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Leaders' reactions to employee creativity

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Leaders' reactions to employee creativity:

An achievement goal approach

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An achievement goal approach

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“Ideas are the seeds, not the substance, of creativity.”

— Michael Schrage

CHAPTER ONE

INTRODUCTION

*“An idea that is developed and put into action is more important
than an idea that exists only as an idea.”*

— Edward de Bono

In the late 1980s, Paul Litchfield, an employee of Reebok, pitched the idea for a new basketball shoe that would use inflated air to better support the ankle, thereby reducing injuries. The brand manager of Reebok did not see any potential in this idea and was not interested. Luckily, the director manager of Reebok recognized the possibility of a truly revolutionary concept, and made the decision to follow through with the development - the Reebok Pump was born. It was the first shoe with an internal inflation mechanism that regulated unique fitting cushion, increased ankle support that provided greater comfort and heightened customizability. This invention gave Reebok a new billion-dollar product line and propelled Reebok ahead of Nike and other competitors for the first time. With a 20th anniversary edition Pump launched in 2009, and a new customizable line in 2011, the Reebok Pump continues to define the brand today. This example clarifies that if it was not for Reebok’s director manager who gave the green light, the Reebok Pump would have died a slow death.

In this dissertation, we will investigate the question why some leaders give the green light to creative ideas voiced by their subordinates whereas others do not. Why is it that some leaders react in positive and supportive ways to voiced creative ideas, whereas other leaders tend to nip new ideas in the bud? The Reebok example makes it clear that it is not idea quality per se that is decisive for the reaction of the leader. In fact, in reaction to the same creative idea, the brand manager reacts in a negative way by rejecting and neglecting the idea, whereas the managing director reacts favorably by approving and supporting the idea. We will propose and demonstrate that achievement goals of leaders as a motivational construct critically affect their reactions. That is, we will show that achievement goals may crucially influence how leaders perceive, evaluate, and respond to creative ideas voiced by their subordinates. While the focus is on leaders’ achievement goals, we acknowledge that other factors might also affect leaders’ responses (e.g., financial reasons, voiced ideas are not in line with mission) and will come back to this issue in the discussion section.

In the remainder of this introduction, we will first define employee creativity. What do we mean when we talk about employees who generate and put forward new and useful ideas and why is it important? Next, the role that leaders play in relation to employee creativity will be discussed. We will tap into leaders' role in stimulating and evaluating employee creativity. Then, we will discuss leaders' achievement goals as a motivational construct that may affect leaders' reactions. Specifically, we will discuss what achievement goals are and how they may affect leaders in their responses and evaluations of creative ideas put forward by employees. We will end this introduction with an overview of the studies in this dissertation.

Employee creativity – definition

Scholars and researchers have defined employee creativity as the development of ideas about products, services, processes, and procedures that are both *novel* and *useful* to the organization (e.g., Amabile, 1996; Ford, 1996; Oldham & Cummings, 1996; Shalley, Zhou, & Oldham, 2004; Shalley, 1991). If ideas are unique relative to other ideas currently available in the organization, they can be considered *novel*. If ideas have the potential for value to the organization, they can be considered *useful* (Shalley et al., 2004). This value can be direct or indirect, and can be in either the short- or long-term. The definition of employee creativity, however, makes no assumptions about the relative newness and value of creative ideas. For example, the utilization of new procedures in a work-environment even though these procedures have been used in other work-environments for a long time, can still be considered and judged as creative in that specific situation. Furthermore, creative ideas may be generated by employees in any job and at any level of the organization (Shalley, Gilson, & Blum, 2000). In fact, research shows that some level of creativity is required in almost any job and crosses occupational boundaries (MacKinnon, 1978; Unsworth, 2001). Finally, creativity can range from incremental adaptations to radical breakthroughs (Madjar, Greenberg, & Chen, 2011; Mumford & Gustafson, 1988). Incremental creative ideas imply only few changes in existing frameworks and offer only minor modifications to existing practices and products (Madjar et al., 2011). Radical creativity, on the other hand, offers ideas that differ substantially from the existing framework of practices and routines within an organization (Dewar & Dutton, 1986; Madjar et al., 2011). Accordingly, creative ideas can range from incremental changes (e.g., incremental improvement of existing products

like Gillette razor blades, or reconfiguration of existing products like GPS in cars) to radical breakthroughs such as the invention of the iPhone and the introduction of Facebook and Twitter (Madjar et al., 2011; Mumford & Gustafson, 1988). In contrast to incremental creative ideas, which typically can be accommodated within existing structures, radical creative ideas tend to be associated with more substantive changes. That is, radical creative ideas imply that established practices, roles, interests, and power structures within the organization are challenged and, as a consequence, may elicit more controversy (Janssen, Van de Vliert, & West, 2004; Kanter, 1988) and may be resisted more often (Damanpour, 1988). Thus, how leaders react to and manage radical ideas put forward by employees may have less to do with the potential value of these ideas than with the personal consequences they may imply for a leader (cf. Wolfe, 1995). We therefore focus on examining leaders' differential reactions to creative ideas that depart from the current ways of doing things rather than to incremental ideas that can be smoothly accommodated within existing structures.

In research, the terms *creativity* and *innovation* are often used interchangeably (West & Farr, 1990). In line with other scholars, we think it is important to distinguish *creativity* from *innovation* (Mumford & Gustafson, 1988). As defined earlier, *creativity* has to do with the *development* of novel and useful ideas (cf. Amabile, 1996), whereas *innovation* refers to the *successful implementation* of creative ideas within an organization (Amabile, 1988; Amabile, Conti, Coon, Lazenby, & Herron, 1996; Axtell et al., 2000). So, when employees share creative ideas with others, we only consider it as *innovation* when these ideas are further developed and successfully implemented in the organization, within the team, or within the individual role (Amabile, 1996; Mumford & Gustafson, 1988). But before ideas reach the stage of implementation, it is necessary that these ideas are heard, appreciated, and receive attention. As such, *creativity* might be best conceptualized as a first necessary but not sufficient condition for *innovation* (Amabile et al., 1996; Oldham & Cummings, 1996; West & Farr, 1990). As leaders fulfill a crucial role in evaluating the potential of ideas for subsequent development and implementation, our focus is on leaders' differential reactions to creative ideas voiced by employees. That is, we exclusively focus on creative ideas that have already been generated and voiced, but not yet implemented.

Employee creativity –importance

Why are creative ideas important and interesting to study? In today's dynamic, complex, and highly competitive environment, creativity and innovation have become imperative for many organizations (Kraatz & Zajac, 2001; Mumford, Scott, Gaddis, & Strange, 2002; Tushman & O'Reilly, 1997). As organizations need to keep pace with changes in the competitive environment in which they operate, organizational creativity and innovation have been recognized as necessary resources to survive and prosper (Amabile, 1988; Woodman, Sawyer, & Griffin, 1993). The notion of 'creativity as a necessity' has rapidly become apparent to an increasing number of organizations. In fact, employee creativity has been shown to play an important role with respect to organizational growth, innovation, and survival (Amabile, 1996; Nonaka, 1994; Shalley et al., 2004). Specifically, creative ideas allow organizations to adjust to shifting market conditions, respond and seize opportunities, and thereby to grow and compete with other organizations (Nonaka, 1994; Nyström, 1990). Employee creativity provides an organization with ideas for novel and useful products, procedures, and problem solutions that form the raw material for innovation processes by which organization can adapt and prosper (Kanter, 1988; Oldham & Cummings, 1996). It is, therefore, hardly surprising that organizations place a premium on employee creativity.

Leader role in employee creativity

Leaders have traditionally been an important resource organizations tap into in order to foster outcomes necessary for organizational survival (Tierney, 2008). Recently, a growing body of research emphasizes this pivotal role of leaders with respect to responding to and managing creative ideas voiced by employees (Ashford, Sutcliffe, & Christianson, 2009; Detert & Burris, 2007; Janssen, 2005). As leaders are central and powerful members of the work context, they have the potential to infuse the environment in which employees work with creativity-conducive elements (Amabile et al., 1996; Kanter, 1988), thereby *stimulating* employee creativity.

However, in order for creative ideas to become part of the framework of thoughts and routines, they are evaluated by the power holders of that framework. As such, leaders also fulfill an important and critical role in *evaluating* employee creativity. In fact, the evaluation of subordinates' creative ideas can be regarded as one of the important roles leaders need to fulfill in carrying out their leadership task (Mumford, 2000; Quinn,

Faerman, Thompson, & McGrath, 1996). As it is leaders' evaluation that decides which ideas will get support and which ideas will not, in this dissertation we will focus on factors that influence leaders in their evaluation of creative ideas. However, before this evaluator role will be discussed in more detail, we will first briefly outline research that has been conducted with respect to the stimulating role of leaders to foster employee creativity.

Leaders' stimulating role in employee creativity

Given the dynamic and highly competitive environment facing today's organizations, a hallmark of contemporary leadership is the capacity to detect, recognize, foster, and utilize employee creativity (Tushman & O'Reilly, 1997). Recognition of this importance has led to an increasing research interest, by both researchers and practitioners, in leader-focused creativity (Mumford et al., 2002; Shalley & Gilson, 2004; Shalley et al., 2004). That is, scholars and researchers have conducted a great deal of research on detecting and understanding leadership attributes and behaviors as determinants of, or facilitative conditions for employee creativity (e.g., George & Zhou, 2007; Gong, Huang, & Farh, 2009; Janssen, 2005; Mumford et al., 2002; Oldham & Cummings, 1996; Shalley & Gilson, 2004; Shalley et al., 2004; Zhou & Shalley, 2003).

Specifically, scholars have shown that leaders' stimulation and enhancement of employee creativity is a function of their willingness and ability to support subordinates' creative endeavors (Amabile et al., 1996; Oldham & Cummings, 1996; Tierney & Farmer, 2004; Zhou, 2003), to provide a certain amount of autonomy to their subordinates (Amabile et al., 1996), to provide structure and direction to their subordinates (Mumford et al., 2002), and to provide contingent rewards and recognition (Tierney & Farmer, 2002, 2004). Furthermore, leader behaviors can signal and reveal their favorable attitudes towards subordinates' engagement in creative endeavors (Morrison & Milliken, 2000). Specifically, research showed that supportive, noncontrolling leaders can enhance employee creativity (e.g., Madjar, Oldham, & Pratt, 2002; Oldham & Cummings, 1996; Shalley & Gilson, 2004). Finally, the quality of the dyadic exchange relationship between supervisors and their subordinates was found to be positively related to subordinates' creativity (e.g., Scott & Bruce, 1994; Zhou & George, 2003). As such, these studies highlight and emphasize the important role leaders enact in *enhancing* employee creativity.

Leaders' evaluating role in employee creativity

From the concise overview presented above, it may be clear that leaders fulfill an important role in detecting, recognizing, fostering, and utilizing employee creativity. Acknowledging the important role of leaders also means that employees do not create and develop novel and useful ideas in isolation. In fact, according to the systems perspective on creativity (Csikszentmihalyi, 1990), creativity is typically not the product of single individuals, but of social systems making judgments about an individual's creative products (Amabile, 1996; Csikszentmihalyi, 1990, 1996). According to Csikszentmihalyi's systems approach, ideas can only be seen as creative in reference to existing patterns, or to 'the way things are' in a certain domain. From this systems point of view, the domain is a necessary component of creativity. For these creative ideas to become accepted or adopted, they need to be sanctioned by actors who decide what should and what should not be included in the domain. The 'natural' hierarchical relation that exists between leaders and subordinates provide leaders with legitimate power and resources. As leaders are in a position to recognize and devote attention and resources to creative ideas or to withhold their support (Amabile, Schatzel, Moneta, & Kramer, 2004; Graen & Cashman, 1975), they decide which ideas will become part of the 'domain' and which ideas will not. That is, they may decide whether creative ideas may evolve or not (Detert & Burris, 2007; Janssen, 2005). So, leaders can be regarded as the power holders or gatekeepers of the domain or the existing framework of thought and routines.

When employees voice creative ideas to their leaders, they put forward novel and useful suggestions that can be adopted to improve the current state of affairs within a specific work domain. It should be noted, however, that at the same time these creative ideas also question the current status quo. That is, as creative ideas imply deviations from or extensions of existing products, services, or current ways of doing things, they challenge existing practices, roles, and power structures within the organization (Baer, 2012). The degree to which these creative ideas challenge the current ways of doing things may differ though. That is, in contrast to incremental creative ideas, which can typically be accommodated within existing structures, more radical creative ideas differ substantially from the existing practices within an organization and thus may challenge the current way of doing things more severely. However, in order to retain these novel and useful ideas, they must be recognized as such by the leader (Zhou & Woodman,

2003). That is, for the preservation of creative ideas, the judgment made by the leader with respect to their appropriateness is crucial (Csikszentmihalyi, 1999). Accordingly, as leaders' evaluation of creative ideas determines what gets through to higher-level actors within the organization, they can be regarded as gatekeepers of the current status quo (Csikszentmihalyi, 1990).

Let us clarify this by using the Reebok example. By proposing the use of an internal inflation mechanism, Paul Litchfield voiced a creative idea with the intention to change and improve basketball shoes. At that time, this idea was novel as it was the first shoe that used this technique. The idea was useful as well, as it increased ankle support and provided greater comfort. As such, with this creative idea he made a change in the domain of shoes and, as such, challenged the current way of doing things. However, without the sanctioning of Reebok's director manager the idea would not have survived. As the director manager decided to support and implement the idea of Reebok Pump, he can be regarded as the gatekeeper of the domain who included this revolutionary idea in the sports shoes domain. This example nicely illustrates the crucial role leaders typically play in the evaluation and fate of creative ideas voiced by subordinates.

Exerting the gatekeeper role allows leaders to separate the wheat from the chaff in order to avoid investing scarce organizational resources into less competitive ideas (Simonton, 1999). At the same time, creative input that deems valuable should be selected and retained as elaborations of customary practices (Ford & Gioia, 2000; Mumford, Marks, Connely, Zaccaro, & Reiter-Palmon, 2000), and subsequently should become part of the 'legitimate' repertoire of thoughts and routines of the leader. As may be clear, for the preservation of meaningful and potentially crucial ideas for organization's survival and prosperity, leaders, and more specifically, leaders' evaluations, are the key in this regard. That is, by means of leaders' evaluations, novel and useful creative input should be detected, recognized, fostered, and utilized.

Influence of motivational goals

As mentioned, novel and potentially useful ideas generated by subordinates do not automatically translate into adoption of these ideas by their leaders. Given the importance of leaders' evaluating role, a relevant question is what factors may affect leaders' evaluation. Specifically, what factors determine leaders' decision to sanction creative ideas and make them become part of the framework of thoughts and routines?

Extant research already identified main determinants for why leaders keep relying on existing frameworks of thoughts and routines instead of being receptive and open to new ideas (Hambrick, Geletkanycz, & Fredrickson, 1993), such as a leaders' tenure (Miller, 1991), organizational tenure (Hambrick et al., 1993), and mere ownership effects (Beggan, 1992). These findings suggest that the prolonged exposure to specific firm and organizational contexts foster an attachment to extant beliefs and practices.

Although it is acknowledged that motivational factors are also of central significance for leadership effectiveness (Hambrick & Mason, 1984), they have been largely ignored as potential factors that may affect leaders' evaluation and reactions to creative ideas voiced by their subordinates. This is remarkable, especially if we realize that motivational factors may color the way individuals perceive and interpret information they receive (Sedikides & Strube, 1997). Furthermore, leaders' perceptions and behaviors towards subordinates are inextricably bound with their achievement pursuits in leadership situations (e.g., Yukl, 1989). As such, motivational factors may crucially affect leaders' evaluation and judgment of creative ideas voiced by their subordinates, and consequently the way they (behaviorally) react to these ideas.

In this dissertation we seek to fill this void by examining the role motivational factors play in leaders' evaluation and subsequent reactions to voiced creative ideas. Investigating motivational factors is an important and necessary next step to advance our understanding when and why leaders are receptive to creative ideas voiced by subordinates and which underlying mechanisms are present. Although there are various theories that explain aspects of motivation in an achievement context such as self-determination theory (Deci & Ryan, 1985) and goal setting theory (Locke & Latham, 1990), the theoretical framework of the achievement goal approach (Dweck, 1986; Elliot, 2005; Nicholls, 1984) has become particularly dominant in the last two decades. As achievement motivation and goals of leaders are likely to affect their feelings, thoughts, and behaviors towards employees (Elliot, 2005; Farr, Hofmann, & Ringenbach, 1993), in this dissertation, our aim is to investigate leaders' achievement goals as a motivational factor that might clarify when and why some leaders are responsive to creative ideas voiced by their subordinates, whereas other are not.

The achievement goal approach

The achievement goal approach to achievement motivation has emerged as a highly influential framework for understanding how people define, experience, and respond to, competence-relevant achievement situations, including the workplace (DeShon & Gillespie, 2005; Elliot, 2005). Achievement goals reflect the purpose of an individual's achievement pursuits in a particular situation (Elliot, 1999; Maehr, 1989). In this approach, two types of goals are delineated, *performance goals* which are focused on demonstrating one's competence relative to others and thus grounded in an *interpersonal* standard, and *mastery goals* which are focused on developing one's competence and thus grounded in an *intrapersonal* standard (Van Yperen, Elliot, & Anseel, 2009). This *definition* dimension of achievement goals (performance versus mastery) is crossed with the *valence* dimension (approach versus avoidance) in Elliot and McGregor's (2001) 2 x 2 achievement goal framework (cf. Pintrich, 2000a). Approach goals are directed towards positive or desirable outcomes, whereas avoidance goals are directed to avoid negative or undesirable outcomes (Elliot, 1999; Elliot & McGregor, 2001). Accordingly, this elaborate 2 x 2 model conceptualizes achievement goals in terms of a mastery-performance distinction and approach-avoidance distinction, thereby yielding four types of goals. *Mastery-approach* goals reflect a desire to develop competence through gaining knowledge, skills, and abilities, whereas *performance-approach* goals reflect a desire to demonstrate competence through outperforming others. Furthermore, *mastery-avoid* goals reflect a desire to avoid the deterioration of competence through loss of knowledge, skills, and abilities, whereas *performance-avoid* goals reflect a desire to avoid the demonstration of incompetence through performing worse than others.

In line with correlational studies (for meta-analyses, see Hulleman, Schragger, Bodmann, & Harackiewicz, 2010; Van Yperen, Blaga, & Postmes, 2013), the extant *experimental* literature on achievement goals suggests that, in general, avoidance goals (either performance or mastery) are detrimental for performance attainment (e.g., Elliot, Cury, Fryer, & Huguet, 2006; Elliot, Shell, Henry, & Maier, 2005; Van Yperen et al., 2009), whereas approach goals (either performance or mastery) are beneficial for performance attainment (for a meta-analysis, see Van Yperen et al., 2013). In this dissertation we exclusively focus on mastery-approach and performance-approach goals for three reasons. First, our interest in how these two achievement goals alone may influence

leaders in their reactions to employee creativity is already sufficiently complex. Second, the conceptualization of mastery-approach and performance-approach goals has a richer theoretical and empirical foundation that we can use for formulating hypotheses about effects than the 2x2 model that also includes avoidance versions (cf. Porter, Webb, & Gogus, 2010). Third, the approach goals are most interesting for achievement-goal-based interventions from an applied perspective (cf. Hulleman et al., 2010). Because we focus on approach goals only, throughout this dissertation, performance-approach goals are referred to as *performance goals* and mastery-approach goals as *mastery goals*.

Achievement goals: Dispositional or situational?

Achievement goals can be construed as dispositional and situational factors (Dweck & Leggett, 1988; Elliot, 2005). Some scholars utilize the achievement goal construct in a dispositional manner inherently associated with self-theories about the nature and development of people's attributes (such as intelligence, personality, abilities, and skills; Dweck, 1999; Nicholls, 1984; VandeWalle, 2003). As such, mastery goals may stem from the belief that people's attributes are dynamic and changeable and that exerting effort leads to competence improvement, whereas performance goals may stem from the belief that attributes are fixed, concrete, and internal entities, which cannot significantly be improved by effort (Dweck, 1999). Other scholars employ a situational-specific level of analysis of achievement goals (e.g., Ames, 1992; Button, Mathieu, & Zajac, 1996; Farr et al., 1993; Pintrich, 2000b). For example, a work climate characterized by a strong focus on effort, self-referenced rather than other-referenced feedback, personal improvement, and skill development might guide leaders to adopt mastery goals. By contrast, a work climate characterized by competitive standards based on social comparison, comparative production schedules, other-referenced feedback and deadlines, and the like might prompt individuals to pursue performance goals (cf. Button et al., 1996; Van Yperen, 2003a).

Dispositional goals are relatively stable over time and situations, whereas situational goals are less stable over time and may vary over different situations and domains (e.g., Button et al., 1996; DeShon & Gillespie, 2005). In this dissertation we investigate achievement goals of leaders in a situation-specific context, that is, the work context. As such, we measured and experimentally induced situation-specific

achievement goals to study the effects of achievement motivation of leaders and their reactions to employee creativity.

Leaders' achievement goals and their perceptions of subordinates' creative ideas

Employees usually generate creative ideas in response to perceived problems, irregularities, or suboptimal processes they are confronted with in the conduct of their daily work (Kanter, 1988; Shalley, 1991; Zhou & George, 2003). Whenever subordinates express these generated creative ideas to their leaders, they in fact give feedback information about perceived problems in the leaders' managerial domain combined with new suggestions for problem solution and making improvements. Feedback usually holds both instrumental and evaluative information for the feedback recipient (i.e. the leader). The appraisal of subordinates' creative input as instrumental or evaluative in nature is likely to influence leaders' reactions to it. Achievement goals may cause leaders to focus on either the instrumental or the evaluative aspect in the feedback information inherently associated with subordinates' creative input (e.g., Brett & VandeWalle, 1999; Farr et al., 1993).

Performance goal leaders, driven by their desire to demonstrate superior competence to subordinates, might interpret and experience creative input delivered by subordinates as a negative and evaluative judgment of their leadership competence (Dweck, 1999). That is, subordinates' creative ideas may make problems in their managerial domain manifest and salient, which might frustrate their performance goal of demonstrating superior rather than inferior leadership competence. In contrast, leaders with a mastery goal are driven by a desire to develop their managerial competence and might therefore perceive subordinates' creative ideas as a potentially useful source of diagnostic information that can facilitate them in achieving their goal of mastering their managerial task (Dweck, 1999). Given this disparity in focus between performance goal leaders and mastery goal leaders, we may expect different evaluations and subsequent reactions to subordinates' creative ideas. In fact, throughout the different chapters of this dissertation, we propose and test that these different achievement goals will lead to different response outcomes.

Overview of the dissertation

In Chapter 2, 3, and 4 of this thesis, we will present series of empirical studies designed to study the effects of leaders' achievement goals on their perceptions of and reactions to subordinates' creative input. Throughout these chapters, we employ different methodologies (i.e., laboratory experiment, cross-sectional survey), different samples (i.e., students, leaders in organizations), and different sources of achievement goals (i.e., situationally induced, freely adopted). Each chapter is written independently and can be read separately from the rest of the dissertation. Consequently, some overlap in theoretical and methodological parts exists. However, as shown in Figure 1.1, the chapters also form a coherent story in which different aspects and factors (contextual or situational) related to leaders' reactions to employee creativity are systematically investigated.

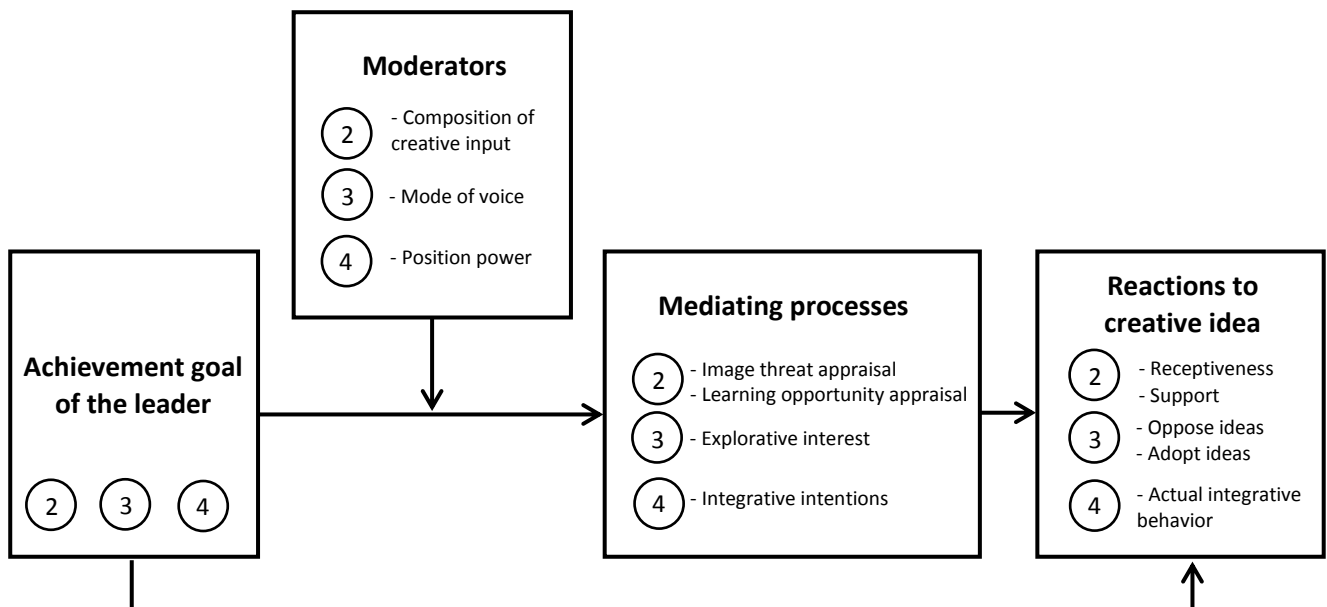


Figure 1.1. Graphical overview of investigated relationships in this dissertation¹

Chapter 2 – Leader achievement goals and composition of creative ideas

In Chapter 2, we will examine leaders' receptiveness to, and support of, subordinates' creative input as a function of leaders' achievement goals. We expect that relative to mastery goal leaders, performance goal leaders are less receptive to, and less supportive of, subordinates' creative input. To further clarify these differential responses of performance goal leaders and mastery goal leaders to subordinates'

¹ Note. The numbers indicate the chapters in which these variables are investigated.

creative input, we investigate appraisals of image threat and learning opportunity as potential mediators. By examining these mediators, we examine whether differential reactions of performance and mastery goal leaders can be explained by differences in their image threat appraisals and learning opportunity appraisals.

Finally, we will investigate specific conditions under which these effects may occur. As creative ideas are usually generated in response to perceived problems or processes that run suboptimally (Kanter, 1988), subordinates' creative input usually consists of two related yet distinct basic aspects, namely, problem identification and creative ideas for problem solution (e.g., Amabile, 1996; Reiter-Palmon, Mumford, Boes, & Runco, 1997; Shalley et al., 2004). Although both aspects are saliently associated with idea generation, they may not always be clear-cut present when subordinates actually voice creative input, resulting in different *compositions of subordinates' creative input*. In Chapter 2, we experimentally disentangle these two aspects of subordinate creative input to be able to test their moderating role in the effects of leaders' achievement goals on their reactions to subordinate creativity. We argue that composition of subordinates' creative input only affects performance goal leaders and not mastery goal leaders. Specifically, we will argue that performance goal leaders are less receptive and less supportive, but only when composition of subordinates' creative input includes both problem identifications and creative ideas. When merely creative ideas are expressed by the subordinate, performance goal leaders will respond like mastery goal leaders.

Chapter 3 – Leader achievement goals and subordinate mode of voice

In Chapter 3, we investigate when and why leaders tend to oppose or adopt creative ideas voiced by their subordinates. We expect that performance goal leaders are more likely to oppose creative ideas, whereas mastery goal leaders are more likely to adopt creative ideas. We further argue that explorative interest mediates the effects of leaders' achievement goals on their oppose and adopt responses. Finally, we argue that *subordinates' mode of voice* (aggressive vs. considerate) may affect the oppose and adopt responses of performance goal leaders rather than mastery goal leaders.

Scholars distinguish different behavioral modes in which individuals can voice their ideas differing on their degree of constructiveness, namely, aggressive voice and considerate voice (e.g., Hagedoorn, Van Yperen, Van de Vliert, & Buunk, 1999; Rubin, Pruitt, & Kim, 1994). *Aggressive voice* lacks subordinates' consideration for leaders'

concerns and consists of efforts to overrule the leader. *Considerate voice* consists of subordinates' attempts to solve the issue at stake considering one's own concerns and those of the leader and organization (Hagedoorn et al., 1999). We argue that reactions of performance goal leaders, rather than mastery goal leaders, are sensitive to the behavioral mode by which subordinates voice their creative ideas. That is, performance goal leaders are less likely to oppose and more likely to adopt creative ideas when subordinates voice creative ideas in a considerate rather than an aggressive mode.

Chapter 4 – Leader achievement goals and their relative position power

In Chapter 4, we investigate how leaders' achievement goals affect leaders' integrative behavior. That is, why are some leaders willing to integrate creative ideas voiced by others into their own framework of ideas, whereas other leaders do not want to integrate those new and useful ideas? As creative ideas flow from multiple directions in an organization, leaders may receive creative ideas from both supervisors and subordinates. As such, they are important linking pins for integrating creative ideas and suggestions from different hierarchical directions (Floyd & Wooldridge, 1997; Likert, 1961). This means that the leaders' position power varies as a function of the position power of the creative input sender. That is, if a subordinate voices the creative input, the leader has relatively high-power position vis-à-vis the subordinate, whereas the leader has a relative low-power position when a superior voices the creative input. We propose that leaders' integration of ideas not only depends on their achievement goal, but also on their *relative position power* vis-à-vis the creative idea sender. Specifically, the difference in integration intentions between mastery goal leaders and performance goal leaders is hypothesized to occur only when creative ideas are voiced by a subordinate, and not when the ideas come from a superior. Furthermore, we argue that integration intentions mediate the interaction effect of leaders' achievement goal and hierarchical position on actual integrative behavior.

Chapter 5 – General discussion

Finally, in Chapter 5, we provide an overview of the findings from the empirical studies including several limitations of our research. We discuss these results in light of the above questions and reflect on the theoretical and practical contributions that our research makes.

LEADERS' ACHIEVEMENT GOALS AND THEIR REACTIONS TO SUBORDINATES' CREATIVE INPUT

In the present research, we identified leaders' achievement goals and composition of subordinates' creative input as important factors that can clarify when and why leaders are receptive to, and supportive of, subordinates' creative input, and when and why they tend to shut the door. As expected, in a field study (Study 2.1) and an experimental study (Study 2.2), we found that relative to mastery goal leaders, performance goal leaders were less receptive to subordinates' creative input. Image threat appraisal and learning opportunity appraisal mediated these relationships. In Study 2.3, we experimentally demonstrated that the composition of subordinates' creative input affected performance goal leaders' supportiveness of the input through receptiveness. Specifically, performance goal leaders were less receptive and less supportive only when composition of subordinates' creative input included both problem identifications and creative ideas. When merely creative ideas were expressed by the subordinate, performance goal leaders responded like mastery goal leaders.

This chapter is based on Sijbom, R.B.L., Janssen, O., & Van Yperen, N.W. (2013). Leaders' achievement goals and their reactions to subordinates' creative input. *Manuscript under review*.

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In today's complex, dynamic, and highly competitive environment, organizations need to innovate continuously to survive and prosper. Since the foundation of all innovation is creative ideas (Axtell et al., 2000; Scott & Bruce, 1994), employee creativity is a crucial resource in the process of organizational innovation (Amabile, 1988; Amabile, Schatzel, Moneta, & Kramer, 2004; Kanter, 1988). Employees exhibit creativity when they "produce novel, potentially useful ideas about organizational products, practices, services or procedures" (Shalley et al., 2004, p. 933). The challenges of managing employee creativity effectively are considerable, and a growing body of research reveals that leaders can either make or break it (e.g., Amabile et al., 1996; Mumford et al., 2002). One way leaders may influence employee creativity in hierarchical work settings is through their power to recognize and devote attention and resources to the creative input put forward by subordinates, or to withhold support (Amabile et al., 2004; Graen & Cashman, 1975). Hence, leaders fulfill key positions in managing bottom-up creativity as they decide whether creative input may germinate or not (Ford & Gioia, 2000; Janssen, 2005).

In accordance with the critical role of leaders in subordinate creativity, scholars and researchers have conducted a great deal of research on detecting and understanding leadership attributes and behaviors as determinants of, or facilitative conditions for, subordinates' willingness to generate creative ideas (e.g., George & Zhou, 2007; Gong et al., 2009; Janssen, 2005; Mumford et al., 2002; Oldham & Cummings, 1996; Shalley & Gilson, 2004; Shalley et al., 2004; Zhou & Shalley, 2003). However, the virtually exclusive focus on leader determinants of subordinate creativity implies that too little research attention has been focused on how leaders actually react to and manage subordinates who come up with challenging creative ideas. There is a lack of knowledge about what factors can clarify why some leaders tend to respond to subordinates' creative input in receptive and supportive ways, whereas others tend to seclude themselves from upward creativity. To address this gap in the literature, in the present research, leaders' achievement goals and distinct characteristics of subordinates' creative input were identified as important factors that can clarify why, in some cases, leaders are receptive to, and supportive of, subordinate creativity and, in other cases, they tend to shut the door. As leaders' perceptions and behaviors towards subordinates are inextricably bound with their achievement pursuits in leadership situations (e.g., Yukl, 1989), achievement motivational factors may crucially influence how leaders perceive and

react to creative input provided by their subordinates.

Based on the achievement goal approach to achievement motivation (e.g., DeShon & Gillespie, 2005; Elliot, 2005; Farr et al., 1993; Payne, Youngcourt, & Beaubien, 2007), we assumed that different achievement goals would lead to leaders' use of different perceptual-cognitive frameworks to respond to subordinates' creative input. We investigated the differential effects of two approach forms of achievement goals. Specifically, leaders with *performance goals* desire to demonstrate superior competence by outperforming others, whereas leaders with *mastery goals* strive to develop and gain competence by acquiring new skills and mastering new situations (Elliot, 2005; Elliot & McGregor, 2001). In a field study (Study 2.1) and an experimental study (Study 2.2), we first show that these achievement goals influence leaders' appraisals of image threat and learning opportunity in response to subordinates' creative input and that these appraisals influence their receptiveness to subordinates' creative input (see Figure 2.1). Finally, in Study 2.3 we experimentally investigate how different aspects of creative input (i.e., problem identification and creative ideas for problem solution) moderate the effects of leaders' achievement goals on their receptiveness to, and supportiveness of, subordinates' creative input.

In sum, the present findings extend research on the role of leadership in subordinate creativity in two ways. We not only illustrate how leaders' reactions to subordinates' creative input are affected by motivational factors of the leader, but we also show how different compositions of subordinates' creative input affect leaders differently. In doing so, we provide a conceptual and empirical basis for the study of this important but largely neglected issue in leaders' reactions to subordinate creativity.

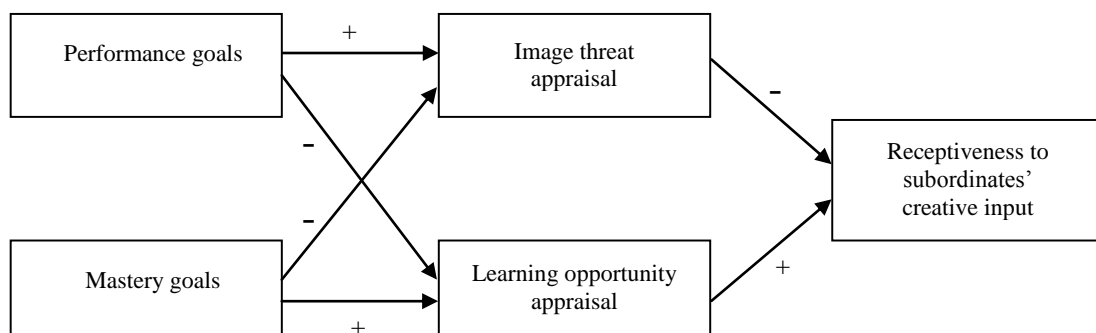


Figure 2.1. Research model Study 2.1 and Study 2.2.

The Achievement Goal Approach

The achievement goal approach to achievement motivation has emerged as a highly influential framework for understanding how people define, experience, and respond to competence-relevant situations, including the workplace (Elliot, 2005). In this approach, *performance goals* are distinguished from *mastery goals*. A core distinction concerns the way people define their competence and evaluate their performances: relative to others vs. relative to the self or the task, respectively (cf. Button et al., 1996; DeShon & Gillespie, 2005; Elliot & McGregor, 2001; VandeWalle, 2003). People who strive for performance goals tend to compare their performances with those of others, thereby developing an other-referenced focus. In contrast, people who pursue mastery goals tend to compare their present performance with their previous performance, and thus develop a self-referenced focus on outcomes in achievement situations (Van Yperen, 2003a).

