THE ROLE OF THE NEED FOR AFFILIATION AND THE BEHAVIORAL MANIFESTATION OF IMPLICIT MOTIVES IN EFFECTIVE LEADERSHIP

A DIMENSIONAL APPROACH

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Summary

Implicit motives have widely been studied with regard to their ability to predict effective leadership. In accordance with theorizing (McClelland, 1977), research (e.g., McClelland & Boyatzis, 1982) showed successful leaders to be motivated by a certain motive combination, the Leadership Motive Pattern (LMP). Leaders characterized by this pattern are motivated by high levels of the need for power (nPow), high levels of activity inhibition (AI), and low levels of the need for affiliation (nAff). Whereas the need for power turns leaders interested in influencing others, a highly developed activity inhibition channels the use of power into socially responsible ways. As leaders high in need for affiliation are more concerned with harmonious leader-follower relationships than with organizational necessities, leaders ought to be low in this motive. The need for achievement (nAch), another basic motive driving human behavior (McClelland, 1985), relates to success in technical or lower management, but does not benefit great leadership in higher management positions. Although a variety of studies has been conducted on the value of implicit motives to leadership, there remain open fields in research on the sub-conscious motivational antecedents of effective leadership the present work concentrates on. Research on these open fields contributes to improving the prediction of managerial success based on leaders' implicit motives, but in the light of changing work environments and leadership requirements equally verifies theorizing on the LMP which dates back more than 40 years. In three studies, the present work examines how various motives combine in yielding effective leadership, whether the need for affiliation indeed undermines leaders' success or rather contributes to it, and examines the manifestation of implicit motives in leadership behaviors as mechanisms mediating their effect on leadership outcomes.

Applying a dimensional approach, Study 1 examined the components of the LMP, need for power, activity inhibition, and need for affiliation, in terms of an interactive effect. Based on a sample of leaders from various industrial sectors, analyses revealed this three-way interaction to significantly account for variance increments in the goal attainment of leaders' teams just as in developments in their income. The relation to both indicators of leadership performance was strongest if leaders were high in need for power, high in activity inhibition, and – contradicting LMP theorizing – high in need for affiliation. Accounting for this latter finding and further evidence emphasizing the value of *n*Aff to managerial success, Study 2 experimentally investigated the role of this implicit motive in a sample of employees. Based on written paper people vignettes, leaders characterized by a certain motive were compared. Contrasted to those using their power for personal benefits (pPow) and those high in need for achievement jointly, leaders characterized by a socialized use of power (sPow) as well as those high in need for affiliation were perceived to display more transformational leadership, and mediated by these leadership behaviors, were rated more successful and elicited more attachment in followers. Whereas leaders high in sPow increased followers' organizational citizenship behavior (OCB), this effect could not be demonstrated for leaders high in *n*Aff. Exploratory analyses contrasting leaders high in *n*Aff to those high in *s*Pow showed both leaders to equally affect followers' satisfaction, attachment, and OCB. Integrating findings of Study 1 and Study 2, Study 3 further examined the interplay of implicit motives in a sample of leader-follower dyads drawing on the motivational Big Three *n*Pow, *n*Ach, and *n*Aff. As assumed, contingent on high need for achievement, leaders' need for power more closely related to followers' satisfaction and their own career success if high compared to low need for affiliation added to this interplay. Whereas the three-way interaction did not account for variance increments in followers' in-role performance and OCB, based on high nAch, nPow more closely related to followers' perceptions of transformational leadership if moderated by high levels of *n*Aff. Transformational leadership did not transmit the impact of the three-way interaction on indicators of followers' satisfaction. Relating individual motives to leaders'

behaviors, we found the need for achievement to marginally relate to passive leadership and the need for affiliation to be significantly associated with leaders' concern for followers' needs.

Applying a dimensional approach, the present work thus shows the needs for power, achievement, and affiliation as well as activity inhibition to interactively take an effect on desirable leadership outcomes. Whereas affiliative concerns have all along been assumed to impede leadership, our findings consistently confirm the need for affiliation to be an essential determinant and crucial motivational add-on for managerial success in various industrial sectors nowadays. Individual needs and their interplay energize specific leadership behaviors of differential effectiveness. These behaviors, however, do not unambiguously explain how implicit motives relate to managerial success. Findings of the three studies challenge and advance theorizing on implicit motives and adapt knowledge on their relation to successful leadership to current leadership demands. As such, the present work entails implications for basic and applied research as well as for practitioners in organizations, but also identifies starting points for future research.

Table of contents

Summary	Ι
Table of contents	IV
Synopsis	1
Introduction	1
Theoretical Background	3
Aims and Outline	14
Study 1 – Implicit Motives and Leadership Performance Revisited: What Constitutes the Leadership Motive Pattern?	23
Study 2 – Promoting the Underestimated: A Vignette Study on the Importance of Need for Affiliation to Successful Leadership	24
Study 3 – Need for Affiliation as Motivational Add-On for Leadership Behaviors and Managerial Success	25
General Discussion	26
References	48
Statement of Authorship	63

Introduction

Regarding the global economy, we find the world on the edge to a new era. Corporate contexts are presently undergoing a severe change induced by the progressing integration of information and communication technology along the value chain. Although technological advancements are at the core of this fourth stage of industrialization, the mounting digitalization has far reaching consequences for employees (Steil & Maier, 2016). Managing these fundamental changes, leaders are faced with enormous challenges entailing pervasive consequences for individuals, organizations, global markets, and entire countries. Therefore, in deciding whom to promote or select into management positions, it is crucial to best predict the potential leaders' behavior and success. For such instances, in which the explanation of unique variance is decisive, scholars recently recommended the use of implicit measures as an underutilized path in organizational research holding great promise (Harms & Luthans, 2012; Uhlmann, et al., 2012). The great potential of such measures lies in the fact that they may assess phenomena operating outside a person's conscious awareness, and thus explain variance increments over and beyond explicit measures. Being personality components of particular relevance for social behavior and leader-follower relations (Winter, 1987), leaders' implicit motives, that is their needs or recurrent concern for certain goal states (McClelland, 1985), have variously been analyzed with regard to their ability to predict managerial success.

Examining the importance of implicit motives in corporate leadership, McClelland and his associates (Jacobs & McClelland, 1994; McClelland & Boyatzis, 1982; McClelland & Burnham, 1976) showed these motives to be vital determinants of leaders' effectiveness and career advancement. Also among U.S. American presidents, Winter as well as House and Spangler and their respective colleagues (House, Spangler, & Woycke, 1991; Spangler & House, 1991; Winter, 1987) found implicit motives to be of value and to significantly relate

1

to their economic, social, and international relations performance just as to perceptions of greatness and charisma. Findings suggest that in both realms being motivated to influence others positively relates to great leadership, whereas an affiliative concern seems to weaken perceived greatness or managerial success.

Although a great deal of evidence has already been accumulated on implicit motives as antecedents of effective leadership, there remain open questions in this field. They centre on how various implicit motives combine in making leaders more effective, whether the need for affiliation indeed undermines managerial success, and through which mechanisms implicit motives exert their influence on indicators of leaders' effectiveness. First, although scholars already 25 years ago called for such research (Spangler & House, 1991), it has not yet been adequately analyzed how various motives combine in yielding managerial success. Evidence, on which motivational foundation to best predict successful leadership is therefore pending. Second, the need for affiliation has been assumed to impede great leadership and evidence has supported this assumption (Jacobs & McClelland, 1994; McClelland & Boyatzis, 1982; Winter, 1991). Some studies, though, showed this need to indeed positively relate to leaders' success (e.g., Cornelius & Lane, 1984; Kirkpatrick, Wofford, & Baum, 2002), questioning whether it is a hindrance to managerial success or even one of its determinants. Not least, the means by which implicit motives relate to effective leadership have not been sufficiently studied. Being one of the core drivers of human behavior (McClelland, 1985), the behavioral expression of motives likely mediates this effect. Initial efforts have been made to link implicit motives and leadership behaviors (De Hoogh, et al., 2005; Delbecq, House, Sully de Luque, & Quigley, 2013). Yet, the process translating implicit motives into great leadership remains a black box. Research closing these gaps essentially improves the prediction of managerial success over and beyond well-established explicit measures. In addition, finding the majority of studies on corporate leadership to date back about three decades, evidence

urgently needs to be verified as along with work environments and leadership requirements also implicit motivational determinants of great leadership likely changed.

The present work aims to conduct research on these questions in order to contribute to theorizing on implicit motives as well as to the leadership literature and to derive valuable implications for researchers and practitioners. Three studies drawing on surveys or applying an experimental design therefore analyze the way implicit motives combine in yielding effective leaders (Study 1 and Study 3), examine the role of the need for affiliation (Study 2 and Study 3), and explore the expression of implicit motives in leadership behaviors and their ability to explain motive-outcomes relations (Study 2 and Study 3).

Theoretical Background

The present work concentrates on leadership in organizations, being "the ability of an individual to influence, motivate, and enable others to contribute toward the effectiveness and success of the organizations of which they are members" (House & Javidan, 2004, p. 15). After introducing the construct of implicit motives, in outlining previous research we equally draw on studies of corporate leaders and presidents, to illustrate the entirety of scientific efforts made so far, before identifying fields which deserve further empirical consideration.

