fuller model of leader self-definitions.

The role of power. Whether in the halls of academia or within the forum of public opinion, power has often been regarded as being the root cause of leader corruption and derailment. Contrary to popular opinion, and in line with more recent conceptualizations of power as having transformative effects that can be both functional as well as dysfunctional, depending on the person and the situation (Galinsky, Jordan, & Sivanathan, 2008; Keltner et al., 2003), in this dissertation, we show that power does not necessarily corrupt. As such, this dissertation also aimed to create a bridge between recent social-psychological research on power and leadership research, especially because, despite the historical and functional link between power and leadership (French & Snyder, 1959), their study has not been very well integrated (Hollander & Offerman, 1990). First, our findings in chapter three are consistent with work by Galinsky and colleagues (2008) showing that power protects the individual from situational influences. This can of course have either functional or dysfunctional consequences depending on the nature of these situational influences as well as on the behaviors of the powerful that are under investigation. Second, our work in chapters four and five not only informs our understanding of how differential levels of power within the leader role affect leader behaviors, but also contributes to the power literature by identifying two moderators of the effects of power that need not necessarily be connected to a leadership context: perspective-taking and accountability. These findings directly build upon and extend previous theorizing on identifying ways to mitigate some of the more dysfunctional effects associated with high power (e.g., Galinsky, Jordan, & Sivanathan, 2008; Keltner et al., 2003). Third, we would suggest that the greatest contribution of our work on the role of power in influencing leader behaviors lies in attempting to identify potential ways to harness its positive effects while mitigating its negative effects. Despite the considerable progress made in depicting power as both a generative and a destructive force, the question of how power can be transformed and used in the service of effective leadership has been largely side-stepped. Therefore, we would argue that addressing this question – of both theoretical and practical importance – remains an open challenge for leadership research.

The role of procedural justice. This dissertation provides first evidence that procedural justice systems are potent moderators of the effects of power on leader resource allocations. First, we found that, at least in a context where leader self-serving behaviors occur at the expense of followers' outcomes, systemic procedural justice can lead to higher subordinate outcome favorability. Typically, procedural justice research has studied the interactive effect of procedural justice and outcome favorability on employee fairness perceptions and attitudinal and behavioral reactions (see Brockner & Wiesenfeld, 1996, for a review). However, by studying systemic procedural justice as an

antecedent of leader allocation behaviors, we found that higher procedural justice at the system level can result in fairer resource distributions on the part of the leader. Of course this particular finding is bound by the specific context under investigation in our research, where the more the leader self-allocated the less was left over for followers. Whether these results can be generalized to different contexts remains an intriguing question to be answered by future research. Second, in this dissertation we treated procedural justice as an exogenous variable influencing leader behaviors. Typically, procedural justice research has studied procedural justice as an exogenous variable influencing employee perceptions and behaviors. Much less attention has been devoted to understanding when, why and how leaders might in fact act in accordance with procedural justice rules (see also Scott, Colquitt, & Zapata-Phelan, 2007). By shifting the focus from the employee as the recipient of procedural justice to the leader as the enactor of procedural justice we opened a new research avenue that could provide us with valuable insights into how systems of procedural justice can influence leader behaviors. For example, one could envision systemic procedural justice having a positive effect on leader implementation of procedural justice as well as on leader expressions of interactional justice. From a theoretical standpoint, examining factors that influence leader expressions of justice can provide us with new directions for building organizational justice models. From a practical standpoint, understanding the conditions that would facilitate leader engagement in distributive justice as well as leader expressions of procedural and interactional justice, could aid organizations in preventing injustice.

The role of perspective-taking. Perspective-taking has often been proclaimed to be a vital component for the smooth functioning of social relations (e.g., Mead, 1934; Piaget, 1932). In this dissertation we have shown that perspective-taking can be a potent mitigator of power-induced egocentric tendencies. This finding corroborates previous power research suggesting that the personalities of high power individuals are better predictors of their behaviors than the personalities of low power individuals (e.g., Bargh, Raymond, Pryor, & Strack, 1995; Chen, Lee-Chai, & Bargh, 2001; Galinsky et al., 2008). For example, Chen and colleagues found that power-primed communally-oriented participants acted more selflessly and power-primed exchange-oriented participants acted more selfishly than participants exposed to neutral primes. Similarly, Bargh et al. (1995) showed that the activation of the concept of power in men who had a predisposition towards sexual harassment led to an automatic triggering of sex-related concepts and consequently to viewing female discussion partners as sexual objects. First, this suggests that future research trying to elucidate leader behaviors may benefit from considering other dispositional attributes that could attenuate some of the potentially