In the achievement goal tradition, performance goals and mastery goals have typically been portrayed, both implicitly and explicitly, as approach forms of regulation (Elliot, 2005). Research has demonstrated that approach goals, defined as goals directed towards positive or desirable events, are the most efficacious in enhancing performance (Elliot & McGregor, 2001), whereas avoidance goals, defined as goals directed towards avoiding negative outcomes, are most likely to adversely affect performance attainment (Roney & Lehman, 2008). Furthermore, a large body of empirical work indicates that approach goals are more adaptive forms of self-regulation than avoidance goals (see Hulleman et al., 2010; Richardson, Abraham, & Bond, 2012). From an applied perspective, therefore, only approach goals are of interest for achievement-goal-based interventions. Accordingly, *performance-approach goals* reflect the desire to demonstrate superior competence by outperforming others, whereas *mastery-approach goals* reflect the desire to develop and gain competence by acquiring new skills and mastering new situations (Elliot & McGregor, 2001; Tuckey, Brewer, & Williamson, 2002). Because we focused on approach goals only in the present research, performance-approach goals are referred to as *performance goals* and mastery-approach goals as *mastery goals*.

Achievement goals can be rooted in both personality and situational factors (Elliot, 2005). Some scholars suggest that achievement goals are rather stable personality characteristics inherently associated with self-theories about the nature and

development of people's attributes (such as intelligence, abilities, and skills; Dweck, 1999; VandeWalle, 2003). As such, performance goals may stem from the belief that attributes are fixed, concrete, and internal entities, which cannot significantly be improved by effort, whereas mastery goals may stem from the belief that people's attributes are dynamic and changeable, and that exerting effort leads to performance improvement. Situational characteristics can also be an important source of achievement goals (e.g., Button et al., 1996; Farr et al., 1993; Pintrich, 2000b). According to the achievement goal approach, an extant motivational climate will encourage the experience of corresponding achievement goal states (Ames, 1992; Nicholls, 1989). That is, the motivational ambience surrounding individuals informs them whether self-referenced competence achievements or other-referenced competence achievements are expected, supported, and rewarded, thereby signaling individuals to adopt and pursue the corresponding achievement goals. In a particular context, one particular achievement goal, either personally adopted or situationally induced, may be the individual's dominant achievement goal (Van Yperen, 2006). Obviously, this does not preclude the possibility that individuals may pursue simultaneously, or subsequently, other achievement goals that are weaker in intensity or strength relative to their dominant achievement goal (Van Yperen & Orehek, in press; cf. Barron & Harackiewicz, 2001).

The achievement motivational climate is likely to play an important role in the way leaders manage subordinate creativity. We define the achievement motivational climate as an overriding psychological environment that impacts the likelihood of individuals being more or less concerned with exhibiting self-referenced or other-referenced competence (cf. Duda, 2007). As such, a work climate characterized by demonstration of superior ability through interpersonal comparisons and competition, other-referenced feedback, and the like might prompt individuals to pursue performance goals. In contrast, a work climate characterized by a strong focus on effort, self-referenced feedback, task mastery, and competence and skill development might induce dominant mastery goals among individuals (Ames, 1992; cf. Button et al., 1996; Van Yperen, 2003b).

Leaders' Achievement Goals and Receptiveness for Creative Input

Creative input is usually generated in response to perceived problems and irregularities that arise in the pursuit of task objectives, or in response to processes that run suboptimally (Kanter, 1988; Shalley, 1991; Zhou & George, 2003). Although creative input may relate to purely technical problems, we focus on creative input that challenges leaders' objectives and the "current way of doing things" with the intent of improving the situation (Detert & Burris, 2007). This kind of creative input can be seen as feedback information that is often more personal in nature, because it criticizes the leader or the sets of routines that are the leaders' responsibility for overseeing (Burris, 2012). As emphasized in the feedback literature (e.g., Ashford, Blatt, & Vandewalle, 2003), feedback often holds both instrumental and evaluative information for the feedback recipient. Instrumental feedback is defined as information that helps individuals to achieve their goals and to regulate their behavior (Ashford, 1986; Ashford & Tsui, 1991); evaluative feedback refers to information that directly references the self and conflicts with the desire to protect one's self-esteem or ego (e.g., Anseel, Lievens, & Levy, 2007; Ashford et al., 2003). Likewise, subordinates' creative input may contain instrumental feedback because it can provide leaders with diagnostic information about problems in their managerial domain combined with potentially useful suggestions for how these problems can be solved. However, leaders can also perceive subordinates' creative input as evaluative in nature, as it may draw attention to potential deficiencies in their leadership competence (cf. Ashford & Cummings, 1983), which may damage their image of being a competent leader (Baumeister, 1998).

In line with other scholars, we suggest that achievement goals may cause leaders to focus on either the instrumental or the evaluative feedback information inherently associated with subordinates' creative input (Brett & Atwater, 2001; Brett & Vandewalle, 1999; Farr et al., 1993). In turn, the salience of either the instrumental or the evaluative information may lead to different cognitive appraisals (Lazarus, 1991) which may influence leaders' receptiveness for subordinates' creative input (see Figure 2.1). Leaders' receptiveness to subordinates' creative input, in this regard, refers to leaders' willingness and motivation to gain a greater understanding of the voiced creative input (cf. Chen, Minson, & Tormala, 2010).

Image threat and learning opportunity appraisals as mediators

Based on the cognitive appraisal theory (see Lazarus, 1991, for a review), we examined *appraisals of image threat* and *learning opportunity* as potential mediators that can clarify why performance goal leaders are less receptive to subordinates' creative input than mastery goal leaders. We refer to *image threat appraisal* when the impressions and perceptions that leaders would like other people to have about their leadership competence run the risk of being damaged (Ashford et al., 2003; Yuan & Woodman, 2010). We refer to *learning opportunity appraisal* when leaders perceive possibilities to acquire new knowledge, skills, or abilities that are relevant for their leadership competence.

Leaders pursuing performance goals desire to demonstrate superior leadership performance relative to others, thereby making their leader qualities an important and relevant aspect of their leadership image (cf. Dweck & Leggett, 1988). Given their desire to demonstrate superior competence to subordinates, performance goal leaders might perceive subordinates' creative input as evaluative information that draws attention to potential deficiencies in their leadership competence. That is, performance goal leaders may perceive creative input as threatening their desired image of being a competent leader delivering superior leadership performances. Due to this image threat appraisal, performance goal leaders become motivated to preserve their image of being a competent leader and are likely to ignore or deny the subordinates' creative input. Hence, image threat appraisal can be expected to inhibit performance goal leaders' receptiveness to subordinates' creative input. Previous research in the feedback domain provides some indication of the validity of this suggestion. Specifically, it has been shown that individuals pursuing performance goals suffer ego cost when they receive unfavorable feedback about the self (Ashford et al., 2003) and are likely to protect their ego from the threat of evaluative feedback by discounting, avoiding, or distorting the feedback (Ashford et al., 2003; Tuckey et al., 2002). Moreover, performance goals produce negative affective reactions in the recipient of the feedback (e.g., anxiety, despair, threats to self-concept, lowered self-efficacy), and inhibit the recipient's receptiveness to the feedback (e.g., Anseel, Van Yperen, Janssen, & Duyck, 2011; G. Chen, Gully, Whiteman, & Kilcullen, 2000; DeNisi & Kluger, 2000). In contrast, as mastery goals are focused on competence development rather than competence demonstration, mastery goal individuals were found to be less concerned about negative evaluations

(VandeWalle & Cummings, 1997), and less likely to protect their ego (Tuckey et al., 2002). Additionally, research indicated that mastery goals are negatively related to “threat-like” variables such as anxiety (Pintrich, Smith, Garcia, & McKeachie, 1993; Roedel, Schraw, & Plake, 1994).

Mastery goal leaders are likely to focus on the instrumental value of subordinates' creative input because such a focus is congruent with their mastery goal of developing and learning new leadership knowledge, abilities, and domain-relevant skills (Elliot & McGregor, 2001). Subordinates' creative input may provide them with important diagnostic information and suggestions for making improvements in their managerial domain, which may enhance their leadership performance and self-development (Johnson & Ferstl, 1999; Reilly, Smither, & Vasilopoulos, 2006). Such learning opportunity appraisals can be expected to promote mastery goal leaders' receptiveness to subordinates' creative input. Indeed, previous findings show that mastery goals tend to induce positive developmental reactions in the recipients of feedback (e.g., motivation to learn, task interest, increased self-efficacy, adaptive learning strategies), and to promote recipients' acceptance of and receptiveness for the feedback (e.g., Barron & Harackiewicz, 2001; Chen et al., 2010; Colquitt & Simmering, 1998; Harackiewicz, Barron, Pintrich, Elliot, & Thrash, 2002; Heslin & Latham, 2004; Kluger & DeNisi, 1996). In contrast, leaders' holding performance goals are focused on demonstrating their competence, and consequently may be negatively related to learning opportunities appraisal to develop their own skills as a leader. In fact, research showed that performance goals are negatively related to motivation to learn (Colquitt & Simmering, 1998) and have null-relationships with learning interest (Elliot & Church, 1997).

In sum, our basic notion is that achievement goals significantly influence leaders in their reactions to subordinates' creative input. We tested this proposition in a series of three studies. We first aimed at obtaining empirical evidence for our basic predictions in a field-based survey in which we measured work-specific performance and mastery goals among leaders with substantial leadership experience. Additionally, in Study 2.2 and 2.3, we experimentally assigned dominant performance and mastery goals in order to examine the relative effects of these achievement goals on leaders' responses to subordinates' creative input. Based on the reasoning developed in the above and displayed in Figure 2.1, we started testing the following two specific hypotheses in a

field study (Study 2.1):

Hypothesis 1: Leaders' performance goals will be negatively related to their receptiveness to subordinates' creativity through stronger image threat appraisal and weaker learning opportunity appraisal.

Hypothesis 2: Leaders' mastery goals will be positively related to their receptiveness to subordinates' creative input through weaker image threat appraisal and stronger learning opportunity appraisal.

Study 2.1

Method

Sample and procedure. One hundred and thirty-seven participants (81 male, $M_{\text{age}} = 34.4$ years, $SD_{\text{age}} = 10.9$) were recruited through Amazon's Mechanical Turk (see Buhrmester, Kwang, & Gosling, 2011) to complete an online questionnaire. Participants received \$1,50 for this 15 minute survey. In order to get a relevant sample, a system qualification was used such that only individuals located in the U.S. could participate. Furthermore, to make sure that only individuals participated who were in supervisory positions with at least three direct subordinates, this requirement was mentioned in the description of the study. Accordingly, respondents had to explicitly answer a question whether they held a supervisory position with at least three subordinates with either 'yes' or 'no'. Only when they answered 'yes' they could proceed with the survey. Finally, at the end of the survey respondents had to answer several additional questions, including how many years they were in a supervisory position and how many subordinates they supervised. These questions were used as control questions to make sure that the respondents really met our criteria. All respondents were in supervisory positions with at least three subordinates they supervised. The respondents' mean total work experience was 15.2 years ($SD = 9.8$); mean total work experience in a supervisory position was 7.0 years ($SD = 6.8$); and mean number of subordinates supervised was 10.3 ($SD = 14.9$).

The questionnaire first assessed participants' achievement goals. They were then asked to think about a recent situation in which a subordinate voiced a creative idea after which their image threat and learning opportunity appraisals and receptiveness were assessed.

Measures

Performance goal ($\alpha = .93$) was measured using the three-item subscale of Elliot, Murayama, and Pekrun's (2011) achievement goal questionnaire. Items were adapted to fit the work context of the research: (1) My aim is to outperform other colleagues in my work; (2) In my work I am striving to do well compared to other colleagues; and (3) In my work my goal is to do better than my colleagues. Response categories ranged from 1 (*not true*) to 7 (*extremely true*).

Mastery goal ($\alpha = .79$) was measured using the three-item subscale of the achievement goal questionnaire (Elliot et al., 2011). We adapted the items to fit the work context: (1) My aim is to perform better in my work than I have done in the past; (2) In my work I am striving to do well relative to how well I have done in the past; and (3) My goal in my work is to do better than I typically do. Response categories ranged from 1 (*not true*) to 7 (*extremely true*).

Image threat appraisal ($\alpha = .88$) was measured using the three-item scale of Yuan and Woodman's (2010) measure of expected image risk. Items were adapted to fit the research context: (1) My subordinates will think worse of me if I, as a leader, follow subordinates' ideas about doing things differently rather than following my own ideas about how things should happen; (2) People will think I am crazy if I support subordinates who propose ideas about new ways of doing things; and (3) Other people will think worse of me if I, as a leader, support subordinates who propose ideas about changing the way things operate within the organization. Response categories ranged from 1 (*strongly disagree*) to 7 (*strongly agree*).

Learning opportunity appraisal ($\alpha = .86$) was measured using an adapted version of the expected positive performance outcome scale of Yuan and Woodman (2010). The scale consisted of three items: (1) The more my subordinates propose ideas about new ways of doing things, the better my performance as a leader; (2) Subordinates who come up with ideas for doing things differently help me do well in my job as a leader; and (3) My work unit will perform better if subordinates often suggest ideas about new ways to achieve objectives. Response categories ranged from 1 (*strongly disagree*) to 7 (*strongly agree*).

Receptiveness to subordinates' creative input ($\alpha = .75$) was measured using two items: (1) How likely is it that you would like to discuss the ideas together with the subordinate? and (2) How likely is it that you would let the subordinate know that you

would like to work out the creative idea together? The response categories ranged from 1 (*not at all*) to 7 (*very much*).

Control variables. We statistically controlled for educational level (1 = less than high school, 2 = High school / GED, 3 = some college, 4 = two-year college degree, 5 = four-year college degree, 6 = Master's degree, 7 = Doctoral degree, and 8 = Professional degree (JD, MD, MBA), and work experience in the current supervisory position (in years).

Discriminant and convergent validity. We conducted a confirmatory factor analysis (CFA) to assess the discriminant and convergent validity of the five scales: mastery goal, performance goal, image threat appraisal, learning opportunity appraisal, and receptiveness. We computed parameter estimates using the LISREL 8.80 computer package, using the maximum likelihood method. We compared five models: (1) a model with the five intended constructs; (2) a model with four underlying constructs, in which image threat appraisal and learning opportunity appraisal were collapsed into one factor; (3) a model with four underlying constructs, in which mastery goal and performance goal were collapsed into one factor; (4) a model with three underlying constructs, in which mastery goal and performance goal were collapsed into one factor and in which image threat appraisal and learning opportunity appraisal were collapsed into one factor; and (5) a model with one underlying construct.

The fit indices of each model clearly showed the best fit for our hypothesized five-factor measurement model (i.e., Model 1). Specifically, the fit statistics of the five-factor model were: $\chi^2(67, N = 137) = 116.19, p < .001$; Root Mean Square Error of Approximation (RMSEA) = .07, Adjusted Goodness of Fit Index (AGFI) = .83, Goodness of Fit Index (GFI) = .89, and Comparative Fit Index (CFI) = .96. The factor loading of each item was significant at the .001 level or better. These indices were better than the second model: $\Delta\chi^2(4) = 240.62, p < .001$, RMSEA = .17, AGFI = .60, GFI = .73, CFI = .85; the third model: $\Delta\chi^2(4) = 272.14, p < .001$, RMSEA = .18, AGFI = .57, GFI = .71, CFI = .71; the fourth model: $\Delta\chi^2(7) = 460.98, p < .001$, RMSEA = .22, AGFI = .46, GFI = .62, CFI = .60; and the fifth model: $\Delta\chi^2(10) = 563.00, p < .001$, RMSEA = .24, AGFI = .43, GFI = .58, CFI = .52.

As our measures were assessed by the same source, the data has potential for common method variance (cf. Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). We used the Harman's single-factor test in combination with the results of the CFA to assess the

severity of common method variance (cf. McFarlin & Sweeney, 1992; Podsakoff & Organ, 1986). The logic of this approach is that if common method variance is problematic, a single factor model should fit the data as well as a more complex model. That is, substantial common method variance might have resulted in supporting four or fewer factors (Podsakoff et al., 2003). The results showed that a single factor did not account for a majority of the variance (33%). Additionally, based on the results of the CFA, we can conclude that our hypothesized five-factor model yielded a better fit of the data than any of the simpler models. While the results of these analyses do not preclude the possibility of common method variance, they do suggest that common method variance is not a pervasive problem in our study.

Results

Table 2.1 displays the means, standard deviations, and correlations of the variables included in our study.

Table 2.1
Means, Standard Deviations, and Correlations (Study 2.1)^a

<i>Variable</i>	<i>Mean</i>	<i>SD</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
1. Years in supervisory position ^b	7.03	6.83							
2. Educational level ^c	4.46	1.32	.24**						
3. Performance goal	5.24	1.54	-.17†	-.03	(.93)				
4. Mastery goal	5.91	0.98	.04	-.05	.07	(.79)			
5. Image threat appraisal	3.22	1.41	-.27**	-.12	.14†	-.22*	(.88)		
6. Learning opportunity appraisal	5.18	1.11	.13	.06	.06	.37***	-.47***	(.86)	
7. Receptiveness	5.03	1.04	.17*	.03	.03	.30***	-.40***	.51***	(.75)

^a $N = 137$. Cronbach's alphas appear in parentheses on the diagonal.

^b $N = 135$.

^c $N = 136$.

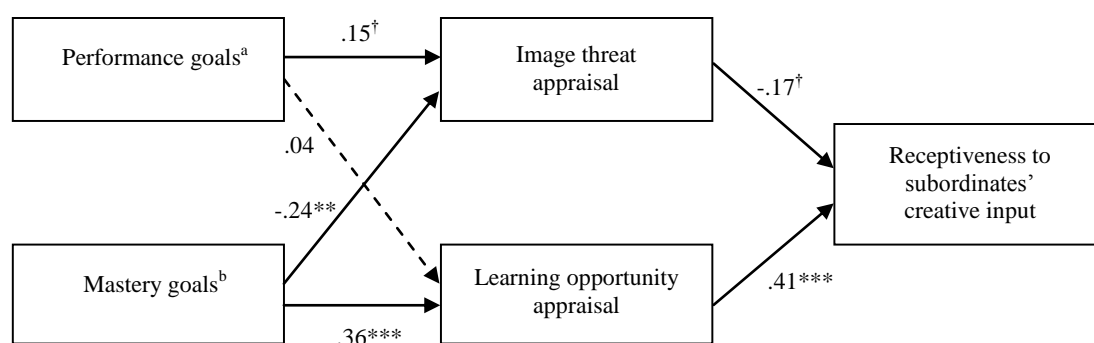
† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed).

To test our research model (see Figure 2.1), we followed scholars' recommendation to directly test the significance of the mediated effect (e.g., Kenny, Kashy, & Bolger, 1998; MacKinnon, Krull, & Lockwood, 2000; Shrout & Bolger, 2002). To do so, we followed Preacher and Hayes' (2008) bootstrapping procedure for assessing and comparing indirect effects in multiple mediator models. Using bootstrap methods to assess multiple mediation is especially recommended in small to moderate samples (as in the present case; Shrout & Bolger, 2002). This method is superior to testing separate mediation models for each mediator. That is, in multiple mediation the specific indirect effect of a particular mediator is controlled for the other mediator(s) in the model, akin to multiple regression (Preacher & Hayes, 2008). For testing significance, confidence intervals (CI) are computed for the indirect effects through each mediator. If zero falls outside the confidence interval, then the indirect effect is significant, and mediation can be said to occur.

As expected (see Figure 2.1), examination of the specific indirect effects revealed that both learning opportunity appraisal (indirect effect = 0.15, $SE = 0.05$, 95% CI: [0.070, 0.259]) and image threat appraisal (indirect effect = 0.04, $SE = 0.03$, 95% CI: [0.001, 0.117]) were significant mediators between mastery goal and receptiveness to subordinates' creative input. As shown in Figure 2.1, we also anticipated that through a stronger image threat appraisal and a weaker learning opportunity appraisal, performance goals would be negatively related to receptiveness to subordinates' creative input. Examination of the specific indirect effects of image threat appraisal (indirect effect = -0.03, $SE = 0.02$, 90% CI: [-0.082, -0.002]) and learning opportunity appraisal (indirect effect = 0.01, $SE = 0.04$, 90% CI: [-0.042, 0.082]) revealed that *only* image threat appraisal was a marginal significant mediator. That is, performance goals are marginally significantly related to receptiveness through image threat appraisal. The findings are summarized in Figure 2.2.

Conclusion and discussion

The results of Study 2.1 give grounds for the assertion that different achievement goals of leaders are differentially associated with mediating mechanisms that can clarify leaders' receptiveness to subordinates' creative input. However, for performance goal we only found image threat appraisal to be a marginally significant mediator, whereas learning opportunity appraisal was unrelated. Ambivalence of performance goals with



† $p = .06$, * $p < .05$, ** $p < .01$, *** $p < .001$.

^a We controlled for mastery goals, educational level, and years in supervisory position.

^b We controlled for performance goals, educational level, and years in supervisory position.

Figure 2.2. Effect of performance goals and mastery goals on receptiveness to subordinates' creative input through the mediators of image threat appraisal and learning opportunity appraisal. Path coefficients represent standardized regression weights. Dashed lines indicate nonsignificant paths.

respect to learning might serve as a post-hoc explanation. That is, creative input contains information from which performance goal leaders can learn and may help them to achieve their goals in the future. At the same time, admitting that the creative input is useful and that they can learn from it, might be perceived by performance goal leaders as threatening their image of being a competent leader. Social desirability bias might serve as a post-hoc explanation for the relatively weak relationship between performance goals and image threat appraisal. Unreceptiveness to or feeling threatened by creative ideas delivered by subordinates might have been seen as undesirable behaviors. Consequently, participants might have answered the self-report questions for ego-defensive or impression management reasons in a way that will be viewed favorably by others (Donaldson & Grant-Vallone, 2002; Fisher, 1993). Nevertheless, we did find an effect of image threat appraisal as a mediator for performance goal leaders, albeit borderline significant.

Whereas Study 2.1 can provide external validity by examining the core prediction in a field setting with a meaningful sample of real leaders with relevant work experience,

it is limited in internal validity. Given the nature of cross-sectional field studies, we cannot rule out the possibility of alternative explanations and omitted third variables using this correlational design. In Study 2.2, we address these limitations and experimentally extend the results of Study 2.1 in a controlled lab setting in which we situationally induced achievement goals to participants. In this way, we were able to investigate whether a causal relationship could be established between leaders' achievement goals, on the one hand, and the hypothesized mediating mechanisms and leaders' receptiveness to subordinates' creative input, on the other.

Study 2.2

In this experimental study, we did not measure but experimentally assigned and contrasted performance and mastery goals in order to examine their relative effects on leaders' reactions to subordinates' creativity. Accordingly, we reformulated the hypotheses of Study 2.1 to make them testable. We expected an indirect effect of achievement goals (performance goal contrasted with mastery goal) on receptiveness to subordinates' creative input through appraisals of image threat and learning opportunity. Specifically, we hypothesized that relative to leaders pursuing dominant mastery goals, leaders pursuing dominant performance goals are less receptive to subordinates' creative input because they appraise higher levels of image threat and lower levels of learning opportunities.

Method

Participants and design. Seventy-seven Dutch undergraduates (of whom 45.5% were male; $M_{age} = 21.7$, $SD_{age} = 3.6$) participated for research points. Participants were randomly assigned to one of the three achievement goal conditions (performance goal condition vs. mastery goal condition vs. no goal condition) of the between-subjects design. The design was balanced and men ($n = 35$) and women ($n = 42$) were equally divided across the conditions. Gender had no effects and is not discussed further.

Procedure. Participants came to the laboratory and were seated in individual cubicles that were equipped with a computer. The participants read that they were participating in a research project on the assessment of managerial skills and abilities.

The experiment began with the presentation of a marketing scenario to the participants. The scenario described a company that developed, produced, and sold fast

food products. The participants were assigned to the role of the company's marketing manager, who was responsible for positioning and selling the fast food products on the consumer market. It was emphasized that the manager had gained this top position in the company's hierarchy by being successful in establishing an *Informational Strategy* (IS). An IS contains factual and meaningful descriptions of relevant product attributes, delivered in a logical, verifiable manner to attract customers (Okazaki, Mueller, & Taylor, 2010; Puto & Wells, 1984).

In the scenario, the organization had developed a new product, *fat-free fries*, and a project team was composed to successfully introduce the product to the consumer market. The project team consisted of three subordinates; the marketing manager operated as the team leader. As team leader, the marketing manager had assigned the team members the task of coming up with informative sentences that could be used to apply the IS in the marketing campaign. The informative sentences developed by the subordinates were sent by email to the team leader in sets of three, and it was his or her task to give preference to one of these three alternatives. In actuality, the team members were nonexistent, and in their role of team leader, the participants received standardized informative sentences. Examples of three informative sentences used to stress the functionality of the product are the following: (1) "Fat-free fries fit in perfectly with a fat-free diet"; (2) "Fat-free fries help to lower bad LDL cholesterol levels"; and (3) "Fat-free fries contain healthy body-building nutrients".

After they had given preference to the informative sentences sent by two subordinates, the participants received an email from the third member of the project team, named Anne (a Dutch unisex name). In the email, Anne proposed the use of another marketing strategy to introduce the new product, namely, a *Transformational Strategy* (TS). A TS conveys affect-based contents that associate the experience of owning or using a product with psychological characteristics, such as excitement and enjoyment (Okazaki et al., 2010; Puto & Wells, 1984). Anne's proposal was completely different from the common, established IS propagated by the team leader to introduce new products. To advocate this novel idea of using the alternative method of TS, Anne described the weaknesses of the IS and emphasized the strengths of the TS relative to the IS with regard to the marketing of the new product (see Appendix A for the detailed instructions). Given its novelty and potential usefulness in the context of the company's aims, Anne's proposal can be considered a creative idea for renewing the marketing

strategy (Amabile, 1996; Shalley et al., 2004). Anne's creative input contains the two aspects of identifying problems with regard to the established IS and proposing the creative idea of using a TS in order to solve the problem identified. The dependent variables and the manipulation checks were then assessed. We also asked participants if they had any idea about the purpose of the study; none of the participants made correct guesses about the purpose of the study. Before leaving, the participants were debriefed and thanked for their participation.

Achievement goal manipulation. The manipulation took place after the participants had stated their preference for one of the informative sentences sent by two subordinates and before they had received the email from the third team member of the project team, Anne. The participants received an email from the editor of the company's staff magazine. In this email, the participants were told that an interview held with them as the marketing manager of the company a week ago would be published in the next edition of the magazine. The interview was focused on a characteristic leadership motto held and frequently expressed by the marketing manager. The email explained the grounds for this specific leadership motto and was used to induce the achievement goal manipulation, that is, the experimental manipulation. In the no goal condition, however, no achievement goal was induced.

The manipulation consisted of three coherent aspects from which a specific achievement goal was derived. First, different information with respect to the organizational climate was given in the different achievement goal conditions. In the performance goal condition it was emphasized that the organization had a strong competitive climate, continuously stimulating leaders to demonstrate their competences by performing better than others. In contrast, in the mastery goal condition, it was emphasized that the organization had a strong developmental climate, continuously stimulating leaders to develop their competences by gaining new knowledge and skills. See Appendix B for the detailed instructions.

Second, the participants held and frequently expressed a personal leadership motto, which was consistent with the organizational climate. In the performance goal condition, the personal leadership motto was, *"Managers are superiors and, therefore, must demonstrate their superior competences in their executive work with subordinates."* The motto in the mastery goal condition was, *"Managers are developers and, therefore, must keep developing their competences in their executive work."* The editor of the staff

magazine asked the participants to write a short narrative in which they clearly advocated their characteristic leadership motto, and to describe their emotions and beliefs associated with it. The participants then had unrestricted time to write their short narratives and to send them to the editor by clicking on the "send" button. In the no goal condition, the participants did not hold a personal leadership motto; they were asked to write a narrative for the staff magazine about a neutral topic, which was unrelated to achievement goals and personal competences. The topic was the outsourcing of several (support) services to India and the Philippines owing to lower wages. The participants had to write down their opinions on this development.

Finally, participants were assigned a specific achievement goal, which was consistent with the leader's individual motto and the organizational climate. In the *performance goal condition*, in which outperforming others was the central aim, participants were advised to demonstrate their leadership competences in their executive work with subordinates (performance goal). In contrast, in the *mastery goal condition*, in which developing their own abilities was the central aim, participants were advised to develop their leadership competences in their executive work (mastery goal). In the no goal condition, no specific achievement goal was assigned to the participants.

Measures

Manipulation checks. In the experimental conditions, participants were asked to indicate which characteristic personal leadership motto they held as a manager. Participants could choose between (1) *"Managers are superiors and, therefore, must demonstrate their superior competences in their executive work with subordinates"* (performance goal condition), and (2) *"Managers are developers and, therefore, must keep developing their competences in their executive work"* (mastery goal condition), and (3) *"I did not receive information with respect to a motto"* (no goal condition).

The short narratives participants wrote about their personal leadership mottos were coded by two judges who were unaware of the study's purposes and content. They independently assessed each participant's narrative on two dimensions: namely, the extent to which the narrative emphasized the importance of demonstrating leadership competences to others (performance goal dimension) and the extent to which it emphasized the importance of developing own leadership competences (mastery goal dimension). The response categories ranged from 1 (*not at all*) to 5 (*very much*).

Intraclass correlations were .80 and .95 for the performance goal dimension and mastery goal dimension, respectively. Measures were averaged to get a single score on each dimension.

Idea quality ($\alpha = .86$) was assessed using a scale comprising nine items: (1) How original do you, as a leader, think Anne's idea is? (2) How renewing do you, as a leader, think Anne's idea is? (3) How refreshing do you, as a leader, think Anne's idea is? (4) How applicable do you, as a leader, think Anne's idea is? (5) How feasible do you, as a leader, think Anne's idea is? (6) How realizable do you, as a leader, think Anne's idea is? (7) How useful do you, as a leader, think Anne's idea is? (8) How much added value do you, as a leader, think Anne's idea has? and (9) How valuable do you, as a leader, think Anne's idea is? The response categories ranged from 1 (*not at all*) to 7 (*very much*).

Mediating variables

A response scale ranging from 1 "not at all" to 7 "very much" was used for all measures. The presentation of the items was randomized for each scale.

Image threat appraisal ($\alpha = .92$) was a scale comprising six items: (1) To what extent does Anne's criticism question your credibility as a leader? (2) Anne's input is an attack on my own ideas as a leader; (3) I consider Anne's input to be negative feedback on my position as a leader; (4) To what extent does Anne's criticism undermine your position as a leader? (5) I have the feeling that Anne is trying to pull the rug out from under me; and (6) I have the feeling that Anne is opposing me.

Learning opportunity appraisal ($\alpha = .83$) was assessed using three items: (1) As a leader, I can learn a lot from Anne's input; (2) Anne's input enriches my own ideas; and (3) Anne's input makes me enthusiastic. The correlation with image threat appraisal was -.26.

Dependent variable

Receptiveness to subordinates' creative input ($\alpha = .81$) was assessed using a three-item scale based on Chen et al. (2010). The items were adapted to fit the research context: (1) How likely is it that you will let Anne know that you would like to discuss the input together? (2) How likely is it that you will let Anne know that you seriously want to discuss the input during the next meeting of the project team? and (3) How likely is it that you will let Anne know that you want to further develop the input

together? Correlations with image threat appraisal and learning opportunity appraisal were $-.54$ and $.53$, respectively.

Results

Manipulation checks. In the performance goal condition 85% indicated the correct personal motto; this was 96% in the mastery goal condition, $\chi^2(1, N = 52) = 34.38, p < .001$. In addition, the narrative scores on the performance goal dimension were significantly higher in the performance goal condition ($M = 4.04, SD = .97$) than in the mastery goal condition ($M = 1.98, SD = .88$), $F(1, 50) = 64.45, p < .001, \eta_p^2 = .56$; the narrative scores on the mastery goal dimension were significantly higher in the mastery goal condition ($M = 4.42, SD = .82$) than in the performance goal condition ($M = 1.04, SD = .14$), $F(1, 50) = 430.22, p < .001, \eta_p^2 = .90$.

We expected no differences between the conditions with respect to participants' cognitive judgment of the quality of the creative idea proposed. A one-way ANOVA with idea quality as the dependent variable revealed a non-significant result, $F(2, 74) = .35, ns$. The overall mean ($M_{total} = 5.06, SD = .83$) suggests that the creative idea was appraised as a rather high-quality idea.

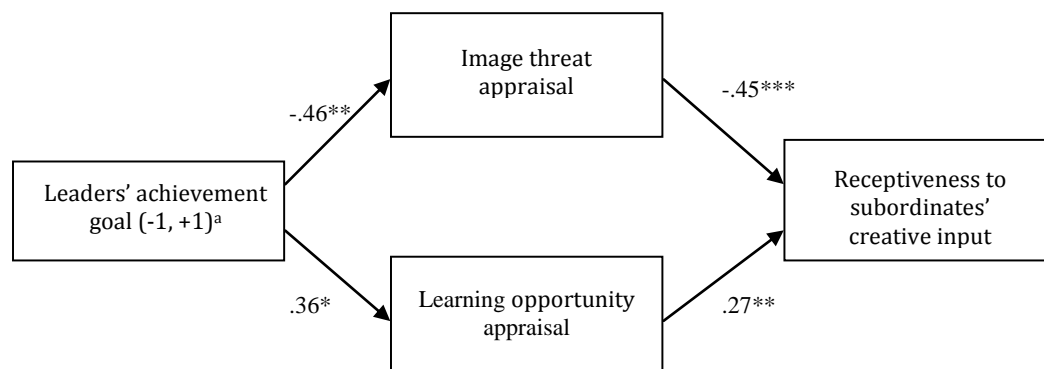
Discriminant and convergent validity. We used confirmatory factor analysis to assess the discriminant and convergent validity of the image threat appraisal, learning opportunity appraisal, and receptiveness scales. We computed parameter estimates using the LISREL 8.80 computer package, using the maximum likelihood method. We compared four models: (1) a model with the three intended constructs; (2) a model with two underlying constructs, in which learning opportunity appraisal and receptiveness were collapsed into one factor; (3) a model with two underlying constructs, in which image threat appraisal and receptiveness were collapsed into one factor; and (4) a model with one underlying construct.

The fit indices of each model clearly showed the best fit for our hypothesized three-factor measurement model (i.e., Model 1). Specifically, the fit statistics of the three-factor model were: $\chi^2(51, N = 77) = 65.22, ns$; Root Mean Square Error of Approximation (RMSEA) = $.06$, Adjusted Goodness of Fit Index (AGFI) = $.81$, Goodness of Fit Index (GFI) = $.87$, and Comparative Fit Index (CFI) = $.98$. The factor loading of each item was significant at the $.001$ level or better. These indices were better than the second model: $\Delta\chi^2(2) = 37.96, p < .001, RMSEA = .11, AGFI = .73, GFI = .82, CFI = .95$; the

third model: $\Delta\chi^2(2) = 86.39, p < .001, RMSEA = .16, AGFI = .63, GFI = .75, CFI = .91$; and the fourth model: $\Delta\chi^2(3) = 197.10, p < .001, RMSEA = .23, AGFI = .47, GFI = .63, CFI = .85$.

Testing for direct effects. A one-way MANOVA was conducted to examine the extent to which participants with different achievement goals (performance goal vs. mastery goal vs. no goal) differed with regard to image threat appraisal, learning opportunity appraisal, and receptiveness to subordinates' creative input. Table 2.2 shows that the main effect was significant at the multivariate level. At the univariate level, the effect was significant for the two mediator variables (i.e. image threat appraisal and learning opportunity appraisal), and for the dependent variable (i.e. receptiveness to subordinates' creative input), and in line with our findings in Study 2.1.

Testing for multiple mediation. To test the hypothesis whether image threat appraisal and learning opportunity appraisal mediated the relationship between leaders' achievement goal (*performance goal* = -1, *mastery goal* = +1) and receptiveness to subordinates' creative input, we used the same bootstrapping procedure (5000 resamples) as in Study 2.1. The multiple mediation model is shown in Figure 2.3. The specific indirect effects indicated that *both* image threat appraisal (indirect effect = 0.21, $SE = 0.09, 95\% CI: [0.063, 0.442]$) and learning opportunity appraisal (indirect effect = 0.10, $SE = 0.06, 95\% CI: [0.007, 0.248]$) were significant mediators.



* $p < .05$, ** $p < .01$, *** $p < .001$.

^a performance goal = -1; mastery goal = +1.

Figure 2.3. Effect of leaders' achievement goals on their receptiveness to subordinates' creative input through the mediators of image threat appraisal and learning opportunity appraisal. Path coefficients represent unstandardized regression weights.

Table 2.2

Multivariate F, Univariate F's, η_p^2 , Means, and Standard Deviations of Measures of Dependent Variables as a Function of Achievement Goals (Study 2.2, N = 77)

		<i>Multivariate F</i> (6, 144)	<i>Univariate F</i> (2, 74)	Partial η^2	Goal					
					Performance (n = 26)		Mastery (n = 26)		No goal (n = 25)	
Responses					M	SD	M	SD	M	SD
	1. Receptiveness	2.60*	3.26*	.08	5.26 _a	1.14	5.83 _b	.71	5.83 _b	.90
	2. Image threat appraisal		6.12**	.14	2.94 _a	1.29	2.02 _b	.78	2.18 _b	.87
	3. Learning opportunity appraisal		3.55*	.09	4.62 _a	1.21	5.33 _b	1.31	5.37 _b	.87

Note. Higher values of means indicate higher receptiveness, higher image threat appraisal, and higher learning opportunity appraisal, respectively.