Implicit Motives

The beginning of scholarly interest in non-conscious motivational processes dates back more than seven decades. During the last years, the field of implicit motives has faced a resurgence of interest (Schultheiss & Pang, 2007). Implicit motives are capacities operating outside one's conscious awareness to experience the attainment of specific types of natural incentives in the immediate environment as rewarding (Schultheiss, 2001; Thrash & Elliot, 2002). Based on the strong affective responses the attainment of these incentives elicits, implicit motives direct, select, and energize a person's behavior (McClelland, 1985). They direct the attention toward stimuli which have been associated with incentive attainment before and which may thus be of assistance in predicting possibilities to again experience the pleasurable emotions one strives for (Schultheiss & Brunstein, 2010). Through processes of instrumental and Pavlovian learning, implicit motives induce the selection and retention of behaviors which contributed to approaching or attaining the rewarding emotions. Implicit motives energize these behaviors so that they are executed with increased vigor, energy, and persistence (Schultheiss & Brunstein, 2010; Schultheiss & Brunstein, 2005). Being among the major determinants of human behavior (McClelland, 1985), these motives can be defined as general dispositions to act in a specific way (Hofer & Busch, 2011). They evolve from affect-based socialization experiences early during pre-lingual childhood (McClelland & Pilon, 1983), and are thus cognitively poorly represented, hardly accessible to introspection, and difficult to articulate (Schultheiss & Pang, 2007; Thrash & Elliot, 2002). Implicit motives are therefore not to be measured through self-reports, but require an indirect assessment through projective techniques (Hofer, Busch, Bond, Li, & Law, 2010). Applying self-reports and asking people directly about their motives, respondents would draw on language-based conscious concepts of the self. Such self-attributions, though, do not reflect innate emotional and motivational themes in life, but assess complex judgments and analytic thoughts about the values or goals one ought to pursue (McClelland, Koestner, & Weinberger, 1989). They relate to expectations normative in a given group and align behavior to what others deem desirable (Schultheiss & Brunstein, 2005). Self-attributed motives are acquired later in one's childhood (McClelland & Pilon, 1983) when the usage of language and the self-concept are already well-developed (McClelland, et al., 1989). Arising from verbal instructions by parents and important others, self-attributed motives are consciously accessible (Thrash & Elliot, 2002), and therefore labeled explicit motives. Implicit and explicit motives hardly overlap: A recent meta-analysis showed the variance shared by both motive measures to amount to 1.7% only (Köllner & Schultheiss, 2014). Accordingly, self-reports are no means

to assess the level of a given implicit motive, which is why projective measures are to be applied when capturing a person's unconscious strivings. As implicit motives are particularly responsive to nonverbal stimuli (Pang & Schultheiss, 2005), they are commonly assessed through content-coding of imaginative stories which people write in response to ambiguous picture cues they are confronted with. Among the instruments deployed to elicit the writing of stories, the Picture Story Exercise (PSE, McClelland, et al., 1989) is the one most widely used and best studied (Schultheiss & Pang, 2007). To determine a person's implicit motives, the thematic content of stories is coded according to specified coding systems. Being valid and rather economic (Schultheiss & Pang, 2007), Winter's (1994) integrated coding system can be used to obtain motive scores from any kind of written or spoken verbal material. Implicit motives predict operant behavior, that is spontaneously occurring behavior, longterm behavioral trends, and real life outcomes, rather than immediate choice behavior and reactions to stimuli controlled by the environment, that is, respondent behavior (McClelland, 1980). Implicit motives relate to a variety of operant outcomes, such as one's (psychological) well-being and health (e.g., Baumeister & Leary, 1995), social behavior (e.g., Schultheiss & Brunstein, 2002), memory, learning and flow (e.g., Engeser & Rheinberg, 2008; Woike, 2008), and sports, creative, or work performance (e.g., Collins, Hanges, & Locke, 2004; Fodor & Carver, 2000; Gröpel, Schoene, & Wegner, 2015; Spangler, 1992), as well as societal, historical, and economic processes (McClelland, 1985).

Research on implicit motives centered on three classes of incentives or needs, the need for power (nPow), the need for affiliation (nAff), and the need for achievement (nAch). These motivational "Big Three" (McClelland, 1985) came to be seen as primary in directing, selecting, and energizing human behavior (see Bernecker & Job, 2011). People motivated by a highly developed nPow seek pleasure from strong and forceful actions that have an impact on others or the entire world (Winter, 1973). They are concerned with getting or maintaining

control (Veroff, 1957), and thus attempt to influence, persuade, or convince others, to give unsolicited help, advice, or support, or to elicit strong emotional reactions (Winter, 1994). As people motivated by a distinct need for power strive to impress others, they are concerned with prestige, reputation, and fame (Winter, 1994). People motivated by high levels of need for affiliation strive to establish, maintain, and restore positive emotional relations with people or groups around them (Heyns, Veroff, & Atkinson, 1958). They seek pleasure from affiliative and companionate activities and feel sadness if separated from others or if friendly relationships are disrupted (Winter, 1994). To satisfy their affiliative interest, they help others and show sympathetic concern (Winter, 1994), but also share their own thoughts, feelings, and desires with them (Weinberger, Cotler, & Fishman, 2010). People motivated by a distinct need for achievement show long-term involvement in achievement goals and have a nonconscious preference for incentives related to enhancing their performance (Schultheiss & Brunstein, 2005). Achievement motivated people seek pleasure from immediate feedback, challenging tasks, and personal responsibility (McClelland, 1961). They strive for excellent performance, unique accomplishments, extraordinary achievements, and successfully competing with others (Winter, 1994). Moreover, they are concerned with doing things differently and improving them (McClelland, 1985).

Although the needs for power, affiliation, and achievement relate to certain behaviors instrumental in approaching the rewarding emotions associated with incentive attainment, this relation is not unalterable. Despite being independent motivational systems (Köllner & Schultheiss, 2014), explicit motives may affect the way implicit motives become manifest in behavior (McClelland, et al., 1989). If, for example, implicit motivational impulses are not appropriate in a given situation, explicit motives may override their impetus (Langens, 2007). Moreover, the behavioral manifestation of implicit motives also depends on one's activity inhibition (AI). AI is not itself an implicit motive, but measures a stable individual difference in self-restraint (McClelland, Kalin, Davis, & Wanner, 1972). As people high in AI are able to restrain and inhibit the expression of motivational or emotional impulses, AI modulates the behavioral manifestation of implicit motives. Empirical evidence on its moderating function has mainly been accumulated for its impact on *n*Pow (Langens, 2010). Evidence on the impact of AI on the behavioral manifestation of *n*Aff and *n*Ach is scarce (Langens, 2010). However, in theoretical propositions the concept of AI has been extended to both these motives (Spangler, Tikhomirov, Sotak, & Palrecha, 2014).

Implicit Motives and Leadership Effectiveness

Given their predictive validity for naturally occurring life outcomes, implicit motives have been related to accomplishments and success in the context of work. Research mainly concentrated on the contribution of implicit motives to the career success and effectiveness of political and corporate leaders. Based on the characteristics related to the needs for power, affiliation, and achievement, McClelland (1975) reasoned a certain motive constellation - the so-called Leadership Motive Pattern (LMP) - to be generic to leaders in higher management levels and to make them more effective. He assumed leaders to be particularly successful if motivated by high levels of the need for power, high levels of activity inhibition, and low levels of the need for affiliation. The need for achievement has not been considered important in this regard. A highly developed *n*Pow is vital in leading as this motive inherently drives people to be concerned with impacting others (McClelland & Boyatzis, 1982), engage in social influence behavior (House & Aditya, 1997), and seek pleasure from controlling or regulating others (Winter, 1994). Gratifying the power-motivated person's predominant need, people high in *n*Pow gain more satisfaction from leadership positions, which in turn sustains their interest in leading (House & Aditya, 1997). High levels of *n*Pow, however, may drive leaders to use power egoistically and become impatient, outspoken, and dictatorial (Winter, 1973). Under this condition, leaders apply their power and position for their own benefits and

try to aggrandize themselves to the account of others or the organization (Spangler & House, 1991). These leaders try to increase their dominance over others acting out their power in assertive or anti-social ways (Magee & Langner, 2008; McClelland, et al., 1972). This drive to use power self-servingly has been termed personalized power motive (pPow; McClelland & Wilsnack, 1972). Leaders may, by contrast, also use their power to serve others, to benefit those around, and to give unsolicited help, advice, or protection (McClelland, et al., 1972; McClelland & Wilsnack, 1972; Winter, 1973). Rendering leaders effective, such a socialized use of power (sPow) is needed. Only then they are concerned with corporate goals, maintain organizational systems, and stick to procedures (McClelland & Boyatzis, 1982; Spangler & House, 1991). As it is the ability to restrain and inhibit motivational impulses which channels the display of power into socially acceptable ways, McClelland (1975) reasoned high levels of activity inhibition to benefit managerial success. In addition, he assumed the need for affiliation to undermine it. Given their drive to establish, maintain, and restore harmonious relationships with others (Heyns, et al., 1958), leaders high in nAff have been said to unduly worry about being liked, to make exceptions for followers' particular needs, and to be overly concerned with personal relationships, thus basing important decisions on favoritism instead of organizational necessities (House, et al., 1991; McClelland & Boyatzis, 1982; Spangler & House, 1991). They may further be assumed to be reluctant to monitor followers' behavior, give negative feedback, or discipline them if necessary (House & Aditya, 1997). Therefore, apart from high *n*Pow and high AI, low *n*Aff has been postulated to determine leaders' success. Regarding the need for achievement, McClelland (1977) argued this motive to not enhance leadership in higher management. Rather than seeking pleasure from exerting an influence on others, those high in *n*Ach are concerned with doing things personally and achieving accomplishments through their own effort (McClelland & Boyatzis, 1982). High levels of *n*Ach have hence been suggested to contribute to leadership success in small-scale

businesses, sales, and technical as well as innovative, entrepreneurial positions as in these realms people accomplish most of the work themselves and are responsible for task outcomes (McClelland, 1977). Non-technical or higher management positions, though, require leaders to delegate tasks. In these positions, success essentially depends on a leader's ability to coordinate, motivate, and manage others (McClelland & Boyatzis, 1982; Spangler & House, 1991). The achievement-motivated leaders' drive to assume control of all aspects of their job (McClelland & Burnham, 1976) is said to run counter to the requirements of leadership positions (Spangler & House, 1991). For this reason, *n*Ach was not included into the LMP although a concern with excellence may contribute to leadership effectiveness.