negative effects associated with high power. For example, justice orientation (Rupp, Byrne, & Wadlington, 2003), social value orientation (MacCrimmon & Messick, 1976), social relationship orientation (Mills & Clark, 1984) or moral identity (Aquino & Reed, 2002) emerge as potential moderators of the effects of power. Second, we argue that perspective-taking can be a powerful moderator of the effects of power on a multitude of organizationally relevant variables, above and beyond leader resource allocations. In fact we would propose that perspective-taking is part and parcel of effective leadership (see also Galinsky, Jordan, & Sivanathan, 2008). Leaders are generally expected to motivate their subordinates toward the achievement of group goals (e.g., Hollander, 1980). But leaders can only be effective motivators if they understand their audience, and we suggest that this understanding relies largely on leaders' capacity to see the world from their subordinates' perspective. Therefore, we argue that leader perspective-taking, especially when coupled with the action-orientation and optimism that comes with high leader power can be an important precursor of leader effectiveness. For example, previous research has found that employees who perceive that their leaders do not treat them with dignity and respect (i.e., interactional justice), are more likely to trust these leaders less (e.g., Folger & Cropanzano, 1998), to exhibit worse performance (e.g., Masterson, Lewis, Goldman, & Taylor, 2000), and to engage in more retaliatory behaviors (e.g., Skarlicki & Folger, 1997) than employees who perceive that their supervisors are treating them fairly. We argue that leader perspective-taking could serve to mitigate some of these negative effects by increasing the extent to which high power leaders engage in expressions of interactional justice.

The role of accountability. Whereas accountability has previously been suggested to be a potential moderator of the more pernicious effects of power (Keltner et al., 2003; Magee, Gruenfeld, Keltner, & Galinsky, 2005), to our knowledge, this is the first empirical test of this contention. Our current findings are also congruent with some earlier research hinting at a possible interaction between power and accountability. For example, Tetlock (1981) showed that U.S. presidents exhibited greater integrative complexity in their thinking after they were elected and became accountable to a wide variety of constituents, than prior to election. Because they had to justify their decisions and policies to a wide array of different interest groups, the elected Presidents were more likely to consider the perspectives of these various groups as well as to ponder on the consequences of their decisions. Accountability is however a complex, multi-dimensional construct (Lerner & Tetlock, 1999) and in this dissertation we have only begun to scrape the surface of the interactive effects of accountability and power on leader behaviors. Future research may benefit from delving deeper into the potential effects of different types of accountability on leader behaviors. Whereas process

accountability has been related to better quality decisions by, for example, increasing judgmental accuracy (Rozelle & Baxter, 1981; Siegel-Jacobs & Yates, 1996) and the thoroughness of information processing (Siegel-Jacobs & Yates, 1996; Tetlock, 1983; Tetlock & Boettger, 1989), outcome accountability has been shown to also lead to a number of detrimental side effects, such as more wasteful resource distributions (Adelberg & Batson, 1978), more politically motivated behaviors (Fandt & Ferris, 1990), and less compromising in a negotiation context (Klimoski, 1972; Klimoski & Ash, 1974). It has been argued that the observed negative effects of outcome accountability stem from the fact that it disproportionately focuses individuals on the outcome to the detriment of the process of reaching the outcome, potentially leading them to take "shortcuts" in reaching their goals (e.g., Davis, Mero, & Goodman, 2007). Because outcome accountability seems to facilitate thinking and action predicated on a "means justify the ends" philosophy, holding high power individuals solely accountable for the final outcome of their actions, could exacerbate their tendency to treat others as means towards an end, and thereby fuel already existing predispositions to objectify others and ignore their internal experiences. This question open to future empirical tests, does however suggest that in certain situations, outcome accountability - devoid of process accountability - could have pernicious effects on high power individuals' behaviors.

#### Caveats and Limitations

This dissertation offers an analysis of how leaders come to engage in relatively self versus group-serving behaviors. Below I will discuss the limitations of the present research in terms of (1) the methods used, and (2) operationalization and measurement issues.