Note. Within each row, means with different subscripts differ at $p < .05$ minimally.

* $p < .05$. ** $p < .01$. *** $p < .001$.

This multiple mediation fully supports our research model (see Figure 2.1) that both *image threat appraisal* and *learning opportunity appraisal* mediate the indirect effect of *leaders' achievement goal* on their *receptiveness* to subordinates' creative input. The specific indirect effects indicated that *both* image threat appraisal (indirect effect = 0.21, $SE = 0.09$, 95% CI: [0.063, 0.442]) and learning opportunity appraisal (indirect effect = 0.10, $SE = 0.06$, 95% CI: [0.007, 0.248]) were significant mediators. This multiple mediation fully supports our research model (see Figure 2.1) that both *image threat appraisal* and *learning opportunity appraisal* mediate the indirect effect of *leaders' achievement goal* on their *receptiveness* to subordinates' creative input.

We also compared each achievement goal condition with the no goal condition. Examination of the specific indirect effects of performance goal vs no goal (performance goal = -1, no goal = +1) on receptiveness to subordinates' creative input indicated that both image threat appraisal (indirect effect = 0.15, $SE = 0.08$, 95% CI: [0.031, 0.376]) and learning opportunity appraisal (indirect effect = 0.14, $SE = 0.07$, 95% CI: [0.045, 0.335]) were significant mediators. However, when we examined the specific indirect effects of mastery goal vs no goal (no goal = -1, mastery goal = +1) on receptiveness, significant mediation was found for neither image threat appraisal (indirect effect = 0.03, $SE = 0.04$, 95% CI: [-0.043, 0.109]) nor learning opportunity appraisal (indirect effect = -0.01, $SE = 0.06$, 95% CI: [-0.112, 0.134]). The reason for these insignificant results is that mastery goal leaders and no goal leaders hardly differ in their appraisals of image threat and learning opportunities (mediating variables) and receptiveness to subordinates' creative input (see Table 2.2). We come back to this finding in the general discussion.

Conclusion and Introduction Study 2.3

Our multiple mediation model provided support for our research model (see Figure 2.1). Image threat appraisal and learning opportunity appraisal were both found to mediate the relationship between leaders' achievement goals and their receptiveness to subordinates' creative input. Building on the feedback literature (e.g., Ashford et al., 2003), we theoretically argued that subordinates' creative input may contain instrumental and evaluative feedback information. We argued and demonstrated in Study 2.1 and Study 2.2 that individuals pursuing performance goals or mastery goals interpret creative input differently (Brett & VandeWalle, 1999; Farr et al., 1993). Mastery goals focus more on the instrumental information of subordinates' creative

input, whereas performance goals focus more on the evaluative information. As the salience of either the instrumental or the evaluative feedback information may lead to different cognitive appraisals (Lazarus, 1991), we argued and found that performance goal leaders interpreted the part of subordinates' creative input that draws attention to potential deficiencies in their leadership competence as evaluative and, therefore, threatening (cf. Northcraft & Ashford, 1990). As shown in Study 2.1 and Study 2.2, it is the evaluative feedback information that causes performance goals leaders to appraise image threat. This would imply that removing the part of subordinates' creative input that is interpreted as evaluative should lead to a reduction of image threat appraisals, which in turn should increase performance goal leaders' receptiveness to subordinates' creative input. This is the focus of Study 2.3, in which we experimentally removed the perceived evaluative information, so that we could expect performance goal leaders to be as receptive to subordinates' creative input as mastery goal leaders.

From the literature we know that several activities and cognitive processes underlie the generation of creative input (see Reiter-Palmon & Illies, 2004 for a review). That is, in order to generate and voice a potentially useful suggestion to solve a perceived problem, the problem needs to be identified first (cf. Davis, 2009; Reiter-Palmon et al., 1997). We will use the term *problem identification* to refer to this first process which comprehends information that structures, defines, and redefines the problem into a form that allows solution (cf. Davis, 2009; Reiter-Palmon & Robinson, 2009). In order to solve the identified problem, potentially useful and new ideas for problem solution are generated and voiced (e.g., Amabile, 1996; Reiter-Palmon et al., 1997; Shalley et al., 2004), which we will refer to as the *creative idea*. Accordingly, subordinates' creative input usually consists of two related yet distinct basic aspects: namely, problem identification and creative ideas for problem solution² (e.g., Amabile, 1996; Reiter-Palmon et al., 1997; Shalley et al., 2004). Although both aspects are present for idea generation, they may not always be clear-cut present when subordinates actually voice creative input, resulting in different *compositions of subordinates' creative input*.

² Although different creative process models have been suggested over the years, they all include as a first step a process in which a problem is recognized, identified, and constructed by the problem solver (Amabile, 1988; Basadur, Graen, & Green, 1982; Runco & Chand, 1995; Ward et al., 1999), followed by a creative idea for problem solution.

In Study 2.3 we will experimentally disentangle the problem identification aspect from the creative idea aspect and investigate the effects of different compositions of subordinates' creative input in interaction with leaders' achievement goals. By doing so, we will be able to examine whether the observed differential reactions of performance goal leaders and mastery goal leaders (see Study 2.1 and Study 2.2) may be triggered by the problem identification aspect rather than the creative idea aspect. We will now outline our expectations with regard to the relationship between leaders' achievement goal, composition of subordinates' creative input, and receptiveness to subordinates' creative input.

As the problem identification aspect contains evaluative information that explicitly criticizes the current way of doing things, performance goal leaders may appraise feelings of image threat (cf. Northcraft & Ashford, 1990). This implies that the removal of the problem identification aspect would also reduce performance goal leaders' image threat appraisals and consequently would increase performance goal leaders' receptiveness to subordinates' creative input. That is, when subordinates' creative input includes only a creative idea for problem solution, performance goal leaders obtain a valuable suggestion that, in their perception, does not evaluate or threaten their leadership image of being capable and competent. So, when subordinates' input only includes a creative idea for problem solution, performance goal leaders can be expected to be more receptive than when subordinates' input includes problem identifications alongside creative ideas.

In contrast, mastery goal leaders see subordinates' creative input as diagnostic information that provides them with information from which they can learn. When subordinates' input constitutes only the creative idea aspect, it still holds instrumental information from which they, as leaders, can learn. Therefore, we predicted that mastery goal leaders would not be affected by composition of subordinates' creative input. That is, we can expect that mastery goal leaders will be equally receptive for subordinates' input that constitutes problem identifications alongside creative ideas or only contains creative ideas. Thus, we expected that composition of subordinates' creative input (problem identification + creative idea vs. creative idea) moderates the effects of leaders' achievement goal (performance vs. mastery) on receptiveness to subordinates' creative input. Specifically, we hypothesized:

Hypothesis 3: Performance goal leaders are expected to be less receptive to subordinates' creative input than mastery goal leaders when the composition of subordinates' creative input contains both problem identifications alongside creative ideas, whereas performance goal leaders and mastery goal leaders are expected to be equally receptive when the composition of subordinates' creative input only contains creative ideas.

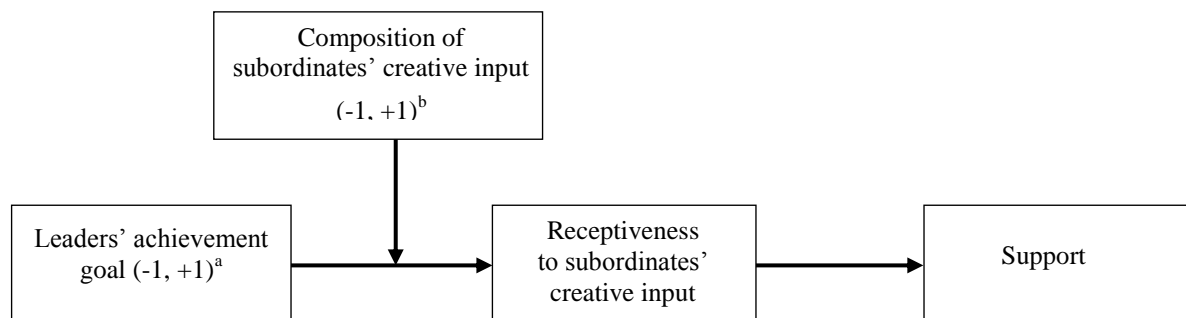
As mentioned above, leaders can either make or break subordinates' creative input by allocating or withholding support (e.g., Amabile et al., 1996, 2004; Mumford et al., 2002). When leaders are receptive to subordinates' creative input, they might also be more willing to take action to implement changes (Ashford, Rothbard, Piderit, & Dutton, 1998; Detert & Burris, 2007). That is, when leaders' receptiveness to the creative input is high, it might promote leaders' support for the creative input (cf. Zhou & Woodman, 2003). Leaders' support, defined as the extent to which a leader provides recognition and encouraging behavior to his or her subordinates (cf. Madjar et al., 2002), is an important and necessary prerequisite for further realization of the creative input within the organization (Amabile et al., 2004; Mumford et al., 2002).

As performance goal leaders might be less receptive under the condition that subordinates' creative input includes problem identifications, they might, consequently, also be less likely to support the creative input. However, when subordinates' input contains only the creative idea aspect, performance goal leaders may be more receptive, as there is no evaluative information present. Consequently, this increased receptiveness is likely to lead to more supportiveness for subordinates' creative input. In contrast, mastery goal leaders are likely to focus on the instrumental value of the creative input, regardless of the presence of problem identifications. As mastery goal leaders were hypothesized to be receptive to creative input, we also expected that they would be likely to support creative input that is deemed valuable and useful for the organization.

Thus, we expect that the interaction between leaders' achievement goal and composition of subordinates' creative input will affect support through its effect on receptiveness. As such, we assume that composition of subordinates' creative input moderates the strength of the indirect effect of leaders' achievement goals on support, thereby demonstrating a pattern of mediated moderation (Edwards & Lambert, 2007;

Preacher, Rucker, & Hayes, 2007) between the study variables, as depicted in Figure 2.4. Accordingly, we predict:

Hypothesis 4: The interaction effect of leaders' achievement goal and composition of subordinates' creative input will indirectly affect support through its effect on receptiveness.



^a performance goal = -1; mastery goal = +1.

^b problem identification + creative idea = -1; creative idea = +1.

Figure 2.4. Mediated moderation model in which composition of subordinates' creative input moderates and receptiveness mediates the relationship between achievement goal and support.

Method

Participants and design. One hundred and six Dutch business school undergraduates (of whom 71.7% were male; $M_{age} = 21.4$, $SD_{age} = 3.9$) were paid 5 Euros for their participation. The participants were randomly assigned to experimental conditions in a 3 (Achievement goal: performance vs. mastery vs. no goal) x 2 (Composition of subordinates' creative input: problem identification + creative idea vs. creative idea) factorial design. Gender had no effects and is not discussed further.

Procedure. The procedure of Study 2.3 was similar to that of Study 2.2, with one crucial difference. In Study 2.3, *composition of subordinates' creative input*, was included as an extra factor. The creative input sent by the third project team member (Anne) to the team leader by email was varied, thereby creating two different conditions. In one condition, the email was identical to that in Study 2.2; it contained problem identifications regarding the established IS as well as the creative idea of using a TS

instead (*problem identification + creative idea condition*). The input in the second condition only included the creative idea of using the alternative TS for introducing the new product to the market (*creative idea condition*).

Measures

Manipulation checks. To check the achievement goal manipulation, the same manipulation checks were used as in Study 2.2. Intraclass correlations were .83 and .93 for the narrative scores on the performance goal dimension and mastery goal dimension, respectively. As achievement goals are best construed in terms of purposeful commitments that guide future behavior (Elliot & Fryer, 2008; Maehr, 1989), it is important to ensure that the impact of imposed achievement goal cannot be explained in terms of differences in goal commitment. Therefore, in Study 2.3, we assessed goal commitment directly after the achievement goal manipulation and checked that no differences in *goal commitment* existed between the achievement goal conditions. We used a five-item scale developed by Klein, Wesson, Hollenbeck, Wright, and DeShon (2001) to assess goal commitment ($\alpha = .84$). The items were: (1) It's hard to take this goal seriously (R); (2) Quite frankly, I don't care if I achieve this goal or not (R); (3) I am strongly committed to pursuing this goal; (4) It wouldn't take much to make me abandon this goal (R); and (5) I think this is a good goal to shoot for. Items followed by (R) indicate that the item was reverse-scored before analysis. The response categories varied from 1 (*not at all*) to 7 (*very much*).

The composition of subordinates' creative input manipulation was checked by asking participants to indicate which input they received from Anne. Participants could choose between: (1) Anne pointed out problems with respect to the intended informational strategy and proposed the creative idea of using a transformational strategy instead (*problem identification + creative idea condition*), or (2) Anne proposed the creative idea of using a transformational strategy (*creative idea condition*).

Mediator and dependent variables

Receptiveness ($\alpha = .69$) was assessed using the same measure as in Study 2.2.

Support ($\alpha = .78$) was measured using a three-item scale developed by Gordijn, Yzerbyt, Wigboldus, and Dumont (2006). The items were adapted to fit the research context: (1) To what extent do you want to show support to Anne? (2) To what extent do

you want to support the input? and (3) To what extent do you want to show sympathy for the input? The correlation with receptiveness was .59.

Results

Manipulation checks. The achievement goal manipulation check concerned the characteristic personal motto. In the performance goal condition and the mastery goal condition, 97% and 100%, respectively, indicated the correct motto, $\chi^2(1, N = 72) = 68.11, p < .001$. In addition, the narrative scores on the performance goal dimension were significantly higher in the performance goal condition ($M = 4.27, SD = .80$) than in the mastery goal condition ($M = 1.82, SD = .83$), $F(1, 70) = 164.47, p < .001, \eta_p^2 = .70$. For the mastery goal dimension, we found significantly higher narrative scores in the mastery goal condition ($M = 4.43, SD = .85$) than in the performance goal condition ($M = 1.44, SD = .92$), $F(1, 70) = 202.56, p < .001, \eta_p^2 = .74$.

We expected no differences between the conditions with respect to participants' commitment to the assigned achievement goal. A one-way ANOVA with goal commitment as the dependent variable revealed a non-significant result, $F(1, 70) = 2.49, ns$. The overall mean ($M_{\text{total}} = 4.77, SD = .71$) suggests that both performance goal leaders and mastery goal leaders were rather highly committed to their assigned achievement goal.

The second manipulation check concerned composition of subordinates' creative input. In the condition that combined problem identification and a creative idea, 78% of the participants indicated the correct composition of subordinates' creative input; in the creative idea condition, 81% of the responses were correct, $\chi^2(1, N = 106) = 36.33, p < .001$.

Discriminant and convergent validity. We used confirmatory factor analysis to assess the discriminant and convergent validity of the receptiveness and support scales. We computed parameter estimates using the LISREL 8.80 computer package, using the maximum likelihood method. We first tested a model in which the receptiveness and support items loaded on two corresponding constructs. The fit statistics were satisfactory, $\chi^2(8, N = 106) = 22.55, ns$; Root Mean Square Error of Approximation (RMSEA) = .13, Adjusted Goodness of Fit Index (AGFI) = .82, Goodness of Fit Index (GFI) = .93, and Comparative Fit Index (CFI) = .95, albeit that the RMSEA value was somewhat higher than desired. The factor loading of each item was significant at the .001 level or

better. We computed one alternative model, which contained only one latent variable. The fit of the model was significantly worse than that of the original model ($\Delta\chi^2(1) = 9.19, p < .01, RMSEA = .16, AGFI = .79, GFI = .91, CFI = .92$). Hence, we concluded that the hypothesized two-factor measurement model was the most appropriate for the matter under consideration.

Dependent variables. A 3 (Achievement goal: performance vs. mastery vs. no goal) X 2 (Composition of subordinates' creative input: problem identification + creative idea vs. creative idea) between-groups MANOVA was conducted to examine differences between the six conditions with regard to the dependent variables of receptiveness and support. At the multivariate level, no main effect was found for achievement goal, $F(4, 198) = 0.86, ns$, nor for composition of subordinates' creative input, $F(2, 99) = 2.31, ns$. However, we found the hypothesized interaction effects of achievement goal and composition of subordinates' creative input at the multivariate level, $F(4, 198) = 6.83, p = .009, \eta_p^2 = .07$, and at the univariate level for both receptiveness, $F(2, 100) = 5.91, p = .004, \eta_p^2 = .11$, and support, $F(2, 100) = 4.72, p = .011, \eta_p^2 = .09$.

The means and standard deviations of the mediator variable of receptiveness and the dependent variable of support are presented in Table 2.3. When subordinates' input contained both problem identification and creative idea aspects, it resulted in lower receptiveness to subordinates' creative input by performance goal leaders ($M = 5.15, SD = 0.95$) than by mastery goal leaders ($M = 6.04, SD = 0.59$) or leaders in the no goal condition ($M = 5.61, SD = 0.99$), $F(2, 100) = 5.20, p = .007, \eta_p^2 = .09$, albeit that the difference in receptiveness between performance goal leaders and no goal leaders was marginally significant ($p < .10$). The difference in receptiveness between mastery goal leaders and no goal leaders was not significant ($p = .13$). These results replicate the results of Study 2. However, as expected, when subordinates' input contained only a creative idea, no significant differences in receptiveness were found between performance goal leaders ($M = 6.06, SD = 0.84$), mastery goal leaders ($M = 5.61, SD = 0.85$), and leaders in the no goal condition ($M = 5.73, SD = 0.65$), $F(2, 100) = 1.39, ns$.

Most interestingly, additional contrast analyses revealed that performance goal leaders were less receptive when composition of subordinates' creative input included problem identification and a creative idea ($M = 5.15, SD = .94$) than when it included only a creative idea ($M = 6.06, SD = .84$), $F(1, 100) = 10.82, p = .001, \eta_p^2 = .10$. No differences were found between the two conditions of composition of subordinates'

Table 2.3

Interaction effects of Achievement Goals (Performance goal vs. Mastery goal vs. No goal) and Composition of Subordinates' Creative Input (Problem Identification and Creative Idea vs. Creative Idea) (Study 2.3, N = 106)

Achievement goals	Achievement goals and Composition of subordinates' creative input											
	Performance				Mastery				No goal			
	1 (n = 18)		2 (n = 18)		3 (n = 18)		4 (n = 18)		5 (n = 18)		6 (n = 16)	
	Problem identification and creative idea		Creative idea		Problem identification and creative idea		Creative idea		Problem identification and creative idea		Creative idea	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Dependent variables												
1. Receptiveness	5.15 _a	0.95	6.06 _b	0.84	6.04 _b	0.59	5.61 _b	0.85	5.61 _{a†b}	0.99	5.73 _b	0.65
2. Support	4.44 _a	1.12	5.61 _b	1.02	5.43 _b	0.71	5.33 _b	0.91	4.98 _{a†b}	1.04	5.08 _b	0.68

Note. Within each row, means with different subscripts differ at $p < .05$ minimally. Means with an additional † behind the subscript, differ at $p < .10$.

creative input for the mastery goal condition $F(1, 100) = 2.39$, *ns.*, nor for the no goal condition, $F(1, 100) = 0.17$, *ns.* These results fully support *Hypothesis 3*.

Mediated moderation analysis. *Hypothesis 4* was that receptiveness would mediate the interaction effect of leaders' achievement goal and composition of subordinates' creative input on support (see Figure 2.4). We used contrast coding for the coding of our independent variables (Cohen, Cohen, West, & Aiken, 2003): performance goal condition was coded -1, mastery goal condition +1, composition that included problem identification alongside creative ideas -1, and the composition that included only creative ideas +1. As noted by Cohen et al. (2003): "contrast codes are particularly useful for interactions involving nominal scales because they are designed to be orthogonal and to represent meaningful differences between means of particular groups or combination of groups" (p. 358). We tested the mediated moderation hypothesis using a bootstrap procedure developed by Preacher et al. (2007). This method is used to directly examine indirect effects using a product of coefficients approach, which is consistent with recommendations made by other methodologists (e.g., Edwards & Lambert, 2007; Muller, Judd, & Yzerbyt, 2005).

Table 2.4 shows the results of two multiple regression models: (1) *the mediator variable model* (with *receptiveness* as the dependent variable), and (2) *the dependent variable model* (with *support* as the dependent variable). As required for mediated moderation (Preacher et al., 2007), in the mediator variable model, the interaction term (Achievement goal x Composition of subordinates' creative input) was significantly associated with the mediator (receptiveness) ($B = -.33$, $p < .001$). In the dependent variable model, the mediator (receptiveness) was significantly associated with the dependent variable (support) ($B = .67$, $p < .001$).

Next, we examined the *indirect effects* from leaders' achievement goal (performance goal = -1, mastery goal = +1) to support for subordinates' creative input containing problem identification alongside a creative idea and solely a creative idea separately. As shown in the lower part of Table 2.4, the indirect effect of achievement goal on support was significant when composition of subordinates' creative input contained both problem identification and a creative idea (composition of subordinates' creative input = -1; 95% CI: [0.134 to 0.524]), but not significant when composition of subordinates' creative input contained only a creative idea (composition of subordinates' creative input = +1; 95% CI: [-0.339 to 0.025]). These results indicate

Table 2.4

Indirect Effects of Achievement Goal on Support through Receptiveness (Study 2.3)

Model	<i>B</i>	<i>SE</i>	<i>t</i>	<i>R</i> ²
Mediator variable model: Receptiveness				0.18**
Constant	5.71	0.10	59.28***	
Achievement goal ^a	0.11	0.10	1.15	
Composition of subordinates' input ^b	0.12	0.10	1.25	
Achievement goal * Composition of subordinates' input	-0.33	0.10	-3.46***	
Dependent variable model: Support				0.46***
Constant	1.40	0.67	2.08*	
Achievement goal ^a	0.10	0.09	1.09	
Composition of subordinates' input ^b	0.19	0.09	2.01*	
Achievement goal * Composition of subordinates' input	-0.09	0.10	-0.93	
Receptiveness	0.67	0.12	5.70***	
Indirect effects	Bootstrap indirect effect	Bootstrap <i>SE</i>	Bootstrap LLCI	Bootstrap ULCI
Composition of subordinates' input:				
(-1) problem identification + creative idea	0.30	0.10	0.134	0.524
(+1) creative idea	-0.15	0.09	-0.334	0.025

Note. *N* = 72. Bootstrap sample size = 5,000. Unstandardized coefficients are presented.

^a Achievement goal manipulation was coded as -1 for performance goal and +1 for mastery goal.

^b Composition of subordinates' creative input manipulation was coded as -1 for problem identification and creative idea condition and +1 for creative idea condition.

* $p < .05$; ** $p < .01$; *** $p < .001$

support for *Hypothesis 4*, such that the interaction effect between achievement goals and composition of subordinates' creative input indirectly affected support with lower support for performance goal leaders combined with composition of subordinates' creative input containing both problem identification and a creative idea.

We also conducted mediated moderation analyses in which we compared each of the experimental achievement goal conditions with the no goal condition, but did not

find significant indirect effects³. The reason for these insignificant results is that the mean values of receptiveness (mediating variable) and support (dependent variable) of no goal leaders were intermediate between those of mastery goal and performance goal leaders when composition of subordinates' input contained both problem identifications and creative ideas. As a consequence, the hypothesized indirect effects were found to be significant when mastery goal and performance goal leaders were compared to each other, whereas indirect effects did not reach a significant level when performance goal and mastery goal leaders were each compared with no goal leaders.

General Discussion

Our studies show that leaders' achievement goals crucially affect their receptiveness and support to creative ideas voiced by subordinates. This is an important finding as it suggests that novelty and potential usefulness are not sufficient for ideas to be considered and recognized. Specifically, the results of the present research are the first to demonstrate that leaders' achievement goals affect their reactions (i.e., receptiveness and support) to creative input voiced by subordinates and that different mediating mechanisms were associated with different achievement goals. That is, we showed that image threat appraisal and learning opportunity appraisal mediated the relation between achievement goals and receptiveness (Studies 2.1 and 2.2), but in different ways. Image threat appraisal was a significant mediator for performance goal leaders, whereas the learning opportunity appraisal and image threat appraisal were significant mediators for mastery goal leaders. We have further shown that performance goal leaders were less receptive to (Studies 2.2 and 2.3) and less supportive of (Study 2.3) subordinates' creative input than mastery goal leaders. The problem identification aspect that is part of the composition of subordinates' creative input was identified to negatively affect performance goal leaders' receptiveness to subordinates' creative input. That is, in Study 2.3, different compositions of subordinates' input were investigated and

³ For performance goals (performance goal = -1, no goal = +1) the indirect effects were not significantly different from zero when composition of subordinates' creative input contained both problem identification and a creative idea (indirect effect = 0.15, SE = 0.11; 95% CI: [-0.038, 0.406]) nor when composition of subordinates' creative input contained only a creative idea (indirect effect = -0.11, SE = 0.09; 95% CI: [-0.297, 0.494]). For mastery goals (no goal = -1, mastery goal = +1) the indirect effects were non-significantly different from zero when composition of subordinates' creative input contained both problem identification and a creative idea (indirect effect = 0.11, SE = 0.08; 95% CI: [-0.001, 0.343]) nor when composition of subordinates' creative input contained only a creative idea (indirect effect = -0.03, SE = 0.07; 95% CI: [-0.197, 0.853]).

were found to interact with leaders' achievement goals. We demonstrated that performance goal leaders were less receptive than mastery goal leaders, but only when subordinates' creative input included both elements of problem identification and creative ideas for problem solution rather than solely creative ideas for problem solution. More specifically, the results supported the hypothesized mediated moderation model, demonstrating that the magnitude of the indirect effect of achievement goals on support through receptiveness was contingent on the composition of subordinates' creative input. Confidence in our findings is bolstered not merely by the replication over studies per se, but especially by the fact that different methodologies (i.e., cross-sectional survey, laboratory experiment), different samples (i.e., nonstudent leaders in organizations, students), and different sources of achievement goals (i.e., freely adopted, experimentally assigned) were used in the studies.

Theoretical implications

These findings extend previous achievement goal research in several ways. First, the present research contributes to the emerging line of research focusing on the interpersonal meaning of achievement goals (e.g., Darnon, Muller, Schragger, Pannuzzo, & Butera, 2006; Janssen & van der Vegt, 2011; Janssen & Van Yperen, 2004; Poortvliet, Janssen, Van Yperen, & Van de Vliert, 2007; VandeWalle, 2003). We provide theoretical logic and experimental evidence showing that leaders' achievement goals are related to how they approach, interpret, and react to bottom-up creativity. Specifically, our findings improve understanding of when, why, and how performance and mastery goals influence leaders' reactions to subordinates' creative input. The impact of leaders' motivational factors, like leaders' achievement goals, is emphasized by the fact that we did not find significant differences between leaders' evaluation of the creative idea quality across the different achievement goal conditions. In fact, all leaders rated the creative idea of rather high quality ($M_{\text{total}} = 5.06$, $SD = .83$). So, it is leaders' motivation rather than a misunderstanding of the creative idea that determines whether ideas will be utilized.

Second, the present findings provide new insights into the meaning of leaders' achievement goals for the management of subordinates' creative input. Scholars and researchers have conducted a great deal of research in order to improve understanding of leaders' receptiveness and supportiveness as determinants of, or facilitative

conditions for, subordinates' willingness to generate and express creative ideas (e.g., George & Zhou, 2007; Janssen, 2005; Oldham & Cummings, 1996; Shalley et al., 2004). However, the question of which factors may clarify why some leaders tend to be receptive to and supportive of subordinates' creative input, whereas others reject it, has largely been neglected. As Heslin and Latham (2004) have shown, several phenomena are embedded in the management of subordinate input, including the effects of being evaluated and motivational preferences for using the upward information to pursue particular goals. The current findings contribute to the existing creativity literature by identifying distinct aspects of subordinates' creative input that may clarify why some leaders tend to be receptive to and supportive of subordinates' creative input, whereas others are not.

Third, we contribute to an emerging line of research documenting how subordinates affect leader reactions by engaging in proactive behavior (Grant, Parker, & Collins, 2009), taking charge (Morrison & Phelps, 1999), or taking initiative (Frese & Fay, 2001). That is, motivational and situational variables were investigated that may have affected the behaviors of leaders in their interactions with subordinates. Thus, we focused on investigating leader reactions to subordinate creativity rather than following mainstream leadership research on how subordinates are influenced by the leader (Yukl, 2009). As such, the present research findings identify leaders' achievement goals and distinct characteristics of subordinates' creative input as important factors that can clarify when and why leaders are receptive to, and supportive of, subordinate creativity, and when and why they tend to shut the door. In this way the current findings contribute to the leadership literature, as well.

Finally, our research findings contribute to the feedback literature by focusing on feedback provided to leaders by subordinates, rather than sought by leaders from subordinates, or provided to subordinates by leaders. Ample research in the feedback domain has been conducted by investigating the fundamentals of feedback-seeking behavior by leaders: the antecedents of seeking, the motives for seeking, and the outcomes of seeking (e.g., Ashford et al., 2003; Ashford & Cummings, 1983; Ashford & Tsui, 1991; VandeWalle, 2003). Similarly, most research has concerned top-down feedback instead of bottom-up feedback (e.g., Ashford et al., 2003; VandeWalle, 2003). In the present study, we aimed to develop and investigate a new leadership research approach in which creativity-focused feedback was provided rather than sought, and in

which the feedback was bottom-up rather than top-down. The results show that leaders' interpretation of and reactions to creativity-related feedback information provided by subordinates were substantially dependent on the nature of the leaders' achievement goals.

Strengths, limitations, and future research

Our study has several desirable features (e.g., two methodologies, different samples, and different sources of achievement goals), whereby we were able to compensate weaknesses of one study with the strengths of another by following a full-cycle research approach (Chatman & Flynn, 2005). The use of a field-based study with actual leaders who had relevant work experience in real organizations has high external validity. However, to compensate for Study 2.1's limitations of internal validity and reverse causality, we also tested our hypotheses in controlled experiments (cf. Berkowitz & Donnerstein, 1982; Colquitt, 2008; Ilgen, 1986). A particular strength of these experimental studies is the effective achievement goal manipulation. That is, almost all participants, in both the performance goal condition and the mastery goal condition, indicated the correct achievement goal motto. Even more important, the narratives that the participants wrote emphasized the importance they placed on demonstrating leadership competences to others (performance goal) and the importance they placed on developing leadership competences (mastery goal), respectively. Furthermore, the experimental set-up of Study 2.2 and Study 2.3, both of which were high in internal validity, allowed us to carefully isolate the effects of the assigned achievement goal manipulation in combination with different compositions of subordinates' creative input. Based on our results, performance goals and mastery goals had contrasting effects. That is, performance goals resulted in lower receptiveness and supportive behaviors, whereas mastery goals led to more receptive and supportive behaviors (although not significantly different from the no goal condition).

Besides these strengths our studies have several limitations. In the first experiment (Study 2.2), mastery goal leaders' responses to subordinate creativity did not differ much from those of no goal leaders, whereas the responses of performance goal leaders were significantly different from those in the no goal control condition. A clarification for this pattern of results might be that the dominant achievement goal for the majority of people tends to be a mastery goal rather than a performance goal (Van

Yperen & Orehek, n.d.), with the consequence that most participants in the no goal control condition might have acted upon their dominant mastery goal. Likewise, in the second experiment (Study 2.3), mastery goal and no goal leaders again did not significantly differ in their responses to subordinates' creative input, albeit that the levels of receptiveness (mediating variable) and support (dependent variable) of the no goal leaders were now, as expected, intermediate between those of mastery goal and performance goal leaders (when composition of subordinates' creative input contained both problem identifications and creative ideas). As a consequence, the hypothesized effects of achievement goals were found to be significant when mastery goal and performance goal leaders were compared to each other, whereas effects did not reach a significant level when mastery goal leaders were compared with no goal leaders. However, although the experiments did not yield significant differences in responses between mastery goal and no goal leaders, our field-based survey (Study 2.1) in which leaders' achievement goals were naturally measured provided empirical evidence that mastery goals do matter. Specifically, leaders' mastery goals were found to be significantly and positively related to their receptiveness to subordinates' creative input, and this relationship was mediated through leaders' lower appraisals of image threat and higher appraisals of learning possibilities. Thus, all in all, we can conclude that the present results confirm our hypotheses assuming that performance goal and mastery goal leaders differ in their responses to subordinates' creative input.

A limitation of Study 2.1 is that it had a mono-source and mono-method design. Such a design may have inflated the relationships between the variables. As such, the relatively strong relationships we found between mastery goals and both learning opportunity appraisal and receptiveness may, therefore, be overestimated. However, as we found mastery and performance goals to have opposite relationships with image threat appraisal, common method bias might be less of a problem than it seems at first sight. Furthermore, in Study 2.1, leaders' reactions were based on a retrospective perspective, that is, they had to think back about a recent event and had to rate how they responded. It may be likely that these retrospective responses differ from leaders' actual reactions. In fact, there is evidence that performance goals enhance a positivity bias when reporting performance (Janssen & Van der Vegt, 2011). Therefore, even though we obtained experimental evidence for the influence of leaders' achievement goals on their reactions to subordinate creativity, it would be valuable if these effects were replicated

in future field studies using longitudinal designs that do not use a retrospective approach.

As the mediators in Study 2.2 and Study 2.3 were not manipulated, there is a possibility of reverse causality (cf. Mathieu & Taylor, 2006; Spencer, Zanna, & Fong, 2005). We acknowledge that definite statements about the flow of causality are not possible based on our data, and alternative models remain possible. As Mathieu and Taylor (2006) noted, for instance, using the exact same data, one can as easily “confirm” an $X \rightarrow M \rightarrow Y$ chain as an $X \rightarrow Y \rightarrow M$ chain, and “no statistical analysis can unequivocally differentiate one causal sequence from another” (p. 1033; see also Everitt & Dunn, 1991; Henley, Shook, & Peterson, 2006). From a sense-making perspective (Weick, 1995), it could be argued that receptivity leads individuals to infer that they have an opportunity to learn, or that a lack of receptivity could lead individuals to infer that they must be afraid that their image as a competent leader is being threatened. In order to rule out alternative explanations, and in order to make credible inferences about mediation, image threat appraisal and learning opportunity appraisal should be manipulated in future research in order to determine their effects on receptiveness (cf. Spencer et al., 2005; Stone-Romero & Rosopa, 2008). Additionally, by manipulating the mediator variables, we can also address the limitation that the mediator and outcome variables were measured by the same method in Study 2.2 and Study 2.3.

Another limitation of this study is that we focused on *approach* goals only: that is, performance-approach goals and mastery-approach goals. An interesting avenue for future research may be to examine the effects of *avoidance* goals on subordinate creativity. Individuals holding avoidance goals strive to avoid detrimental outcomes (Elliot & McGregor, 2001). Particularly individuals who pursue performance-avoidance goals tend to report more negative affect, anxiety, and fear of negative evaluation (Elliot & McGregor, 2001; Van Yperen, 2006; VandeWalle, 2003). Therefore, we may expect that leaders with performance-avoidance goals would react most sensitively and negatively to subordinates who provide creative input that contains problem definitions.

In order to investigate the influence of leaders’ achievement goals on their reactions to creative input, we assigned participants with either a performance goal or a mastery goal. One might argue that it seems unlikely that leaders, particularly those in complex organizational settings, would only adopt a single goal (e.g., DeShon & Gillespie, 2005). Moreover, it might be possible that different achievement goals serve different

purposes in the different stages of organizational creativity and innovation processes. Creative idea generation may indeed thrive when leaders hold mastery goals. However, creative performance in organizations also requires the ability to determine which ideas should be selected and implemented in practice (Amabile, 1988; Reiter-Palmon & Illies, 2004). As evaluation of ideas is a more convergent process (Charles & Runco, 2001), performance goals might be more effective in the stages of idea selection and idea implementation. Moreover, going through the different stages in an iterative process of looping back and forth may induce tension between innovation and control (Weick, 1995), or between technological and market possibilities (Dougherty, 1992). It is possible that leaders need both mastery goals and performance goals to effectively manage the complex process of organizational creativity and innovation (e.g., DeShon & Gillespie, 2005). Therefore, we encourage use of a multiple goal perspective (Barron & Harackiewicz, 2001) in future research to investigate the simultaneous or sequential use of multiple achievement goals across different stages of creativity and innovation.

We argued that the generation of ideas is often triggered by the identification of problems that need creative solutions (Amabile, 1988; Runco & Chand, 1995; Ward, Smith, & Finke, 1999). However, not all problem identifications are necessarily identifying a problem regarding leaders' competence or effectiveness. Sometimes identified problems may have technical causes (i.e., a machine that suddenly breaks down). As such problem identifications do not threaten leaders' competence, even performance goal leaders might appreciate it if subordinates' come up with creative ideas to solve this problem. Furthermore, we investigated leaders' reactions to subordinates' creative input at an individual level. However, creativity may also involve iterative processes at both individual level and group level (Amabile, 1988; Drazin, Glynn, & Kazanjian, 1999). As group-level creativity also involves cognitive processes of idea generation and idea testing, it can be considered to be of similar composition to individual-level creativity (Amabile, 1988, 1996). Therefore, it might be interesting to investigate the influence of achievement goals on the iterative processes that take place in a group and between groups as they engage in creative behavior.