The LMP has empirically been validated among corporate and political leaders. In their seminal work, McClelland and Boyatzis (1982) followed entry-level leaders and examined what happened in their careers after eight and 16 years. Indeed, they found non-technical leaders with the LMP to show significantly higher levels of promotion at both points in time. For technical leaders no such relation emerged. Findings showed the need for achievement to relate to success in lower management positions, in which advancement more likely depends on individual contributions. Meanwhile, nAch has meta-analytically been acknowledged to be associated with the choice of and performance in entrepreneurial positions (Collins, et al., 2004). As such jobs involve tasks that require skill, effort, and moderate risks and provide performance feedback they satisfy the achievement-motivated person's need (McClelland, 1961). Besides replicating its value for leaders' career advancement (Jacobs & McClelland, 1994; Winter, 1991), research in corporate contexts found the LMP to raise followers' team spirit, sense of responsibility, and organizational clarity (McClelland & Burnham, 1976). In politics, the LMP has been shown to be associated with presidential outcomes (Winter, 1987). Spangler and House (1991), however, revealed the motive combination of the LMP not to be predictive of a president's performance over and above single motives, AI, and the interplay

of *n*Pow and AI. House and colleagues (1991) right away related single motives rather than the LMP to indicators of presidential performance. As suggested, *n*Pow and AI positively related to the president's effectiveness.

Open Fields in Research on Implicit Motives and Leadership Effectiveness

Although the value of implicit motives to successful leadership in organizations has widely been acknowledged by theory and research, there still remain open fields pertinent to both, basic as well as applied realms which deserve further consideration. An important open field in basic research centers on the question of how motives combine and are modulated in arousing effective leadership. Entailing considerable implications for LMP theorizing as well as corporate settings, two open fields evolve in applied research centering on the questions whether the need for affiliation indeed impedes leadership success and by which mechanisms implicit motives exert their influence on leadership outcomes, with the behavioral expression being the most obvious one. These three fields either arise from methodological concerns taking up the claim to further investigate the way the LMP is constructed (combination and interaction of motives), evolve from inconsistent findings and changing requirements in leadership (role of nAff), or are derived from insufficient and inconclusive research in that field (behavioral expression of motives and their impact on outcomes). In the following, the three fields are illustrated in more depth.

The combination and interaction of implicit motives in predicting effective leadership. Whereas at its origin, research on implicit motives solely concentrated on the need for food, studies have quickly been broadened to a variety of motives following groundbreaking work (McClelland, Atkinson, Clark, & Lowell, 1953) on the need for achievement (Schultheiss & Brunstein, 2010). Being basic motivational needs (Schultheiss & Brunstein, 2010), research today is most advanced with regard to the needs for power, achievement, and affiliation (Heckhausen & Heckhausen, 2010). From early days, scholarly interest has been directed toward the question how these various motives combine in affecting human behavior (McClelland, 1992). Although motives have mainly been studied individually to accumulate knowledge on single motives and to develop and validate measures, it has been assumed that more than one implicit motive at a time arouses one's behavior (McClelland, 1992). Based on theoretical considerations, the need to explain findings which could not be attributed to single motives, or due to pure curiosity, a number of motive configurations or patterns has been developed. It was reasoned that configurations predict behavior in ways different from the constituting motives (Spangler & House, 1991), thus helping to explain differences between people (McClelland, 1992). Just as the ability to dissolve sugar depends on a particular proportion of hydrogen to oxygen (see Spangler & House, 1991), it has been assumed that motives need to be clustered in a specific manner to yield certain behaviors. Constructing configurations, scoring weights of motives and AI are clustered on the basis of defined cutoff values such as the mean, the median, a standard deviation below or above the mean, or a fixed motive score. Defining such values for each motive making up a pattern, a person is said to display a given configuration if, in each motive, her or his score is above that value. Being below the cut-off in one of the constituents, a person may not be characterized by that motive pattern. As such, motive configurations represent dichotomous typological patterns.

McClelland (1977) theoretically proposed leaders to only be effective if motivated by high levels of *n*Pow, high levels of AI, and low levels of *n*Aff. Studying the association between motives and leadership success, though, the composition of motives representing the LMP has frequently been varied and the pattern has been operationalized in ways different from theorizing. Researchers drew on the difference between scores in power and affiliation (Winter, 1987), excluded the activity inhibition component (Jacobs & McClelland, 1994), or operationalized a responsible display of power independent of the concept of AI (Winter, 1991). Regardless of the postulate that a specific configuration of motives is needed to predict successful leadership, these alternative patterns equally related to desirable leadership outcomes. Drawing on the dichotomous LMP and individual motives, Spangler and House (1991) tried to support the hypothesis that the LMP predicts behavior which may not be predicted based on its constituents. They failed to empirically support this assumption which has been referred to in justifying the methodologically unsound clustering of motives and AI into typological patterns (McClelland, 1992; Spangler & House, 1991). Rather, they found presidential performance to be predicted by individual motives and the interaction of *n*Pow and AI. Hence, it is questionable whether the LMP is appropriately operationalized by a typological pattern or whether McClelland's (1977) propositions are statistically better represented in a different way. To answer this question, Spangler and House (1991) called for the examination of implicit motives and their interactions.

The role of the need for affiliation for effective leadership. McClelland (1977) reasoned the need for affiliation to energize behaviors and characteristics which contradict essential requirements in leading. Therefore, leaders ought to be low in *n*Aff in order to be effective. Combining *n*Pow, AI, and *n*Aff into the dichotomous LMP, results by McClelland and Boyatzis (1982) seem to support this assumption just as studies constructing the LMP in different ways (Jacobs & McClelland, 1994; Winter, 1991). Drawing on a difference score subtracting *n*Aff from *n*Pow, however, most of the relations reported by Winter (1987) did not reach statistical significance. Moreover, although Jacobs and McClelland (1994) found *n*Aff to negatively relate to attained management level, neither House and colleagues (1991) nor Spangler and House (1991) consistently reported negative relations across indicators of presidential performance for the single motive. Findings thus question the negative impact attributed to *n*Aff. Beyond that, studies even report a positive association between leaders' need for affiliation and indicators of successful leadership. As such, the affiliative concern was found to contribute to a work group's performance (Kirkpatrick, et al., 2002), followers'

job satisfaction and their perceptions of a favorable organizational climate, as well as leaders' efficiency or job performance (Cornelius & Lane, 1984). Besides, *n*Aff seems particularly relevant in rendering leaders in integrative positions more effective (Lawrence & Lorsch, 1967; Litwin & Siebrecht, 1967). Their tasks require unifying efforts of functional specialists (e.g., program coordinators or project managers). Given the inconsistent findings, it remains unclear whether McClelland (1977) was right to assume the need for affiliation to impede effective leadership, or whether *n*Aff more likely is a negligible motivational antecedent, or even adds to managerial success – at least under certain circumstances.

The behavioral expression of implicit motives and their impact on indicators of effective leadership. Examining the value of the LMP, implicit motives have mostly been directly related to indicators of effective leadership. Whereas such studies did not take into consideration by which mechanisms a leader's inner striving for certain types of incentives exerts an influence on success indicators, De Hoogh and colleagues (2005) assumed motives to rather indirectly take an effect. Being dispositions to act in a specific way (Hofer & Busch, 2011), behaviors energized by these motives likely transmit their impact on outcomes. As in the context of leading, behaviors directed at influencing, motivating, and enabling others are essential, leadership behaviors have been assumed to mediate the impact of implicit motives on various indicators of leadership success (De Hoogh, et al., 2005). Although, theoretically, the needs for achievement and affiliation as well as a socialized display of power have been connected to certain leadership behaviors, empirical evidence on these associations is widely missing. Analyzing an indirect effect of leaders' implicit motives on followers' work attitudes, De Hoogh and colleagues (2005) assumed charismatic leadership to mediate the relation. These leadership behaviors indeed related to *n*Pow, but did not transmit its impact on attitudes. Relating the needs for power, achievement, and affiliation to different leadership styles, Delbecq and colleagues (2013) obtained inconsistent results. Mediation has not been

analyzed in this study. Based on this evidence we may not conclude whether leadership behaviors translate a leader's implicit motives into favorable outcomes. Neither do these studies consistently confirm individual motives to relate to particular leadership behaviors.

Aims and Outline of the Present Work

Advancing knowledge in basic as well as applied regards, the present work takes up these open fields in research on implicit motives and leadership effectiveness. As such, the main concern of the present work is to examine the combination of implicit motives (Study 1 and Study 3) and to further evidence on the contribution of the need for affiliation to effective leadership (Study 2 and Study 3). Concurrently, the present work aims to relate motives and their interactions to certain leadership behaviors, and to explore whether these behaviors mediate the effect of motives on outcomes (Study 2 and Study 3).

The work is based on the assumption that the combined effects of various motives represent interactions rather than typological patterns. Whereas clustering implicit motives into dichotomous configurations the contribution of each motive may not be determined, the extent to which single motives and their interactions add to the prediction of outcomes can be quantified applying a dimensional approach (McClelland, 1992). Determining their value and knowing their relative impact contributes to refining literature on motivational antecedents of leadership, but also is of practical significance in leadership selection, for example. Drawing on linear additive combinations, Study 1 answers the call by Spangler and House (1991) and examines the LMP in terms of a three-way interaction of *n*Pow, AI, and *n*Aff. To further substantiate evidence on the interactivity of implicit motives, Study 3 considers the interplay of the motivational Big Three for being the motives primary in human behavior. Study 1 and Study 3 thus aim to shed light on the interplay of implicit motives and to lend support to the assumption that the way leaders' *n*Pow, *n*Ach, and *n*Aff become manifest also depends on the impact of interacting motives. As so far, the expression of implicit motives has only been

assumed to be moderated by one's activity inhibition (e.g., Langens, 2010), explicit motives (e.g., Langens, 2007), or traits (e.g., Hofer, Busch, & Schneider, 2015; Lang, Zettler, Ewen, & Hülsheger, 2012; Winter, John, Stewart, Klohnen, & Duncan, 1998), the studies contribute to advancing basic knowledge and theorizing in the field of implicit motives, but also refine motive research methodologically.