Method. In this dissertation, I report a total of sixteen empirical studies, spread over four empirical chapters attempting to answer my central research question. Six of the studies are laboratory experiments, five are scenario experiments and five are cross-sectional organizational surveys. Each of the employed methodologies suffers from its own drawbacks in terms of generalizability and validity. Whereas laboratory experiments have the advantage of experimental control and hence a relatively strong internal validity of results, they also have the disadvantage of being artificial in nature and somewhat disconnected from reality – which threatens the external validity of the findings. We did however choose for an experimental set-up because our aim was to establish causality in our predicted relationships (Berkowitz & Donnerstein, 1982). Moreover, to alleviate some of the concerns regarding the artificiality of the experimental set-up we complemented most of our laboratory experiments with scenario experiments, which usually score higher on levels of mundane realism. Additionally, previous research has

indicated that there is no reason to suspect that students behave differently than other populations (Brown & Lord, 1999; Dipboye, 1990) and experimental findings using similar paradigms have been replicated in survey-based organizational research (De Cremer & van Knippenberg, 2002, 2004; van Knippenberg & van Knippenberg, 2005). More important, in each chapter, we replicated the findings from our experimental studies in at least one organizational survey, for which external validity concerns should pose less of a problem. This is not to say that cross-sectional surveys do not suffer from their own drawbacks in terms of being correlational in nature (i.e., rendering them mute in matters of causality). All in all, we argue that, the employed combination of experimental designs with the survey designs leads us to see these concerns as less of a threat to the overall conclusions of the present research, given that the strengths of the one methodology may compensate for the weaknesses of the other. Confidence in our results is bolstered not only by replication across studies and methodologies but also across samples (i.e., Dutch students, managers and supervisors in the United Kingdom).

Operationalizations and measurement. First, whereas, in chapter two we used multiple operationalizations of the self-definition concept as well as of the social information construct, one could argue that in chapters three, four and five, we used the same power manipulation in all of our experimental studies. This could of course raise questions as to whether our findings are limited to the manipulation we employed. We would argue that, because we also measured leader power either by measuring position power (chapters 3 and 4) or by measuring leaders' subjective sense of power (chapter 5), and replicated the results of our experimental studies, our specific operationalization of leader power should constitute less of a concern. We do nonetheless acknowledge this potential limitation and endorse future studies with different power manipulations.

Second, whereas our narrow focus on the allocation of monetary resources as a dependent measure can be considered a limitation of our experimental studies, we extended the scope of our dependent variable in the surveys by also measuring leaders' time investment in group projects as well as their attributions of credit for jobs performed. Although we believe that the present results provide useful insights into leader self-serving behaviors, the nature and scope of our dependent variable should be borne in mind when generalizing conclusions. Future investigations might benefit from extending the scope of our dependent variable to other domains such as the relational domain (i.e., leaders' treatment of subordinates in terms of showing respect or allowing for voice behaviors).

Third, one could criticize our measurement of undesirable behaviors via self-reports rather than via behavioral measures. There is however evidence suggesting that, when measuring undesirable behaviors, self-reports are as accurate as more 'objective' measures such as police reports or lie detector tests (Clark & Tifft, 1966; Hindelang, Hirschi, & Weiss, 1979). Nonetheless, we do not want to be presumptuous and assume that our self-reported measure of self-serving behaviors is necessarily accurate, just because similar research has found a correlation between self-reports of undesirable behaviors and their 'objective' measurement. Ultimately, this remains a question to be answered in future research and we wholeheartedly endorse future tests of our hypotheses in field settings with both follower and leader ratings of self-serving behaviors as well as more 'objective' measures.

Fourth, a potential weakness of our survey studies could be that all variables were measured in a single questionnaire (i.e., making common source and common method variance a potential problem). We would argue that this does not necessarily threaten the validity of our conclusions for two reasons. First, we also replicated our survey findings in experimental studies. Second, because this type of design could lead to an inflation of the main effects, it may lead to an underestimation of the effect sizes for interactions (Evans, 1985; McClelland & Judd, 1993). As such, common source or method bias does not pose a threat to the validity of our conclusions regarding our proposed interactions.