Although creativity usually encompasses the two basic elements of problem identification and creative ideas for problem solution, identifying and upwardly voicing problems to leaders is not exclusively reserved for subordinates' *creative* input. That is, subordinates can provide leaders with feedback on any kind of work-related matter that

is not creative in nature but does include problem identifications that can be interpreted as instrumental or evaluative in nature. It is possible that the differential reactions of performance goal leaders and mastery goal leaders will also emerge in response to, for example, feedback on leadership behaviors that subordinates give to their leaders. Therefore, future research may be focused on exploring differential reactions of leaders to other kinds of subordinate input.

It would be interesting to investigate other boundary conditions than composition of subordinates' creative input under which performance goal and mastery goal leaders are more or less receptive to new ideas put forward by subordinates. Leader-member exchange (LMX) might be such a relevant moderator. As the quality of the exchanges that develop between subordinates and their leaders is predictive of performance-related outcomes (Gerstner & Day, 1997; Graen & Uhl-Bien, 1995), performance goal leaders might be more receptive when LMX is high rather than low. Another potential moderator concerns the way the creative input is presented to the leader. Scholars distinguish different behavioral modes in which individuals can voice their concerns and opinions (e.g., Hagedoorn et al., 1999; Rubin et al., 1994). Leaders might be more receptive to creative input when subordinates use considerate rather than aggressive behavioral modes to voice creative input. Furthermore, as narcissistic tendencies cause people to be preoccupied with proving their superiority to others (Morf & Rhodewalt, 2001), narcissistic leaders might be obsessed with performance goals and, therefore, highly susceptible to image threat in response to subordinate creativity. Thus, potential moderators of the effects of leader achievement goals on leader responses to subordinate creativity can include leader characteristics, follower characteristics, and characteristic features of the social context.

Finally, it is important to acknowledge that the present study was focused exclusively on how achievement motivational factors in leaders would influence leader-subordinate interactions. However, achievement goals may not exclusively influence leaders' reactions to subordinates; they may also influence their comparisons with peers (i.e., other leaders) or their relationships with superiors. Comparisons with other referents may cause leaders to respond and behave differently in order to achieve their goals. For instance, performance goal leaders, who are motivated to perform better than others, might exhibit different behaviors to their subordinate (e.g., explicitly reject creative input) than to their superior (e.g., implicitly adopt the subordinate's creative

input and show off with it). In future research, the influence of achievement motivational factors on the relationship between the leader and relevant others, including co-leaders and superiors, may be investigated.

Practical implications

In line with the findings of prior field research (Janssen & Van Yperen, 2004; VandeWalle, Brown, Cron, & Slocum, 1999), the present results suggest that performance goals might be less effective on the job than mastery goals. When (performance goal) leaders repeatedly fail to be receptive to, and supportive of, subordinates' creative input, they are likely to be seen as unapproachable and unresponsive, and may thus frustrate subordinates in their efforts to bring in new creative input. If subordinates perceive that leaders are too convinced of the rightness of their own ideas, the former may lose their motivation to generate and provide creative input (House & Howell, 1992), resulting in a substantial loss of creative potential for the organization. In contrast, when subordinates feel that their contributions are valued by the leader, their motivation and the effort they put into making creative suggestions and carrying out creative activities in the workplace are likely to be maintained or enhanced (Grant, 2008; Grant & Gino, 2010; Janssen, 2005). Furthermore, leader behaviors indicating receptiveness to, and support of, subordinates' creative input decrease the salience of the power differential between leaders and subordinates in such a way that employees perceive few potential costs from raising potentially risky ideas (Edmondson, 2003), which may be beneficial for the organization.

This suggestion is in accordance with the dominant view on achievement goals in the industrial-organizational literature that mastery goals are effective and desirable for task performance on the job, whereas performance goals are less beneficial or even detrimental (e.g., DeShon & Gillespie, 2005; VandeWalle, Ganesan, Challagalla, & Brown, 2000). Contrary to this preponderant belief, however, our results show that under certain circumstances performance goals can be as effective and beneficial on the job as mastery goals. In the present research, we provide empirical evidence that specifies in which situations, and why, performance goal leaders are as receptive to, and supportive of, subordinate creativity as mastery goal leaders. A practical implication is that subordinates, when proposing their creative input to (performance goal) leaders, should focus on voicing their new and potentially useful ideas rather than emphasizing the

problems for which they have generated creative solutions. However, as performance goal leaders may be less effective than mastery goal leaders in situations where both problem identification and creative ideas for problem solution play a key role, organizations may structurally create an environment in which leaders are encouraged to adopt mastery goals rather than performance goals (VandeWalle, 2003; VandeWalle & Cummings, 1997).

Conclusion

Our research findings show that leader reactions to subordinate creativity are contingent upon leader achievement goals and the content of subordinate creative input. As such, the current findings lay a foundation of empirical and experimental evidence for the influential role of achievement motivational factors in leader perceptions and responses to subordinate creativity, and provide a platform for further research on this intriguing and important managerial issue.

CHAPTER THREE

HOW TO GET CREATIVE IDEAS INTO A LEADER'S MIND? LEADER'S ACHIEVEMENT GOALS AND SUBORDINATES' VOICE OF CREATIVE IDEAS

In the present research we investigated when and why leaders tend to oppose or adopt creative ideas voiced by their subordinates. In a field study (Study 3.1, $N = 108$) and an experimental study (Study 3.2, $N = 90$), we showed that leaders with performance goals tended to oppose subordinates' creative ideas, whereas mastery goal leaders tended to adopt those ideas. In Study 3.2, we further showed that the effects of leaders' achievement goals on their oppose and adopt responses were mediated by leaders' interest in exploration. Finally, in Study 3.3 ($N = 91$), we experimentally demonstrated that oppose and adopt responses of performance goal leaders, rather than mastery goal leaders, were sensitive to the behavioral mode by which subordinates voiced their creative ideas. That is, performance goal leaders were less likely to oppose and more likely to adopt creative ideas when subordinates voiced them in a considerate mode rather than an aggressive mode.

This chapter is based on Sijbom, R.B.L., Janssen, O., & Van Yperen, N.W. (2013). How to get creative ideas into a leader's mind? Leaders' achievement goals and subordinates' voice of creative ideas. *Manuscript under review*.

In the present dynamic environment of global competition, creativity and innovation have become more important for many organizations (Tushman & O'Reilly, 1997). As it is individuals who generate creative ideas for innovation (Amabile et al., 1996; Axtell et al., 2000; Scott & Bruce, 1994), the evaluation and approval of bottom-up creativity can be regarded as one of the important aspects that leaders need to handle in their complex tasks. Recognition of the importance of employee creativity, defined as the generation of novel and useful ideas (Amabile, 1988), for organizational effectiveness has led to an increasing research interest in understanding how leaders facilitate employees to perform creatively or impede them from performing creatively (Mumford et al., 2002; Zhou & Shalley, 2003). The predominant focus of this work centers on identifying leader behaviors as determinants of employee creativity (Sternberg & Vroom, 2002). However, scant research has explored how leaders actually react to employees who voice challenging creative ideas (Amabile, 1988; Mumford & Gustafson, 1988; for an exception see Burris, 2012). These leader reactions are of particular interest because even though subordinates' creative ideas may provide an organization with crucial material for innovation and development (Amabile, 1988; Amabile, Schatzel, Moneta, & Kramer, 2004; Kanter, 1988; Oldham & Cummings, 1996), it often challenges the frameworks of thoughts and routines established by their leaders (Detert & Burris, 2007).

Leaders have the power to provide or withhold support to bottom-up creativity (Amabile et al., 2004) and control the transfer of subordinates' creative input to higher-level actors (Detert & Burris, 2007; Janssen, 2005). Given the ubiquitous influence that leaders' choices exert, investigating them might be key to advancing our understanding of utilization of employee creativity within organizational settings (Ford & Gioia, 2000). Although many research consistently showed how employee creativity can contribute to organizational effectiveness (cf. Amabile, 1996; Shalley et al., 2004), we know little about the factors that influence when and why subordinates' creative ideas are opposed or adopted by their leaders. To address this gap in the literature, in the present research, leaders' achievement goals and subordinates' mode of voice are identified as important factors that can clarify leaders' oppose and adopt responses to subordinates' voice of creative ideas. That is, we will demonstrate when and why leaders oppose and stick to their own established ideas and when and why leaders are motivated to consider and adopt creative ideas voiced by their subordinates.

Scholars have shown that leaders' perceptions, behaviors, and reactions towards subordinates are inextricably bound with their achievement pursuits in leadership situations (e.g., Yukl, 1989). Consequently, achievement goals may crucially influence how leaders perceive and respond to creative ideas voiced by subordinates. Using the achievement goal theory (Elliot, 2005; Farr et al., 1993; Payne et al., 2007), we examined the differential effects of two approach forms of achievement goals for which leaders strive, namely, *performance goals* and *mastery goals*. Performance goals reflect the desire of demonstrating competence, whereas mastery goals reflect the desire of developing competence (Elliot & McGregor, 2001; Elliot, 2005). We examined how those different achievement goals influence leaders in their tendencies to oppose or adopt valuable creative ideas voiced by subordinates. Furthermore, scholars distinguish between different behavioral modes of voice, that is, modes in which subordinates voice their creative ideas (e.g., Hagedoorn et al., 1999). Employing this distinction, we investigated how aggressive versus considerate modes of voice with which subordinates suggest their creative ideas moderate the effects of leaders' achievement goals on their oppose and adopt responses. By doing so, we provide a fine-grained understanding of specific situational conditions under which voice can affect leaders' responsiveness to subordinate creativity.

In sum, the present study contributes to the literature on leadership and creativity by providing a conceptual and empirical basis for the study of leaders' oppose and adopt responses to subordinate creativity. That is, we first illustrate how leaders' responses to subordinates' creative ideas are affected by motivational factors of the leader (Studies 3.1 and 3.2). Second, we show how different *modes of voice* differentially affect leaders' responses (Study 3.3).

Leaders' Evaluation of Creative Ideas

Ideas are perceived as creative when they are novel and useful (Amabile, 1996). In line with Shalley and colleagues (2004), we consider ideas to be novel if it is unique relative to other ideas currently available in the organization. If ideas have potential value to the organization, in either the short or long-term, we consider it as useful. Given this definition, creative ideas can range from suggestions for small adaptations in current practices to radical and major adaptations in the development of new products (Madjar et al., 2011; Mumford & Gustafson, 1988). Finally, our definition assumes that

creative ideas may be generated by employees in any job and at any level of the organization (Madjar et al., 2002; Shalley et al., 2000), however in the current research we focus exclusively on subordinates who generate and voice creative ideas.

Leaders in organizations have the principal task of recognizing and managing subordinates' creative input, as it is a crucial resource for creativity and innovation (Mumford, 2000; Zhou & Woodman, 2003). By means of leaders' evaluation, novel and useful ideas should be identified and utilized for subsequent development and implementation. As power holders and linking pins in the organizational hierarchy, leaders control the transfer of grassroots creativity to higher-level actors within the organization. Leaders may, therefore, be seen as key actors who decide whether creative ideas may evolve or not (Janssen, 2005). Accordingly, for the preservation of meaningful and potentially crucial ideas for the organization's survival and prosperity, leaders, and more specifically, leaders' evaluating role, are key.

However, leaders may experience difficulties with this role. Due to their key position in an established and proven organization, leaders tend to operate as gatekeepers of the current status quo (Csikszentmihalyi, 1990). As such, they may perceive little need to adjust their current practices and ways of thinking, even not in the face of very useful and valuable ideas. Research has already identified main determinants for why leaders keep relying on existing frameworks of thoughts and routines instead of being open to new ideas (Hambrick et al., 1993), such as a leader's tenure (Miller, 1991), organizational tenure (Hambrick et al., 1993), and mere ownership effects (e.g., Beggan, 1992). These findings suggest that the prolonged exposure to specific firm and organizational contexts foster an attachment to extant beliefs and practices. However, although it is acknowledged that motivational factors are of central significance for leadership effectiveness (Hambrick & Mason, 1984), they have been largely ignored as potential factors that may affect leaders' responses to creative ideas voiced by their subordinates. The present study aims to fill this gap by testing the role of achievement goals as a motivational construct to clarify why some leaders tend to oppose creative ideas, whereas others adopt creative ones.

The Achievement Goal Approach

The achievement goal approach to achievement motivation has emerged as a highly influential framework for understanding how people define, experience, and

respond to competence-relevant achievement situations, including the workplace (DeShon & Gillespie, 2005). In the present research, two distinct types of achievement goals were investigated, namely, mastery-approach goals and performance-approach goals (Elliot, 2005). We focus exclusively on approach goals, defined as goals directed towards positive or desirable events, as research has demonstrated that they are the most efficacious in enhancing performance (Elliot & McGregor, 2001), whereas avoidance goals, defined as goals directed to avoid negative outcomes, are most likely to adversely affect performance attainment (Roney & Lehman, 2008). So, from an applied perspective, only approach goals are of interest for achievement goal based interventions. Accordingly, performance-approach goals reflect the desire to demonstrate superior competence by outperforming others, whereas mastery-approach goals reflect the desire to develop and gain competence by acquiring new skills and mastering new situations (Elliot & McGregor, 2001; Van Yperen, 2003a). Because in the present research we focused on approach goals only, performance-approach goals are referred to as *performance goals* and mastery-approach goals as *mastery goals*.

Achievement goals can be construed as dispositional and situational factors (Dweck & Leggett, 1988; Elliot, 2005). Some scholars utilize the achievement goal construct in a dispositional manner in their work (Nicholls, 1984; VandeWalle, 2003), whereas others employ a situational-specific level of analysis of achievement goals (e.g., Farr et al., 1993; Pintrich, 2000b). Conceptual and empirical considerations seem to suggest that achievement goals may be best suited for the situation-specific level rather than the dispositional-specific level (cf. Baranik, Barron, & Finney, 2010; see Elliot, 2005). In Study 3.1, we measured work-specific performance goals and mastery goals among leaders with substantial leadership experience. In Study 3.2 and Study 3.3, we focused on, and experimentally manipulated, situational achievement goals because we aimed to identify leaders' goal states as possible *causes* of their oppose and adopt responses to creative input voiced by their subordinates.

Leaders' oppose and adopt responses to voiced creative ideas

Considering the importance of innovation for many organizations, leaders might be expected to welcome creative ideas voiced by their subordinates. However, one of the complications is that leaders are the power holders of, and responsible for, the current status quo (Detert & Burris, 2007). As instigators of creativity are often perceived

problems, incongruities, or discontinuities (Kanter, 1988; Shalley, 1991; Zhou & George, 2003), creative ideas, by definition, question the status quo, and accordingly, the person responsible for the status quo. Leaders' perceptions of, and responses to, these challenging ideas can be expected to be motivated and regulated by their achievement goals.

Performance goal leaders are focused on demonstrating superior competence and performance relative to others (i.e., their subordinates) (e.g., Dweck, 1986; Nicholls, 1984). Given their focus on competence demonstration, performance goal leaders tend to view the proven framework of thoughts, practices, and routines they have established in their managerial domain as a demonstration of their leadership competence and performance. Consequently, they tend to view new ideas that challenge the established status quo as a kind of a dispute about the validity of their competence. Driven by their goal to demonstrate superior competence, they tend to respond to such an experienced competence dispute by defending the status quo and protecting their self-view and image of being a competent leader. Hence, in the evaluation of subordinates' creativity, they are likely to stick to their own established ideas and oppose subordinates' creative and challenging ideas. Indeed, previous research shows that performance goals are less likely to utilize creative input as they see little value in it (VandeWalle, 2003). Furthermore, they have been linked to self-presentation, self-validation, and self-protection concerns (Elliot, 1999; Elliot & Moller, 2003; Tuckey, Brewer, & Williamson, 2002).

On the contrary, mastery goal leaders are focused on developing and gaining competence by acquiring new skills and mastering new situations (e.g., Dweck, 1986; Nicholls, 1984). Driven by this focus, they might view subordinates' creative ideas as a potentially useful source of diagnostic information they can learn from. As such, the creative ideas can facilitate their competence and performance as leaders, even though it may challenge the content of the current state of affairs. Therefore, spending time on and exploring the content and validity of subordinates' creative ideas seem to be congruent with a mastery goal. Consequently, when mastery goal leaders recognize valuable and useful potential for improvement and innovation in the creative input, it might lead them to reconsider their own thoughts and ideas. That is, mastery goal leaders might be willing to reconstruct their current framework of thoughts and routines and consequently (partially) abandon the status quo in favor of the newly

adopted ideas. Thus, driven by their desire for developing their competence, mastery goal leaders are able to let go their own viewpoints and ideas and adopt and welcome new ones voiced by subordinates that can facilitate the pursuit of their own development goals. In line with this argumentation, research showed that mastery goal leaders tend to evaluate subordinates' creative input in an epistemic way (Doise & Mugny, 1984), which includes examination of the creative ideas' usefulness and validity. Additionally, mastery goals have been linked to positive developmental reactions in the recipients of feedback information (e.g., motivation to learn, task-interest, increased self-efficacy, adaptive learning strategies), and to promote the recipients' utilization of this information (e.g., Barron & Harackiewicz, 2001; Chen et al., 2000; Colquitt & Simmering, 1998; Kluger & DeNisi, 1996; VandeWalle, 2003). On the basis of these arguments, we tested the following hypotheses:

Hypothesis 1: Leaders' performance goals are positively related to their tendency to oppose creative ideas voiced by subordinates.

Hypothesis 2: Leaders' mastery goals are positively related to their tendency to adopt creative ideas voiced by subordinates.

Study 3.1

Method

One hundred and seventy-seven participants were recruited through Amazon's Mechanical Turk (see Buhrmester et al., 2011) to complete an online questionnaire in exchange for monetary compensation. In order to get a relevant sample, a system qualification was used such that only individuals in the U.S. could participate who were in supervisory positions. Furthermore, we included five control questions (example item: For this item click the 'strongly disagree' answer option). Participants who answered one or more control questions incorrectly were left out for further analyses, resulting in a usable sample of one hundred and eight participants (62 male, $M_{\text{age}} = 32.6$ years, $SD_{\text{age}} = 11.3$). The respondents' mean total work experience was 12.9 years ($SD = 10.9$), mean total work experience in a supervisory position was 5.9 years ($SD = 6.4$), and mean number of supervised subordinates was 12.5 ($SD = 24.1$).

The questionnaire first assessed participants' achievement goals. They were then asked to think about a recent situation in which a subordinate voiced a creative idea that

challenged their own established ideas about the current practices and routines after which their tendencies to oppose and adopt the creative idea were assessed.

Measures

Performance goal ($\alpha = .88$) was measured using the three-item subscale of Elliot and colleagues' (2011) achievement goal questionnaire. Items were adapted to fit the work context of the research: (1) My aim is to outperform other colleagues in my work, (2) In my work I am striving to do well compared to other colleagues, and (3) In my work my goal is to do better than my colleagues. Response categories ranged from 1 (*not true*) to 7 (*extremely true*).

Mastery goal ($\alpha = .76$) was measured using the three-item subscale of the achievement goal questionnaire (Elliot et al., 2011). We adapted the items to fit the work context: (1) My aim is to perform better in my work than I have done in the past, (2) In my work I am striving to do well relative to how well I have done in the past, and (3) My goal in my work is to do better than I typically do. Response categories ranged from 1 (*not true*) to 7 (*extremely true*).

Oppose creative ideas ($\alpha = .64$) was measured using the forcing subscale of the conflict handling measurement developed by De Dreu, Evers, Beersma, Kluwer, and Nauta (2001). Participants were asked to indicate how they would respond to the creative idea voiced by the subordinate that challenged their own established ideas about the current practices and routines. The scale consisted of three items: (1) I push my own point of view, (2) I fight for a good outcome for myself, and (3) I do everything to win. Response categories ranged from 1 (*not at all*) to 7 (*very much*).

Adopt creative ideas ($\alpha = .60$) was measured using the accommodating subscale of the conflict handling measurement developed by De Dreu et al. (2001). The scale consisted of three items: (1) I concur with the subordinate, (2) I try to accommodate the subordinate, and (3) I adapt to the subordinates' goals and interests. Response categories ranged from 1 (*not at all*) to 7 (*very much*).

Control variables. We statistically controlled for age (in years), educational level (1 = less than high school, 2 = High school / GED, 3 = some college, 4 = two-year college degree, 5 = four-year college degree, 6 = Master's degree, 7 = Doctoral degree, and 8 = Professional degree (JD, MD, MBA), and work experience in the current supervisory position (in years).

Discriminant and convergent validity. To provide evidence of discriminant and convergent validity, we conducted a confirmatory factor analysis (CFA) on the survey items of the four variables: mastery goal, performance goal, oppose creative ideas and adopt creative ideas. We computed parameter estimates using LISREL 8.80 with the maximum likelihood method. We compared three models: (1) a model with the four intended constructs; (2) a model in which mastery goal and adopting creative ideas were collapsed into one factor and in which performance goal and opposing creative ideas were collapsed into one factor; and (3) a model with one underlying construct.

The fit indexes of each model clearly showed the best fit for our hypothesized four-factor model (i.e., Model 1). Specifically, the fit statistics of the four-factor model were: $\chi^2 (48, N = 108) = 65.36, p < .05$; Root Mean Square Error of Approximation (RMSEA) $< .06$, Adjusted Goodness of Fit Index (AGFI) = .85, Goodness of Fit Index (GFI) = .91, and Comparative Fit Index (CFI) = .95. The factor loading of each item was significant at the .001 level or better. These indexes were better than the second model: $\Delta\chi^2 (5) = 57.69, p < .001$, RMSEA = .11, AGFI = .76, GFI = .84, CFI = .83; and the third model: $\Delta\chi^2 (6) = 163.76, p < .001$, RMSEA = .17, AGFI = .62, GFI = .74, CFI = .64.

Common method variance. Prior to examining our hypotheses, we performed an additional analysis to determine the extent of common method variance in our data. Following the recommendations of Podsakoff, MacKenzie, Lee, and Podsakoff (2003), we used a common latent factor approach with structural equation modeling. We found that the method factor accounted for only 6% of the variance, which is less than the average amount of method variance in organizational research (Podsakoff et al., 2003; Williams, Cote, & Buckley, 1989). These results suggest that common method variance is not a pervasive problem in our study.

Results

Table 3.1 displays the descriptive statistics and correlations for all variables. As expected, performance goals were positively related to oppose to creative ideas ($r = .42, p < .001$), whereas mastery goals appeared to be positively correlated with adopting creative ideas ($r = .25, p < .01$).

Table 3.1

Means, Standard Deviations, and Correlations^a

<i>Variable</i>	<i>Mean</i>	<i>SD</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
1. Age	32.61	11.27						
2. Educational level	4.49	1.24	.16 [†]					
3. Time in position ^b	4.79	4.72	.70 ^{***}	.10				
4. Performance goal	5.06	1.49	-.05	.12	-.14			
5. Mastery goal	5.71	1.06	.26 ^{**}	-.18 [†]	.16 [†]	.27 ^{**}		
6. Oppose creative ideas	4.41	1.05	-.21 [*]	.08	-.20 [*]	.42 ^{***}	.06	
7. Adopt creative ideas	4.97	0.82	.03	.02	.16	-.02	.25 ^{**}	-.03

^a *N* = 108.

^b Refers to time in current supervisory position in years.

† *p* < .10; * *p* < .05; ** *p* < .01; *** *p* < .001.

Table 3.2

Results of Regression Analyses^a

Steps and Variables	<i>Oppose creative ideas</i>		<i>Adopt creative ideas</i>	
	1	2	1	2
1. Age	-.02	-.02	-.01	-.02 [†]
Educational level	.10	.06	.01	.07
Time in position	-.02	-.01	.05	.04
2. Performance goal		.28 ^{***}		-.05
Mastery goal		.03		.25 ^{**}
ΔR^2	.07 [†]	.16 ^{***}	.04	.08 [*]
Adjusted <i>R</i> ²	.04 [†]	.18 ^{***}	.01	.07 [*]

^a *N* = 108. Unstandardized regression coefficients are reported for the respective regression steps.

† *p* < .10, * *p* < .05, ** *p* < .01, *** *p* < .001.

Hypothesis testing. Hierarchical regression analyses consisting of two successive steps were conducted. In the first step, the control variables were entered to control for relationships with performance goals, mastery goals, and oppose and adopt creative ideas. In the second step, we included performance goals and mastery goals to test their hypothesized effects on the outcome variables.

As shown in Table 3.2, leaders' performance goals were positively related to their tendency to oppose subordinates' creative ideas (see step 2 of the regression equation), which is in line Hypothesis 1. Leaders' mastery goals were positively related to their tendency to adopt creative ideas, confirming Hypothesis 2. Furthermore, performance goals were unrelated to their tendency to adopt creative ideas, and mastery goals were unrelated to their tendency to oppose creative ideas.

Conclusion and discussion

The purpose of this first study was to test whether leaders' performance and mastery goals have differential effects on their oppose and adopt responses to creative ideas proposed by subordinates. Using data from a sample of real leaders with meaningful work experience, we found that leaders' performance goals are positively related to their tendency to oppose the creative ideas delivered by subordinates, whereas leaders' mastery goals are positively related to their tendency to adopt those creative ideas. Notwithstanding these outcomes, one major drawback of Study 3.1 is its cross-sectional nature, so that no conclusions about causality can be made. Therefore, in Study 3.2 we will use an experimental design in which we manipulate leaders' achievement goals. By using this approach we will be able to establish causality between leaders' achievement goals and their subsequent oppose and adopt responses. Furthermore, in Study 3.2, we will investigate underlying processes that can further clarify the differential responses of performance goal and mastery goal leaders to subordinates' creative input.

Study 3.2

In this study, we experimentally manipulated performance and mastery goals to compare their effects to one another. Therefore, we had to reformulate Hypothesis 1 and 2 to make them testable. Based on the same argumentation for Hypotheses 1 and 2, we reformulated them as follows:

Hypothesis 3: Performance goal leaders are more likely to oppose creative ideas voiced by subordinates than mastery goals leaders.

Hypothesis 4: Mastery goal leaders are more likely to adopt creative ideas voiced by subordinates than performance goal leaders.

Explorative Interest as a Mediating Mechanism

Based on interest theories and research (for reviews see, Lepper & Henderlong, 2000; Renninger & Hidi, 2011), we argue that explorative interest, defined as an interactive relation between an individual and certain aspects or activities in a given area that demands concentrated cognition (cf. Hidi, Renninger, & Krapp, 2004; Krapp, Hidi, & Renninger, 1992; Krapp, 2007), can explain the differences in performance and mastery goal leaders' responses to subordinates' creative input. As delineated above, performance goal leaders may experience subordinate's creative input as challenging information that is incongruent with their goal of demonstrating superior leadership competence. The reason for this incongruence perception is that they tend to relate their image of a competent leader to the framework of thoughts and routines they have established in their managerial domain. Consequently, such leaders tend to react to creative ideas voiced by subordinates by putting efforts in protecting and preserving their own established ideas rather than taking a genuine interest in exploring the potential usefulness of the creative ideas. This low explorative interest can be expected to inhibit performance goal leaders from adopting the creative ideas proposed by subordinates and set them free to oppose those ideas. Previous research in the motivational domain provides some indication for this suggestion by showing that individuals holding performance goals tend to avoid challenge, minimize effort in learning new strategies, and experience impaired problem solving (Graham & Golan, 1991; Pintrich, 1989).

In contrast, mastery goals are congruent with explorative interest because it directs the individual to potential resources for performance improvement, skill development, and leadership ability growth. Accordingly, mastery goal leaders may tend to display high levels of explorative interest in subordinates' creative input because it may provide them with valuable information about potential problems they can learn from and use for leadership improvement. Hence, mastery goal leaders' explorative interest can be expected to enhance their adoption of the new ideas suggested by

subordinates while inhibiting their opposition to those ideas. Indeed, previous research shows that mastery goals promote situational interest, elicit feelings of excitement, and encourage cognitive and affective immersion in task activities (Elliot & Church, 1997; Elliot & McGregor, 2001; Rawsthorne & Elliot, 1999), all of which are presumed to facilitate explorative interest. Cumulatively, we predict:

Hypothesis 5. Explorative interest mediates the effects of leaders' achievement goals on their tendency to oppose (H5a) and adopt (H5b) creative ideas suggested by subordinates.

Method

Participants and design. Ninety Dutch business undergraduates participated for research points. The ages of the participants ranged from 18 to 45 years, and the mean age was 20.7 years ($SD = 3.3$). Participants were randomly assigned to one of the three achievement goal conditions (performance vs. mastery vs. no goal) of the between-subjects design, with men ($n = 45$) and women ($n = 45$) equally divided across the conditions. Gender had no effects and is not discussed further.

Procedure. Participants came to the laboratory and were seated in individual cubicles that were equipped with a computer. The participants read that they were participating in a research project on the assessment of managerial skills and abilities, and that the researchers were interested in how the participants would carry out and experience different managerial tasks.

The experiment began with the presentation of a marketing scenario to the participants. The scenario described a company that developed, produced, and sold fast food products. The participants were assigned to the role of the company's marketing manager, who was responsible for positioning and selling the fast food products on the consumer market. It was emphasized that the manager had gained this top position in the company's hierarchy by being successful in establishing an *Informational Strategy* (IS). An IS contains factual and meaningful descriptions of relevant product attributes, delivered in a logical, verifiable manner to attract customers (Okazaki et al., 2010; Puto & Wells, 1984).

In the scenario, the organization had developed a new product, *fat-free fries*, and a project team was composed to successfully introduce the product on the consumer market. The project team consisted of three subordinates, and the marketing manager

operated as the team leader. As team leader, the marketing manager had assigned the team members the task to come up with informative sentences that could be used for applying the IS in the marketing campaign. The informative sentences developed by the subordinates were sent by email to the team leader in sets of three, and it was his or her task to give preference to one of these three alternatives. In actuality, the team members were nonexistent, and in their role of team leader, the participants received standardized informative sentences. Examples of three informative sentences used to stress the functionality of the product are as follows: (1) "Fat-free fries fit in perfectly with a fat-free diet"; (2) "Fat-free fries help to lower bad LDL cholesterol levels"; and (3) "Fat-free fries contain healthy body-building nutrients".

After they had given preference to the informative sentences sent by two subordinates, the participants received an email from the third member of the project team, named Anne (a Dutch unisex name). In the email, Anne proposed the use of another marketing strategy to introduce the new product, namely, a *Transformational Strategy* (TS). A TS conveys affect-based contents that associate the experience of owning or using a product with psychological characteristics, such as excitement and enjoyment (Okazaki et al., 2010; Puto & Wells, 1984). Anne's proposal was completely different from the common, established IS propagated by the team leader to introduce new products. To advocate this novel idea of using the alternative method of TS, Anne described the weaknesses of the IS and emphasized the strengths of the TS relative to the IS with regard to the marketing of the new product. Given its novelty and potential usefulness in the context of the company's aims, Anne's proposal can be considered a creative idea for renewing the marketing strategy (Amabile, 1996; Shalley et al., 2004). The dependent variables and the manipulation checks were then assessed. We also asked participants if they had any idea about the purpose of the study; none of the participants made correct guesses about the purpose of the study. Before leaving, the participants were debriefed and thanked for their participation.

As recognition of creative input is an essential and crucial prerequisite for evaluation (cf. Zhou & Woodman, 2003), we tested whether participants would recognize and perceive the creative input voiced by a subordinate as creative for the

situation at hand in a pilot study⁴. Results showed that the subordinate's creative input was judged and evaluated as novel and having high potential value for marketing the invention of fat-free fries, meaning that leaders were able to recognize the subordinate's ideas as being creative. Therefore, the leadership task seemed appropriate to test our hypotheses in Study 3.2.

Achievement goal manipulation. The manipulation took place after the participants had stated their preference for the informative sentences sent by two subordinates and before they had received the email from the third team member of the project team, Anne. The participants received an email from the editor of the company's staff magazine. In this email, the participants were told that an interview held with them as the marketing manager of the company a week ago would be published in the next edition of the magazine. The interview was focused on a characteristic leadership motto held and frequently expressed by the marketing manager. The email explained the grounds for this specific leadership motto and was used to induce the achievement goal manipulation, that is, the experimental manipulation.

The manipulation consisted of three coherent aspects from which a specific achievement goal was derived. First, different information with respect to the organizational climate was given in the different achievement goal conditions. In the performance goal condition it was emphasized that the organization had a strong competitive climate, continuously stimulating leaders to demonstrate their competences by performing better than others. In contrast, in the mastery goal condition, it was emphasized that the organization had a strong developmental climate, continuously

⁴ Twenty-two Dutch business undergraduates received €3 for their participation. The ages of the participants ranged from 17 to 27 years, and the mean age was 21.4 years ($SD = 2.74$). The mean work experience of the participants was 48.8 months ($SD = 36.0$). Participants were presented the same procedure as described above, without the achievement goal manipulation. Subsequently, they were asked a number of questions that measured the valence, suitability and preference of both strategies.

Valence of strategy was assessed using two items: (1) How do you feel about the Transformational Strategy? (2) How do you feel about the Informational Strategy? The response categories ranged from 1 (very negative) to 7 (very positive). Suitability of strategy was assessed using the following two items: (1) How do you feel about the suitability of the Transformational Strategy for the current situation? (2) How do you feel about the suitability of the Informational Strategy for the current situation? The response categories ranged from 1 (not at all suitable) to 7 (very suitable).

To test whether leaders could recognize the valence of the subordinates' creative idea (the TS) relative to the valence of the leaders' established idea (the IS) a dependent t-test was conducted. There was a significant effect for valence of strategy, $t(21) = 2.23, p < .04$, with the TS ($M = 5.64, SD = .95$) valenced more positively than the IS ($M = 4.68, SD = 1.49$). Furthermore, there was a significant effect for suitability of strategy as well, $t(21) = 2.15, p = .04$, with the TS ($M = 5.59, SD = .96$) being evaluated as more suitable than the IS ($M = 4.82, SD = 1.33$).

stimulating leaders to develop their competences by gaining new knowledge and skills. In the control condition, no information about the organizational climate was given.

Second, the participants held and frequently expressed a personal leadership motto, which was consistent with the organizational climate. In the performance goal condition, the personal leadership motto was, *"Managers are superiors and, therefore, must demonstrate their superior competences in their executive work with subordinates."* The motto in the mastery goal condition was, *"Managers are developers and, therefore, must keep developing their competences in their executive work."* The editor of the staff magazine asked the participants to write a short narrative in which they clearly advocated their characteristic leadership motto, and to describe their emotions and beliefs associated with it. The participants then had unrestricted time to write their short narratives and to send them to the editor by clicking on the "send" button. In the control condition, the participants did not hold a personal leadership motto; they were asked to write a narrative for the staff magazine about a neutral topic, which was unrelated to achievement goals and personal competences. The topic was the outsourcing of several (support) services to India and the Philippines owing to lower wages. The participants had to write down their opinions on this development.

Finally, participants were assigned a specific achievement goal, which was consistent with the leader's individual motto and the organizational climate. In the *performance goal condition*, in which outperforming others was the central aim, participants were advised to demonstrate their leadership competences in their executive work with subordinates (performance goal). In contrast, in the *mastery goal condition*, in which developing their own abilities was the central aim, participants were advised to develop their leadership competences in their executive work (mastery goal). In the control condition, no specific achievement goal was assigned to the participants.

Measures

Manipulation checks. In the experimental conditions, participants were asked to indicate which characteristic personal leadership motto they held as managers. Participants could choose between (1) *"Managers are superiors and therefore must demonstrate their superior competences in their executive work with subordinates"* (performance goal condition), (2) *"Managers are developers and therefore must keep*

developing their competences in their executive work" (mastery goal condition) or (3) *"I did not receive information with respect to a motto"* (no goal condition).

The short narratives participants wrote about their personal leadership mottos were coded by two judges who were unaware of the study's purposes and content. They independently assessed each participant's narrative on two dimensions, namely, the extent to which the narrative emphasized the importance of demonstrating leadership competences to others (performance goal dimension) and the extent to which it emphasized the importance of developing leadership competences (mastery goal dimension). The response categories ranged from 1 (*not at all*) to 5 (*very much*). Intraclass correlations were .68 and .86 for the performance goal dimension and mastery goal dimension, respectively. Measures were averaged to get a single score on each dimension.

Dependent variables. Unless otherwise indicated, all items used a Likert-type scale anchored at 1, "not at all," and 7, "very much." The presentation of the items was randomized for each scale.

Explorative interest ($\alpha = .85$) was measured using an adapted version of the situational interest subscale measurement developed by Chen, Darst, and Pangrazi (2001). The scale consisted of three items: (1) I want to get to the bottom with respect to Anne's input, (2) I like to inquire into details about Anne's input, and (3) Anne's input is interesting for me. The response categories ranged from 1 (*totally disagree*) to 7 (*totally agree*).

Oppose creative ideas ($\alpha = .75$) and **adopt creative ideas** ($\alpha = .85$) were measured using the similar scales as in Study 3.1. However, the items were now context-specific. For oppose creative ideas the items were: (1) I push my own point of view with respect to the marketing strategy, (2) I struggle to win this dispute [about the marketing strategy] with Anne, and (3) I do everything to win. For adopt creative ideas the items were: (1) I concede to Anne's ideas with respect to the marketing strategy, (2) I will sacrifice my ideas in favor of Anne's input to the marketing strategy, and (3) I will go along with Anne's input to the marketing strategy. The correlation between oppose and adopt creative ideas was $-.27$ ($p = .01$). Correlations with explorative interest were $-.36$ ($p < .001$) and $.34$ ($p < .001$) for oppose and adopt creative ideas, respectively.