Substantiating findings by Cornelius and Lane (1984) and Kirkpatrick and colleagues (2002), Study 2 and Study 3 aim to unequivocally emphasize the importance of the need for affiliation in the context of leadership. Besides reinforcing the significance of a socialized display of power, Study 2 analyzes the effectiveness of affiliation-motivated leaders when contrasted to those motivated to use their power self-servingly and those motivated by nAch, thus to leaders whose motive disposition has been considered obstructive or ineffective in higher management (McClelland, 1977; McClelland & Boyatzis, 1982). Study 3 investigates the potential of *n*Aff to channel the interplay of *n*Pow and *n*Ach into more effective ways, strengthening the value of affiliative needs in leading while shedding light on the interplay of motives. Due to changing and uncertain work environments, globalized markets, flattening hierarchies, and different determinants of career success, leadership demands have notably changed compared to the time when McClelland (1977) derived the LMP and together with Boyatzis (McClelland & Boyatzis, 1982) empirically validated this proposition, making *n*Aff an essential predictor of effective leadership these days. Given that until now researchers as well as practitioners act on the assumption that *n*Aff impedes leadership performance and success, results of Study 2 and Study 3 contribute to validating and updating theorizing on the LMP and have substantial implications for leadership selection and development.

Finally, the present work assumes implicit motives to become manifest in certain leadership behaviors. Being the most popular paradigm in leadership research (Dinh, Lord, Gardner, Meuser, Liden, & Hu, 2014), Study 2 relates the socialized display of power as well as the need for affiliation to transformational leadership when contrasted to the personalized use of power and the need for achievement and assumes these leadership behaviors to transmit the impact of motives. Study 3 relates leaders' motives and the interplay of *n*Pow, *n*Ach, and *n*Aff to various leadership styles. These studies continue work by De Hoogh and colleagues (2005) and Delbecq et al. (2013) and empirically validate relations among implicit motives and leadership behaviors which until now only have been suggested theoretically. Being a topic of particular interest (Hofer, et al., 2015), Study 2 and Study 3 consider the behavioral realization of implicit motives and follow the call to further examine their link to subordinate outcomes (De Hoogh, et al., 2005). Identifying behavioral correlates of implicit motives in leadership and illuminating the black box relating leaders' motives and outcomes, the present work advances applied research and enhances scholarly understanding on how one's inner strivings may lead to managerial success. Such knowledge benefits the leadership literature, but may also direct leadership trainings aiming to develop successful leaders.

The present work hence considers the open fields in three empirical studies. Based on a dimensional approach, Study 1 investigates the LMP as an interactive effect and relates the three-way interaction of leaders' *n*Pow, AI, and *n*Aff to developments in their income as well as to the performance of their team. Using an experimental design, Study 2 compares leaders high in a socialized display of power, high in need for affiliation, high in a personalized use of power, and high in need for achievement. Contrasting leaders with these motives, Study 2 determines the causal effect of motives on transformational leadership and, consequently, indicators of successful leadership, followers' attachment to the leader and organizational citizenship behavior (OCB). Integrating findings of the previous two studies, Study 3 illuminates the interactive effect of the needs for power, achievement, and affiliation and its association with followers' satisfaction and performance, the leader's career success, and perceptions of transformational leadership. Besides, it relates the need for achievement and

the need for affiliation to leadership behaviors. Together, these studies answer the questions whether motive combinations are represented by interactive effects, whether the need for affiliation benefits successful leadership today, and whether implicit motives relate to certain leadership styles transmitting their impact on outcomes.

Study 1 – Implicit Motives and Leadership Performance Revisited: What Constitutes the Leadership Motive Pattern?

Resuming the work by Spangler and House (1991) the aim of Study 1 was to explore whether the LMP rather represents a three-way interaction than a dichotomous configuration as which it has commonly been analyzed. Analyses relied on a sample of 70 leaders working in various non-profit and for-profit organizations. Leader's motives were assessed using the Picture Story Exercise (see McClelland, et al., 1989). Indicating their performance, leaders evaluated the degree to which their teams attained their goals in the last year and stated how their income had developed during that period. Hierarchical regression analyses showed the interactive effect of *n*Pow, *n*Aff, and AI to significantly account for variance increments in both performance indicators over and beyond main effects of motives and AI as well as two-way interaction terms. In the goal attainment of the team the amount of variance additionally explained by the three-way interaction was 9%, in developments in income it explained 10% (both p < .01). Further analyzing the specific form of the three-way interaction, we found the relation to both indicators of leadership Performance to be strongest if *n*Pow and AI, and – deviating from the LMP – also *n*Aff was highly developed in a leader. We termed this motive combination the *Compassionate Leadership Profile*.

Results of Study 1 confirm that human behavior indeed is motivated by various implicit motives at a time. Such motive configurations, though, do not necessarily represent dichotomous typological patterns as usually advocated in motive research (see McClelland, 1992). Rather, in energizing, selecting, and orienting behavior implicit motives interactively take an effect. Accordingly, their behavioral expression is not only modulated by one's activity inhibition and traits, but also depends on the particular interplay of motives. Besides emphasizing the value of a dimensional approach in motive research and giving evidence on the interactivity of implicit motives, findings suggest that in being a successful leader a distinct need for affiliation seems of importance nowadays. Challenging LMP theorizing, Study 1 thus also adds to the growing body of research on the contribution of nAff to leadership performance and effectiveness.

Study 2 – Promoting the Underestimated: A Vignette Study on the Importance of Need for Affiliation to Successful Leadership

In the light of the results of Study 1 and previous findings and propositions (Cornelius & Lane, 1984; Kirkpatrick et al., 2002; Spangler et al., 2014), Study 2 further investigated the contribution of the need for affiliation in the context of leadership and aimed to substantiate evidence on its importance to leaders' effectiveness. In linking leaders' motives to leadership success, followers' attachment, and OCB, this study also aimed to further shed light on how the influence of implicit motives on these outcomes unfolds. Therefore, motives were related to transformational leadership. As we aimed to determine causal effects of single motives and to compare socialized power-motivated as well as affiliation-motivated leaders with those high in *p*Pow and high in *n*Ach jointly for both having been stated ineffective leaders, an experimental design was applied. In line with previous experimental studies in the field of leadership (e.g., Choi & Mai-Dalton, 1999; Felfe & Schyns, 2006; Nübold, Muck & Maier, 2013), written paper people vignettes (Aguinis & Bradley, 2014) were used presenting each participant a specific leader. Vignettes either illustrated characteristics of a leader high in *n*Aff, *s*Pow, *p*Pow, or *n*Ach. Although we did not assume female and male leaders to differ, we yet varied leaders' gender in order to be able to generalize the findings to both leaders. Relying on a sample of 80 employees of various organizations and industrial sectors,

hypotheses were examined in a 2 (gender) x 4 (motives) questionnaire-based between-subject design. Preliminary analyses did not find any significant difference dependent on the leaders' gender so that experimental groups were merged according to the motive being manipulated. Results suggest that just as leaders high in sPow (d = 2.70), also those high in nAff (d = 1.96) were perceived to lead more transformational when contrasted to leaders high in pPow and leaders high in *n*Ach jointly. Transmitted by ascribed transformational leadership behavior leaders high in sPow were on average rated more successful and elicited more attachment and OCB in followers (effects ranging from d = 1.22 to d = 2.80) than leaders high in pPow and high in *n*Ach jointly. As expected, compared to the latter ones, also leaders high in *n*Aff were on average rated higher in leadership success and attachment indicators (effects ranging from d = 0.79 to d = 2.67). They, however, did not more strongly elicit followers' OCB. According to the average overall effect size of the empirically derived benchmark by Bosco, Aguinis, Singh, Field, and Pierce (2015), effects of motives on leadership behavior and outcomes can be considered high. Exploratively contrasting leaders high in sPow with those high in nAff, socialized power-motivated ones had a higher impact on perceived effectiveness (d = 0.90) and followers' extra effort (d = 0.57), two indicators of leadership success. With regard to followers' satisfaction with the leader, another success indicator, their attachment to the leader, and OCB, though, those high in *s*Pow and high in *n*Aff did not significantly differ.

Advancing experimental designs to the study of implicit motives in leadership, Study 2 lends support to a causal effect of motives on ascriptions of transformational leadership behavior as well as on followers' perceptions of leadership success, their attachment, and OCB. Results suggest that the leader's socialized power motive, but also her or his need for affiliation affects desirable outcomes by becoming manifest in transformational leadership. Illuminating a way motives exert an influence on outcomes, Study 2 contributes to furthering knowledge on the relation of implicit motives and managerial success. Findings demonstrate leaders high in affiliative interests to be more successful than those high in pPow and high in nAch. Although the need for affiliation has been reasoned to impede managerial success and a highly developed need for power to ensure it, in arousing followers' attachment, keeping them satisfied, and eliciting their OCB, the concern for establishing, maintaining, and restoring harmonious relationships with others is as important as being motivated to impact others in socially responsible ways. Study 2 thus promotes the value of the need for affiliation beyond existing evidence and attests this implicit motive to actually be an important asset for successful leadership today.