# **Practical Implications**

Although conclusions regarding practical implications are to be regarded as tentative and as requiring further inquiry and clarification, we see potential for our findings to be used in applied settings, i.e., in organizations trying to curb leader self-serving behaviors. First, in chapters two and three, we showed that leaders' effective leadership beliefs substantially impacted their resource allocation behaviors. The leader development (London, 2002) and coaching literature (Smither & Reilly, 2001) suggests that interventions directed at improving leadership generally work because they aim at creating new self-schemas. Some value might therefore be drawn from promoting group-serving effective leadership beliefs as ideal leadership self-schemas. Moreover, if more leaders would endorse group-serving effective leadership beliefs this could lead to a more general downward compensation spiral. As we have shown in chapter two, leaders self-defining more strongly as leaders are more likely to use information about other leaders' outcomes. Therefore, if a high number of leaders endorses group-serving effective leadership beliefs this could influence other leaders to claim lower outcomes for themselves. The promotion of group-serving effective leadership beliefs could be done via leadership training and executive seminars as well as via teaching in MBA programs, where future leaders are formed.

Second, based on our findings in chapters four and five, there seems to be some value in the institution of procedural justice systems as well as in the implementation of organizational systems of checks and balances. First, whereas procedural justice research has typically shown that procedural justice systems increase employee satisfaction, wellbeing, and performance (for a review see Colquitt et al. 2001), our research suggest that the simple presence of procedural justice systems serves to temper leader resource selfallocations. Thus, procedural justice systems can, under certain conditions (i.e., when leaders and subordinates share a common resource pool) beget more distributive justice. Second, we would suggest that organizations may best be able to reap the benefits of the constraining power of accountability on leader behaviors with systems of checks and balances that combine outcome and process accountability concerns. Additionally, if the context precludes the creation of formal accountability systems, organizations could try to create flatter hierarchies. By creating more democratic decision making systems, accountability implicitly becomes part and parcel of the decision making process, because each individual can expect to have to justify his/her position to the rest of the group.

Third, in chapter four, we have shown that leader perspective-taking can also act as a damper on self-serving leader allocations. This finding has two different practical implications. First, because power increases the correspondence between traits and behavior (Bargh et al., 1995; Chen et al., 2001), the personalities of high power individuals are better predictors of their behaviors than the personalities of low power individuals. Consequently, organizations could select individuals into leadership roles who score high on perspective-taking measures. Second, because perspective-taking is a highly trainable ability (e.g., Parker & Axtell, 2001), organizations could invest in training programs that provide leaders with an appreciation of, as well as the skills necessary to engage in perspective-taking. The simple act of trying to see the world through their subordinates' eyes could make leaders aware of their employees' interests and act accordingly. This could be done via leadership training and executive seminars.

# Concluding Remark

Leader self-serving actions are a particularly pernicious class of leader behaviors that carry the specter of negative consequences for subordinates' motivation and performance, as well as for the organization at large. In contrast, leader group-serving behaviors have consistently been depicted as a positive force, linked to increased leader effectiveness. Despite the considerable dysfunctional downstream consequences associated with leader self-serving behaviors, our understanding of *when* and *why* leaders choose to serve their own interests or to benefit their groups has been limited. This

dissertation aimed to uncover some of the factors that would inform us when and why leaders may engage in self versus group-serving behaviors. First, we found that self-definition as a leader and power influence the type of information used by leaders in resource allocation contexts. Contingent on the content of this information, more or less self-serving behaviors ensued. Importantly, power did not necessarily lead to increased leader self-servingness. Second, we identified systemic procedural justice, accountability, and perspective-taking as potential mitigators of some of the more negative tendencies associated with elevated leader power that could result in relatively self-serving leader behaviors. All in all, we hope to have opened a new avenue for exploring potential determinants of leader self versus group-serving actions by pointing to the value of a self-concept-based analysis, as well as at to the value of a power-based analysis of leader behaviors.