Results

Manipulation checks. The achievement goal manipulation check concerned the characteristic personal motto. In both the performance goal condition and the mastery goal condition, 97 percent of the subjects indicated the correct motto, $\chi^2(1, N = 60) = 52.27, p < .001$. In addition, the narrative scores on the performance goal dimension were significantly higher in the performance goal condition ($M = 4.15, SD = .76$) than in the mastery goal condition ($M = 1.52, SD = .75$), $F(1, 58) = 183.84, p < .001, \eta_p^2 = .76$; the narrative scores on the mastery goal dimension were significantly higher in the mastery goal condition ($M = 4.80, SD = .57$) than in the performance goal condition ($M = 1.53, SD = .78$), $F(1, 58) = 346.84, p < .001, \eta_p^2 = .86$. Hence, the manipulation of achievement goals was successful.

Discriminant and convergent validity. We used confirmatory factor analysis to assess the discriminant and convergent validity of the scales for oppose and adopt creative ideas, and explorative interest. We computed parameter estimates with the LISREL 8.80 computer package, using the maximum likelihood method. We first tested a model (1) in which opposition to creative ideas, adopting creative ideas, and explorative interest items were loaded on three corresponding constructs. The overall fit of the model to the data was adequate ($\chi^2[24, N = 90] = 35.10, p = .07$, Root Mean Square Error of Approximation [RMSEA] = .07, Adjusted Goodness of Fit Index [AGFI] = .85, Goodness of Fit Index [GFI] = .92, and Comparative Fit Index [CFI] = .97). The factor loading of each item was significant at the .001 level or better.

To further evaluate the discriminant validity of our scales, we computed three alternative models: (2) a model with two underlying constructs, in which oppose creative ideas and explorative interest were collapsed into one factor, (3) a model with two underlying constructs, in which adopt creative ideas and explorative interest were collapsed together, and (4) a model with one underlying construct. The fit statistics of the second model were: $\Delta\chi^2(2) = 42.40, p < .001$, RMSEA = .15, AGFI = .72, GFI = .84, CFI = .88. For the third model: $\Delta\chi^2(2) = 72.33, p < .001$, RMSEA = .19, AGFI = .63, GFI = .79, CFI = .82. For the fourth model: $\Delta\chi^2(3) = 117.88, p < .001$, RMSEA = .23, AGFI = .54, GFI = .72, CFI = .72. These fit indices clearly show that our hypothesized three-factor measurement model (i.e. Model 1) fits our data well, and was the most appropriate for the situation under consideration.

Dependent variables. A one-way multivariate analysis of variance (MANOVA) was conducted to examine the extent to which participants with different achievement goals (performance goal vs. mastery goal vs. no goal) differed in their explorative interest and oppose and adopt responses. Table 3.3 shows that, at the multivariate level, the main effect was significant. At the univariate level, the effect was significant for adopting creative ideas and explorative interest, and marginally significant for opposing creative ideas.

Hypothesis 3 stated that performance goal leaders are more likely to oppose creative ideas than mastery goal leaders. As can be seen in Table 3.3, performance goal leaders indeed opposed the creative ideas voiced by subordinates to a greater extent than leaders in the mastery goal condition. There were no significant differences in opposition to creative ideas between the no goal condition and the performance or mastery conditions.

Hypothesis 4 stated that mastery goal leaders would to a greater extent adopt creative ideas than performance goal leaders. Again, the results (see Table 3.3) were in line with our expectation. Compared to performance goal leaders, mastery goal leaders were more likely to adopt creative ideas in response to subordinates' creative input. There was no difference between the performance goal condition and the no goal condition.

Mediating hypothesis. To test whether explorative interest mediated the effect of achievement goal (performance goal = -1, mastery goal = +1) on opposing creative ideas (*Hypothesis 5a*) and adopting creative ideas (*Hypothesis 5b*), we followed scholars recommendations to directly test the significance of the indirect effects (e.g., MacKinnon et al., 2000; Shrout & Bolger, 2002). To do so, we performed two bootstrap analyses (5000 bootstrap resamples) following the procedure outlined by Preacher and Hayes (2004, 2008). Examination of the specific indirect effect revealed that explorative interest (indirect effect = -0.10, $SE = 0.09$, 90% confidence interval: [-0.329, -0.011]) was a significant mediator between achievement goal and opposing creative ideas, because the confidence interval did not contain zero. Therefore, we found support for Hypothesis 5a. Furthermore, examination of the specific indirect effect also revealed that explorative interest (indirect effect = 0.06, $SE = 0.05$, 90% confidence interval: [0.014, 0.189]) was a significant mediator between achievement goal and adopting creative

Table 3.3

Multivariate F, Univariate F's, η^2 , Means, and Standard Deviations of Measures of Dependent Variables as a Function of Achievement Goals in Study 3.2 (N = 90)

	<i>Multivariate</i> F (6, 170)		<i>Univariate</i> F (2, 87)	Partial η^2	Goal					
					Performance (n = 30)		Mastery (n = 30)		No goal (n = 30)	
					M	SD	M	SD	M	SD
Responses	2.63*	1. Oppose creative ideas	2.58 [†]	.06	3.72 _a	1.29	3.00 _b	1.22	3.32 _{ab}	1.19
		2. Adopt creative ideas	4.54*	.10	2.73 _a	.97	3.29 _b	1.30	2.41 _a	1.13
		3. Explorative interest	3.68*	.08	5.34 _a	.74	5.77 _b	.96	5.23 _a	.68

Note. Higher values of means indicate a higher tendency of opposing creative ideas, adopting creative ideas, and higher explorative interest, respectively.

Note. Within each row, means with different subscripts differ at $p < .05$ minimally, except for adopting new ideas, $p = .06$.

[†] $p < .10$. * $p < .05$.

ideas. As this confidence interval did not include zero, we found support for Hypothesis 5b.

Conclusion and discussion

The results of Study 3.2, which are in line with findings of Study 3.1, demonstrate that leaders' achievement goals influence their tendency to oppose or adopt creative ideas voiced by subordinates. That is, leaders holding performance goals were found to be more likely to oppose voiced creative ideas than mastery goal leaders. In contrast, mastery goal leaders were more likely to adopt creative ideas than performance goal leaders. Explorative interest was found to mediate these effects of leaders' achievement goals on their oppose and adopt responses to subordinates' creative ideas.

Contrasts with the no goal condition suggest that relative to performance goals, mastery goals produce more favorable leaders' evaluations and subsequent utilization of valuable creative input voiced by subordinates. Therefore, in Study 3.3, we will investigate conditions under which performance goal leaders might be more likely to adopt new and valuable ideas voiced by subordinates rather than oppose those ideas. As the mode in which subordinates voice their creative ideas may increase or decrease performance goal leaders' sensitivity to interpersonal competence issues (Butera & Mugny, 2001), we examined, in Study 3, specific modes of voice (i.e., aggressive and considerate) as potential boundary conditions for the effects of leaders' achievement goals on their oppose and adopt responses to valuable creative ideas voiced by subordinates.

Study 3.3

Scholars distinguish different behavioral modes in which individuals can voice their concerns and opinions differing on their degree of constructiveness, namely, aggressive voice and considerate voice (e.g., Hagedoorn et al., 1999; Rubin et al., 1994; Saunders, Sheppard, Knight, & Roth, 1992). *Aggressive voice* lacks subordinates' consideration for leaders' concerns and consists of efforts to overrule the leader. *Considerate voice* consists of subordinate's attempts to solve the issue at stake considering one's own concerns and those of the leader and organization (Hagedoorn et al., 1999). We propose that *subordinates' mode of voice* (aggressive vs. considerate) may affect the oppose and adopt responses of performance goal leaders rather than mastery

goal leaders.

As performance goal leaders rely on interpersonal standards when evaluating their competence, relative competence between leader and subordinate may be considered as an important and crucial factor (Butera & Mugny, 2001). When subordinates use aggressive voice, they display efforts aimed at winning a dispute with the leader, leaving no room for leaders' concerns. Performance goal leaders might perceive such aggressive voice as a 'win-lose' frame in which they see the subordinate as a rival (Ryan & Pintrich, 1997) who challenges and threatens their superior competence as a leader (Darnon et al., 2006). Thus, aggressive voice makes performance goal leaders' tendency to focus on relative competence issues more salient. Accordingly, it strengthens these leaders' dominant reaction to defend their superior competence by opposing rather than adopting the creative ideas voiced aggressively by the subordinate. Scholars indeed show that aggressive ways of expressing oneself can evoke defensiveness as a result of a perceived threat (Penney & Spector, 2005).

In contrast, when subordinates voice creative ideas in a considerate way, they request their leader to consider the content and value of their new ideas. Such a considerate request by a subordinate confirms rather than threatens a leader's superior competence. Considerate requests acknowledge the leader's role as a superior in considering and evaluating ideas for doing things differently. Leaders might even feel strengthened in their own competence when subordinates appeal to their leader's expertise in evaluating their input. By respecting the leader's superior position and taking his or her opinion into account, considerate voice may create a more constructive foundation for discussing the content of the creative input. That is, by neutralizing the potential for competence-related conflict and focusing on the content of the ideas, considerate voice provides the leader with the opportunity to really consider the value of the creative ideas. Consequently, performance goal leaders should be less likely to oppose and more likely to adopt creative ideas when they are voiced considerately rather than aggressively.

Rather than performance goal leader, mastery goal leaders are more focused on content-related aspects of the subordinates' creative input. Given this focus on the instrumental value of the input, mastery goal leaders may not be very sensitive for and influenced by the way in which the creative input voiced by the subordinate. Mastery goal leaders are focused on learning and improving, so when the input contains

elements that can meet these demands, they are willing to use that input, regardless of the aggressive or considerate way the creative input is voiced. Therefore, we predict the following:

Hypothesis 6: Subordinates' mode of voice moderates the oppose and adopt responses of performance goal leaders rather than mastery goal leaders. Specifically, performance goal leaders are less likely to oppose and more likely to adopt creative ideas when subordinates voice them in a considerate rather than aggressive mode.

Method

Participants and design. Ninety-one Dutch business school undergraduates were given either partial course credit or €5 each for their participation. The ages of the participants ranged from 18 to 28 years, and the mean age was 20.8 years ($SD = 2.8$). Participants were randomly assigned to experimental conditions in a 2 (Achievement goal: performance vs. mastery) \times 2 (Subordinates' mode of voice: aggressive vs. considerate) between-subjects factorial design, with men ($n = 50$) and women ($n = 41$) equally divided across the conditions. Gender had no effects and is not discussed further.

Procedure. The procedure of Study 3.3 was similar to that of Study 3.2, with one crucial difference. In Study 3.3, an additional factor was included: subordinates' mode of voice. The behavioral mode in which the creative input of the third team member (Anne) was voiced to the team leader varied, thereby creating two different voice conditions. In one condition, the input was voiced aggressively, characterized by efforts to overrule the leader (*aggressive voice*). In the other condition, the input was voiced considerately, characterized by requests to the leader to consider the creative input (*considerate voice*). See Appendix C for the complete texts, where words in italics indicate the differences between the two voice conditions.

Measures

Manipulation checks. To check the achievement goal manipulation, the same characteristic personal motto check was used as in Study 3.2. Furthermore, the same procedure was used for the assessment of the short narratives participants wrote about their personal leadership mottos. Intraclass correlations were .70 for the performance goal dimension and .92 for the mastery goal dimension. Measures were averaged to get a single score on each of these dimensions.

The subordinates' mode of voice manipulation was checked by asking participants to assess the extent to which certain adjectives described the subordinates' input. For aggressive voice we used the following three adjectives ($\alpha = .86$): hostile, aggressive, and ill-mannered. For considerate voice the three adjectives were: polite, diplomatic, and respectful; $\alpha = .87$. A higher score means a higher degree of perceived aggressiveness and perceived considerateness, respectively.

Oppose creative ideas ($\alpha = .78$) and **adopt creative ideas** ($\alpha = .69$) were assessed using the same measures as in Study 3.2. The correlation between both variables was $-.36$.

Results

Manipulation checks. In the performance goal condition and the mastery goal condition, 86% and 100%, respectively, indicated the correct motto, $\chi^2(1, N = 91) = 69.60, p < .001$. In addition, the narrative scores on the performance goal dimension were significantly higher in the performance goal condition ($M = 3.91, SD = .93$) than in the mastery goal condition ($M = 1.36, SD = .46$), $F(1, 89) = 280.62, p < .001, \eta_p^2 = .76$; the narrative scores on the mastery goal dimension were significantly higher in the mastery goal condition ($M = 4.72, SD = .49$) than in the performance goal condition ($M = 1.23, SD = .50$), $F(1, 89) = 1108.74, p < .001, \eta_p^2 = .93$. These narrative scores are comparable to those found in Study 2. Hence, the manipulation of achievement goals was successful.

The participants in the aggressive voice condition ($M = 4.12, SD = 1.37$) perceived the subordinates' creative input to be more aggressive than did participants in the considerate voice condition ($M = 2.19, SD = 1.02$), $F(1, 89) = 57.86, p < .001, \eta_p^2 = .39$. Furthermore, the participants in the considerate voice condition ($M = 4.87, SD = 1.10$) perceived the subordinates' creative input to be more considerate than did participants in the aggressive voice condition ($M = 3.13, SD = 1.24$), and this difference was significant, $F(1, 89) = 50.20, p < .001, \eta_p^2 = .36$. Therefore, the manipulation of the subordinates' mode of voice was successful.

Dependent variables. A 2 (Achievement goal: performance vs. mastery) X 2 (Subordinates' mode of voice: aggressive vs. considerate) between-groups MANOVA was conducted to examine differences between the four conditions with regard to the dependent variables of resisting and adopting creative ideas. At the multivariate level, no main effect for achievement goal was found, $F(2, 86) = .41, ns$. The main effect of

subordinates' mode of voice was significant, $F(2, 86) = 3.20, p < .05, \eta_p^2 = .07$. At the univariate level a significant effect was found for opposing creative ideas, $F(1, 87) = 4.05, p < .05, \eta_p^2 = .04$, and a borderline significant effect was found for adopting creative ideas, $F(1, 87) = 3.34, p = .06, \eta_p^2 = .04$. Overall, leaders reported lower intentions to oppose creative ideas when the subordinates voiced the creative input considerately ($M = 2.89, SD = 1.15$) than when the creative input was voiced aggressively, ($M = 3.35, SD = 1.24$). Similarly, leaders reported higher intentions to adopt the creative idea when subordinates voiced the creative input considerately ($M = 3.16, SD = 1.36$) than when the creative input was voiced aggressively ($M = 2.72, SD = 1.12$). Most interestingly, we found the hypothesized interaction effects of achievement goal and subordinates' mode of voice at the multivariate level, $F(2, 86) = 3.39, p < .04, \eta_p^2 = .07$, and at the univariate level for both opposing creative ideas, $F(1, 87) = 4.28, p = .04, \eta_p^2 = .05$, and adopting creative ideas, $F(1, 87) = 3.54, p = .06, \eta_p^2 = .04$.

The means and standard deviations are presented in Table 3.4. As expected, performance goal leaders were less likely to oppose creative ideas when the creative input was voiced considerately ($M = 2.51, SD = 1.03$) rather than aggressively ($M = 3.52, SD = 1.01$), $F(1, 87) = 7.89, p < .01, \eta_p^2 = .08$. We found a similar pattern for adopting creative ideas, $F(1, 87) = 6.52, p = .01, \eta_p^2 = .07$, with performance goal leaders being more likely to adopt creative ideas when they were voiced considerately ($M = 3.49, SD = 1.44$) rather than aggressively ($M = 2.53, SD = 1.00$). No differences were found for mastery goal leaders on opposing creative ideas, $F(1, 87) < .01, ns$, and adopting creative ideas, $F(1, 87) < .01, ns$. These results are completely in line with *Hypothesis 6*.

General Discussion

We proposed and demonstrated that achievement goals influence leaders in their tendency to oppose or adopt potentially useful creative ideas proposed by their subordinates. Specifically, we showed that relative to mastery goal leaders, performance goal leaders are more likely to oppose and stick to their own established ideas at the cost of novel and valuable ideas voiced by subordinates (Studies 3.1 and 3.2). In contrast, relative to performance goal leaders, mastery goal leaders were more likely to adopt their new and valuable insights that subordinates deliver to them (Studies 3.1 and 3.2). In Study 3.2, we further showed that these effects of leaders' achievement goals on their oppose and adopt responses were mediated by leaders' explorative interest. Finally the

Table 3.4

Significant Interaction Effects of Achievement Goal (Performance vs. Mastery) and Subordinates' Mode of Voice (Aggressive vs. Considerate): Study 3.3 (N = 91)

Achievement goals	Performance				Mastery			
	Aggressive (n = 22)		Considerate (n = 21)		Aggressive (n = 24)		Considerate (n = 24)	
Subordinates' mode of voice	M	SD	M	SD	M	SD	M	SD
Dependent variables								
1. Oppose creative ideas	3.52 _a	1.01	2.51 _b	1.02	3.21 _{ab}	1.43	3.22 _{ab}	1.16
2. Adopt creative ideas	2.53 _a	1.00	3.49 _b	1.44	2.89 _{ab}	1.22	2.88 _{ab}	1.25

Note. Higher values of means indicate higher degree of opposing creative ideas and adopting creative ideas, respectively.

Note. Within each row, means with different subscripts differ at $p < .05$ minimal.

results of Study 3.3 show that subordinates' mode of voice interacts with leaders' achievement goals. That is, we demonstrated that the behavioral mode in which subordinates voice their creative ideas (aggressively or considerately) may compensate performance goal leaders' maladaptive responses to subordinates' creative input. Specifically, rather than mastery goal leaders, performance goal leaders were sensitive to subordinates' mode of voice, such that performance goal leaders responded more positively (i.e., less likely to oppose and more likely to adopt creative ideas) when the creative input was voiced considerately rather than aggressively. In other words, performance goal leaders tend to smother bottom-up creativity *only* when subordinates voice their creative input aggressively rather than considerately. Confidence in our findings is bolstered not just by the replication over studies per se but especially by the fact that the studies used different methodologies (i.e., cross-sectional survey, laboratory experiment), different samples (i.e., nonstudent leaders in organizations, students), and different sources of achievement goals (i.e., freely adopted, assigned).

Theoretical implications

The primary contribution of this study lies in providing an explanation for why leaders sometimes oppose creative ideas and other times adopt creative ideas. Our research shows that motivational drivers, that is, leaders' achievement goal, can explain differences in leaders' responses to creative ideas voiced by their subordinates. Not only does our research demonstrate that leaders' achievement goals affect their responses to subordinates' voice of creative input, it also shows that subordinates' mode of voice affect performance goal leaders in their responses. As leadership in its core is an interpersonal influence process, the current results represent, in this sense, a significant contribution to the growing field of interpersonal achievement goal research by showing that leaders' achievement goal affect leaders' task-related outcomes (cf. Poortvliet & Darnon, 2010).

Our results contribute theoretically to the creativity literature as well. Given the important role of creativity on organizational performance, scholars have produced a great deal of research in which personal and contextual factors were identified that promote and enhance employee creativity (for a review see, Oldham & Cummings, 1996; Shalley et al., 2004). An important task for organizations is to create conditions under which the creative potential of these employees can be fully utilized. In this regard, a

leader who recognizes and utilizes employee creativity might be beneficial. Although the importance of the leader role in recognizing employee creativity is acknowledged (Zhou & Woodman, 2003), scant research has actually investigated factors and conditions that determine leaders' responses to subordinates' creativity. The present research contributes to the literature by showing that achievement motivational factors affect leaders in their tendency to oppose or adopt creative ideas proposed by subordinates.

Likewise, researchers have made important strides in identifying factors that influence voice, where the majority of that research focused on antecedents of voicing 'up the hierarchy' (e.g., Burris, Detert, & Chiaburu, 2008; Detert & Burris, 2007; Tangirala & Ramanujam, 2008). The current findings move beyond merely enumerating different antecedents and investigate consequences, in terms of leaders' responses to subordinates' voice. More specifically, we identified boundary conditions under which leaders react differently to subordinates' voice of creative input. We showed that subordinates' mode of voice is a critical factor in determining leaders' oppose and adopt responses.

Finally, this research contributes to the literature of leadership behavior as well. Rather than following mainstream leadership research on how subordinates are influenced by and respond to the leader (Yukl, 2009), we focused on investigating why leaders react in different ways to subordinate creativity. As such, we contribute to an emerging line of upward leadership research documenting how subordinates affect leader reactions by engaging in proactive behavior (Grant et al., 2009), taking charge (Morrison & Phelps, 1999) or by taking initiatives (Frese & Fay, 2001). In addition, it also extends our understanding why leaders oppose and keep relying on existing thoughts and routines instead of adopting new ideas. Earlier work has identified determinants, such as a leader's tenure (Miller, 1991) and organizational tenure (Hambrick et al., 1993), but motivational factors have been largely ignored. Not only did the present research findings identify leaders' achievement goals as an important motivational factor, it also showed that subordinates' mode of voice may clarify why some leaders stay attached to the status quo and oppose bottom-up creativity, whereas others undertake adaptive measures by adopting and incorporating new ideas delivered by subordinates.

Strengths, limitations, and future research

The present study clearly has both strengths and limitations. A particular strength of Study 3.1 is the use of a sample consisting of real leaders with relevant work-experience. However, the data is cross-sectional, so no conclusions about causality can be made. To enable making causal conclusions for our observations in Study 3.1, while ruling out alternative explanations, we chose to test our hypotheses through controlled experiments in Study 3.2 and Study 3.3 (cf. Berkowitz & Donnerstein, 1982; Colquitt, 2008; Ilgen, 1986). This experimental setup, which has high internal validity, allowed us to carefully isolate the effects of different achievement goals. At the same time, we may note that not only were the results of Study 3.1 replicated in Study 3.2, but also that leadership research using similar multi-method approaches documented highly similar effects between field studies and laboratory experiments (Anderson, Lindsay, & Bushman, 1999; Mitchell, 2012). Therefore, the consistent results between our studies, while employing different methods and samples contribute to the generalizability of our outcomes, and thus can be regarded as another strength of the present research.

In this study, we focused exclusively on how achievement motivational factors in leaders would influence leader-subordinate interactions. However, this focus tells only part of the story. Besides their influence on leaders' responses to subordinates, achievement motivational factors may also influence their comparisons with peers (i.e., other leaders) or their relationship with superiors. Consequently, comparisons with other referents may lead to different responses and displays of behavior by leaders to achieve their goal. For instance, performance goal leaders, who are motivated to demonstrate superior competence relative to others, might display other behaviors to the subordinate (e.g., explicitly reject creative input) than to their superior (e.g., implicitly adopt the subordinate's creative input and exploit it). Future research may investigate the influence of achievement motivational factors on the relationship between the leader and other relevant individuals, such as peer leaders and superiors.

It is important to acknowledge that we only examined *approach* goals in this research, that is, performance-approach goals and mastery-approach goals; we have done this because approach goals have the most potential in terms of practical implications by means of achievement goal based interventions. Responses to upwardly voiced creative input, however, might also be affected by *avoidance* goals. More specifically, and in contrast to approach goals, we might expect avoidance goals to be

particularly maladaptive to voiced creative input. Avoidance goals have been negatively linked to risk-taking behavior (Jagacinski, Kumar, & Kokkinou, 2008). Therefore, we expect that in uncertain situations (e.g., changing current ways of doing things based on the suggestion of a subordinate), these individuals might overestimate the risk of creative change (Elliot & Church, 1997) and stick to the status quo.

Practical implications

Organizations, especially those that depend on creativity and innovation to survive, benefit from leaders who are able to recognize and utilize creative input that is deemed valuable for the organization. As some leaders might be more attached to their own established framework of thoughts and routines (Hambrick et al., 1993), valuable and fruitful ideas might be lost which may negatively affect organizational effectiveness. When evaluating and managing creative input delivered by subordinates, rather than performance goal leaders, mastery goal leaders are more likely to abandon their initial thoughts and adopt new ideas. The present findings suggest that organizations that create an environment in which leaders are encouraged to adopt mastery goals rather than performance goals may have an advantage in this regard (VandeWalle, 2003; VandeWalle & Cummings, 1997). As it is easier to increase mastery goals than to lower performance goals of leaders (Baranik et al., 2010), organizations should take this into account when determining the most efficient strategy to motivate leaders. One way organizations can achieve this is by using goal setting to attain desirable outcomes (Latham & Locke, 2006; Locke & Latham, 2002). That is, organizations may induce mastery goals in their leaders when they emphasize exploration and task mastery (Kozlowski & Bell, 2006). Another practical implication is that subordinates, when voicing their creative input to their leader, should make attempts to voice it considerately, rather than aggressively. That is, they should be trained to leave room for the leader to act upon their creative suggestion, and do not give signals to overrule the leader in his or her decisions, which might be the case when creative input is voiced aggressively.

The dominant view on achievement goals in the industrial-organizational psychology literature is that mastery goals are effective and desirable for task performance on the job, whereas performance goals are less beneficial or even detrimental (e.g., DeShon & Gillespie, 2005; VandeWalle et al., 2000). Contrary to this

preponderant belief, our results suggest that under certain circumstances, performance goals can be as effective and beneficial on the job as mastery goals. That is, we provide empirical evidence showing that performance goal leaders are less likely to oppose and more likely to adopt subordinates' creative ideas when the input was voiced considerately rather than aggressively. Hence, to increase the likelihood that creative ideas may be recognized and managed by leaders, organizations may provide training to subordinates in how to voice creative ideas in considerate ways and to avoid exaggerating aggressive ways of voicing ideas. In line with this suggestion, (performance goal) leaders might also be trained to focus on the content of the voiced creative input instead of focusing on the mode of voice.

Conclusion

Our research findings show that it is not only novelty and usefulness that determine whether ideas voiced by subordinates will become part of the 'legitimate' repertoire of thoughts and routines of the leader. We showed that leaders' achievement goals and the mode of voice of the creative input affect leaders' responses to valuable creative ideas. By taking these factors into account, meaningful and potentially crucial ideas for an organization's survival and prosperity may be preserved. We hope that the present study provides an impetus for further research on this topic.

THE JOINT IMPACT OF LEADERS' ACHIEVEMENT GOALS AND POSITION POWER ON THEIR INTEGRATIVE MANAGEMENT OF CREATIVE IDEAS

In the present research, we examined the joint impact of leaders' achievement goals and position power on their integrative management of creative ideas delivered either by a subordinate or a superior. In a field study ($N = 149$), we found that leaders' mastery goals, but not their performance goals, were positively related to the intention to integrate creative ideas voiced by subordinates with their own ideas. When superiors delivered the creative ideas, however, both mastery goals and performance goals were positively related to integrative idea management. Similarly, in an experimental study ($N = 94$), we found that relative to mastery goal leaders and low-power performance goal leaders, high-power performance goal leaders reported lower intentions and were less likely to actually integrate creative ideas with their own ideas.

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In the present dynamic environment of global competition, creativity – the generation of novel and useful ideas about organizational products, practices, or procedures (Shalley et al., 2004) – has become crucial for organizations to survive and prosper (Kraatz & Zajac, 2001; Mumford et al., 2002; Tushman & O'Reilly, 1997). To enhance organizational flexibility in order to meet the creativity and innovation demands, power, resources, and responsibility are more decentralized (Schilling & Steensma, 2001), which elevate the role of leaders in middle management positions (Balogun & Johnson, 2004). As these leaders connect vertically related groups (Pugh, Hickson, Hinings, & Turner, 1968), they are important linking pins for integrating creative ideas and suggestions from different hierarchical directions (Floyd & Wooldridge, 1997; Likert, 1961). Indeed, a growing body of research shows that leaders play a more important and significant role within organizations (Balogun & Johnson, 2004; Currie & Procter, 2005), also when it comes to integrating creative ideas delivered by superiors and subordinates into the current state of affairs in their managerial domain (Kanter, 1982; Nonaka, 1994).

Although creative ideas have been shown to benefit organizations in many ways (Oldham & Cummings, 1996; Shalley et al., 2004), one underexposed aspect is that creative ideas may also challenge the existing framework of thoughts and routines that is partly established by the leaders themselves (Detert & Burris, 2007). Given that leaders exert ubiquitous influence on creativity processes and outcomes in organizations (Amabile et al., 1996; Mumford et al., 2002), an important issue is to what extent leaders are able and willing to integrate creative ideas proposed by others with their own ideas. In particular, it is critical to understand why and when leaders are willing to integrate bottom-up or top-down generated creative ideas.

In the present research, we argue and demonstrate that it may not only be characteristics of creative ideas, such as novelty and usefulness (Amabile, 1988; Shalley & Gilson, 2004), that determine whether they will become part of current practices of the organization. Particularly leaders who have relatively few constraints and much freedom to act may be guided in their behavior by internal states such as goals, interests, preferences, and opinions (Guinote, 2007; Mumford et al., 2002). Based on power literature (Galinsky, Gruenfeld, & Magee, 2003; Guinote, 2007; Keltner, Gruenfeld, & Anderson, 2003), we argue that leaders in high-power positions may be more affected by internal states than leaders in low-power positions. Building on the achievement goal

approach (Elliot, 2005; Farr et al., 1993; Payne et al., 2007), we examined the impact of achievement goals as an internal motivational factor that may affect leaders' behaviors. Specifically, we focus on two distinct types of achievement goals leaders may strive for, namely, *performance goals*, which are focused on demonstrating one's competence relative to others, and *mastery goals*, which are focused on developing one's competence (Elliot & McGregor, 2001).

Accordingly, in the present research we show that leaders' willingness to integrate creative ideas might be a function of both leaders' achievement goals (see next paragraph) and their relative position power. Specifically, in a field-based survey (Study 4.1) and an experimental study (Study 4.2), we propose and test the notion that the relationship between leaders' achievement goals and integrative idea management is moderated by leaders' relative position power vis-à-vis subordinates and superiors. As such, we advance understanding of the role of leaders in organizational creativity, by providing a conceptual and empirical basis for the study of their reactions to creative input delivered by superiors and subordinates.

The Achievement Goal Approach

The achievement goal approach to achievement motivation has emerged as a highly influential framework for understanding how people define, experience, and respond to competence-relevant situations, including the workplace (Elliot, 2005). In this approach, performance goals and mastery goals have typically been portrayed, both implicitly and explicitly, as approach forms of regulation, that is, as goals directed towards attaining positive or desirable outcomes (Elliot, 2005). Also in the present research, *performance goals* reflect the desire to outperform others and to demonstrate superior competence, whereas *mastery goals* reflect the desire to develop and gain competence by acquiring new skills and mastering new situations (Elliot & McGregor, 2001; Tuckey et al., 2002). Thus, people who strive for performance goals compare their performances with those of others, thereby developing an other-referenced focus. In contrast, mastery goal individuals aim at developing their competence and tend to compare their present performance with their previous performances, and thus develop a self-referenced focus on outcomes in achievement situations (Van Yperen, 2003; Van Yperen & Orehek, in press). In Study 4.1, we measured work-specific performance goals and mastery goals among actual leaders. In Study 4.2, we assigned participants a leader

role and manipulated achievement goals.

We postulate that achievement goals affect leaders' integrative idea management, but that this relationship is moderated by leaders' relative position power vis-à-vis subordinates and superiors. For the development of our argumentation, we will first define and conceptualize the construct of position power and then discuss its interacting effects with leaders' achievement goals on leaders' integrative idea management.

Leaders and their Position Power vis-à-vis Subordinates and Superiors

Considering the importance of creativity for organizations to survive and prosper, leaders may be expected to welcome creative ideas, irrelevant whether these ideas are voiced by either subordinates or superiors. In fact, integration of information and perspectives from subordinates and superiors has been identified as a crucial basis for activities of leaders in middle management positions (Raes, Heijltjes, Glunk, & Roe, 2011). This influential role gives leaders the power to support and give attention to creative ideas, or to withhold their support, delay it, or even sabotage the idea (e.g., Floyd & Wooldridge, 1997; Guth & MacMillan, 1986; Huy, 2002). As such, by detecting novel and useful ideas and in mobilizing resources around these creative ideas, these leaders are key linking pins in the organizational hierarchy (Kanter, 1982).

In order to fulfill their integrative linking pin role, leaders need to maintain role relations with both their superiors and their subordinates (Graen, 1976). However, as middle leaders' relative position power differs in the hierarchical structure vis-à-vis subordinates and superiors, the leader-subordinate and leader-superior relations are likely to have different power dynamics as well (Festinger, 1957). Position power (or formal power), stemming from one's position in a hierarchy, is defined as the legitimate authority to control and use organizational resources and to allocate desirable and undesirable outcomes to others (Astley & Sachdeva, 1984; French & Raven, 1959; Pfeffer, 1981). It is the power an individual possesses as a result of a certain position or role (e.g., subordinate or superior) to which a predetermined specific level of power is attached (Ellyson & Dovidio, 1985). It should be noted that an actor is not 'powerful' in an absolute sense, but has power over particular others based on the interdependencies between them (Emerson, 1962; Salancik & Pfeffer, 1977).

When a subordinate voices creative input, the leader has a relative high-power position and thus can decide whether to provide or withhold resources and support to

the creative input (e.g., Detert & Burris, 2007). Moreover, according to Ridgeway and Berger (1986), leaders might attach lower competence levels to subordinates than themselves based on their higher position in the organizational hierarchy, which might influence them in their evaluations and reactions to subordinates' creative input. This is in line with research on power that shows that high-power individuals may view others in more critical, devaluing ways (Gruenfeld, Inesi, Magee, & Galinsky, 2008; Overbeck & Park, 2006). Furthermore, a vast body of literature emphasizes that power liberates people from the influence of normative pressures, leading them to guide their behavior by their own goals they strive for (Galinsky, Magee, Gruenfeld, Whitson, & Liljenquist, 2008; Guinote, 2007; Keltner et al., 2003). That is, high-power individuals have fewer constraints and greater freedom to act at will compared to low-power individuals. As high-power leaders lack constraints, they can devote their undivided attention to the pursuit of their own goals (Guinote, 2007).

Middle leaders may also receive creative ideas from their superiors. Because of their lower formal position in the organizational hierarchy, leaders may attach higher competence levels to their superiors than themselves. In turn, this may influence them in their willingness to integrate creative ideas voiced by their superiors with their own ideas. Indeed, research shows that advice is weighted more heavily when actors are relatively more experienced and knowledgeable than the decision maker (Yaniv & Kleinberger, 2000). Furthermore, superiors have relatively much formal power and control over a broad range of resources that are highly relevant for lower-level leaders (e.g., information, budget, pay, promotion, work assignments, career opportunities). Consequently, superiors have the power to reward or punish leaders (Roberto, 2003). Given this dependency of leaders toward their more powerful superior, upsetting or making a bad impression on a powerful is potentially risky (Guinote, 2007; Keltner et al., 2003). As such, low-power leaders have to take into account several constraints, like the influence and possible actions of the powerful superior. Thus, because of their dependency toward powerful superiors, low-power leaders have greater constraints and more concerns which may direct their attention away from their own goals and towards the power-related aspects of the situation (e.g., Guinote, Brown, & Fiske, 2006).

Interplay of Achievement Goals and Position Power

Based on the achievement goal literature (DeShon & Gillespie, 2005; Elliot, 2005)

and power literature (Galinsky et al., 2003; Guinote, 2007; Keltner et al., 2003), we will argue that leaders' willingness to integrate creative ideas voiced by subordinates or superiors with their own ideas is a function of leaders' achievement goals and relative position power. As leaders in high-power positions have fewer constraints and greater freedom to act at will than leaders in low-power positions (Guinote, 2007), we expect that the integrative idea management of leaders in high-power positions will be more affected by their own achievement goals.

Performance goal leaders and position power

Performance goal leaders are focused on outperforming others, and accordingly, by demonstrating their superiority (e.g., Dweck, 1986; Nicholls, 1984). Given this other-referenced focus in defining competence and evaluating performance, they might be sensitive to the predetermined specific level of power that is attached to the hierarchical position of the creative input provider (Mast, 2010). Driven by their desire to demonstrate superiority in competence-relevant leadership issues (Butera & Mugny, 2001), performance goal leaders may tend to let their own proven framework of thoughts and routines dominate over alternative ideas and approaches promoted by others. As such, integrative management of creative ideas voiced by subordinates might be perceived by performance goal leaders as a demonstration of inferior rather than superior competence. As for high-power performance goal leaders few constraints have to be taken into account (Galinsky et al., 2008), they can act in ways that help to obtain their performance goals.

In contrast, low-power performance goal leaders have more constraints to take into account when reacting to ideas provided by their superior (Galinsky et al., 2008). That is, given superior's power to reward and punish leaders (Roberto, 2003), rejecting or dismissing superior's creative input might lead to negative consequences for leaders. Furthermore, seriously considering and accepting creative ideas voiced by a powerful superior is aligned with performance goal leaders' expectations about the superiority of superior's competence attributed to his or her higher position in the formal hierarchy. Taken together, compared with high-power performance goal leaders vis-à-vis subordinates, low-power performance goal leaders may be more willing to integrate superiors' creative ideas with their own ideas.