Study 3 – Need for Affiliation as Motivational Add-On for Leadership Behaviors and Managerial Success

Integrating findings on the interactivity of implicit motives with evidence on the value of *n*Aff to leadership success, Study 3 aimed to investigate the interplay of the motivational Big Three, *n*Pow, *n*Ach, and *n*Aff, and their relation to effective leadership. Broadening evidence on the value of *n*Aff to a leader's success, Study 2 took up the findings of Study 1 and rigorously advanced this line of research by determining causal effects and comparing leaders high in *n*Aff to those high in *s*Pow. Given its contrastive design, Study 2 did not quantify the extent to which single motives contribute to the outcomes studied. Moreover, examining the impact of independent motives, it did not take into consideration that human behavior is commonly energized by various motives at a time (McClelland, 1992), and left aside the finding of Study1 that besides being channeled by AI, motives also modulate each other. Building on findings of both studies, Study 3 regarded the interplay among all three major motives relating it to different leadership outcomes. In so doing, we assumed the need for power to be the essential implicit motive in driving leaders' success. Given increasing demands for creative and innovative employees, we suggested *n*Ach to also be a vital motive for leaders in current organizations. Aligning their influencing to the completion of work

tasks, challenging of routines, improvement of things, and excellent performance, powermotivated leaders are more successful under the condition of being equally high in need for achievement. As need for affiliation turns leaders sensitive to followers' needs and their development and drives them to initiate, maintain, and restore advantageous relations with important others, we assumed a distinct affiliative concern to channel this interaction into more effective ways. Contingent on high *n*Ach, we proposed *n*Pow to more strongly relate to followers' satisfaction and performance when moderated by high compared to low *n*Aff. Keeping up with Study 2, Study 3 also related implicit motives to leadership behaviors so as to broaden empirical evidence on their behavioral manifestation in the context of leading. We assumed the need for achievement to relate to perceptions of passive leadership, the need for affiliation to ratings of leaders' concern for followers' needs, and the interplay of all three implicit motives to perceived transformational leadership. In a sample of 70 leader-follower dyads, we assessed implicit motives and career success on the part of leaders, whereas followers rated the leaders' leadership behavior, indicated how satisfied they were with jobs and leaders, and evaluated their own in-role performance and OCB. Hierarchical regression analyses revealed the three-way interaction of *n*Pow, *n*Ach, and *n*Aff to significantly account for variance increments in both satisfaction indicators (in each case $\Delta R^2 = .10, p < .01$) as well as in leaders' career success ($\Delta R^2 = .06, p < .05$). Supporting our assumptions, slope difference tests demonstrated that contingent on high nAch, the association between nPowand each outcome was indeed closer if high compared to low *n*Aff added to the interplay. Linking implicit motives to leadership behavior, leaders' need for affiliation significantly related to perceptions of their concern for followers' needs (r = .25, p < .05) and need for achievement marginally related to perceptions of passive leadership (r = .21, p < .10). The three-way interaction of nPow, nAch, and nAff accounted for variance increments in follower-rated transformational leadership ($\Delta R^2 = .07, p < .05$). Contingent on high *n*Ach, the relation of nPow and ratings of transformational leadership was again closer if moderated by high compared to low nAff. Transformational leadership, however, did not transmit the effect of the interplay of nPow, nAch, and nAff on followers' satisfaction.

Substantiating findings of Study 1, results of Study 3 give further evidence on the interactivity of implicit motives. In rendering followers' satisfied with jobs and leaders, and advancing one's career, the needs for power, achievement, and affiliation interactively take an effect. Confirming the contribution of *n*Aff to effective leadership, the interplay of *n*Pow and *n*Ach actually closer related to outcomes contingent on high *n*Aff. Study 3 thus shows the need for affiliation to be a vital motivational add-on for leadership today (see Spangler, et al., 2014) channeling leaders' behaviors into more effective ways. Results of Study 3 further suggest that motives differentially find expression in various leadership behaviors. Whereas *n*Aff significantly related to perceptions of leaders' concern for followers' needs, and *n*Ach tended to relate to perceptions of passive leadership, interplaying with *n*Pow these motives accounted for variance increments in transformational leadership. This finding leads us to assume that whereas activity inhibition restrains the expression of motivational impulses, interacting motives add a new quality to the manifestation of the motive being aroused. Implicit motives hence relate to different behaviors depending on whether being aroused individually, channeled by AI, or modulated by another motive. Not least, although Study 2 experimentally implied implicit motives to exert an influence on followers' satisfaction by becoming manifest in transformational leadership behavior, Study 3 does not confirm this finding relying on leader-follower dyads. Therefore, the means by which implicit motives foster desirable outcomes deserve further examination. In so doing, also the characteristics associated with certain motives, such as leaders' empathy or trustworthiness need to be considered.

Study 1 – Implicit Motives and Leadership Performance Revisited: What Constitutes the Leadership Motive Pattern?

Steinmann, B., Dörr, S. L., Schultheiss, O. C., & Maier, G. W. (2015). Implicit motives and leadership performance revisited: What constitutes the leadership motive pattern? *Motivation and Emotion*, 39, 167-174. doi:10.1007/s11031-014-9458-6

Study 2 – Promoting the Underestimated: A Vignette Study on the Importance of Need for Affiliation to Successful Leadership

Steinmann, B., Kleinert, A., & Maier, G. W. (2016). Promoting the underestimated: A vignette study on the importance of need for affiliation to successful leadership.
Manuscript submitted for publication.

Study 3 – Need for Affiliation as Motivational Add-On for Leadership Behaviors and Managerial Success

Steinmann, B., Ötting, S. K., & Maier, G. W. (2016). Need for affiliation as motivational add-on for leadership behaviors and managerial success. *Frontiers in Psychology*, 7:1972. doi:10.3389/fpsyg.2016.01972

General Discussion

The aim of the present work was to contribute to basic and applied research and thus to theorizing and practice in the field of implicit motives and leadership success in three ways: First, we aimed to analyze combinations of various motives in terms of interactive effects. Using a dimensional approach, we may examine the extent to which motives and interactions add to outcomes. Revealing implicit motives to interplay, theorizing and research on implicit motives may be advanced. Second, we aimed to investigate the need for affiliation in the leadership arena to substantiate the value of this implicit motive to managerial success. The work thus contributes to verifying and updating LMP theorizing and to deriving implications for HR selection and development. Third, we aimed to shed light on the manifestation of implicit motives in leadership behaviors and to investigate whether these behaviors explain how the effect of implicit motives on indicators of effective leadership unfolds. Identifying mechanisms which transmit the impact of the leaders' inner strivings on leadership success.

Summary and Discussion of the Results

Results of the three studies give evidence on the interplay of implicit motives, confirm the value of the need for affiliation to effective leadership, and show implicit motives and their interactions to become manifest in different leadership styles. Main results are summarized according to the three open fields of research we considered.

The combination and interaction of implicit motives in predicting effective leadership. Applying a dimensional approach, Study 1 found the LMP components need for power, activity inhibition, and need for affiliation to indeed interactively take an effect on teams' goal attainment and developments in leaders' income. Additional analyses showed this three-way interaction to still account for significant variance increments in the outcomes when the dichotomous LMP was first entered into regression analyses. Looking at individual motives and the interaction of *n*Pow and AI, Spangler and House (1991) already found single motives and the interaction term to explain variance over and above the LMP. In their study, though, the examination of interactive effects was limited to the impact of AI on the display of power. Considering the interaction of all three LMP components, our study takes up and rigorously broadens findings by Spangler and House (1991). Results of Study 1 illustrate that besides being modulated by activity inhibition (McClelland, et al., 1972), explicit motives (Langens, 2007), and traits (Hofer, et al., 2015; Lang, et al., 2012; Winter, et al., 1998), implicit motives moderate each other. To further evidence on this effect, Study 3 considered the interplay of the motivational Big Three, *n*Pow, *n*Ach, and *n*Aff, for being the motives predominant in directing, selecting, and energizing behavior (see Bernecker & Job, 2011). In line with our assumptions, the three-way interaction accounted for variance increments in followers' satisfaction, leaders' career success, as well as follower-rated transformational leadership. In sum, the present work emphasizes that motivational syndromes made up of several motives driving a person's behavior at a time do not necessarily represent typological patterns as long-time advocated. They may equally represent interactive effects.

The role of the need for affiliation to effective leadership. Across all three studies, the value of the need for affiliation to effective leadership has unequivocally been supported. Although Study 1 did not decidedly assume nAff to contribute to leadership performance, findings yet give evidence on its value. Drawing on an experimental design, Study 2 showed that compared to those high in *p*Pow and those high in *n*Ach jointly, leaders high in *n*Aff were perceived more effective and more strongly enhanced followers' extra effort and work-related attitudes. Effects were fully or partially mediated by perceptions of transformational leadership. Affiliative leaders, though, did not appear to more strongly impact followers' OCB than those high in *p*Pow and high in *n*Ach jointly. Exploratory analyses suggest that in enhancing followers' attitudes and OCB, a concern for others is on par with a concern for

impacting others socially intelligent. Study 3 confirmed the need for affiliation to be a vital add-on for successful leadership. Analyses showed that contingent on high nAch, high nPow more closely related to followers' satisfaction, leaders' career success and transformational leadership if high *n*Aff added to this interplay. In followers' OCB and in-role performance implicit motives and their interplay did not account for variance. Contributing to the growing body of research challenging LMP theorizing (e.g., Cornelius & Lane, 1984; House, et al., 1991; Kirkpatrick, et al., 2002) and substantiating remarks by Spangler et al. (2014), this work clearly emphasizes the value of the need for affiliation to leadership in contemporary organizations. Whereas this motive seems irrelevant for followers' individual performance (Study 3) and OCB (Study 2 and Study 3), it contributes to their satisfaction and attachment (Study 2 and Study 3), as well as to teams' collective performance (Study 1) and leaders' career success (Study 1 and Study 3). As affiliative leaders are empathetic about followers' needs (Kanungo & Mendonca, 1996) and place them above unpleasant organizational decisions (House, et al., 1991), high *n*Aff may be assumed to specifically boost positive work-related attitudes such as followers' satisfaction and attachment to the leader. As each motive is associated with certain behaviors and attributes, it is reasonable that motives are of varying significance for different leadership outcomes. Our studies suggest the need for affiliation to be particularly valuable for attitudinal outcomes and career success.