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### **Dutch Summary**

Organisaties die geleid worden door leiders die de fondsen van hun bedrijven plunderen om hun egocentrische belangen te behartigen lopen niet alleen het risico op minachting en woede van het publiek, maar ook op potentieel verlies van rijkdom en aanzien. Zelf-dienende gedragingen van leiders worden zowel in de wetenschap als in de publieke opinie aangedragen als een bijzonder destructieve categorie leiderschapsgedragingen (Choi & Mai-Dalton, 1998; De Cremer & van Knippenberg, 2002, 2004) die negatieve consequenties heeft voor zowel de organisatie als de motivatie en prestatie van de medewerkers. Daarentegen wordt gedrag van leiders dat de groep dient consistent in verband gebracht met toegenomen leider effectiviteit (Choi & Mai-Dalton, 1999; De Cremer & van Knippenberg, 2002, 2004; van Knippenberg & van Knippenberg, 2005; Yorges, Weiss, & Strickland, 1999). Ondanks de aanzienlijk negatieve consequenties die geassocieerd worden met leider zelf- dienende gedragingen, is ons begrip van wanneer en waarom leiders zich relatief zelf- of groep-dienend gedragen tot nog toe beperkt. Wij stellen dat begrip van waarom sommige leiders meer geneigd zijn om gedragingen ten toon te spreiden die de belangen van de groep schaden dan andere leiders, een eerste stap is om manieren te vinden om het voordoen van zulk gedrag te beperken. Deze dissertatie beoogde het begrip hieromtrent te vergroten door de waarde van (1) een op het zelf-concept gebaseerde analyse, evenals (2) een op macht gebaseerde analyse van leidergedragingen in kaart te brengen. In vier empirische hoofdstukken hebben we ten eerste getracht om uiteen te zetten hoe zelfdefiniëringsprocessen die nauw verbonden zijn met de rol van de leider en tevens gerelateerd zijn aan machtsprocessen, invloed hebben op de manier waarop de leider de allocatiesituatie waarneemt en op de gedragingen die daarop volgen. Ten tweede hebben we verschillende manieren om negatieve gevolgen van toegenomen macht van de leider, met name die gevolgen die zouden kunnen leiden tot relatief zelf-dienende leidergedragingen, geïdentificeerd.

In hoofdstuk twee veronderstelden we dat het verwerken van sociale informatie in een allocatiecontext zou worden gemodereerd door de mate waarin een leider zichzelf definieert als leider, en dat afhankelijk van de aangeboden informatie de zelf-allocatie van de leider meer of minder zelf-dienend zou zijn. We testten deze meer algemene voorspelling, afgeleid van een integratie van theorieën op het gebied van leider zelf-definitie (Kramer, 2003; Lord & Hall, 2005) en de sociale vergelijkingstheorie (Festinger, 1954), in een serie van vier laboratorium- en scenario-experimenten en twee veldstudies. We toonden consistent aan dat leider-zelfdefiniëring samen met normatieve sociale informatie, van zowel descriptieve (bijv. informatie over de zelf-allocatie van andere

leiders) als injuctieve (bijv. effectieve leiderschapsovertuigingen, -hierna ELB's genoemd-) aard, invloed heeft op leider-zelf-dienende allocaties. De zes studies lieten zien dat de effecten van descriptieve en injuctieve sociale informatie op de mate waarin leiders uitkomsten aan zichzelf toewezen sterker waren voor leiders die zich sterker als leiders definieerden dan diegenen die zich minder sterk als leider definieerden. Leiders die zich sterker als leider definieerden gedroegen zich meer zelf-dienend wanneer de zelf-allocaties van andere leiders hoog (vs. laag) waren, of als leiders zelf-dienende (vs. groeps-diendende) ELBs hadden. Deze effecten waren minder sterk voor leiders die zich zelf minder sterk definieerden als leiders. Samengevat vonden we consistent dat zelf-dienende leidergedragingen het resultaat zijn van een interactie tussen zelfdefiniering als een leider en sociale informatieverwerking. Met andere woorden, de huidige data suggereren dat leiders vooral sociale informatie die verankerd is met de manier waarop zij zichzelf definiëren zullen gebruiken. Dit onderzoek geeft het eerste en noodzakelijke bewijs dat het zelfconcept van leiders, om precies te zijn de zelfdefinitie van een leider als leider, een significant effect heeft op de zelf-dienende gedragingen van een leider. We hopen hiermee niet alleen het onderzoek naar de determinanten van leider zelf- en groep-dienende gedragingen op de onderzoeksagenda te hebben gezet, maar ook leider zelf-definitie geïntroduceerd te hebben als een concept waar rekening mee gehouden dient te worden bij onderzoek naar gedrag van leiders.