Mastery goal leaders and position power

Mastery goal leaders are focused on developing and gaining competence by

acquiring new skills and mastering new situations (e.g., Dweck, 1986; Nicholls, 1984). Rather than an interest in evaluative information grounded in interpersonal standards, mastery goal leaders' focus is on the development of their competences as a leader itself (e.g., Butler, 1993; VandeWalle & Cummings, 1997). Given this focus on intrapersonal standards and self-development, either high or low power mastery goal leaders might view creative input as a potentially useful source of diagnostic information that may have potential for leadership development. As such, the creative input can facilitate their growth and development as a leader even though it may challenge the current state of affairs in the managerial domain they are responsible for. Their main focus will be on the content of the creative input, regardless of their own position power in relation to the creative input sender.

In addition, mastery goal leaders tend to evaluate creative input in an epistemic way (Doise & Mugny, 1984). Therefore, exploring the content and validity of creative ideas seem to be congruent with a mastery goal of further developing leadership knowledge, skills, and abilities. Driven by their desire of developing their competence, mastery goal leaders are able to take into account others' viewpoints and willing to integrate them in order to come to an optimal solution that can facilitate the pursuit of their development goals. Hence, mastery goal leaders are likely to show relatively high intentions to integrate creative ideas, irrespective of the power position of the provider of the creative idea.

In sum, we expected that relative position power of the leader (high vs. low) moderates the effects of leaders' achievement goals (performance vs. mastery) on intentions to integrate creative ideas with their own ideas. Specifically, relative to mastery goal leaders and low-power performance goal leaders vis-à-vis superiors, high-power performance goal leaders will display weaker intentions to integrate creative ideas voiced by subordinates with their own ideas.

Leaders' Integrative Intentions and Actual Integrating Behaviors

According to the theory of planned behavior (Ajzen, 1991), intentions are the primary driver of specific behaviors. Indeed, results from a meta-analysis conducted by Armitage and Connor (2001) showed that the average correlation between intentions and actual behavior was .47. This link exists across a variety of behaviors, including ethical behavior (Flannery & May, 2000), recycling (Boldero, 1995), social networking

activity (Caska, 1998), and turnover (Griffeth, Hom, & Gaertner, 2000). The relation between intention and behavior may be stronger, especially when the correspondence between them is high and the described behavior is specific rather than general (e.g., Ajzen, 1991). Accordingly, we expect intentions of leaders to integrate voiced creative ideas with their own ideas to be positively related to their actual integrative behaviors. That is, the higher leaders' intentions to integrate voiced creative ideas, the higher their actual integrative behaviors will be.

In line with these models in which intentions predict behavior (e.g., Ajzen, 1991), we expect that the interaction between achievement goals and position power will affect leaders' actual integrating behavior through its effect on leaders' integrating intentions. Specifically, we predict a pattern of mediated moderation (Edwards & Lambert, 2007; Preacher et al., 2007) indicating that the interaction effects of achievement goals and position power indirectly affect actual integrating behavior through integrating intentions (see Figure 4.1).

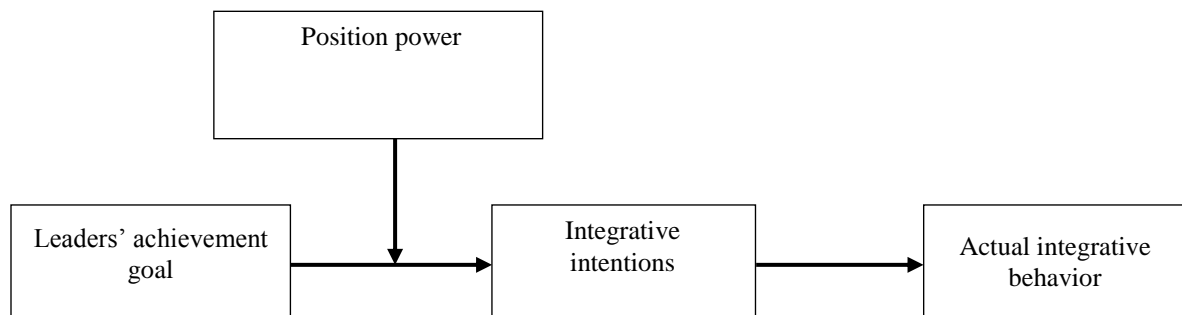


Figure 4.1. Research model Study 4.1 and Study 4.2.

Study 4.1

In Study 4.1 we tested the effect of position power on the relationship between leaders' achievement goals and their intentions to integrate creative ideas in a sample of actual leaders. As we measured leaders' achievement goals, we focus on the question how variation in strength of each of these achievement goals is related with the variation of integrative intentions. As such, we predicted that leaders' mastery goals are positively related to their intentions to integrate creative ideas voiced by subordinates or superiors with their own ideas. Furthermore, we predicted a positive relation between leaders' performance goals and their integrative intentions, but only when ideas are voiced by a superior.

Method

Participants were recruited through Amazon's Mechanical Turk (see Buhrmester et al., 2011) to complete an online questionnaire in exchange for monetary compensation. In order to get a relevant sample, a system qualification was used such that only individuals in the U.S. could participate who were in supervisory positions with at least three direct subordinates, and a direct superior. Furthermore, to assure the quality of the data, we included eleven control questions (example item: 'For this item click the 'strongly disagree' answer option') as recommended by Mason and Suri (2012). It was mentioned at the beginning of the survey that only participants who answered all control questions correctly were paid. One hundred and fifty-one participants met our requirements. We left two participants out for further analyses as their responses indicated that they did not take the survey seriously (e.g., always choosing one option). As such, our final sample was $N = 149$ (70 female, $M_{age} = 34.8$ years, $SD_{age} = 11.1$). The respondents' mean total work experience was 15.2 years ($SD = 11.4$) and mean work experience in a supervisory position was 6.6 years ($SD = 5.9$).

The questionnaire first assessed participants' achievement goals. They were then asked to think about a recent situation in which a subordinate voiced a creative idea that challenged their own established ideas after which their tendencies to integrate the creative idea with their own ideas was assessed. Next, participants were asked to think about a recent situation in which a superior voiced a creative idea that challenged their own established ideas. Participants then also had to indicate their tendencies to integrate the creative idea with their own ideas. Whether participants were first asked to think about a subordinate or the superior was randomly determined. We counterbalanced the order of the questions and included in our analyses a dummy variable to check possible order-effects. All participants answered both the questions about the subordinate and the superior.

Measures

Mastery goal ($\alpha = .85$) was measured using the three-item subscale of the achievement goal questionnaire developed by Elliot and colleagues (2011). We adapted the items to fit the work context: (1) My aim is to perform better in my work than I have done in the past, (2) In my work I am striving to do well relative to how well I have done in the past, and (3) My goal in my work is to do better than I typically do. Response

categories ranged from 1 (*not true*) to 7 (*extremely true*).

Performance goal ($\alpha = .91$) was measured using the three-item subscale of the achievement goal questionnaire (Elliot et al., 2011). Items were adapted to fit the work context of the research: (1) My aim is to outperform other colleagues in my work, (2) In my work I am striving to do well compared to other colleagues, and (3) In my work my goal is to do better than my colleagues. Response categories ranged from 1 (*not true*) to 7 (*extremely true*).

Intentions to integrate ideas was measured using three items based on the problem solving subscale of the conflict management questionnaire developed by De Dreu et al. (2001). After presenting the stem "When a subordinate/superior voices a creative idea that challenges my own established ideas, I do the following:" participants indicated the extent to which they agreed or disagreed with the following three items: (1) I examine issues until I find a solution that really satisfies me and the subordinate/superior, (2) I stand for my own and subordinate's/superior's goals and interests, and (3) I examine ideas from both sides to find a mutually optimal solution. The response categories ranged from 1 (*not at all*) to 7 (*very much*). Items were averaged to create an index for intentions to integrate ideas voiced by a subordinate ($\alpha = .84$) and intentions to integrate ideas voiced by a superior ($\alpha = .81$).

Control variables. To control for possible order effects for relative position power, we included a dummy variable for the order of the questions that let participants think about creative ideas that were voiced by a subordinate or superior.

Results

Table 4.1 displays the means, standard deviations, and correlations of the variables included in our study.

Table 4.2 presents the regression results. As expected, mastery goals were positively related to intentions to integrate ideas of subordinates, $\beta = .36, p < .001$, and superiors $\beta = .28, p = .004$. Also in line with our expectations is the finding that performance goals were positively related to intentions to integrate ideas, but only when the ideas were voiced by superiors ($\beta = .19, p = .03$). Performance goal leaders' intentions to integrate ideas were unrelated when the ideas were voiced by subordinates ($\beta = .11, p > .20$).

Table 4.1
Means, Standard Deviations, and Correlations^a

<i>Variable</i>	<i>Mean</i>	<i>SD</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>
1. Order effect ^b	-0.06	1.00				
2. Performance goal	5.35	1.32	.02			
3. Mastery goal	5.68	1.16	.01	.46***		
4. Intention to integrate ideas of subordinate	5.53	1.02	.02	.26**	.37***	
5. Intention to integrate ideas of superior	5.37	1.04	.05	.30***	.34***	.59***

^a *N* = 149.

^b Order effect coded as: -1 first questions about subordinate’s creative input followed by questions about superior’s creative input; +1 first questions about superior’s creative input followed by questions about subordinate’s creative input.

* *p* < .05; ** *p* < .01; *** *p* < .001.

Table 4.2
Results of Regression Analyses^a

Steps and Variables	<i>Intention to integrate ideas of subordinate</i>		<i>Intention to integrate ideas of superior</i>	
	1	2	1	2
1. Order effect ^b	.02	.02	.05	.04
2. Performance goal		.11		.19*
Mastery goal		.36***		.28**
ΔR^2	.00	.15***	.00	.14***
Adjusted <i>R</i> ²	-.01	.13***	-.01	.13***

^a *N* = 149. Standardized regression coefficients are reported for the respective regression steps.

^b Order effect coded as: -1 first questions about subordinate’s creative input followed by questions about superior’s creative input; +1 first questions about superior’s creative input followed by questions about subordinate’s creative input.

* *p* < .05, ** *p* < .01, *** *p* < .001.

Conclusion and discussion

The purpose of this first study was to test whether leaders' differential effects of performance goals and mastery goals on their intentions to integrate creative ideas were dependent on their relative position power. Using a sample of workers in actual leader positions, we found that both performance goals and mastery goals were positively related to their intentions to integrate creative ideas voiced by superiors with their own ideas. However, when subordinates voiced creative ideas, only mastery goal leaders were positively related to intentions to integrate those ideas. Although Study 4.1 has high external validity, it contains several limitations including its cross-sectional nature, concerns about causality, and its focus on behavioral intentions rather than actual behavior. In Study 4.2 we addressed these shortcomings.

Study 4.2

In this experimental study, in which we test the complete research model (see Figure 4.1), we experimentally induced and contrasted leaders' achievement goals and position power in order to examine their relative and interactive effects on leaders' intentions and actual behavior to integrate creative ideas voiced by a subordinate or superior with their own ideas.

Method

Participants and design. One hundred Dutch business school undergraduates (of whom 57.6% were male; $M_{age} = 20.3$, $SD_{age} = 1.9$) participated for 7 euro or partial course credit. Participants were randomly assigned to the conditions of a 2 (Achievement goal: performance vs. mastery) \times 2 (Position power: high vs. low) between-subjects factorial design. Gender had no effects and is not discussed further.

Procedure. Participants were presented with a marketing scenario. The scenario described a company that developed, produced, and sold fast food products. The participants were assigned to the role of the company's marketing manager, who was responsible for positioning and selling the fast food products on the market. It was emphasized that the manager had gained this management position in the company's hierarchy by being successful in establishing an *informational strategy* (IS). An IS contains factual and meaningful descriptions of relevant product attributes, delivered in a logical, verifiable manner to attract customers (Okazaki et al., 2010; Puto & Wells,

1984).

In the scenario, the organization had developed a new product, so-called fat-free fries, and a project team was composed to successfully introduce the product to the market. The project team consisted of three subordinates, the CEO, and the marketing manager operated as the team leader. As the team leader, the marketing manager had assigned the team members the task of developing informational sentences that could be used for applying the IS toward marketing the new product. The informative sentences developed by the team members were sent by email to the team leader in sets of three, and it was his or her task to give preference to one of these three alternatives. In actuality, the team members were nonexistent, and in their role of team leader, the participants received standardized informative sentences. Examples of three informative sentences used to stress the functionality of the product are as follows: (1) "Fat-free fries fit in a fat-free diet," (2) "Fat-free fries lead to a reduction of bad LDL cholesterol levels," and (3) "Fat-free fries contain healthy nutrients."

After they had given preference to the informative sentences sent by two subordinates, the participants received an email from a third member of the project team, named Anne (a Dutch unisex name). In the email, this team member proposed the use of another marketing strategy to introduce the new product, namely, a *transformational strategy* (TS). A TS conveys affect-based contents that associate the experience of owning or using a product with psychological characteristics, such as excitement and enjoyment (Okazaki et al., 2010; Puto & Wells, 1984). Anne's proposal of using a TS was completely different from the common, established IS propagated by the team leader to introduce new products. To advocate this novel idea of using the alternative method TS, Anne described the weaknesses of the IS and emphasized the strengths of the TS relative to the IS with regard to the marketing of the new product. Given its novelty and potential usefulness in the context of the company, Anne's proposal can be considered a creative idea for renewing the marketing strategy (Amabile, 1996; Shalley et al., 2004). The dependent variables and the manipulation checks were then assessed. Before leaving, the participants were debriefed and thanked for their participation.

Manipulations

Achievement goal manipulation. The manipulation took place after the participants had given preference to the informative sentences sent by two project team members and before they received an email message from the third member of the project team, named Anne. The participants received an email from the editor of the company's staff magazine. In this email, the participants were told that an interview held with them as the marketing manager of the company a week previously would be published in the next edition of the magazine. The interview was focused on a characteristic leadership motto held and frequently expressed by the marketing manager. The email explained the grounds for this specific leadership motto and was used to induce the achievement goal manipulation, that is, the experimental manipulation.

The manipulation consisted of three coherent aspects from which a specific achievement goal was derived. First, different information with respect to the organizational climate was given in the different achievement goal conditions. In the performance goal condition it was emphasized that the organization had a strong competitive climate continuously stimulating leaders to demonstrate their competences by performing better than others. In contrast, in the mastery goal condition it was emphasized that the organization had a strong developmental climate continuously stimulating leaders to develop their competences by gaining new knowledge and skills.

Second, the participants held and frequently expressed a personal leadership motto, which was consistent with the organizational climate. In the performance goal condition, the personal leadership motto was, *"Executives are superiors and, therefore, must demonstrate their superior competences in their executive work with others."* The motto in the mastery goal condition was, *"Executives are developers and, therefore, must keep developing their competences in their executive work."* The editor of the staff magazine asked the participants to write a short narrative in which they clearly advocated their characteristic leadership motto, and to describe their emotions and beliefs associated with it. This short narrative was intended to be placed as an introduction to the interview scheduled to be published in the next edition of the staff magazine. The participants then had unrestricted time to write their short narratives and to send them to the editor by clicking on the "send" button.

Finally, participants were assigned a specific achievement goal, which was consistent with the leader's individual motto and the organizational climate. In the *performance goal condition*, in which outperforming others was the central aim, participants were advised to demonstrate their leadership competences in their executive work with subordinates (performance goal). In contrast, in the *mastery goal condition*, in which developing own abilities was the central aim, participants were advised to develop their leadership competences in their executive work with subordinates (mastery goal). Following this stepwise achievement goal manipulation, the participants received the email from Anne.

Position power manipulation. The position of the third team member (Anne) who voiced the creative input varied, thereby creating two different position power conditions. In one condition Anne was a subordinate of the marketing manager (*high-power position condition*), whereas in the other condition Anne was the superior of the marketing manager (*low-power position condition*). To emphasize the relative position power of the marketing manager (i.e., the participants) in relation to Anne, participants were presented a picture of the hierarchy of the formal power positions. So, all participants were confronted with both linguistic and visual stimuli of their position power relative to Anne.

Measures

Achievement goal manipulation checks. In the experimental conditions, participants were asked to indicate which characteristic personal leadership motto they held as manager. Participants could choose between (1) "*Executives are superiors and, therefore, must demonstrate their superior competences in their executive work with others*" (performance goal condition), (2) "*Executives are developers and, therefore, must keep developing their competences in their executive work*" (mastery goal condition).

The short narratives participants wrote about their personal leadership mottos were coded by two judges who were unaware of the study's purposes and content. They independently assessed each participant's narrative on two dimensions, namely, the extent to which the narrative emphasized the importance of demonstrating leadership competences to others (performance goal dimension) and the extent to which it emphasized the importance of developing leadership competences (mastery goal dimension). The response categories ranged from 1 (*not at all*) to 5 (*very much*).

Intraclass correlations were .76 and .89 for the performance goal dimension and mastery goal dimension, respectively. Measures were averaged to get a single score on each dimension.

Position power manipulation check. The position power manipulation was checked by asking participants to assess the extent to which the following six words described their position in relation to Anne: inferior (R), superior, powerful, subordinate (R), powerless (R), and superordinate. A higher score means a higher degree of position power. The α coefficient for this six-item scale was .88.

Dependent variables

Intentions to integrate ideas ($\alpha = .83$) was measured using the same scale as in Study 4.1 (based on a subscale of De Dreu et al., 2001). The scale consisted of three items which were adapted to fit the research context: (1) I examine ideas until I find a solution that really satisfies me and Anne, (2) I stand for my own and Anne's opinion and interest, and (3) I examine ideas from both sides to find a mutually optimal solution. The presentation of the items was randomized. The response categories ranged from 1 (*not at all*) to 7 (*very much*).

Actual integrative behavior. After participants received the email from Anne, they had the opportunity to write a response letter by email. The response letters participants wrote were coded on the *action taken by the leader*. Two raters, who were blind to condition, individually coded each of the response letters on actions taken by the leader using a coding scheme (see Appendix D) that ranged from 1 (*does not integrate the idea with own idea*) to 5 (*does integrate the idea with own idea*). Agreement among raters was good (Cohen's $\kappa = .82$). The rating was averaged to get a measure for *actual integrative behavior*.

Results

Achievement goal manipulation checks. In the performance goal condition 88% indicated the correct personal motto; this percentage was 100% in the mastery goal condition. The six participants who indicated the incorrect motto in the performance goal condition were left out for further analysis, leaving $N = 94$. All further analyses will be conducted with this sample.

In addition, the narrative scores on the performance goal dimension were significantly higher in the performance goal condition ($M = 4.34, SD = .78$) than in the mastery goal condition ($M = 1.48, SD = .63$), $F(1, 91) = 383.01, p < .001, \eta_p^2 = .81$; the narrative scores on the mastery goal dimension were significantly higher in the mastery goal condition ($M = 4.61, SD = .62$) than in the performance goal condition ($M = 1.22, SD = .72$), $F(1, 91) = 599.65, p < .001, \eta_p^2 = .87$. Therefore, the achievement goal manipulation was successful.

Position power manipulation check. The position power manipulation check concerned scores on six words. The participants in the high position power condition ($M = 5.60, SD = .55$) perceived their power position in relation with Anne to be higher than did participants in the low position power condition ($M = 4.11, SD = .90$), and this difference was significant, $F(1, 91) = 95.12, p < .001, \eta_p^2 = .51$. Therefore, the manipulation of position power was successful.

Test of research model. We conducted a 2 (Achievement goal: performance vs. mastery) X 2 (Position power: high vs. low) univariate analysis of variance (ANOVA) with intentions to integrate as a dependent variable. No significant main effect of Achievement goal was found, $F(1, 90) = 1.11, ns$. The main effect of Position power ($F(1, 90) = 4.99, p < .03, \eta_p^2 = .05$) indicates that when the creative input was voiced by a superior, leaders reported stronger intentions to integrate ($M = 5.79, SD = .84$) than when subordinates voiced the creative input ($M = 5.33, SD = 1.26$).

More interestingly, Figure 4.2 displays the anticipated interaction effect of Achievement goal and Position power for intentions to integrate creative ideas, $F(1, 90) = 3.98, p < .05, \eta_p^2 = .04$. Planned comparisons showed that high-power performance goal leaders' intentions to integrate were lower ($M = 4.97, SD = 1.50$) relative to low-power performance goal leaders ($M = 5.90, SD = 0.78$), $t(90) = 2.87, p = .005$, high-power mastery goal leaders ($M = 5.64, SD = 0.92$), $t(90) = 2.21, p = .03$, and low-power mastery goal leaders ($M = 5.69, SD = 0.89$), $t(90) = 2.36, p = .02$. All other contrasts were not significant ($ps > .40$). These results are in line with our expectations.

Next, results of a regression analysis showed that – when controlling for achievement goal and position power (dummy-coded) – integrative intentions were a significant predictor of actual integrative behavior ($b = 0.28, \Delta R^2 = .13, p < .001$), which is in line with our research model (see Figure 4.1).

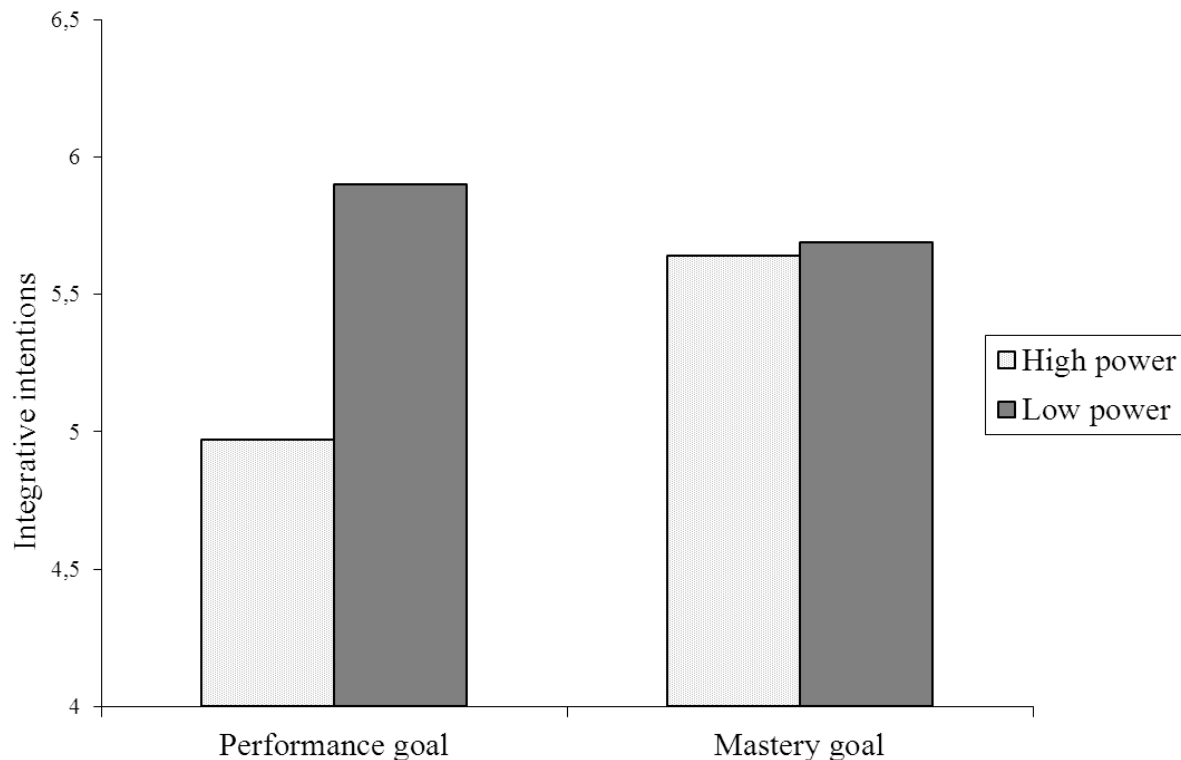


Figure 4.2. Effect of achievement goal and position power on integrative intentions.

Mediated moderation. Figure 4.1 also shows that we predicted an indirect effect from the interaction effect between achievement goals and position power on actual integrative behavior through the mediator, integrative intentions. To test this mediated moderation, we used the bootstrapping approach outlined by Preacher and colleagues (2007). Results of the mediated moderation analysis are presented in Table 4.3. The upper part of the table presents the results of the first step of the analysis wherein the mediator (integrative intentions) is regressed on the main and interaction effects of achievement goal and position power. Next, we proceeded by regressing the dependent variable (actual integrative behavior) on the main and interaction effects of achievement goal and position power, and the main effect of the mediator (integrative intentions). As can be seen in the middle part of Table 4.3, the mediator, integrative intentions, significantly predicted actual integrative behavior.

Table 4.3

Indirect Effects of Achievement Goal on Actual Integrative Behavior through Integrative Intentions (Study 4.2)

Predictor	Mediator variable model (DV = integrative intentions)			
	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Achievement goal ^a	0.12	0.11	1.05	< 0.30
Position power ^b	0.25	0.11	2.23	< 0.03
Achievement goal * Position power	-0.22	0.11	-2.00	< 0.05
	Dependent variable model (DV = actual integrative behavior)			
	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Achievement goal ^a	0.05	0.08	0.68	0.50
Position power ^b	0.21	0.08	2.60	0.01
Achievement goal * Position power	-0.02	0.08	-0.28	0.78
Integrative intentions	0.28	0.07	3.71	< 0.001
	Bootstrap indirect effect	Bootstrap <i>SE</i>	Bootstrap <i>LLCI</i>	Bootstrap <i>ULCI</i>
(- 1) Low-power position	-0.03	0.04	-0.112	0.037
(+ 1) High-power position	0.09	0.05	0.005	0.216

Note. *N* = 94. Bootstrap sample size = 5,000. Unstandardized coefficients are presented.

^a Achievement goal manipulation was coded as -1 for performance goal and +1 for mastery goal.

^b Position Power was coded as -1 for low-power position and +1 for high-power position.

As a mediated moderation model does not necessarily imply a direct effect of the interaction on the dependent variable (e.g., Edwards & Lambert, 2007; Preacher et al., 2007), we tested the indirect effects from achievement goal to actual integrative behavior for high-power position and low-power position separately. The lower part of Table 4.3 shows that the indirect effect of achievement goal on actual integrative behavior was significant for high-power position, but not significant for low-power position. These results indicate support for our research model (see Figure 4.1), such

that the indirect effect of leaders' achievement goal on actual integrative behavior through integrative intentions only emerged when leaders' power position was high. Specifically, the interaction effect between achievement goals and position power indirectly affected actual integrative behavior with lower actual integrative behavior for performance goal leaders with high-power positions.

General Discussion

The present study was conducted to demonstrate when and why leaders tend to integrate creative ideas voiced by meaningful others with their own ideas. Using a multi-method approach, we showed that the interaction of leaders' achievement goals and position power significantly influenced leaders' intentional and actual integrative idea management behaviors. In Study 4.1 we have shown that leaders' performance goals were positively related to their integrative intentions when a superior voiced the creative input, whereas leaders' mastery goals were positively related to their integrative intentions in response to creative ideas voiced by both subordinates and superiors. In Study 4.2, we replicated these findings by means of an experiment. Specifically, we found that performance goals yielded equally favorable intentions to integrate creative ideas as mastery goal leaders when a superior proposed the creative idea. However, when subordinates voiced the creative idea, performance goal leaders were showing lower intentions to integrate the creative idea than mastery goal leaders. In other words, performance goal leaders tend to smother creativity *only* when subordinates voice creative input rather than superiors. These results are in line with the idea that performance goal leaders are more sensitive to hierarchical power differences than their mastery goal counterparts (Ashford & Cummings, 1983; VandeWalle, 2003). Furthermore, as integrative intentions were predictive of actual integrative behavior, we found support for a mediated moderation model: the interaction effects of achievement goals and position power indirectly affected actual integrative behavior through integrative intentions. Confidence in our findings is bolstered not just by the replication over studies per se but especially by the fact that the studies used different methodologies (i.e., cross-sectional survey, laboratory experiment), different samples (i.e., nonstudent leaders in organizations, students), different sources of achievement goals (i.e., freely adopted, assigned), and different dependent variables (intentional behavior, actual behavior).

Theoretical implications

This study contributes to the achievement goal research in several ways. Our research shows that motivational drivers, that is, leaders' achievement goal, can explain differences in leaders' integrative behavior to creative ideas proposed by meaningful others. Most studies in the achievement goal field have focused on achievement goals at an intra-individual level (for an overview, see Elliot, 2005; Payne et al., 2007). However, scant research attention has been devoted to study the effects of achievement goals on interpersonal variables (for expectations, see Darnon et al., 2006; Poortvliet et al., 2007). Thus, in order to obtain a complete understanding of the effects of achievement goals and to give relevant advice to managers, the interpersonal effects of achievement goals should be taken into account when studying behaviors of leaders. Fortunately, scholars have become increasingly interested in the interpersonal effects of mastery and performance goals in leader-subordinate relationships (e.g., Janssen & van der Vegt, 2011; Janssen & Van Yperen, 2004). As leadership in its core is an interpersonal influence process, the current results represent a significant contribution to the growing field of interpersonal achievement goal research by showing that leaders' achievement goal affect leaders' task-related outcomes (cf. Poortvliet & Darnon, 2010).

Our results contribute theoretically to the creativity literature as well. Given the important role of creativity on organizational performance, scholars have devoted a lot of research in which personal and contextual factors were identified that promote and enhance employee creativity (for a review, see Oldham & Cummings, 1996; Shalley et al., 2004). An important task for organizations is to create conditions under which the creative potential of these employees can be fully utilized. In this regard, a leader who recognizes and utilizes employee creativity might be beneficial. Although the importance of the leader role in recognizing employee creativity is acknowledged (Zhou & Woodman, 2003), scant research actually investigated factors and conditions that determine leaders' reactions. The present research contributes to our understanding by showing that achievement motivational factors and position power affect leaders in the way they integrate and react to potentially novel and valuable ideas. It shows that novelty and usefulness are not sufficient for ideas to be considered, recognized, and finally, implemented.

Finally, our studies contribute to the literature of leadership behavior. Rather than following mainstream leadership research on how subordinates are influenced by

and respond to the leader (Yukl, 2009), we investigated the specific role leaders fulfill in organizations. More specifically, we focused on how leaders react to creative input voiced by different sources. As such, we contribute to an emerging line of leadership research documenting how leaders have to deal with different power influences. Most research on leaders' roles has investigated either their downward (Balogun & Johnson, 2004) or upward (Dutton, Ashford, O'Neill, Hayes, & Wierba, 1997; Dutton, Ashford, O'Neill, & Lawrence, 2001; Dutton & Ashford, 1993) influence. This study contributes to the literature that investigated the combination of both influences (Floyd & Lane, 2000), by demonstrating the impact motivational factors can have on leaders' upward and downward reactions.

Strengths, limitations, and future research

The present study clearly has both strengths and limitations. A particular strength of Study 4.1 is the use of a sample consisting of real leaders with relevant work-experience. However, the data is cross-sectional which does not permit causal inference, a limitation that we compensated by testing our observations in a controlled experiment in Study 4.2 (cf. Berkowitz & Donnerstein, 1982; Colquitt, 2008; Ilgen, 1986). This experimental setup, which has high internal validity, allowed us to carefully isolate the effects of different achievement goals in combination with different power positions of the leader. At the same time, we may note that not only were the results of Study 4.1 replicated in Study 4.2, but also that leadership research using similar multi-method approaches documented highly similar effects between field studies and laboratory experiments (Anderson et al., 1999; Mitchell, 2012). Therefore, the consistent results between our studies, while employing different methods and samples contribute to the generalizability of our outcomes. Finally, the inclusion of an actual behavioral measure in Study 4.2 can be regarded as another strength of the present research.

It is important to acknowledge that we only examined *approach* goals in this research, that is, performance-approach goals and mastery-approach goals. The reason is that these goals have been studied the most extensively and have been subject of most debate (cf. Hulleman et al., 2010). Responses to voiced creative input however, might also be affected by *avoidance* goals. More specifically, and in contrast to approach goals, we might expect avoidance goals to be particularly maladaptive to voiced creative input. Individuals holding avoidance goals strive to avoid detrimental outcomes (Elliot &

McGregor, 2001), and are reluctant to engage in risk-taking behavior (Jagacinski et al., 2008). Therefore, we expect that in uncertain situations (e.g., subordinate or superior suggests to change current ways of doing things), these individuals might overestimate the chance of failure (Elliot & Church, 1997) and stick to the status quo.

The purpose of the present study was to clarify why performance goal leaders and mastery goal leaders differ in their reactions to creative input. We have argued and demonstrated how achievement goals and position power jointly determine leaders' reactions to voiced creative input. However, suggestions for improvement to leaders are not exclusively reserved for *creative* input. That is, leaders can be provided with feedback on any kind of work-related matter that is not creative in nature. It is possible that the differential reactions of performance goal leaders and mastery goal leaders will also emerge in response to, for example, feedback on leadership behaviors that subordinates or superiors give to the leaders. Therefore, future research may be focused on exploring differential reactions of leaders to other kinds of voice input.

It is important to acknowledge that the present study exclusively focused on how achievement motivational factors in leaders would influence leader-subordinate and leader-superior interactions. However, achievement motivational factors may not exclusively influence leaders' reactions to subordinates and superiors; it may also influence their comparisons on the individual level (i.e., other leaders) or on the team level (i.e., other teams). Comparisons with other referents may lead to different responses and behaviors by leaders in order to achieve their goal. With comparisons on the team level, additional issues come into play that might be fundamentally different from the individual level. For instance, performance goal leaders, who are motivated to perform better than others, might display competitive behaviors to peers when an intra-team context is salient, but may cooperate with those peers if the focus is to outperform other teams or other organizations. Future research, may investigate the influence of achievement motivational factors on the relationship between the leader and relevant others.

In the current research, we investigated ideas that are novel and valuable to the organization. Our results show that performance goal leaders are sensitive to position power, and only integrate ideas proposed by superiors. For novel and valuable ideas proposed by subordinates, performance goals have detrimental effects. An interesting avenue for future research might be to investigate whether the sensitivity of

performance goal leaders to only integrate ideas of superiors might also have detrimental effects. As performance goal leaders are more focused on competence-related aspects of the idea sender, they may also integrate novel but invaluable ideas of their superiors, which may have detrimental consequences for organizations. In contrast, mastery goal leaders, who are more focused on content-related aspects, may not integrate novel and invaluable ideas, irrespective of the power position of the provider of the creative idea.

Practical implications

Organizations, especially those that depend on creativity and innovation in order to survive, benefit from leaders that are able to recognize and evaluate creative input that deems valuable for the organization. As some leaders might be more attached to their own established framework of thoughts and routines (Hambrick et al., 1993), valuable and fruitful ideas might be lost. When evaluating and managing creative input delivered by subordinates, rather than performance goal leaders, mastery goal leaders are more likely to integrate their initial thoughts with the voiced creative input. The present findings suggest that organizations that create an environment, in which leaders are encouraged to adopt mastery goals rather than performance goals, may create an advantage in this regard (VandeWalle & Cummings, 1997; VandeWalle, 2003). As it is easier to increase mastery goals than to lower performance goals of leaders (Baranik et al., 2010), organizations should take this into account when determining the most efficient strategy to motivate leaders.

The dominant view on achievement goals in the industrial-organizational psychology literature is that mastery goals are effective and desirable for task performance on the job, whereas performance goals are less beneficial or even detrimental (e.g., DeShon & Gillespie, 2005; VandeWalle et al., 2000). Contrary to this preponderant belief, our results suggest that under certain circumstances performance goals can be as effective and beneficial on the job as mastery goals. That is, we provide empirical evidence showing that performance goal leaders are more likely to use an integrative approach when the creative input was voiced by a superior rather than a subordinate.

Conclusion

Our research findings show that it is not only novelty and usefulness that determine whether voiced creative ideas will become part of the 'legitimate' repertoire of thoughts and routines of the leader. We showed that leaders' achievement goals and their relative position power also affect their reactions and behaviors to valuable creative ideas. By taking these factors into account, meaningful and potentially crucial ideas for organization's survival and prosperity may be preserved. We hope that the present study provides an impetus for further research on this topic.

CHAPTER FIVE

GENERAL DISCUSSION

“Ideas are useless unless used.”

— Theodore Levitt

“If there is a bottleneck in organizational creativity, might it be at the top of the bottle?”

— Scott Cook

Although considerable research attention has been given to the role of leaders in stimulating employee creativity, scant research attention has focused on leaders' role in evaluating creative ideas that are actually delivered by their subordinates. The Reebok example given in the introduction made it clear that it is not idea quality per se that is decisive for the reaction of the leader. In fact, in their reactions to the same creative idea, the brand manager reacted in a negative way by rejecting and neglecting the idea, whereas the managing director reacted favorably by approving and supporting the idea. The question following this example was: Why is it that some leaders give the green light to creative ideas voiced by their subordinates whereas others do not? In this dissertation we provided a partial answer to this question by showing that motivational factors crucially affect leaders in their reactions towards creative ideas that are presented to them. Specifically, in different empirical chapters we showed that leaders' achievement goals have a profound impact on their subsequent reactions and responses to voiced creative ideas. As such, we demonstrated that novelty and potential usefulness of ideas are not always enough to make ideas become adopted or implemented.

In this concluding chapter we reflect on the findings of the empirical studies that we presented in this dissertation. We will first discuss the effects leaders' achievement goals have on their subsequent reactions. Then, we will discuss when and why these effects occur. Next, we discuss the major theoretical implications of these findings and highlight several strengths of our results. However, as with all studies and research, our studies have several limitations, which we will discuss as well. We will also provide some avenues for future research. We finish this chapter by reflecting on several practical implications of our research. By doing so, we address the question how practitioners, managers or organizations may benefit from the knowledge we cumulated in this dissertation.