The behavioral expression of implicit motives and their impact on indicators of effective leadership. Considering the manifestation of implicit motives in leading, Study 2 and Study 3 related leaders' motives to different leadership behaviors. Results of Study 2 corroborate that compared to those high in personalized power and motivated by a distinct need for achievement, both leaders high in socialized power and high in need for affiliation were perceived to lead more transformational. This adds evidence to the inconclusive results on the relation of *n*Pow and *n*Aff to the charisma component of transformational leadership

(De Hoogh, et al., 2005; Delbecq, et al., 2013). On all outcomes but OCB, transformational leadership transmitted the effect of motives. Whereas Study 2 applied a contrastive design permitting relational conclusions only, Study 3 directly related implicit motives and their interaction to follower-rated leadership behaviors. Leader's *n*Ach only marginally related to passive leadership. Given their concern with excellence they probably intervene more timely than passive leaders do. Achievement-oriented leaders acknowledge improved work quality and articulate performance expectations (Delbecq, et al., 2013), thus actively influencing and motivating others. As expected, *n*Aff significantly related to leaders' concern for followers' needs, and the interaction of nPow, nAch, and nAff accounted for variance increments in transformational leadership. Transformational leadership, though, did not mediate the effect of the three-way interaction on outcomes. In real-life work situations followers may have perceived a number of aspects (e.g., behaviors, attributes or the atmosphere leaders create) we were unable to adequately convey in the vignettes. These attributes and behaviors might be of greater importance in transmitting the influence of motives on leaders' career success or followers' attitudes than the leaders' focal leadership behavior. Predicting employees' career success, the ability to interact with others and use these relations for one's advantage may more readily transmit the effect of implicit motives (see Ng, Eby, Sorensen, & Feldman, 2005), whereas the empathetic and considerate nature of leaders high in nAff and high quality relations with followers may play an essential role in transmitting the effect on attitudes (see Dulebohn, Bommer, Liden, Brouer, & Ferris, 2012). Identifying mechanisms mediating the effect of implicit motives, research needs to be broadened beyond core leadership behaviors, considering attributes and behaviors beneficial to the outcome of interest.

Theoretical Contributions

Results of the three studies contribute to advancing the field of implicit in basic as well as applied regards. Contributions are described according to the open fields of research. leadership. Considering the way the combined effect of implicit motives may be represented, the present work furthers the field of implicit motives on methodological grounds, contributes to basic research, and advances theorizing on moderators. Instead of drawing on typological patterns and splitting a sample based on cut-off values into those having or not having the pattern, in this work we applied a dimensional approach. Although the dichotomization of continuous motive scores has been common practice in motive research (McClelland, 1992), statistically seen this procedure is hardly tenable as it gets along with a dramatic loss of information and yields misleading results (MacCallum, Zhang, Preacher, & Rucker, 2002). Dichotomizing an independent variable, for example, may reduce the effect size, power, and statistical significance of an analysis (MacCallum, et al., 2002). Therefore, scholars cautioned against dichotomization (MacCallum, et al., 2002). Research on implicit motives hence based on deficient statistical procedures questioning the validity of previous results. Considering linear additive combinations, this work overcomes the negative impact of dichotomization and advances motive research toward more adequate and methodologically sound procedures and thus more valid findings. Examining the impact of motives in hierarchical regression analyses, we may also quantify the extent to which single motives and interactions contribute to certain leadership outcomes. As assumed, results revealed the combined effect of the needs

The combination and interaction of implicit motives in predicting effective

effects. Finding implicit motives to interact, the present work advances motive theorizing. By now, the behavioral expression of implicit motives has only been assumed to vary dependent on one's explicit motives, traits, or AI. Confirming implicit motives to interact, we reveal a new kind of moderator having the potential to alter the way an implicit motive becomes manifest. Whereas activity inhibition restrains the expression of an implicit motivational impulse (McClelland, et al., 1972), we assume an interacting motive to give a new quality

for power, achievement, and affiliation, as well as activity inhibition to represent interactive

(related to its genuine motivational impulse) to the outlet of the motive being modulated. This finding may initiate important developments in motive theorizing. Revealing implicit motives to influence one another may assist in disentangling and understanding inconclusive results on traits found to channel the behavioral realization of certain motives (Hofer, et al., 2015; Lang, et al., 2012; Winter, et al., 1998). If people are motivated by the interplay of high nAff and high nPow, extraversion may channel the behavioral outlet of nAff (Winter, et al., 1998), whereas solely being high in nAff, agreeableness might be the relevant moderator (Hofer, et al., 2015). In this regard, our findings further knowledge on the channeling effect of traits. In sum, besides advancing motive research methodologically, findings resulting from the use of the more adequate statistical procedure equally contribute to advancing our understanding of implicit motives. Based on our findings researchers in the field of implicit motive are advised to apply a dimensional approach and to carefully think about potential interactive effects among various implicit motives when investigating motive-outcome relation.

The role of the need for affiliation to effective leadership. Across studies, we found the need for affiliation to contribute to successful leadership. The present work thus clearly strengthens the value of this implicit motive which has long-time been underestimated by scholars in the field of leadership. Whereas *n*Aff has been assumed to impede leadership, we even found this motive to increase leaders' success. As a critical determinant of effective corporate leadership would be neglected if we further discredited this motive, theorizing on the relation of implicit motives and leadership urgently needs to be revised. McClelland's (1975) remarks on the LMP date back more than four decades and have not been refined since. Studies on the LMP have been conducted in the 1970s and 80s (e.g., McClelland & Boyatzis, 1982; McClelland & Burnham, 1976; Winter, 1987). Even though *n*Aff showed to be obstructive then, leadership demands have widely changed compared to that time. These changes in the real world have not yet entered theorizing on implicit motives in leadership.

Based on our findings, the LMP urgently has to be updated and adapted to current leadership demands. Expanding theories by our findings, we propose the interplay of high *n*Pow, high AI, and high *n*Aff to be the motivational foundation of coaching others with compassion, involving both an influence on others in socially responsible ways and the establishment of close, intimate, and nurturing relationships with followers. Findings further suggest that we may not find *the one* motive disposition driving effective leadership as such. The predictive value of leaders' implicit motives actually varies dependent on the outcome. Accordingly, in boosting followers' performance we probably find different motive combinations to be most conducive than in increasing their satisfaction.

The behavioral expression of implicit motives and their impact on indicators of effective leadership. Our work empirically showed single motives and their interactions to relate to perceptions of different leadership behaviors. The behavioral realization of implicit motives has been considered in various realms such as intimate relations or marriages, sports, everyday life, or competitions. Attempts to determine the way motives become manifest in a leader's actual leadership behavior are in its early stages (De Hoogh, et al., 2005; Delbecq, et al., 2013). Confirming the theoretically derived foundation of LMP theorizing, we found *n*Aff to relate to follower-rated concern for followers' needs, and revealed marginal relations of *n*Ach and passive leadership. Accordingly, the present work adds to empirically verifying fundamental assumptions relating implicit motives to leadership behaviors upon which the entirety of previous research rested, but which up to now have been taken for granted rather than having been properly analyzed. In addition, results show that whereas single motives may be associated with rather ineffective leadership behaviors, interactions of implicit motives may yield effective leadership styles. This finding suggests that implicit motives do not per se benefit or impede effective leadership, but that the specific combination of motives driving a leader's behavior is essential. In that, interacting motives may even change the

quality of the behavioral manifestation, reversing the value of an underlying motive to effective leadership. Although findings shed light on behavioral correlates of implicit motives in leading, the work did not unmistakably identify behaviors as mechanisms transmitting the impact of motives on outcomes. Results of the exploratory analyses conducted in Study 3 yet stress an important aspect we have to bear in mind when examining the way motives relate to outcomes: A certain motive may find expression in a variety of behaviors (Schultheiss & Schultheiss, 2014). As such, we assumed need for affiliation to either become manifest in networking behaviors or in leaders' consideration and care, depending on the outcome we aimed to predict. Yet, we regarded transformational leadership as mediator. Identifying mediating behaviors, we need to make sure to not only investigate behaviors related to a certain motive (combination), but to consider those out of the variety of possible behaviors energized by the respective motives, which indeed benefit the outcome of interest. Further verifying the way implicit motives exert their influence on leadership outcomes, researchers need to carefully account for the multitude of behaviors energized by a certain motive.

Practical Implications

Whereas these theoretical refinements have to find entrance into the scientific field, our work also entails implications for organizations. Based on the dimensional approach, we may quantify how much of the variance in outcomes may in sum be attributed to motives and their interplay, just as the extent to which these motives contribute to the outcomes. Determining the value of motives and their interactions to specific indicators of managerial success, HR specialists may select applicants characterized by that motive disposition which proves particularly beneficial. Finding motives and their combinations to be associated with certain leadership behaviors, potential leadership styles may be predicted based on applicants' implicit motive scores and matched with current demands. If, for example, a particularly considerate leader is searched for, a person high in nAff is to select. Given the inconsistent

findings on the relation of affiliative concerns and effective leadership, we did not know whether a rejection of applicants for a leadership position high in affiliation was empirically justified. Clarifying the contribution of nAff, evidence-based selection decisions may now be taken. Integrating these findings into organizational routines, selection processes have to be supplemented by measures of implicit motives. Whereas personality questionnaires are widely used in selecting staff, projective measures such as the PSE are commonly neglected due to criticisms on their reliability and their time-consuming application and coding. Given, however, that traits and implicit motives together predict behavior (Winter et al., 1998), that motives and their combinations are of value to leadership success, and that implicit measures are of great potential in predicting unique variance (Uhlmann, et al., 2012), the assessment of implicit motives is not only justified but strongly recommended. As such, HR specialists need to be trained with Winter's (1994) practice material to obtain applicants' motives from PSE stories, cover letters, speeches applicants delivered in former positions, or any verbal material stemming from these persons. Finding *n*Aff to benefit leaders' success, HR specialists have to be attentive to behaviors energized by this motive. These behaviors may either be revealed in biographical or situational questions posed in structured interviews or become obvious in assessment centers. As behaviors resulting from a socialized power motive are currently seen to be of special importance in group discussions or role plays, observer trainings have to be attuned to the significance of affiliation-driven behaviors. Apart from observer trainings also leadership trainings have to be reconsidered. One way is to conduct motive trainings aimed to change leaders' implicit motives. Following McClelland and Burnham (1976), such trainings analyze the leaders' jobs and leadership styles, but also assess and report their implicit motives. Becoming aware of one's motives and their effect on leadership outcomes is meant to have a modifying impact on motive dispositions. Yet, efforts should equally concentrate on the practice of behaviors energized by nAff. Trainings enhancing leaders' competencies in

reciprocal communication, sensitivity toward followers' individual needs, and abilities to establish and maintain harmonious relationships have to be designed. As, however, behavior is executed with more vigor, persistence, and energy if driven by an underlying motive, an appropriate motive disposition should not be disregarded. Given the relative stability of implicit motives, findings will be of greater importance in selecting than in training leaders.