In hoofdstuk drie stelden we dat de mate waarin een leider gevoelig is voor verschillende soorten signalen in allocatiecontexten beïnvloed wordt door macht. We veronderstelden dat veel macht van de leider niet onvermijdelijk zou resulteren in meer leider zelf-dienende gedragingen. Wel veronderstelden we dat hoe meer macht een leider heeft, des te meer de acties van deze leider afhankelijk worden van interne aannames en overtuigingen (bijv. effectieve leiderschapsaannames, ELBs), en des te minder afhankelijk ze worden van situationele, contextuele signalen (bijv. prestatiefeedback). Of dit zou leiden tot meer of minder zelf-dienende gedragingen zou afhangen van de aard van deze aannames en contextuele signalen. We hebben deze voorspellingen, die tot stand zijn gekomen op basis van een integratie van de power-approach theorie (Keltner et al., 2003), de equity theorie (Adams, 1965), en leider-categorisatie theorie (Lord & Mahler, 1993), getoetst in een serie van vier laboratorium- en scenario-experimenten en één veldstudie. We hebben consistent aangetoond dat de macht van een leider interacteerde met situationele informatie (prestatiefeedback) en interne overtuigingen (ELBs) in het voorspellen van leider zelf-dienende allocaties. Ten eerste gaven twee experimentele studies aan dat prestatiefeedback minder impact had op de zelf-allocaties van leiders met veel macht dan op de zelf-allocaties van leiders met weinig macht. Leiders met weinig macht claimden meer of juist minder middelen dan leiders met veel macht, afhankelijk van hun prestatie ten opzichte van volgers. Ten tweede lieten de resultaten van twee additionele experimenten zien dat de zelf-allocaties van leiders met veel macht meer een reflectie waren van hun interne overtuigingen aangaande effectief leiderschap dan de zelf-allocatie van leiders met weinig macht. We vonden dat leiders met veel macht zich of meer zelf-dienend of meer groep-dienend gedroegen dan leiders met weinig macht, afhankelijk van de inhoud van hun ELBs. Tot slot hebben we onze experimentele bevindingen gerepliceerd in een cross-sectionele organisatie-survey. Ten eerste leveren deze studies overtuigend bewijs dat de macht van een leider een significante invloed heeft op zelf-dienende gedragingen. We toonden echter ook aan dat, in tegenstelling tot de populaire publieke opinie, leiders met veel macht niet noodzakelijkerwijs egocentrisch, zelfbevoordelend of corrupt hoeven te zijn. De allocaties van leiders met veel macht zijn echter afhankelijk zijn van hun overtuigingen aangaande effectief leiderschap. Machtige leiders die ervan uit gaan dat effectief leiderschap betekent dat de belangen van de groep gediend moeten worden, zullen eerder tot groep-dienende gedragingen over gaan dan leiders die denken dat een effectieve leider voornamelijk de eigen belangen dient. Ten tweede slaat dit onderzoek een brug naar recente ontwikkelingen in sociaal psychologisch onderzoek naar macht en leiderschap. We hebben aangetoond dat verschillende machtsniveaus, zelfs binnen een rol die traditioneel gezien wordt als een rol met veel macht, tot verschillende besluiten en gedragingen leidt. Dit suggereert dat voor inzicht in leiderschapsprocessen het niet alleen belangrijk is de effecten van machtsverschillen tussen leiders en volgers op besluitvorming en gedrag in ogenschouw te nemen, maar ook de effecten van verschillen in macht binnen de leiderschapsrol.