Effects of Leaders' Achievement Goals to Voiced Creative Ideas

Why is it that some leaders give the green light to creative ideas voiced by their subordinates whereas others do not? To provide an answer to this question, we conducted nine empirical studies on the effects of leaders' achievement goal on their reactions and responses to voiced creative ideas. Based on the achievement goal approach (Elliot, 2005), we investigated the effects of performance goals, which reflect the desire to demonstrate superior competence by outperforming others, and mastery goals, which reflect the desire to develop and gain competence by acquiring new skills and mastering new situations (Elliot & McGregor, 2001). In different empirical chapters we showed that leaders' achievement goals have a profound impact on their subsequent reactions and responses to voiced creative ideas. That is, in Chapter 2 we found in a field study (Study 2.1) and two experimental studies (Study 2.2 and Study 2.3), that in reaction to subordinates' voiced creative input, performance goal leaders were less receptive and supportive than mastery goal leaders. In Chapter 3 we further showed that leaders' achievement goals influenced their tendency to oppose or adopt potentially useful creative ideas proposed by their subordinates. Specifically, in a field study (Study 3.1) and an experimental study (Study 3.2), we showed that relative to mastery goal leaders, performance goal leaders were more likely to oppose and stick to their own established ideas at the cost of novel and valuable ideas voiced by subordinates. In contrast, relative to performance goal leaders, mastery goal leaders were more likely to adopt new and valuable ideas that subordinates deliver to them. Finally, in Chapter 4, we showed that leaders' achievement goals also affected their integrative idea management. That is, in a field study (Study 4.1) and an experimental study (Study 4.2), we found that in response to voiced creative ideas by subordinates, performance goal leaders showed lower integrative idea management behaviors than mastery goal leaders. All in all, our studies showed that leaders' achievement goals crucially influenced how leaders perceived, evaluate, and respond to creative ideas voiced by their subordinates.

Contextual and Situational Influences

As we demonstrated throughout the different chapters in this dissertation, performance goal leaders' responses to voiced creative ideas might be less effective than mastery goal leaders. However, these less effective behaviors and responses may depend on contextual and/or situational conditions. Therefore, we investigated

boundary conditions to determine under which specific conditions performance goals leaders might be as effective as mastery goals leaders in handling voiced creative ideas. By doing so, we address the question *when* performance and mastery goals influence leaders' reactions to voiced creative input.

Composition of subordinates' creative input

Subordinates' creative input usually consists of two related yet distinct basic aspects, namely, problem identification and creative ideas for problem solution (e.g., Amabile, 1996; Reiter-Palmon et al., 1997; Shalley et al., 2004). Although both aspects underlie idea generation (e.g., Amabile, 1996; Reiter-Palmon et al., 1997), they may not always be clear-cut present when subordinates actually voice their creative ideas towards the supervisor, resulting in different *compositions of subordinates' creative input*. Accordingly, in Study 2.3, we experimentally disentangled the two aspects of problem identification and creative ideas in subordinate creative input and tested their moderating role in the effects of leaders' achievement goals on their reactions to subordinate creativity. The results showed the predicted interaction between leaders' achievement goals and compositions of subordinates' creative input. Specifically, we demonstrated that performance goal leaders were less receptive and supportive than mastery goal leaders, but only when subordinates' creative input included both elements of problem identification and creative ideas for problem solution rather than solely creative ideas for problem solution. When subordinates' creative input contained only creative ideas, performance goal leaders were as receptive and supportive as mastery goal leaders. As such, the results of Study 2.3 showed that the differential reactions of performance goal leaders and mastery goal leaders observed in Studies 2.1 and 2.2, were triggered by the problem identification aspect rather than the creative idea aspect.

Subordinates' mode of voice

Besides composition of the creative input, the mode in which subordinates voice their creative ideas might also affect leaders' reactions. Therefore, in Chapter 3, we investigated the moderating effect of *subordinates' mode of voice* on the relation between leaders' achievement goals and their oppose and adopt responses. Scholars distinguish different behavioral modes of voice, namely, aggressive voice and considerate voice (e.g.,

Hagedoorn et al., 1999; Rubin et al., 1994). *Aggressive voice* lacks subordinates' consideration for leaders' concerns and consists of efforts to overrule the leader. *Considerate voice* consists of subordinates' attempts to solve the issue at stake considering one's own concerns and those of the leader and organization (Hagedoorn et al., 1999). In Study 3.3 we experimentally showed that subordinates' mode of voice interacts with leaders' achievement goals. That is, we argued and demonstrated that oppose and adopt responses of performance goal leaders, rather than mastery goal leaders, were sensitive to the behavioral mode by which subordinates voiced their creative ideas. The results of Study 3.3 indeed showed that, rather than mastery goal leaders, performance goal leaders responded more positively (i.e., less likely to oppose and more likely to adopt creative ideas) when the creative input was voiced considerately rather than aggressively. So, we demonstrated that subordinates' mode of voice is a relevant moderator and determines under which conditions performance goal leaders tend to smother bottom-up creativity.

Leaders' relative position power

In Chapter 4, we investigated the moderating effect of leaders' position power on the relation between leaders' achievement goal and their integrative idea management. As creative ideas flow from multiple directions in an organization, leaders may receive creative ideas from both supervisors and subordinates. This also means that the leaders' relative position power varies as a function of the position power of the creative input sender. We defined position power as the legitimate authority to control and use organizational resources and to allocate desirable and undesirable outcomes to others (French & Raven, 1959; Pfeffer, 1981). Accordingly, when a subordinate voices creative input, the leader has a relative high-power position, whereas the leader has relative low-power position when a superior voices creative input. As such, high-power individuals have fewer constraints and greater freedom to act at will compared to low-power individuals (Galinsky et al., 2008; Guinote, 2007; Keltner et al., 2003). In a field study (Study 4.1) and an experimental study (Study 4.2), we found that performance goal leaders yielded equally favorable intentions to integrate creative ideas as mastery goal leaders when a superior proposed the creative idea. However, when subordinates voiced the creative idea, performance goal leaders were showing lower intentions to integrate the creative idea than mastery goal leaders. In other words, performance goal

leaders tend to smother creativity only when subordinates voice creative input rather than superiors. These results are in line with the idea that performance goal leaders are more sensitive to hierarchical power differences than their mastery goal counterparts (Ashford & Cummings, 1983; Vandewalle, 2003).

Cognitive Appraisals, Explorative Interest, and Integrative Intentions as Mediators

Although we consistently show over multiple studies that leaders' achievement goals affect their subsequent reactions and behaviors, we do not yet have an answer to what the underlying processes are. Therefore, throughout the different chapters we investigated underlying processes that could clarify the found differential responses of performance goal and mastery goal leaders to subordinates' voiced creative input.

In Chapter 2 we found that performance goal leaders were less receptive to subordinates' creative input than mastery goal leaders. Based on the cognitive appraisal theory (see Lazarus, 1991, for a review), we examined appraisals of image threat and learning opportunity as potential mediators that could further clarify the found relationship. In Study 2.1 and Study 2.2 we showed that image threat appraisal and learning opportunity appraisal mediated the relation between achievement goals and receptiveness but in different ways. Image threat appraisal –the risk that impressions and perceptions that leaders prefer others to have about their leadership competence may be damaged (Ashford et al., 2003; Yuan & Woodman, 2010)– was a significant mediator for performance goal leaders. For mastery goal leaders, however, learning opportunity appraisal –leaders perceived possibilities to acquire new knowledge, skills, or abilities that are relevant for their leadership competence– and image threat appraisal were significant mediators.

In Study 3.2, we showed that leaders' explorative interest was a significant mediator that explained the differences in performance and mastery goal leaders' oppose and adopt responses to subordinates' creative input. We found that, in response to voiced creative ideas, performance goal leaders showed relative low levels of interest in exploring the potential usefulness of the voiced creative idea, whereas mastery goal leaders displayed relative high levels of explorative interest. Accordingly, this disparity in explorative interest explained why mastery goal leaders were more likely to adopt creative ideas than performance goals leaders. Furthermore, is also explained why, rather than mastery goal leaders, performance goal leaders were more likely to oppose

voiced creative ideas.

Finally, in Chapter 4, we investigated why some leaders are willing to integrate creative ideas voiced by meaningful others with their own framework of ideas, whereas other leaders do not want to integrate those new and useful ideas. We also investigated whether integrative intentions were predictive of actual integrative behavior. According to the theory of planned behavior (Ajzen, 1991), intentions are the primary driver of specific behaviors. As such, we expected intentions of leaders to integrate voiced creative ideas with their own ideas to be positively related to their actual integrative behaviors. In Study 4.2, we found support for a mediated moderation model: the interaction effects of achievement goals and position power indirectly affected actual integrative behavior through integrative intentions.

Theoretical Implications

The research presented in this dissertation makes several noteworthy contributions relevant to research in several domains. In this section we mention the most important contributions.

Interpersonal effects of achievement goals

Our research findings contribute and extend previous achievement goal research in several ways. Most studies in the achievement goal field have focused on the effects of achievement goals at an intra-individual level (for an overview, see Elliot, 2005; Payne et al., 2007). That is, they pitted mastery and performance goals against each other to see which yield most beneficial effects and should therefore be promoted in achievement situations (e.g., Elliot, 2005). However, an important outcome criterion of achievement goals that has so far received scant research attention is interpersonal behavior. This is remarkable given that achievement situations, like the workplace, are often characterized by the presence of peers, colleagues, rivals or leaders. In these achievement situations individuals depend in various ways on others to accomplish their goals (cf. Poortvliet & Darnon, 2010). Thus, in order to obtain a complete understanding of the effects of achievement goals and to give relevant advice to managers, the interpersonal effects of achievement goals should be taken into account when studying behaviors of leaders. As leadership in its core is an interpersonal influence process, the current results represent, in this sense, a significant contribution

to the growing field of interpersonal achievement goal research by showing that leaders' achievement goals affect their responses to creative ideas voiced by their subordinates.

Specifically, based on the achievement goal approach to achievement motivation (e.g., DeShon & Gillespie, 2005; Elliot, 2005; Farr et al., 1993; Payne et al., 2007), we showed that performance goals and mastery goals induce different perceptual-cognitive frameworks through which leaders respond to subordinates' creative ideas in different ways. When subordinates express creative ideas to their leaders, they in fact give feedback information about (potential) problems in the leaders' managerial domain combined with new suggestions for problem solution and improvements. As such, this feedback information often holds both instrumental and evaluative information for the leader. Instrumental information helps individuals to achieve their goals and to regulate their behavior, whereas evaluative information directly references the self and conflicts with the desire to protect one's self-esteem or ego (e.g., Ashford, 1986; Ashford et al., 2003). Achievement goals may cause leaders to focus on either the instrumental or the evaluative feedback information inherently associated with subordinates' creative input (e.g., Brett & VandeWalle, 1999; Farr et al., 1993). Given the disparity in focus between performance goal leaders, who are driven by their desire to demonstrate superior competence to subordinates, and mastery goal leaders, who are driven by a desire to develop their managerial competence, we expected different evaluations and subsequent reactions to subordinates' creative ideas.

In fact, throughout the different chapters of this dissertation, we showed that these different achievement goals led to different response outcomes. That is, in Chapter 2 we found that in reaction to subordinates' voiced creative input, performance goal leaders were less receptive and supportive than mastery goal leaders. In Chapter 3 we further showed that performance goal leaders were less likely to adopt and more likely to oppose voiced creative ideas than mastery goal leaders. Finally, in Chapter 4, we showed that performance goal leaders showed lower integrative idea management behaviors than mastery goal leaders. All in all, our studies show that individual achievement goals have important interpersonal effects in social achievement settings, like the workplace.

As our results can meaningfully explain differential reactions of leaders to employee creativity, these findings amend to the emerging line of research focusing on the interpersonal meaning of achievement goals (e.g., Darnon et al., 2006; Poortvliet &

Darnon, 2010; Poortvliet et al., 2007; VandeWalle, 2003), and more specially to the interpersonal effects of mastery and performance goals in leader-subordinate relationships (e.g., Janssen & van der Vegt, 2011; Janssen & Van Yperen, 2004). In three empirical chapters we provided theoretical logic and experimental evidence showing that leaders' achievement goals are related to how they approach, interpret, and react to creative ideas voiced by their subordinates. Thus, our findings contribute to a better understanding of when, why, and how performance and mastery goals influence leaders' reactions to subordinates' creative input.

Implications for the innovation and creativity literature

Our results contribute theoretically to the innovation and creativity literature as well. That is, the present findings provide new insights into the meaning of leaders' achievement goals for the management of subordinates' creative input. Given the importance of employee creativity for organizational performance, survival and prosperity, scholars have devoted a lot of research to identify factors that promote and enhance employee creativity (for reviews, see George & Zhou, 2007; Oldham & Cummings, 1996; Shalley et al., 2004). Employee creativity has been studied with respect to personal characteristics (Amabile, 1983; Tierney & Farmer, 2002), like personality (e.g., Oldham & Cummings, 1996; Zhou & Oldham, 2001) and cognitive style (e.g., Amabile, 1996; Woodman et al., 1993). Furthermore, contextual characteristics have also been studied extensively (Amabile, 1996; Oldham & Cummings, 1996; Shalley, 1991), like job complexity (e.g., Oldham & Cummings, 1996; Tierney & Farmer, 2002), relationship with supervisors (e.g., Madjar et al., 2002; Shalley & Gilson, 2004; Zhou & George, 2003), and judgmental and developmental evaluations (e.g., Shalley & Perry-Smith, 2001; Zhou, 1998). This body of work has provided valuable insights into personal and contextual factors, and their interactions, that shape the production of creative ideas in organizations. However, an additional and important task for organizations is to create conditions under which the creative potential of these employees can be fully utilized and implemented.

In this regard, although the importance of the leader role in recognizing employee creativity is acknowledged (Zhou & Woodman, 2003), scant research has actually investigated factors and conditions that determine leaders' responses to subordinates' creativity. Our results show that leaders' achievement goal, as a

motivational factor, crucially affect leader reactions to subordinates' creative ideas. This is an important contribution to the innovation and creativity literature as it highlights the importance of leaders' evaluating role when it comes to employee creativity. Furthermore, these results show that novelty and usefulness are not sufficient for ideas to be retained by the leader. This is in line with recent studies showing that the generation of creative ideas is no guarantee for their implementation (Sohn & Jung, 2010). As such, a recent study by Baer (2012) demonstrated that the chances for successful implementation of creative ideas significantly improve when individuals are highly motivated to put ideas into practice (i.e. implementation instrumentality) and when they are skilled networkers. So, although the generation of creative ideas is a prerequisite for idea implementation, the implementation of these ideas is not as straightforward as one might expect (e.g., Levitt, 1963; West, 2002). Our results add to this insight, as we show that leaders' motivation affect leaders' evaluation and judgment of creative ideas voiced by their subordinates, and consequently determines the way they (behaviorally) react to these ideas. As such, the investigation of achievement goals as a factor that affects leaders' evaluation and reaction to employee creativity contributes to a better understanding why some leaders tend to react in positive ways to creative ideas, whereas other leaders nip those ideas in the bud. In Study 2.3, we showed that composition of subordinates' creative input is an important boundary condition for leaders' receptiveness and support to voiced creative ideas. Specifically, we demonstrated that performance goal leaders were less receptive and supportive than mastery goal leaders, but only when subordinates' creative input included both elements of problem identification and creative ideas for problem solution rather than solely creative ideas for problem solution.

Implications for voice literature

Third, we contribute to an emerging line of research documenting how subordinates affect leader reactions by engaging in proactive behavior (Grant et al., 2009), taking charge (Morrison & Phelps, 1999), or taking initiative (Frese & Fay, 2001). Scholars have made important strides in identifying factors that influence voice, where the majority of that research focused on antecedents of voicing 'up the hierarchy' (Burriss et al., 2008; Detert & Burriss, 2007; Tangirala & Ramanujam, 2008). The current findings move beyond merely enumerating different antecedents and investigate consequences,

in terms of leaders' responses to subordinates' voice. That is, motivational and situational variables were investigated that may have affected the behaviors of leaders in their interactions with subordinates. We found that, relative to performance goal leaders, mastery goal leaders were more likely to support, adopt and integrate, and less likely to oppose creative ideas voiced by subordinates. However, we identified boundary conditions under which leaders react differently to subordinates' voice of creative input. In Study 3.3, we showed that subordinates' mode of voice is a critical factor in determining leaders' oppose and adopt responses. We demonstrated that the behavioral mode in which subordinates voice their creative ideas (aggressively or considerately) may compensate performance goal leaders' maladaptive responses to subordinates' creative input. Specifically, rather than mastery goal leaders, performance goal leaders were sensitive to subordinates' mode of voice, such that performance goal leaders responded more positively (i.e., less likely to oppose and more likely to adopt creative ideas) when the creative input was voiced considerately rather than aggressively. In other words, performance goal leaders tend to smother bottom-up creativity when subordinates voice their creative input aggressively rather than considerately.

Implications for the feedback literature

Fourth, our research findings contribute to the feedback literature by focusing on feedback imposed on leaders by subordinates, rather than sought by leaders from subordinates, or imposed on subordinates by leaders. Ample research in the feedback domain has been conducted by investigating the fundamentals of feedback-seeking behavior by leaders: the antecedents of seeking, the motives for seeking, and the outcomes of seeking (e.g., Ashford et al., 2003; Ashford & Cummings, 1983; Ashford & Tsui, 1991; VandeWalle, 2003). Similarly, most research has concerned top-down feedback instead of bottom-up feedback (e.g., Ashford et al., 2003; VandeWalle, 2003). In the present study, we aimed to develop and investigate a new leadership research approach in which creativity-focused feedback was provided rather than sought, and in which the feedback was bottom-up rather than top-down. Note, however, that in Chapter 4 we also included feedback that was provided by superiors. Nevertheless, the results of our studies show that leaders' interpretation of and reactions to creativity-related feedback information provided by subordinates were substantially dependent on the nature of the leaders' achievement goals. That is, we showed that, rather than

mastery goal leaders, performance goal leaders were less receptive and supportive to voiced creative ideas (Chapter 2), they were more likely to oppose and less likely to adopt voiced creative ideas (Chapter 3), and were less likely to integrate voiced creative ideas of subordinates with their own ideas (Chapter 4).

Implications for the leadership literature

Finally, this research contributes to the literature of leadership behavior as well. Rather than following mainstream leadership research on how subordinates are influenced by and respond to the leader (Yukl, 2009), we focused on investigating why leaders react in different ways to subordinate creativity. As such, we contribute to an emerging line of upward leadership research documenting how subordinates affect leader reactions by engaging in voice behavior (e.g., Grant et al., 2009; Morrison & Phelps, 1999). The results of Chapter 4 show the relevance to distinguish between upward and downward leadership as leader reactions and responses might differ significantly. Specifically, in Study 4.2 we demonstrated that performance goal leaders were showing lower intentions to integrate the creative idea than mastery goal leaders when subordinates voiced the creative ideas. However, when a superior proposed the creative ideas, performance goals leaders yielded equally favorable intentions to integrate creative ideas as mastery goals leaders. In addition, the results of our studies also extend our understanding why leaders oppose and keep relying on existing thoughts and routines instead of adopting new ideas. Earlier work has identified determinants, such as a leader's tenure (Miller, 1991) and organizational tenure (Hambrick et al., 1993), but motivational factors have been largely ignored. Not only did the present research findings identify leaders' achievement goals as an important motivational factor, it also showed that composition of subordinates' creative input (Chapter 2), subordinates' mode of voice (Chapter 3) and position power of creative input sender (Chapter 4) may clarify why some leaders stay attached to the status quo and nip ideas in the bud, whereas others react in positive and supportive ways by incorporating creative ideas delivered by subordinates with their own ideas.

Strengths, Limitations and Future Research Directions

In this section we will discuss the most important strengths, limitations, and avenues for future research. A particular strength of this dissertation is the use of

different methodologies (i.e., cross-sectional survey, laboratory experiment), different samples (i.e., nonstudent leaders in organizations, students), and different sources of achievement goals (i.e., freely adopted, experimentally induced) in each chapter. As such, we were able to compensate weaknesses of one study with the strengths of another by following a full-cycle research approach (Chatman & Flynn, 2005). In every empirical chapter we conducted a field-based study (Study 2.1, Study 3.1, and Study 4.1) with actual leaders who had relevant work experience in real organizations. Although these studies have high external validity, they have also several limitations, including concerns about reverse causality and limitations of internal validity. Therefore, in every empirical chapter we also tested our hypotheses using controlled experiments (Studies 2.2 and 2.3; Studies 3.2 and 3.3; Study 4.2) to compensate for these shortcomings (cf. Berkowitz & Donnerstein, 1982; Colquitt, 2008; Ilgen, 1986). These experimental setups, which have high internal validity, allowed us to carefully isolate the effects of different achievement goals in combination with different moderators. That is, in Chapter 2, different aspects of subordinates' creative input were investigated and were found to interact with leaders' achievement goals. The results clarified why some leaders tend to be receptive to and supportive of subordinates' creative input, whereas others are not. In Chapter 3 we showed that subordinates' mode of voice interacts with leaders' achievement goals. Finally, in Chapter 4 we demonstrated that the relationship between leaders' achievement goals and integrative idea management was moderated by leaders' relative power position. As mentioned before, we combined field-based studies and experimental studies. The consistent results between our studies, while employing different methods and samples contribute to the generalizability of our outcomes, and thus can be regarded as a strength of the present dissertation. Furthermore, these results add to and are in line with other (leadership) research that uses similar multi-method approaches and documented highly similar effects between field studies and laboratory experiments (Anderson et al., 1999; Mitchell, 2012).

Despite several desirable features (e.g., different methodologies, different samples, and different sources of achievement goals), the present research has limitations leading to unanswered questions, and thus providing opportunities for future research. First, it is important to acknowledge that we only examined approach goals in the different chapters, that is, performance-approach goals and mastery-approach goals. The reason is that these goals have been studied the most extensively

and have been subject of most debate (cf. Hulleman et al., 2010). Responses to voiced creative input however, might also be affected by avoidance goals. More specifically, and in contrast to approach goals, we might expect avoidance goals to be particularly maladaptive to voiced creative input. Individuals holding avoidance goals strive to avoid detrimental outcomes (Elliot & McGregor, 2001), and are reluctant to engage in risk-taking behavior (Jagacinski et al., 2008). Therefore, we expect that in uncertain situations (e.g., subordinate or superior suggests to change current ways of doing things), these individuals might overestimate the chance of failure (Elliot & Church, 1997) and stick to the status quo.

Second, although creativity usually encompasses the two basic elements of problem identification and creative ideas for problem solution, identifying and upwardly voicing problems to leaders is not exclusively reserved for subordinates' creative input. That is, subordinates can provide leaders with feedback on any kind of work-related matter that is not creative in nature but does include problem identifications that can be interpreted as instrumental or evaluative in nature. It is possible that the differential reactions of performance goal leaders and mastery goal leaders will also emerge in response to, for example, feedback on leadership behaviors that subordinates give to their leaders. Therefore, future research may be focused on exploring differential reactions of leaders to other kinds of subordinate input.

Third, it is important to acknowledge that the present dissertation was focused exclusively on how achievement motivational factors in leaders would influence leader-subordinate interactions. However, achievement goals may not exclusively influence leaders' reactions to subordinates; it may also influence their comparisons with peers (i.e., other leaders), or influence their comparisons on the team level (i.e., other teams). First, comparisons with other referents may lead to different responses and behaviors by leaders in order to achieve their goal. In that sense, the results of Chapter 4 provide initial evidence for this suggestion. We found that performance goal leaders, who are motivated to perform better than others, exhibited different behaviors to their subordinate (i.e., reject creative input) than to their superior (i.e., integrate creative input with their own ideas). Related to this, although we demonstrated in several studies that performance goal leaders reacted in less positive ways than mastery goal leaders, we do not know whether they will use (parts of) subordinates' voiced creative ideas. For example, it might be that performance goal leaders might explicitly reject

creative input, but implicitly adopt the voiced creative ideas and show off with it to their superiors. Future research is necessary to investigate these questions and to disclose underlying processes why these leaders may react so differently. Second, with comparisons at the team level, additional issues come into play that might be fundamentally different from the individual level. For instance, performance goal leaders, who are motivated to perform better than others, might display competitive behaviors to peers when an intra-team context is salient, but may cooperate with those peers if the focus is to outperform other teams or other organizations. Future research, may investigate the influence of achievement motivational factors on the relationship between the leader and relevant others.

We investigated ideas that are novel and valuable to the organization. In Chapter 4, we showed that performance goal leaders are sensitive to position power, and only integrate ideas proposed by superiors. For novel and valuable ideas proposed by subordinates, performance goals have detrimental effects. An interesting avenue for future research might be to investigate whether the sensitivity of performance goal leaders to only integrate ideas of superiors might also have detrimental effects. As performance goal leaders are more focused on the relative power status of the idea sender, they may also integrate novel but invaluable ideas of their superiors, which may have detrimental consequences for organizations. In contrast, mastery goal leaders, who are more focused on content-related aspects of the creative input, may be less susceptible to integrating novel and invaluable ideas, irrespective of the power position of the provider of the creative idea.

Our research focused on leaders' reactions to creative ideas that have been generated, but not yet implemented. Yet, the suggestion to promote mastery goals and discourage performance goals may be too simplistic and even unwarranted. It might be possible that different achievement goals serve different purposes in the different stages of organizational creativity and innovation processes. Creative idea generation and evaluation may indeed thrive when leaders hold mastery goals. However, creative performance in organizations also requires the ability to determine which ideas should be selected and implemented in practice (Amabile, 1988; Reiter-Palmon & Illies, 2004). As the selection and implementation of ideas are more convergent rather than divergent processes (Charles & Runco, 2001), performance goals might be more effective at these stages. It is possible that leaders need both mastery goals and performance goals to

effectively manage the complex process of organizational creativity and innovation (e.g., DeShon & Gillespie, 2005). So, an interesting question is whether individuals alternate between goals states during different stages of the organizational creativity process. Therefore, we encourage use of a multiple goal perspective (Barron & Harackiewicz, 2001) in future research to investigate the simultaneous or sequential use of multiple achievement goals across different stages of creativity and innovation.

Although the focus of this dissertation was to investigate the role of leaders' achievement goals, it may not be the only relevant factor that might affect leaders' responses. Financial circumstances, the extent to which creative ideas do fit with the mission and strategy of the organization, and formal idea management procedures might also be reasons that a leader needs to take into account when deciding to act upon creative ideas or not.

Practical Implications

Organizations, especially those that depend on creativity and innovation to survive, benefit from leaders who are able to recognize and utilize creative input that is deemed valuable for the organization. As some leaders might be more attached to their own established framework of thoughts and routines (Hambrick et al., 1993), valuable and fruitful ideas might be lost which may negatively affect organizational effectiveness. It is therefore interesting and important to determine whether performance or mastery goal leaders are more beneficial for organizations. In Studies 2.1 and 2.2 we showed that mastery goal leaders were more receptive of and more supportive to voiced creative ideas than performance goal leaders. Similarly, in Studies 3.1 and 3.2 we found that in evaluating and managing creative input delivered by subordinates, rather than performance goal leaders, mastery goal leaders are more likely to abandon their initial thoughts and adopt creative ideas and oppose less. Likewise, in Studies 4.1 and 4.2, we showed that, rather than performance goal leaders, mastery goal leaders are more likely to integrate their initial thoughts with the voiced creative input. These results are in line with the findings of prior field research (Janssen & Van Yperen, 2004; VandeWalle et al., 1999), suggesting that performance goals might be less effective on the leadership job than mastery goals.

Accordingly, these outcomes suggest that organizations that create an environment in which leaders are encouraged to adopt mastery goals rather than

performance goals may have an advantage in this regard (VandeWalle, 2003; VandeWalle & Cummings, 1997). However, in determining fruitful strategies to motivate leaders, organizations should take into account that it is easier to increase mastery goals than to lower performance goals of leaders (Baranik et al., 2010). One way organizations may induce mastery goals in their employees is by emphasizing a work climate characterized by a strong focus on effort, exploration, learning from errors, competence and skill development, and task mastery (Ames, 1992; Kozlowski & Bell, 2006).

Although the results of our studies are in line with the dominant view on achievement goals in the industrial-organizational psychology literature in which mastery goals are effective and desirable for task performance on the job, whereas performance goals are less beneficial or even detrimental (e.g., DeShon & Gillespie, 2005; VandeWalle et al., 2000), results from our studies also suggest that under certain circumstances, performance goals can be as effective and beneficial on the job as mastery goals. Specifically, in Chapter 2 we showed that the problem identification aspect that is part of the composition of subordinates' creative input was identified to negatively affect performance goal leaders' receptiveness to subordinates' creative input. That is, in Study 2.3, different compositions of subordinates' input were investigated and were found to interact with leaders' achievement goals. We demonstrated that performance goal leaders were as receptive as mastery goal leaders when subordinates' creative input included solely creative ideas for problem solution and not problem identifications. Furthermore, in Chapter 3 we showed that subordinates' mode of voice interacts with leaders' achievement goals. In Study 3.3, we demonstrated that the behavioral mode in which subordinates voice their creative ideas (aggressively or considerately) may compensate performance goal leaders' maladaptive responses to subordinates' creative input. That is, we provided empirical evidence showing that performance goal leaders are less likely to oppose and more likely to adopt subordinates' creative ideas when the input was voiced considerately rather than aggressively. Finally, in Study 4.2 we showed that performance goals yielded equally favorable intentions to integrate creative ideas with their own ideas as mastery goal leaders when a superior proposed the creative idea. So, throughout the different chapters of this dissertation, we provided empirical evidence that specifies in which situations, and why, performance goal leaders are as effective and desirable for task performance on the job as mastery goal leaders.

Based on these boundary conditions, a practical implication is that subordinates, when proposing their creative input to (performance goal) leaders, should focus on voicing their new and potentially useful ideas rather than overemphasizing the problems that triggered their engagement in generating ideas (Chapter 2). Based on the outcomes of Chapter 3, organizations may provide training to subordinates in how to voice creative ideas in considerate ways and to avoid exaggerating aggressive ways of voicing ideas. In line with this suggestion, (performance goal) leaders might also be trained to focus on the content of the voiced creative input instead of focusing on the mode of voice.

Finally, it is important to investigate determinants of leaders' responses to voiced creative ideas for multiple reasons. First, why encouraging and increasing employee creativity when leaders are not effective managers of the creative ideas that employees produce? In this sense, fostering employee creativity is a waste of resources if leaders fail to utilize those creative ideas. Second, when (performance goal) leaders repeatedly fail to be receptive to, and supportive of, subordinates' creative input, they are likely to be seen as unapproachable and unresponsive, and may thus frustrate subordinates in their efforts to bring in new creative input. Furthermore, if subordinates perceive that leaders are too convinced of the rightness of their own ideas, the former may lose their motivation to generate and provide creative input (House & Howell, 1992). Failing to provide attention to creative ideas of subordinates might lead to several negative outcomes for employees, like demotivation, detachment, and reduced employee well-being. Eventually, this might result in employees to leave the organization, which is likely to result in a substantial loss of creative potential for the organization. As such, failing to recognize and act upon creative ideas voiced by employees might not only lead to negative outcomes for employees, but for organizations as well.

In contrast, when subordinates feel that their contributions are valued by the leader, their motivation and the effort they put into making creative suggestions and carrying out creative activities in the workplace are likely to be maintained or enhanced (Grant, 2008; Grant & Gino, 2010; Janssen, 2005). Accordingly, employees who feel that their contributions are valued might experience less stress which might result in better employee well-being and motivation. Furthermore, leader behaviors indicating receptiveness to, and support of, subordinates' creative input decrease the salience of the power differential between leaders and subordinates in such a way that employees

perceive few potential costs from raising potentially risky ideas (Edmondson, 2003), which may be beneficial for the organization.

Concluding Remark

This dissertation started with an example of employee creativity at Reebok and with the question why some leaders give the green light to creative ideas voiced by their subordinates whereas others do not. The results presented in this dissertation show that achievement goals of leaders as a motivational construct critically affect their reactions. That is, we show that achievement goals may crucially influence how leaders perceive, evaluate, and respond to creative ideas voiced by their subordinates. As such, the current findings lay a foundation of empirical and experimental evidence for the influential role of achievement motivational factors in leader perceptions and responses to subordinate creativity, and provide a platform for further research on this intriguing and important managerial issue.

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APPENDICES

Appendix A: Script of Creative Input Email

[Problem identification aspect]

Thinking about the introduction of the new revolutionary product, non-fat chips, I'm convinced the Informational Strategy will not generate the best results. Non-fat chips are a product with no specific external characteristics. Hence, consumers will have a hard time to distinguish the non-fat chips from the other chips products. The Informational Strategy focuses on technical, sometimes 'invisible' characteristics of the product. As such the new product will not stand out and attract the attention of consumers. In my opinion the Informational Strategy is not the best blue print for this campaign and I doubt the strategy will lead the way to success.

This is why I wish to present an alternative strategy. I took the liberty to send it to you in attachment.

[Creative idea for problem solution aspect]

In my opinion the campaign should focus on the emotion we want the non-fat chips to evoke. I'd start with a catching slogan that plays on the emotion of the consumer and stresses the distinctive features of the non-fat chips. Combining the slogan with a specific tune, the recognition and familiarity with the product will quickly increase. A few examples:

- Even the most sever diet allows our non-fat chips!
- Eating the most tasteful chips of the world, without a bad conscious!
- As tasteful as ever, as fat-free as never before!

An important advantage of the **Transformational Strategy** is the possibility to integrate the important social values of our society. This will allow us to stress both a healthy lifestyle and the joy of eating. Using the Transformational Strategy, it will be a lot easier to create a positive image for our non-fat chips.

I expect the use of the Transformational Strategy and the elements mentioned above will be more effective than the Informational Strategy.

Appendix B: Scripts for Achievement Goal Manipulations

Performance goal condition

As you know, you're considered to be the prototypical example of the **competitive climate** that characterizes our company. Within this strong **competitive climate** a leader such as you are is forced to show what he or she is worth on a daily basis by making your competencies visible to others and performing better than others.

Within this **highly competitive climate** you have succeeded in demonstrating your leadership capacities from day one, and proved yourself using your excellent qualities and skills. This is how you gradually climbed the hierarchical ladder within the organization and ended up being the chief of our marketing department. Your motto is "**Managers are superiors and, therefore, must demonstrate their superior competences in their executive work with subordinates**". This statement stresses your vision on leadership: the only way you can be a successful leader is when you show your superior knowledge and skills as a marketer and manager within the context of your daily work and interaction with others. Being superior, you need to excel; and in your position as a manager you need to prove your superior competencies to others.

Mastery goal condition

As you know, you're considered to be the prototypical example of the developmental climate that characterizes our company. Within this strong **developmental climate** a leader such as you are is forced to keep developing your competencies and, if possible, keep improving your results.

Within this **highly developmental climate** you have succeeded in continuously improving your leadership capacities and raised your own qualities and skills in your work with others to a higher level. This is how you gradually climbed the hierarchical ladder within the organization and ended up being the chief of our marketing department. Your motto is "**Managers are developers and, therefore, must keep developing their competences in their executive work**". This statement stresses your vision on leadership: the only way you can be a successful leader is when you keep developing your own knowledge and skills as a marketer and manager within the context of your daily work and interaction with others. As a developer, you need to keep

learning; and in your position as a manager you need to keep developing and improving your own competencies and those of others.

No goal condition

One of the recent developments within the company is the outsourcing of several services to India and the Philippine Islands. The main reason for this evolution is the lower staff costs in these countries.

The several customer services are good examples. For instance, when you call the help desk of an organization it is quite possible you will end up talking to a person in India or the Philippine Islands. We will devote special attention to this topic in the upcoming edition of the staff magazine. In preparation for the article we are asking several managers to give us their opinion on the topic. You are one of them.

Appendix C: Subordinates' Mode of Voice Manipulation

Aggressive Voice Condition

I think it is ridiculous that you want to use an Informational Strategy for the introduction of this revolutionary new product. Fries are namely a product that is difficult for consumers to distinguish from other fries. With an Informational Strategy, technical and sometimes 'invisible' characteristics of the product are emphasized, by which the product will definitely not catch the eye of customers. Everyone can see that an Informational Strategy is completely unsuitable, and therefore I have absolutely no confidence that this strategy will lead to success.

I think the campaign needs to focus more on people's feelings and emotions that they may experience with the product. First, I would use a catchy and feeling-evoking slogan to emphasize the distinctive characteristics of the fat-free fries. By combining the slogan with a tune, the recognition and reputation of the fat-free fries will increase quickly. Some ideas for a slogan:

- Even with the strictest diet you are allowed to eat these fries, so try them!
- Eat the world's tastiest fries, without your conscience in disguise!