Strengths and Weaknesses of the Present Work

Considering all three studies, certain strengths but also certain limitations become obvious which are discussed in the following.

The major strengths of the set of studies concern its methodological diversity as well as the fact that each open field has been approached in two studies. As every method applied in research has its limitations, the use of multiple methods within one study (questionnaires and PSEs) or across multiple studies (survey study with either leaders or leaders and followers as well as an experiment based on vignettes) on the same question has been recommended in organizational research (Greenberg, 2007). Each of the three studies was characterized by a unique design. Whereas the experimental design allows for the determination of causality and the examination of isolated effects of variables which might not be disentangled based on survey data (Brown & Lord, 1999), the survey approach allows for the examination of a phenomenon in its full complexity (Brown & Lord, 1999). Using the dyadic approach, we were able to broaden our analyses to outcomes assessed on the part of followers, increasing the variety of outcomes studied. Conducting studies in the field and relying on samples of employees or leaders, we increased the generalizability of our conclusions, and the variety of methods applied strengthened their validity. Given recent discussions on the quality of psychological research, the replicability of study findings has extensively gained attention in the scholarly discourse (e.g., Asendorpf, et al., 2013; Makel, Plucker, & Hegarty, 2012; Kepes & McDaniel, 2013). In this work, each of our research questions was considered in

two studies. Whereas the mediator function of transformational leadership could not be confirmed across studies, the interactivity of implicit motives has been corroborated in both studies analyzing motive combinations in terms of interactive effects. Study 1 did not initially aim to examine the value of *n*Aff. Yet, it revealed its significance in leading. Accordingly, the contribution of need for affiliation to leadership success has even been supported across all three studies. Repeatedly investigating our assumptions, the present work provides a kind of conceptual replication. Limiting this strength, Kepes and McDaniel (2013) call for exact replications in industrial and organizational psychology. Pashler and Harris (2012) state that instead of strengthening findings, conceptual replication can even contribute to amplifying the publication bias and can be misleading. Although with respect to experimental research, Stroebe and Strack (2014) argue in favor of conceptual compared to exact replication for emphasizing the generalizability of the phenomenon of interest, in any case more powerful studies replicating our findings are urgently needed.

Weaknesses of this work apply to all three studies or concern aspects related to two studies. In the following, five major limitations are discussed. First, the three studies did not analyze the relation between the leaders' implicit motives and leadership outcomes in terms of a dynamic process. Whereas experiments are designed to determine causal effects rather than identifying processes, Study 1 and Study 3 could have benefitted from such an approach. Although we aimed to shed light on how the impact of leaders' implicit motives on various outcomes unfolds, study designs did not allow for the examination of such processes. Leadership has come to be seen as a dynamic process subject to changes (Uhl-Bien & Ospina, 2012), but none of our studies accounted for such a perspective. Second, the role of followers has increasingly gained attention confessing that leadership is a co-creation and relational interaction of various persons (Shamir, 2007; Uhl-Bien & Ospina, 2012). Study 3 indeed relied on leader-follower dyads. However, assessing their attitudes, performance, and perceptions of leaders' leadership behaviors we conceived of followers as recipients of leadership rather than investigating their impact on and role within leadership processes. Ignoring followers' influence, processes which are substantive in leader-follower dyads and, thus, of significance to the question under investigation, are inadequately represented and may not be modeled based on the data we obtained. Third, in all three studies outcome measures were derived drawing on self-reports of leaders and followers rather than relating motives to objective criteria. Implicit motives, though, are of particular predictive value to spontaneous behavior and naturally occurring life outcomes rather than to respondent behaviors elicited by a specific stimulus in a defined instructional set (McClelland, 1980). According to McClelland (1980), self-reports are the most constrained respondent measures eliciting answers aligned to social desirability. Yet, they may be considered operant measures if they base on factual reports of behavior. Assessing developments in income, teams' goal attainment and individual performance, as well as leadership behavior, such facts were requested. Whereas self-reports on income converge with objective criteria (Judge, Cable, Boudreau, & Bretz, 1995), ratings of one's performance may suffer from social desirability. With regard to attitudes, objective measures are hard to obtain and self-reports have been judged appropriate (Chan, 2009). In Study 3, followers indicated how frequently leaders displayed certain behaviors. Despite drawing on behavioral facts that way, this evaluation depends on followers' individual perceptions, attributions, and the similarity of leaders and followers (Felfe & Schyns, 2010) as well as on their ability to distinguish behaviors a person displayed from those which did not occur (Hansborough, Lord, & Schyns, 2015). Study 2 did not imply direct interactions among leaders and followers, but participants rated behaviors illustrated in vignettes. Also in this design, leadership ascriptions are affected by participants' characteristics (Felfe & Schyns, 2006). Objective measures of leadership, though, do not exist (Felfe & Schyns, 2010). Fourth, some researchers may see the use of the PSE as another

limitation of this work. The PSE has been characterized by low internal consistency and its test-retest reliability has been considered problematic (Entwisle, 1972; Lilienfeld, Wood, & Garb, 2000). Attenuating these statements, Schultheiss, Liening, and Schad (2008) report substantial retest reliabilities ranging from .37 to .61 for an interval of two weeks, and scores have shown to even be consistent across a time span of 18 months (Busch & Hofer, 2012). Using meta-analytic procedures, Schultheiss and Pang (2007) found scores of *n*Pow, *n*Ach, and *n*Aff to be moderately stable and to decrease over time at a rate comparable to that of trait questionnaires. Regarding the low internal consistency of motive scores across PSE pictures, one reason may be seen in the fact that pictures have a differential "pull" for certain motives (Schultheiss & Pang, 2007). More recently, Schultheiss and Schultheiss (2014) emphasized the variability of motive scores across picture cues to even be a critical source of the validity of the PSE. They suggested that by illustrating different situations (e.g., workrelated ones, interactions with authorities, intimate relations) various pictures elicit different responses in people. Therefore, rather than having equal scorings across pictures at a point in time, Schultheiss and Schultheiss (2014) argue in favor of stable motive profiles, that is equable motive scores on a set of pictures across occasions. As such, retest reliability not internal consistency is essential. Varying responses to varying picture cues may even give insights into the circumstances and the manner of motive enactment. Finally, results stressing the value of the need for affiliation to managerial success may be reproached with arising from the scoring system we used to determine motive scores. In coding nAff, Winter's (1994) manual considers the establishment, maintenance, and restoration of harmonious relations, as well as sadness in the case of separation. In addition it integrates a concern for intimacy, a striving related to interpersonal warmth, self-disclosure, closeness, and good overall life adjustment (McAdams, 1992). These aspects of nAff are not assessed with the scoring system by Heyns and colleagues (1958) McClelland and Boyatzis (1982) used in their study. Besides

alluding to the initiation and maintenance of relationships, this system emphasizes a fear of being rejected by others. Methods sections of the various studies analyzing this relation show that both scoring systems have equally been applied in studies supporting (Cornelius & Lane, 1984; Kirkpatrick, et al., 2002) or disapproving (House, et al., 1991; Jacobs & McClelland, 1994; Spangler & House, 1991) the value of *n*Aff to leaders' success. Therefore, findings are unlikely to be attributable to the scoring system we used.

Future Directions

Together, the three studies of the present work contribute to the open fields in research on implicit motives and leadership success we identified. Although findings significantly advance knowledge in basic as well as applied regards, there still remain unanswered questions related to each field but also going beyond deserving further consideration.

The combination and interaction of implicit motives in predicting effective leadership. Whereas a person's activity inhibition has all along been assumed to modulate the behavioral manifestation of implicit motives, the present work investigated for the first time whether in taking a combined effect, various implicit motives influence each other. The behavioral manifestation and the relation of interactive effects to leadership outcomes are to further illuminate in future research. Rather than attenuating an initial motivational impulse as high AI would do, we assume implicit motives to give a new quality to the behavioral expression of the underlying impulse when interactively impacting behavior. Whether our finding that an interacting motive changes the quality of the behavioral outlet of an implicit motive replicates needs to be verified and broadened to further behaviors and characteristics, also outside the context of leadership. Moreover, given that it is also possible that various implicit motives jointly affect one's behaviors at a time, research urgently has to examine in which ways the expression of joint effects of implicit motives differs from the manifestation of interactive effects of the same motives and has to give evidence on their differential

validity for outcomes.