In hoofdstuk vier voorspelden we dat de kortzichtige egoïstische focus van de meer machtige leider zou worden beperkt door enerziids procedurele rechtvaardigheidssystemen en anderzijds het in psychologische zin innemen van de positie van de ander. We baseerden ons hierbij op een integratie van de power-approach theorie (Keltner et al., 2003), onderzoek naar procedurele rechtvaardigheid (Colquitt, 2001; Colquitt et al., 2001; Leventhal, 1980; Thibaut & Walker, 1975), en onderzoek naar perspectief nemen (Davis, 1980, 1983; Galinsky & Ku, 2004; Galinsky et al., 2005). De hypotheses werden getest in een laboratoriumexperiment, een scenario-experiment, en een veldstudie. In ons eerste experiment beredeneerden we dat procedurele rechtvaardigheidssystemen het perspectief innemen van de ander door leiders met veel macht zou faciliteren, wat zou moeten leiden tot minder zelf-allocaties in vergelijking met situaties waarin procedurele rechtvaardigheidssystemen afwezig zijn. overeenstemming met onze voorspellingen vonden we dat vooral leiders met veel macht zichzelf minder punten toekenden wanneer ondergeschikten inspraak hadden dan wanneer ondergeschikten dat niet hadden. We toonden aan dat deze effecten verklaard konden worden doordat deze leiders meer geneigd waren het perspectief van de ander in te nemen. In de volgende twee studies hebben we onze mediatiehypothese geherformuleerd als een moderatiehypothese. In deze studies hebben we daarom de drieweg-interactie tussen macht, procedurele rechtvaardigheidssystemen en het innemen van het perspectief van de ander op de zelf-allocaties van de leider onderzocht. Hierbij voorspelden we dat onder condities waarbij het perspectief van de ander nauwelijks of niet wordt ingenomen, leiders met veel macht zichzelf minder bevoordelen als procedurele rechtvaardigheidssystemen aanwezig zijn dan wanneer ze afwezig zijn. In condities waarbij het perspectief van de ander wel wordt ingenomen zal deze relatie minder sterk naar voren komen. Verder verwachtten we dat leiders met veel macht hun zelf-allocatie zouden beperken, onafhankelijk van de aanwezigheid of afwezigheid van procedurele rechtvaardigheidssystemen. In overeenstemming met onze voorspellingen, toonden we in studie 2 aan dat procedurele rechtvaardigheidssystemen en de macht van de leider interacteerden in het voorspellen van leider zelf-allocatie wanneer leiders het perspectief van de ander niet innamen. Wanneer leiders het perspectief van de ander wel innamen kenden leiders met veel macht relatief veel toe aan anderen, onafhankelijk van de aanwezigheid of afwezigheid van procedurele rechtvaardigheidssystemen. In studie 3 repliceerden we deze bevindingen in een organisatiecontext. We gebruikten hiervoor een uitgebreidere conceptualisatie van procedurele rechtvaardigheidssystemen, individuele verschilmaat van het innemen van het perspectief van de ander en een bredere afhankelijke variabele in vergelijking tot onze experimentele studies. Het onderzoek dat wordt beschreven in dit hoofdstuk levert het eerste bewijs dat het samenspel tussen procedurele rechtvaardigheidssystemen en het innemen van het perspectief van de ander het gedrag van leiders kan beïnvloeden.

In hoofdstuk vijf stellen we dat aansprakelijkheid de effecten van de macht van een leider op zelf-dienende gedragingen zou modereren. Heel concreet stelden we dat machtige leiders die aansprakelijk gesteld kunnen worden zich zouden inhouden en zich minder zelf-dienend zouden gedragen dan leiders met veel macht die niet aansprakelijk gesteld kunnen worden. We baseerden ons hierbij op de power-approach theorie (Keltner et al., 2003) en op onderzoek naar de psychologische effecten van aansprakelijkheid (Lerner & Tetlock, 1999). De hypothese werd getoetst met behulp van een laboratorium experiment en een veldstudie. In beide studies vonden we dat de macht van een leider interacteerde met aansprakelijkheid in het voorspellen van het gedrag van de leider. In studie 1 toonden we aan dat vooral als leiders weten dat zij aansprakelijk gesteld kunnen worden) leiders met veel macht zichzelf minder toebedeelden dan leiders met veel

macht. De zelf-allocaties van leiders met weinig macht waren minder afhankelijk van aansprakelijkheid dan de zelf-alloacties van leiders met veel macht. In studie 2 werden deze bevindingen gerepliceerd in een cross-sectionele veldstudie van leiders in organisaties. Hierbij werd aangetoond dat machtige leiders die zich aansprakelijk voelden zichzelf minder zelf-dienend gedroegen dan machtige leiders die zich niet aansprakelijk voelden. Dit onderzoek ondersteunt theoretische bespiegelingen waarin gesteld werd dat aansprakelijkheid van machtige personen schadelijke effecten van macht zou kunnen beperken.

In hoofdstuk zes vatten we de bevindingen van de empirische hoofdstukken samen en bespraken we de theoretische en praktische implicaties voor leiderschapsonderzoek in het algemeen en voor onderzoek naar leider zelf-dienende gedragingen in het bijzonder.