An important advantage of a Transformational Strategy is that we can anticipate important values in society. In addition to the emphasis on healthy lifestyles, it also allows you to stress other emotions and feelings such as enjoyment and the experience of tasting the fries. With a Transformational Strategy you are more capable of creating a positive image around the fat-free fries. *Everyone can see that the use of a Transformational Strategy with the abovementioned elements will be way more effective than an Informational Strategy. I am counting on the fact that you will not use your Informational Strategy, but will use my Transformational Strategy for the introduction of the fat-free fries.*

Considerate Voice Condition

With all due respect, I think that the Informational Strategy you are planning to use for the introduction of this new revolutionary product might possibly not lead to the best results. Fries are namely a product that is difficult for consumers to distinguish from other fries. With an Informational Strategy, technical and sometimes 'invisible' characteristics of the product are emphasized, by which the product might not catch the eye of the customer very well. In my modest opinion, I think that an Informational Strategy might not be the best-suited strategy, and therefore I have some doubts if this strategy will lead to success.

I think the campaign needs to focus more on people's feelings and emotions that they may experience with the product. First, I would use a catchy and feeling-evoking slogan to emphasize the distinctive characteristics of the fat-free fries. By combining the slogan with a tune, the recognition and reputation of the fat-free fries will increase quickly. Some ideas for a slogan:

- Even with the strictest diet you are allowed to eat these fries, so try them!
- Eat the world's tastiest fries, without your conscience in disguise!

An important advantage of a Transformational Strategy is that we can anticipate important values in society. In addition to the emphasis on healthy lifestyles, it also allows you to stress other emotions and feelings such as enjoyment and the experience of tasting the fries. With a Transformational Strategy you are more capable of creating a positive image around the fat-free fries. *The use of this Transformational Strategy with the abovementioned elements could possibly be more effective than an Informational Strategy. May I therefore ask you to consider the use of a Transformational Strategy for the introduction of the fat-free fries?*

Appendix D: Coding scheme action taken by leader

Action taken by the leader: What will the supervisor do with the input from Anne?

1	Does not integrate the idea with own idea	Will not use the creative input <i>e.g., Thank you for the creative input, but I will hold on to the initial strategy.</i>
2	Does take a look at it but most likely not integrate the idea with own idea.	Will take a look at it, but most likely will hold on to own initial idea. <i>e.g., Nice idea, but I am still not convinced.</i>
3	Does take a look at it and will explore it further	Does view and explore the creative idea. <i>e.g., Good suggestion, but I will have to obtain more information and acquaint myself with it more thoroughly before I can decide to use it or not.</i>
4	Does thoroughly explore it and most likely integrate the idea with own idea	Does thoroughly explore the creative idea and also asks for additional information with respect to the creative idea. <i>e.g., Very interesting suggestion, but I would like to receive some additional information.</i>
5	Does integrate the idea with own idea.	Does use elements of the creative idea and integrates them in the campaign. <i>e.g., Very good idea, I will combine elements of your suggestion with elements of my initial strategy for the campaign.</i>

SUMMARY

Employee creativity is widely acknowledged to play an important role in firm competitiveness and survival (Kraatz & Zajac, 2001; Tushman & O'Reilly, 1997). Employees exhibit creativity when they “produce novel, potentially useful ideas about organizational products, practices, services or procedures” (Shalley et al., 2004, p. 933). As the challenges of managing creativity are considerable, a growing body of research reveals that leaders fulfill a critical role when it comes to employee creativity. That is, leaders may influence employee creativity through their power to recognize and devote attention and resources to the creative input, or to withhold their support (Amabile et al., 2004; Graen & Cahsman, 1975). An interesting and relevant question in this regard is: Why are some leaders receptive and supportive to creative ideas voiced by their subordinates, whereas others tend to nip those ideas in the bud? This is the main question that we investigated in this dissertation.

As the Reebok example in the introduction made clear, it is not the idea quality per se that is decisive for the reaction of the leader. In this dissertation we proposed and demonstrated that achievement goals of leaders may critically affect their reactions. Specifically, we conducted nine empirical studies on the effects of leaders' achievement goal on their reactions and responses to voiced creative ideas. Based on the achievement goal approach (Elliot, 2005), we investigated the effects of performance goals, which reflect the desire to demonstrate superior competence by outperforming others, and mastery goals, which reflect the desire to develop and gain competence by acquiring new skills and mastery new situations (Elliot & McGregor, 2001). In different empirical chapters we showed that leaders' achievement goals have a profound impact on their subsequent reactions and responses to voiced creative ideas. The theoretical frameworks and results are described in detail in Chapters 2, 3, and 4 of this dissertation. A summary of the most important outcomes of each chapter is presented below.

Chapter 2 – Leader achievement goals and composition of creative input

In this chapter we examined how achievement goals affected leaders' receptiveness to creative ideas voiced by their subordinates. Employing the achievement goal approach to achievement motivation (e.g., Elliot, 2005), we found, as expected, in a field study (Study 2.1) and two experimental studies (Study 2.2 and Study 2.3), that relative to mastery goal leaders, performance goal leaders were less receptive to, and supportive of, subordinates' creative input.

Furthermore, we examined potential mediators that can explain why performance goal leaders were less receptive to subordinates' creative input than mastery goal leaders. Based on the cognitive appraisal theory (see Lazarus, 1991, for a review), we examined appraisals of image threat and learning opportunity. We refer to image threat appraisal when the impressions and perceptions that leaders would like other people to have about their leadership competence run the risk of being damaged (Ashford et al., 2003; Yuan & Woodman, 2010). We refer to learning opportunity appraisal when leaders perceive possibilities to acquire new knowledge, skills, or abilities that are relevant for their leadership competence. In Study 2.1 and Study 2.2 we showed that image threat appraisal and learning opportunity appraisal mediated the relation between achievement goals and receptiveness but in different ways. Image threat appraisal was a significant mediator for performance goal leaders, whereas learning opportunity appraisal and image threat appraisal were significant mediators for mastery goal leaders.

Finally, we investigated specific conditions under which performance goals may be as receptive and supportive as mastery goal leaders. As creative ideas are typically generated in response to perceived problems or processes that run suboptimally (Kanter, 1988), subordinates' creative input usually consists of two related yet distinct basic aspects, namely, *problem identification* and *creative ideas* for problem solution (e.g., Amabile, 1996; Reiter-Palmon et al., 1997; Shalley et al., 2004). Although both aspects of creative input underlie idea generation (e.g., Amabile, 1996, Reiter-Palmon et al., 1997), they may not always be clear-cut present when subordinates actually voice their creative input towards the supervisor, resulting in different *compositions of subordinates' creative input*. In Study 2.3, we experimentally disentangled the two aspects of problem identification and creative ideas in subordinate creative input and tested their moderating role in the effects of leaders' achievement goals on their reactions to subordinate creativity.

We argued that performance goal leaders interpreted the part of subordinates' creative input that draws attention to potential deficiencies in their leadership competence as evaluative, and therefore, threatening (cf. Northcraft & Ashford, 1990). This also implied that the removal of the problem identification aspect would reduce the appraised threat and consequently would increase performance goal leaders' receptiveness to subordinates' creative input. This is exactly what we found in Study 2.3;

when subordinates' creative input only included a creative idea, performance goal leaders were more receptive and supportive than when subordinates' creative input included problem identifications alongside creative ideas. In contrast, mastery goal leaders see subordinates' creative input as diagnostic information that provides them with information from which they can learn. When subordinates' creative input constitutes only the creative idea aspect, it still holds instrumental information from which they, as leaders, can learn. Our results indeed showed that mastery goal leaders were as receptive and supportive for subordinates' creative input that constitutes problem identifications alongside creative ideas or only contains creative ideas. In fact, when subordinates' creative input contained only creative ideas, performance goal leaders were as receptive and supportive as mastery goal leaders.

The results of Study 2.3 show that the differential reactions of performance goal leaders and mastery goal leaders observed in Studies 2.1 and 2.2, were triggered by the problem identification aspect rather than the creative idea aspect. In other words, we demonstrated that performance goal leaders were less receptive and supportive than mastery goal leaders, but only when subordinates' creative input included both elements of problem identification and creative ideas for problem solution rather than solely creative ideas for problem solution.

Chapter 3 – Leader achievement goals and subordinate mode of voice

In the third chapter we investigated whether achievement goals influence leaders in their tendency to oppose or adopt potentially useful creative ideas proposed by their subordinates. In a field study (Study 3.1) and an experimental study (Study 3.2), we showed that relative to mastery goal leaders, performance goal leaders were more likely to oppose and stick to their own established ideas at the cost of novel and valuable ideas voiced by subordinates. In contrast, relative to performance goal leaders, mastery goal leaders were more likely to adopt new and valuable insights that subordinates deliver to them.

Moreover, in Study 3.2, we showed that leaders' explorative interest was a significant mediator that explained the differences in performance and mastery goal leaders' oppose and adopt responses to subordinates' creative input. We found that, in response to voiced creative ideas, performance goal leaders showed relative low levels of interest in exploring the potential usefulness of the voiced creative idea, whereas

mastery goal leaders displayed relative high levels of explorative interest. Accordingly, this disparity in explorative interest explained why mastery goal leaders were more likely to adopt creative ideas than performance goals leaders. Furthermore, it also explained why, rather than mastery goal leaders, performance goal leaders were more likely to oppose voiced creative ideas.

Finally, in Study 3.3, we investigated whether *subordinates' mode of voice* (aggressive vs. considerate) affected oppose and adopt responses of performance goal leaders rather than mastery goal leaders. Scholars distinguish different behavioral modes in which individuals can voice their ideas differing on their degree of constructiveness, namely, aggressive voice and considerate voice (e.g., Hagedoorn et al., 1999; Rubin, Pruitt, & Kim, 1994). *Aggressive voice* lacks subordinates' consideration for leaders' concerns and consists of efforts to overrule the leader. *Considerate voice* consists of subordinates' attempts to solve the issue at stake considering one's own concerns and those of the leader and organization (Hagedoorn et al., 1999).

In Study 3.3 we experimentally showed that subordinates' mode of voice interacts with leaders' achievement goals. That is, we argued and demonstrated that oppose and adopt responses of performance goal leaders, rather than mastery goal leaders, were sensitive to the behavioral mode by which subordinates voiced their creative ideas. We found that performance goal leaders were less likely to oppose and more likely to adopt creative ideas when they were voiced considerately rather than aggressively. We argued that aggressive voice strengthened performance goal leaders' dominant reaction to defend their superior competence by opposing rather than adopting the creative ideas voiced by their subordinates. In contrast, considerate voice acknowledged the leader's role as a superior in considering and evaluating ideas for doing things differently. As such, considerate voice created a more constructive foundation for discussing the content of the creative input. As the creative input contains elements that can meet mastery goal leaders' demands for learning and development, they were willing to use the voiced creative input, regardless whether it was voiced aggressively or considerately. These results of Study 3.3 showed that, rather than mastery goal leaders, performance goal leaders responded more positively (i.e., less likely to oppose and more likely to adopt creative ideas) when the creative input was voiced considerately rather than aggressively. So, we demonstrated that performance goal leaders tend to smother bottom-up creativity only when subordinates voice their

creative input aggressively rather than considerately.

Chapter 4 – Leader achievement goals and their relative position power

In Chapter 4, we investigated how leaders' achievement goals affect leaders' integrative management of creative ideas. That is, why are some leaders willing to integrate creative ideas voiced by meaningful others with their own framework of ideas, whereas other leaders do not want to integrate those new and useful ideas? As creative ideas flow from multiple directions in an organization, leaders may receive creative ideas from both supervisors and subordinates. As such, leaders in middle management positions fulfill an important linking pin role for integrating creative ideas and suggestions from different hierarchical directions (Floyd & Wooldridge, 1999; Likert, 1961). Because the relative position power differs in the hierarchical structure vis-à-vis subordinates and superiors, the leader-subordinate and leader-superior relations are likely to have different power dynamics as well (Festinger, 1957).

We proposed and demonstrated that leaders' integration of ideas not only depends on their achievement goal, but also on their relative power position vis-à-vis the creative idea sender. Position power (or formal power), is defined as the legitimate authority to control and use organizational resources and to allocate desirable and undesirable outcomes to others (French & Raven, 1959; Pfeffer, 1981). Accordingly, when a subordinate voices creative input, the leader has a relative high power position, whereas the leader has a relative low power position when a superior voices creative input. As leaders in high power positions have fewer constraints and greater freedom to act at will than leaders in low power positions (Guinote, 2007), we expect that the integrative idea management of leaders with relative high position power will be more affected by their own achievement goals than leaders with relative low position power. We tested these ideas in a field-based survey (Study 4.1) and an experimental study (Study 4.2). Specifically, in Study 4.1 we showed that leaders' mastery goals, but not their performance goals, were positively related to the intention to integrate the creative ideas voiced by their subordinates. When superiors delivered the creative ideas, however, both mastery goals and performance goals were positively related to integrative idea management.

In Study 4.2, we replicated these findings by means of an experiment. Specifically, we found that performance goals yielded equally favorable intentions to integrate

creative ideas as mastery goals when a superior proposed the creative idea. However, when subordinates voiced the creative idea, performance goal leaders were showing lower intentions to integrate the creative idea than mastery goal leaders. In other words, performance goal leaders tend to smother creativity only when subordinates voice creative input rather than superiors. These results are in line with the idea that performance goal leaders are more sensitive to hierarchical power differences than their mastery goal counterparts (Ashford & Cummings, 1983; VandeWalle, 2003). Furthermore, we also investigated whether integrative intentions were predictive of actual integrative behavior. According to the theory of planned behavior (Ajzen, 1991), intentions are the primary driver of specific behaviors. As such, we expected intentions of leaders to integrate voiced creative ideas with their own ideas to be positively related to their actual integrative behaviors. In Study 4.2, we found support for a mediated moderation model: the interaction effects of achievement goals and position power indirectly affected actual integrative behavior through integrative intentions.

Overall conclusion

The aim of this dissertation was to investigate how leaders react and respond to creative ideas voiced by subordinates. The results presented in this dissertation show that achievement goals of leaders as a motivational construct critically affect their reactions to voiced creative ideas. That is, we show that achievement goals may crucially influence how leaders, perceive, evaluate, and respond to creative ideas voiced by their subordinates. Although the importance of the leader role in recognizing subordinate creativity is acknowledged (Zhou & Woodman, 2003), this research contributes to a better understanding of factors and conditions that determine leaders' responses to subordinate creativity. It shows that novelty and usefulness are not sufficient for ideas to be considered, recognized, and ultimately implemented. As such, the current findings lay a foundation of empirical and experimental evidence for the influential role of achievement motivational factors in leader perceptions and responses to subordinate creativity. Furthermore, our results provide a platform for further research on this intriguing and important managerial issue.

SAMENVATTING

In de huidige dynamische omgeving van globale competitie, is creativiteit van medewerkers cruciaal voor het innovatieve vermogen en de vitaliteit van organisaties (Kraatz & Zajac, 2001; Tushman & O'Reilly, 1997). We spreken van creativiteit wanneer medewerkers "nieuwe, potentieel bruikbare ideeën omtrent organisationele producten, gebruiken, diensten of procedures produceren" (Shalley et al., 2004, p. 933). Een toenemende hoeveelheid onderzoek laat zien dat leidinggevenden een belangrijke rol vervullen om deze creativiteit van medewerkers in goede banen te leiden. Leidinggevenden verkeren namelijk in een positie waarin zij middelen beschikbaar kunnen stellen om de creatieve input van medewerkers verder uit te werken, of juist kunnen nalaten om de creatieve input van aandacht en middelen te voorzien (Amabile et al., 2004; Graen & Cahsman, 1975). In die zin kunnen leidinggevenden creatieve ideeën maken of breken. Een interessante en relevante vraag is dan ook: Waarom zijn sommige leidinggevenden ontvankelijk voor creatieve ideeën van medewerkers en al snel bereid deze te ondersteunen, terwijl andere leidinggevenden veeleer geneigd zijn de door medewerkers aangedragen ideeën reeds in de kiem te smoren? Dit is de centrale vraag die we in deze dissertatie hebben onderzocht.

Zoals uit het voorbeeld van Reebok in de introductie van deze dissertatie al duidelijk werd, is het niet louter de kwaliteit van een creatief idee dat bepalend is voor de reacties van de leidinggevende. We beargumenteren en tonen aan dat de prestatiedoelen van leidinggevenden op betekenisvolle wijze hun reacties op creatieve ideeën beïnvloeden. Prestatiedoelen zijn doelen die leidinggevenden nastreven in leiderschapssituaties om een bepaalde prestatie te halen. Als zodanig geven prestatiedoelen motivatie en richting aan de reacties van leidinggevenden op de creatieve ideeën die medewerkers aandragen. Gebruikmakend van de prestatiedoelbenadering (Elliot, 2005) hebben we de effecten van zogenaamde *performancedoelen* en *masterydoelen* onderzocht. Performancedoelen reflecteren een verlangen om competenties te demonstreren en beter te presteren dan anderen. Masterydoelen reflecteren een verlangen om de eigen competenties en prestaties te verbeteren door nieuwe kennis en vaardigheden te leren (Elliot & McGregor, 2001). In negen empirische studies die staan beschreven in de hoofdstukken 2, 3, en 4 van deze dissertatie tonen we aan dat prestatiedoelen van leidinggevenden een betekenisvolle invloed hebben op de wijze waarop zij reageren op creatieve ideeën die worden aangedragen door ondergeschikten. Hieronder zal per hoofdstuk een samenvatting

worden gegeven van de belangrijkste bevindingen uit de empirische onderzoeken. Een meer gedetailleerde beschrijving en bespreking van het theoretische raamwerk en de resultaten is te vinden in de hoofdstukken 2, 3, en 4 van deze dissertatie.

Hoofdstuk 2 – Prestatiedoelen van de leidinggevende en compositie van de creatieve input

In dit hoofdstuk wordt onderzocht hoe prestatiedoelen de ontvankelijkheid van leidinggevendenden ten aanzien van door medewerkers aangedragen creatieve ideeën beïnvloeden. Gebruikmakend van de prestatiedoelbenadering (e.g., Elliot, 2005) hebben we in een veldstudie (Studie 2.1) en in twee experimentele studies (Studie 2.2 en Studie 2.3) gevonden dat ten opzicht van leidinggevendenden met masterydoelen, leidinggevendenden met performancedoelen relatief minder ontvankelijk en ondersteunend zijn voor creatieve ideeën van ondergeschikten.

Vervolgens hebben we potentiële mediators onderzocht die kunnen verklaren waarom leidinggevendenden met een performancedoel minder ontvankelijk zijn voor creatieve ideeën van ondergeschikten dan leidinggevendenden met een masterydoel. Gebaseerd op de cognitieve evaluatie theorie (voor een overzicht, zie Lazarus, 1991), hebben we de mediërende invloed van imagobedreiging en leermogelijkheden onderzocht. We spreken van imagobedreiging wanneer leidinggevendenden bang zijn voor reputatieschade in de zin dat anderen een minder positieve indruk krijgen van hun leiderschapscompetenties (Ashford et al., 2003; Yuan & Woodman, 2010). Met leermogelijkheid bedoelen we het vooruitzicht die leidinggevendenden zien om nieuwe kennis, vaardigheden of capaciteiten op te doen die relevant zijn voor hun leiderschapscompetenties. In Studie 2.1 en Studie 2.2 tonen we aan dat evaluaties van imagobedreiging en leermogelijkheid de relatie tussen prestatiedoelen en ontvankelijkheid voor creatieve input mediëren. Oftewel, deze twee evaluaties kunnen verklaren waarom prestatiedoelen leiden tot ontvankelijkheid voor creatieve input. Interessant daarbij is dat de effecten van de onderscheiden prestatiedoelen via verschillende evaluaties lopen. Evaluatie van imagobedreiging bleek een significante mediator voor de negatieve relatie tussen performancedoelen van leidinggevendenden en hun ontvankelijkheid voor creatieve input van medewerkers. Oftewel, leidinggevendenden met performancedoelen zijn minder ontvankelijk voor creativiteit van medewerkers omdat ze hierin een bedreiging van hun imago ervaren. Voor de positieve relatie tussen

masterydoelen van leidinggevenden en ontvankelijkheid blijken evaluaties van leermogelijkheid te opereren als een significante mediator. Dit betekent dat leidinggevenden met masterydoelen ontvankelijker zijn voor creatieve ideeën omdat ze hierin mogelijkheden zien om te leren.

Tot slot hebben we condities onderzocht waaronder leidinggevenden met een performancedoel ook ontvankelijk en ondersteunend zijn net als leidinggevenden met een masterydoel, waarbij we specifiek hebben gekeken naar de *compositie van de creatieve inbreng*. Aangezien creatieve ideeën veelal worden gegenereerd in reactie op waargenomen problemen (Kanter, 1988), bestaat creatieve inbreng van medewerkers vaak uit twee gerelateerde maar verschillende aspecten, namelijk uit het identificeren van een probleem ('probleemidentificatie') en uit het aandragen van een nieuw idee als potentiële oplossing van het probleem ('creatief idee') (e.g., Amabile, 1996; Reiter-Palmon et al., 1997; Shalley et al., 2004). Om het effect van deze te onderscheiden aspecten te onderzoeken, hebben we in Studie 2.3 het 'probleemidentificatie'-aspect en het 'creatief idee'-aspect experimenteel uit elkaar gehaald. Specifiek hebben we onderscheid gemaakt tussen een conditie met creatieve inbreng die beide aspecten bevat en een conditie die enkel het 'creatieve idee'-aspect bevat. Vervolgens hebben we het effect van de verschillende composities van de creatieve inbreng onderzocht op de relatie tussen prestatiedoelen van de leidinggevende en hun reacties op creatieve inbreng van medewerkers.

Wat hebben we gevonden? Voor hun reacties blijkt het 'probleem-identificatie'-aspect veel saillant te zijn voor leidinggevenden met een performancedoel dan voor leidinggevenden met een masterydoel. Wanneer de creatieve inbreng zowel identificatie van problemen als creatieve ideeën bevat dan focussen leidinggevenden met een performancedoel zich vooral op de problemen die door de creatieve medewerker worden aangestipt. Vanwege hun drang om superieure leiderschapskwaliteiten te demonstreren, zien zij de identificatie van de vermeende problemen in hun leiderschapsdomein als een soort van negatieve evaluatie van hun leiderschapscompetenties. Door deze focus op de evaluatieve probleem informatie, hebben leidinggevenden met performancedoelen onvoldoende oog voor de instrumentele waarde van de probleem informatie en voor de aangedragen ideeën in de creatieve inbreng. Als gevolg hiervan zullen deze leidinggevenden minder open staan voor en minder steun geven aan de creatieve inbreng. Deze verklaring impliceert dat

verwijdering van het 'probleem-identificatie'-aspect het evaluatieve element uit de creatieve inbreng haalt, waardoor leidinggevenden met een performancedoel hierop ontvankelijker zouden moeten reageren. Dit is ook wat we hebben gevonden. Wanneer de creatieve inbreng alleen het 'creatieve idee'-aspect bevat, blijkt dat leidinggevenden met een performancedoel zich minder geëvalueerd voelen. Zij percipiëren nu enkel de instrumentele, creatieve informatie en zijn als gevolg daarvan ontvankelijker en meer ondersteunend. De resultaten van Studie 2.3 laten voorts zien dat voor leidinggevenden met een masterydoel het niet uitmaakt of de creatieve input al dan niet het 'probleem-identificatie'-aspect bevat. Zij zien zowel de aangedragen informatie over vermeende problemen als de gesuggereerde creatieve ideeën als instrumentele informatie die interessant kan zijn voor verdere verbetering en ontwikkeling van hun leiderschapsprestaties, met als gevolg dat zij in beide condities (creatieve inbreng bevat al dan niet het 'probleemidentificatie'-aspect) even ontvankelijk en ondersteunend reageren.

Samenvattend vonden we dus dat leidinggevenden met een performancedoel even ontvankelijk en ondersteunend reageren op de creatieve inbreng van medewerkers als leidinggevenden met een masterydoel wanneer deze inbreng louter uit creatieve ideeën bestaat zonder dat problemen in het leiderschapsdomein worden benadrukt. Indien de creatieve inbreng echter ook bestaat uit identificatie van problemen dan reageren leidinggevenden met performancedoelen aanmerkelijk minder ontvankelijk en ondersteunend. De resultaten van Studie 2.3 laten dus zien dat de verschillende reacties van leidinggevenden met een performancedoel en leidinggevenden met een masterydoel, zoals geobserveerd in Studies 2.1 en 2.2, waren getriggerd door het 'probleem-identificatie'-aspect en niet door het 'creatieve idee'-aspect.

Hoofdstuk 3 – Prestatiedoel van de leidinggevende en de wijze van communiceren van de medewerker

In het derde hoofdstuk hebben we onderzocht of prestatiedoelen invloed hebben op de neiging van leidinggevenden om zich te verzetten tegen potentieel bruikbare creatieve ideeën aangedragen door medewerkers danwel om deze ideeën te benutten. In een veldstudie (Studie 3.1) en een experimentele studie (Studie 3.2) laten we zien dat ten opzichte van leidinggevenden met een masterydoel, leidinggevenden met een performancedoel zich meer verzetten tegen aangedragen creatieve ideeën. Dit verzet

houdt in dat zij vasthouden aan hun eigen gevestigde ideeën ten koste van de nieuwe, potentieel bruikbare ideeën aangedragen door medewerkers. In tegenstelling hiermee zijn leidinggevend met een masterydoel meer geneigd om nieuwe en bruikbare ideeën te benutten en over te nemen.

In Studie 3.2 laten we verder zien dat de interesse van leidinggevend voor exploratie van de aangedragen ideeën (exploratie-interesse) een significante mediator is die de gevonden effecten nader kunnen verklaren. We vonden namelijk dat in hun reacties op aangedragen creatieve ideeën, leidinggevend met een performancedoel relatief weinig interesse vertoonden om de potentiële bruikbaarheid van de aangedragen creatieve suggestie te exploreren. Daarentegen vertoonden leidinggevend met een masterydoel relatief veel exploratie-interesse. Dit verschil in interesse om het aangedragen idee te verkennen resulteert er voorts in dat leidinggevend met een masterydoel meer geneigd zijn om het idee te gebruiken en te benutten, terwijl leidinggevend met een performancedoel zich door hun geringe exploratie-interesse meer verzetten tegen de aangedragen creatieve ideeën.

Tenslotte hebben we in Studie 3.3 onderzocht of de wijze waarop medewerkers hun creatieve idee communiceren naar hun leidinggevende (agressief vs. vriendelijk) invloed heeft op de verzet- en benutresponsen van leidinggevend. In de literatuur over de wijze waarop medewerkers hun zorgen, grieven en ideeën kenbaar kunnen maken aan hun leidinggevende ('employee voice') wordt de mate van constructiviteit van dit communicatiegedrag gezien als een bepalende effectiviteitsfactor. In deze literatuur wordt onderscheid gemaakt tussen een agressieve en een vriendelijke manier van communiceren (e.g., Hagedoorn et al., 1999; Rubin et al., 1994). Een *agressieve manier* is voornamelijk gericht op het overreden van de leidinggevende zonder dat de medewerker het belang van de leidinggevende in ogenschouw neemt. Een *vriendelijke manier* bestaat uit pogingen van de medewerker om het probleem dat aanwezig is op te lossen waarbij zowel eigen belangen als de belangen van de leidinggevende in ogenschouw worden genomen (Hagedoorn et al., 1999).

In Studie 3.3 hebben we in een experimentele studie aangetoond dat de relatie tussen prestatiedoelen van de leidinggevend en hun verzet- en benutreacties op de door de medewerkers aangedragen creatieve ideeën wordt beïnvloedt door de wijze waarop medewerkers hun creatieve ideeën communiceren. We vonden dat leidinggevend met een masterydoel niet gevoelig zijn voor de wijze waarop de

creatieve inbreng wordt gecommuniceerd. Zij zijn enkel geïnteresseerd in en gefocust op door de medewerkers aangedragen informatie waarvan zij kunnen leren en die zij kunnen benutten om zich te ontwikkelen, waarbij het hen blijkbaar weinig uitmaakt hoe die informatie wordt gecommuniceerd. We zien dat ongeacht de communicatiewijze leidinggevend met een masterydoel zich relatief weinig verzetten tegen creatieve ideeën en deze ideeën in relatief hoge mate benutten. Daarentegen blijken leidinggevend met een performancedoel wel gevoelig voor de wijze waarop de creatieve inbreng wordt gecommuniceerd. Uit de resultaten komt naar voren dat zij zich minder verzetten tegen aangedragen creatieve ideeën en deze meer benutten wanneer deze ideeën op een vriendelijke in plaats van een agressieve manier worden gecommuniceerd. De reden hiervoor is dat door de agressieve manier van communiceren deze leidinggevend zich gedwarsboemd voelen in hun streven naar superioriteit waardoor hun dominante verzetreactie wordt versterkt. In tegenstelling hiermee bevestigt een vriendelijke manier van communiceren de leidinggevende in diens rol als een superieur en in diens verantwoordelijkheid en competentie om de waarde van door medewerkers aangedragen creatieve ideeën te evalueren. Als gevolg hiervan creëert een vriendelijke manier van communiceren een meer constructieve basis om de inhoud van het idee te bespreken. De resultaten van Studie 3.3 laten dus zien dat leidinggevend met een performancedoel weliswaar de neiging hebben om opwaartse creativiteit te smoren, maar dat minder doen wanneer medewerkers hun creatieve inbreng op een vriendelijke manier communiceren in plaats van op een agressieve wijze.

Hoofdstuk 4 – Prestatiedoelen en relatieve positiemacht van leidinggevend

In hoofdstuk 4 hebben we onderzocht hoe prestatiedoelen van leidinggevend van invloed zijn op de mate waarin zij door medewerkers aangedragen creatieve ideeën proberen te integreren met hun eigen ideeën. Aangezien leidinggevend in middenmanagement posities met zowel ondergeschikten als hun superieuren relaties onderhouden, krijgen zij vanuit deze verschillende hiërarchische niveaus in de organisatie creatieve ideeën aangereikt. Aldus vervullen deze leidinggevend een belangrijke spilpositie waarin zij creatieve ideeën van verschillende niveaus dienen te integreren (Floyd & Wooldridge, 1999; Likert, 1961). In een hiërarchische structuur is er per definitie sprake van relatieve machtsverschillen tussen individuen die vanuit

verschillende hiërarchische posities met elkaar interacteren. Deze relatieve machtsverschillen zouden van invloed kunnen zijn op de wijze waarop een leidinggevende in een middenpositie reageert op creatieve ideeën die worden aangedragen door een ondergeschikte dan wel door een meerdere. Doen leidinggevend in een middenpositie beter hun best om de ideeën aangedragen door een superieur te integreren in de bestaande bedrijfsvoering dan wanneer deze zijn aangedragen door een ondergeschikte, of maakt de hiërarchische machtspositie van de aandrager van het idee niet uit?

We beargumenteren en demonstreren in deze studie dat de integratie van de aangedragen ideeën door de leidinggevend niet alleen afhankelijk is van de prestatiedoelen die zij nastreven, maar ook van de relatieve positiemacht van de leidinggevend ten opzichte van de aandrager van de creatieve ideeën. Positiemacht (of formele macht) wordt gedefinieerd als de door de hiërarchische positie gelegitimeerde autoriteit om middelen uit de organisatie te beheren en te gebruiken en om wenselijke en onwenselijke uitkomsten aan anderen toe te wijzen (French & Raven, 1959; Pfeffer, 1981). Een leidinggevende heeft dus een relatief hoge positiemacht ten opzichte van een ondergeschikte, maar een relatief lage positiemacht ten opzichte van zijn of haar directe meerdere. Uit de machtsliteratuur weten we dat machtigen, in vergelijking met minder machtigen, minder beperkingen vanuit de sociale omgeving ervaren waardoor zij in hun strevingen minder rekening houden met anderen en zich minder druk maken over de gevolgen van hun handelen (Guinote, 2007; Keltner et al., 2003). Als gevolg hiervan wordt het gedrag van meermachtigen meer gedreven door interne factoren, zoals hun prestatiedoelen dan dat bij mindermachtigen het geval is. We verwachten daarom dat leidinggevend tegenover ondergeschikte ideeëaandragers zich sterker door hun prestatiedoelen laten leiden bij het al dan niet integreren van aangedragen ideeën dan tegenover bovengeschiedte ideeëaandragers. We hebben deze ideeën onderzocht in een veldonderzoek (Studie 4.1) en een experimentele studie (Studie 4.2).

De resultaten van het veldonderzoek laten zien dat wanneer ondergeschikten creatieve ideeën aandrigen alleen masterydoelen van de leidinggevend positief gerelateerd zijn aan hun intenties om de aangereikte creatieve ideeën te integreren met hun eigen ideeën. Wanneer een meerdere de creatieve suggestie aandroeg, waren zowel masterydoelen als performancedoelen van leidinggevend positief gerelateerd aan hun

intenties tot integratie.

In Studie 4.2 hebben we deze resultaten gerepliceerd door middel van een experiment. Zo vonden we dat wanneer een meerdere het creatieve idee aandroeg, performancedoelen in vergelijkbare intenties van de leidinggevende resulteerden om ideeën te integreren als masterydoelen. Echter, wanneer een ondergeschikte het creatieve aandroeg, dan vertoonden leidinggevendenden met een performancedoel lagere intenties om het idee met hun eigen idee te integreren dan leidinggevendenden met een masterydoel. Met andere woorden, leidinggevendenden met performancedoelen hebben de neiging om creativiteit van ondergeschikten te smoren, terwijl zij openstaan voor ideeën die worden aangedragen door een meerdere. Deze resultaten zijn in overeenstemming met de notie dat leidinggevendenden met performancedoelen variëren in hun reacties op creatieve ideeën al naar gelang deze worden aangedragen door ondergeschikten dan wel bovengesikten. Als meermachtige laten ze zich tegenover ondergeschikten in hun reacties sterker leiden door hun performancedoelen, met als gevolg dat ze minder bereid zijn de door de ondergeschikten aangedragen ideeën te integreren. Tegenover hun superieuren daarentegen zijn leidinggevendenden met performancedoelen meer bereid tot integratie, omdat superieuren externe machtscontrole hebben over de leidinggevendenden waardoor laatstgenoemden zich in hun reacties minder kunnen laten leiden door hun interne prestatiedoelen. Leidinggevendenden met masterydoelen daarentegen variëren niet in hun intenties tot integratie tegenover meer- of mindermachtige ideeëndragers. Zij focussen op de instrumentele waarde die creatieve ideeën kunnen hebben voor verbetering van hun leiderschapsprestaties waarbij ze onverschillig zijn of deze worden aangedragen door onder- of bovengesikten. Deze resultaten zijn in overeenstemming met eerder onderzoek waaruit blijkt dat leidinggevendenden met performancedoelen gevoeliger zijn voor hiërarchische machtsverschillen dan leidinggevendenden met masterydoelen (Ashford & Cummings, 1983; VandeWalle, 2003).

Voorts hebben we onderzocht of intenties om ideeën te integreren ook een voorspeller was voor daadwerkelijke integratie van ideeën. Gebaseerd op de theorie van gepland gedrag (Ajzen, 1991), waarin wordt gesteld dat intenties de primaire aandrijver is van specifieke gedragingen, was onze verwachting dat de intenties van de leidinggevende om creatieve ideeën te integreren positief zouden samenhangen met hun daadwerkelijke integratieve gedragingen. In Studie 4.2 hebben we hiervoor evidentie

gevonden in de zin dat de prestatiedoelen en de relatieve positiemacht van leidinggevenden via hun intentie tot integratie een indirect effect hebben op hun daadwerkelijk integratief gedrag.

Algemene conclusie

Het doel van deze dissertatie was om te onderzoeken hoe leidinggevenden reageren op creatieve ideeën die worden aangedragen door medewerkers. De resultaten laten zien dat de prestatiedoelen van leidinggevenden een cruciale invloed hebben op hoe zij creatieve ideeën die worden aangedragen door medewerkers waarnemen, evalueren en hanteren. Hoewel het belang van de rol van leidinggevenden in het herkennen van creativiteit van medewerkers is onderkend (Zhou & Woodman, 2003), draagt het onderzoek in deze dissertatie bij aan een beter begrip van motivationele factoren en condities die bepalend zijn voor hoe leidinggevenden reageren op creatieve ideeën van medewerkers. De resultaten laten zien dat nieuwheid en bruikbaarheid niet voldoende zijn voor ideeën om overwogen, herkend en uiteindelijk geïmplementeerd te worden. De gepresenteerde bevindingen bieden empirische evidentie voor de invloedrijke rol die prestatiedoelen hebben in de percepties en reacties van leidinggevenden als het gaat om creativiteit van medewerkers. Bovendien bieden deze resultaten een platform voor verder onderzoek naar dit intrigerende en belangrijke onderwerp voor leidinggevenden en organisaties.

It's a wrap! Het moment waar ik ruim vier jaar naartoe heb gewerkt is dan eindelijk daar. Mijn dissertatie is af. Als ik terugkijk op deze periode kan ik niet anders concluderen dan dat ik het promoveren als een fantastische, unieke en leerzame tijd heb ervaren. Een tijd waarin ik mezelf heb kunnen ontwikkelen en waarin het duidelijk is geworden waar mijn interesses liggen. Natuurlijk zijn er momenten geweest dat het allemaal wat stroef ging, maar als ik terugkijk zijn het toch hoofdzakelijk positieve en leuke momenten die in mijn gedachten naar boven komen. Hierbij denk ik vooral aan de vele inspirerende gesprekken die ik met verschillende mensen heb gehad over mijn onderzoek en de verschillende nationale en internationale congressen waar ik mijn werk heb mogen presenteren.

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