### Conclusie

Leider zelf-dienende gedragingen zijn een bijzonder schadelijke categorie van leiderschapsgedragingen die een scala van negatieve consequenties voor ondergeschikten en organisaties met zich meebrengt. Het is daarom enigszins verrassend dat leiderschapsonderzoek zich tot nu toe nauwelijks heeft bezig gehouden met factoren die zelf-dienend gedrag in de hand zouden kunnen werken. Deze dissertatie was erop gericht om enkele factoren aan het licht te brengen die ons konden informeren over wanneer en waarom leiders zich meer zelf-dienend of groep-dienend gedragen. Ten eerste vonden we dat leider zelf-definitie en leider macht het soort informatie dat leiders gebruiken in een allocatiecontext beïnvloedt. De mate waarin een leider zich zelfdienend gedroeg bleek afhankelijk van de inhoud van deze informatie. Belangrijk hierbij is dat macht niet noodzakelijkerwijs meer zelf-dienend gedrag van de leider tot gevolg had. Ten tweede hebben we procedurele rechtvaardigheidssystemen, aansprakelijkheid en het perspectief nemen door de leider als potentiële begrenzers van enkele van de meer negatieve consequenties van macht van de leider aangewezen. We hopen dat ons onderzoek aanleiding zal geven voor het verder exploreren van factoren die ertoe leiden dat leiders zich zelf-dienend gedragen, en dat de belangrijke rol van leider zelfconcept en leider macht hierbij in ogenschouw genomen zal worden.

### About the Author



After having received a Master of Science degree in Organization Science from the University of Tilburg in 2005, Diana Rus started her PhD at the Organization and Personnel Management Department at the Rotterdam School of Management, Erasmus University. Her dissertation investigates self-definition and power processes as potential determinants of leader self versus

group-serving behaviors. In the spring of 2008, Diana spent a few months as a visiting scholar at the Kellogg School of Management, Northwestern University. There she collaborated with Adam Galinsky on a number of projects investigating the interplay between power and perspective-taking on a variety of organizationally relevant variables.

Her research interests revolve primarily around issues of leadership and power as well as procedural justice and perspective-taking. Diana has presented her work at various international conferences such as the *Society for Industrial and Organizational Psychology*, the *Academy of Management*, and the *European Association for Work and Organizational Psychology*. Currently, Diana is an Assistant Professor in the Psychology Department of the University of Groningen.

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# THE DARK SIDE OF LEADERSHIP EXPLORING THE PSYCHOLOGY OF LEADER SELF-SERVING BEHAVIOR

Leaders often have considerable control over the distribution of scarce resources within their organizations or groups. In the quintessentially interdependent organizational context these resources are typically needed to reach collective goals, and yet some leaders choose to enrich themselves at the expense of the group. In academic circles as well as in the forum of public opinion, leader self-serving behaviors have been proposed to be particularly destructive, because they carry the specter of negative consequences for the organization at large, as well as for individual followers' motivation and performance. In contrast, leader group-serving behaviors have consistently been depicted as a positive force, linked to increased leader effectiveness. Despite the considerable dysfunctional downstream consequences associated with leader self-serving behaviors, our understanding of when and why leaders choose to serve their own interests or to benefit their groups has been limited. This dissertation aimed to uncover factors that influence leader self versus group-serving behaviors by pointing to the value of (1) a self-concept-based analysis, as well as (2) a power-based analysis of leader actions.

In a series of experimental and field studies, across four empirical chapters (1) I have outlined how self-definition processes intimately tied to the leader role, as well as power-related processes influence leaders' framing of allocation situations and their subsequent behaviors, and (2) I have identified potential ways to mitigate some of the negative effects associated with elevated leader power. First, I found that self-definition as a leader and power influence the type of information used by leaders in resource allocation contexts. Contingent on the content of this information, more or less self-serving behaviors ensued. Importantly, power did not necessarily lead to increased leader self-servingness. Second, I identified systemic procedural justice, accountability, and perspective-taking as potential mitigators of some of the more negative tendencies associated with elevated leader power that could result in relatively self-serving leader behaviors.

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Fax +31 10 408 96 40
E-mail info@erim.eur.nl
Internet www.erim.eur.nl