The role of the need for affiliation to effective leadership. Across industrial sectors, the three studies clearly supported the value of the need for affiliation to effective leadership. Nonetheless, conditions under which this motive is particularly supportive are to be verified. Some moderators have already been discussed. In politics, for example, the contribution of nAff has been assumed to depend on the point of time of the presidency. High levels of nAff have been reasoned vital during the electoral period and the primaries in which a friendly and caring personal image helps to gain the electorate's compliance (Spangler & House, 1991). In organizations, De Hoogh and colleagues (2005) suggested nAff to be more detrimental in turbulent contexts. During these times, leaders are forced to take vigorous actions, enforce authority, and to make crucial business decisions which might yield unpleasant consequences for followers. These tasks apparently run counter to the affiliative leader's inner striving. We, by contrast, suggested *n*Aff to rather be of relevance in times of organizational upheavals and uncertainty as intuition and awareness of others' feelings are called for in times of crises (Bruckmüller & Branscombe, 2010). Then, leaders need to show confidence, raise followers' motivation, and keep them committed to the organization (Lim & Ployhart, 2004). Given that considerate leaders enhance followers' motivation (Judge, Piccolo, & Illies, 2004) and trust (Dirks & Ferrin, 2002), an affiliative concern is vital in these times. Another moderator may be the composition of the team, with higher levels of nAff being more beneficial the more heterogeneous the members as considerate leaders improve the functioning of diverse teams (Homan & Greer, 2013). Yet another potential moderator is the leaders' gender. Although in Study 1 we did not find any difference, women are on average higher in *n*Aff (Drescher & Schultheiss, 2016). As such, their motive disposition may facilitate their leadership success, as women are expected to show more caring behaviors in leading positions and are evaluated less positive when using powerful and assertive, thus traditionally "male" behaviors (Eagly &

Karau, 2002). Male employees and leaders have been found to even obtain extra approval when using considerate, altruistic, and interpersonally sensitive "female" behaviors energized by nAff (e.g., Embry, Padgett, & Caldwell, 2008; Heilman & Chen, 2005; Mohr & Wolfram, 2008). The extra credit of sensitive male leaders, though, has also been challenged by study findings (e.g., Johnson, Murphy, Zewdie, & Reichard, 2008) as such leaders deviate from gender roles and masculine stereotypes (Moss-Racusin, Phelan, & Rudman, 2010). Research further suggests *followers*' gender to equally moderate the relation of *n*Aff and leadership success. Whereas female subordinates expect leaders to be more sensitive, male followers expect their leaders to be more masculine, strong, and tyrannical (Johnson, et al., 2008). Hence, leader's and followers' gender ought to be investigated as potential moderators in the relation of the need for affiliation to successful leadership.

The behavioral expression of implicit motives and their impact on indicators of effective leadership. Yielding inconclusive results, the manifestation of implicit motives and mechanisms mediating their impact on leadership outcomes deserve further investigation. Analyzing mediators such as networking behaviors or high quality leader-follower relations, scholars need to account for variables moderating the expression of implicit motives. Apart from AI, traits and explicit motives have been stated to channel their behavioral outlet or the association of motives and life outcomes (Hofer, et al., 2015; Lang, et al., 2012; Winter, et al., 1998). Winter and colleagues (1998) confirmed extraversion to channel the display of *n*Aff and *n*Pow. The positive emotionality, general activity, and sociability evolving from extraversion assist in initiating social activities which, on the long-run, yield the harmonious relations affiliation-motivated people long for. Keeping persons interactive, expressive, and focused on the outward, extraversion eases the expression of the power motive. Results by Lang and colleagues (2012) – applying a different projective measure than the PSE – do not support the effect for *n*Pow, and Hofer and colleagues (2015) failed to support the channeling

effect on *n*Aff, but rather report agreeableness to promote and neuroticism to constrain its behavioral realization. As in understanding human behavior the joint consideration of implicit motives and explicit traits is substantial (Lang, et al. 2012), research on mechanisms should not ignore leaders' traits and needs to make sure mechanisms fit both, motives and outcomes.

Further directions for the study of implicit motives and leadership success. Being of particular importance in better understanding leaders' implicit motives as well as their association with successful leadership, further directions going beyond any particular open field are highlighted. These directions concern the interplay of implicit and explicit motives and their value for effective leadership, allude to situational factors moderating the relation among leaders' inner strivings and leadership outcomes irrespective of nAff, emphasize the need to consider the way leaders' and followers' motives interact, refer to the variability of implicit motives, and close with the assessment of implicit motives.

Apart from personality traits like the Big Five, the behavioral manifestation of implicit motives is also channeled by their explicit counterparts. As explicit motives may override the manifestation of implicit ones (Langens, 2007), we expect the relation to managerial success to be stronger if explicit motives are congruent to an effective implicit motive disposition. Moreover, future research ought to study whether irrespective of the value of the underlying implicit motives to leaders' success, incongruence as such is detrimental. Whereas evidence on the detrimental effect of incongruence on one's emotional well-being is abundant (for an overview see Brunstein, 2010), with one such study conducted among managers (Kazén & Kuhl, 2011), research has not yet examined its impact on leaders' success. As implicit and explicit motives are virtually unrelated (Köllner & Schultheiss, 2014), people are at risk of perceiving incongruence. If incongruence shows to translate into less effective leadership, measures have to be taken to improve leaders' motive congruence. To reduce incongruence, people commonly adjust the more modifiable explicit motives to their implicit ones (Thrash,

Elliot, & Schultheiss, 2007). Certain personality dispositions have been found to turn people more aware of the occurrence of motive arousal or better attuned to their implicit motives (Hofer, Busch, Bond, Kärtner, Kiessling, & Law, 2010; Hofer, Busch, Chasiotis, & Kiessling, 2006; Thrash & Elliot, 2002; Thrash, et al., 2007) leading to increased motive congruence. As mindful people are characterized by a receptive attention to and nonjudgmental awareness of inner experiences such as thoughts, emotions, and sensations (Brown, Ryan & Creswell, 2007), mindfulness may also increase one's motive congruence. Mindfulness is learnable and self-trainings have lately been regarded in relation to work (Hülsheger, Feinholdt, & Nübold, 2015). Whether such interventions are a way to actively increase leaders' implicit-explicit motive congruence and, in turn, their effectiveness is to analyze.

Besides variables inherent in leaders, situational factors may impact the relation of motives to managerial success. Apart from specific moderators affecting the value of *n*Aff, we assume further contextual factors to moderate the motive-success relation no matter which motive we focus on. Spangler et al. (2014) suggested the predictive value of implicit motives to depend on an organization's type and on the role requirements related to a job position. In addition, we assume the motive structure prevalent in an organization to moderate this link. McClelland (1961) described societies or nations to be distinguished by motive profiles and Van Emmerik, Gardner, Wendt, and Fischer (2010) found cultural dimensions of countries to relate to managers' implicit motives. Accordingly, functional units or entire organizations may also display specific motive profiles linked to leaders' motives. Borrowing from the field of person-organization fit, we expect the congruence in implicit motives between leaders and organizations or units to affect the strength of the motive-success relation. So far, employees' fit to the organization has been found to relate to their performance (Hoffman & Woehr, 2006) or promotion (Hoobler, Wayne, & Lemmon, 2009). Therefore, we expect leaders to be more successful if their motive disposition proves to be congruent to the organization's or

unit's motive profile. Accordingly, Winter (1987) found a president's appeal to depend on the congruence of his motive profile to that of the respective society. Analyzing situational or contextual stimuli as moderators, researchers need to take into account that apart from impacting the relation of motives and outcomes, such stimuli have the potential to initially arouse one's implicit motives (Schultheiss, 2001).

In line with Shamir (2007), ascribing followers an active role in leadership, followers' implicit motives may be assumed to be of significance in the relation of leaders' motives and leadership outcomes especially for those outcomes assessed on the part of followers such as their performance or work-related attitudes. Future research should therefore use a dyadic approach to identify motive constellations within leader-follower dyads which particularly benefit successful leadership. Regarding the fit of leaders and followers, research commonly examined values (e.g., Krishnan, 2002), personality (e.g., Zhang, Wang, & Shi, 2012), and goals (e.g., Witt, 1998). Fit may either result if subordinates' characteristics complement those of leaders or the other way round (complementary fit), or if - in line with the similarityattraction paradigm (Byrne, 1971) – leaders and followers are similar (supplementary fit; Kristof-Brown, Zimmerman & Johnson, 2005). Although for person-supervisor fit similarity has been stated to closer relate to favorable outcomes, meta-analytic findings did not confirm this dominance (Kristof-Brown, et al., 2005). With regard to implicit motives, the dominance of either a complementary or supplementary fit may depend on the respective motives. In being motivated to exert an influence on others similarity probably is a hindrance, in being concerned with establishing and maintaining close relationships a supplementary fit likely enhances the commitment and satisfaction of leaders and followers. Therefore, studies are needed expanding research on person-supervisor fit to implicit motives. Using polynomial regression analyses (Edwards, 2002), scholars may identify constellations which are of particular importance for leadership success. In so doing, we need to be aware that although

people are characterized by a certain motive disposition, implicit motives are susceptible to being aroused by experiential stimuli (Schultheiss, 2001). Hence, research ought to analyze to which extent leaders' and followers' implicit motives affect one another. Implicit motives are not entirely visible to well-acquainted others (Daugherty, Kurtz, & Phebus, 2009), but yet become apparent in behavior. Such behaviors or manifestations like one's facial expression or tone of voice may, in turn, act as experiential stimuli arousing the implicit motives of those around (Schultheiss, 2001). Shedding light on the mutual arousability of leaders' and followers' motives, a process approach is vital. Such dynamic approaches are called for in research on leadership, as only based on them we may understand *how* exactly leadership outcomes may be achieved (Dinh, et al., 2014).

Being of particular importance for applied settings, knowledge on the variability of implicit motives has to be advanced. Attempts to modify a person's implicit motives center on motive trainings. Trainings commonly aim at turning participants aware of their implicit motives as well as to the behaviors and characteristics related to them (e.g., McClelland & Burnham, 1976; McClelland & Winter, 1969). As motives are relatively stable dispositions, training approaches moved from a modificatory to a clarificatory perspective directed at increasing participants' awareness of their sub-conscious strivings (Rheinberg & Engeser, 2010). Instead of regarding trainings, we propose to analyze a modificatory potential of motive arousal. Borrowing from personality research on traits it may be speculated that the steady arousal of one's implicit motives may modify one's motive disposition on the long haul. The Sociogenomic Model (Roberts, 2009), for example, assumes personality traits not only to determine one's personality states, but expects these states and one's behavior to feed back into the underlying traits. Based on that, we suggest investigating whether a constant arousal of certain motives has the ability to modify the hierarchy of one's inner strivings. Researchers found implicit motives to be aroused by excerpts from movies (e.g., Schultheiss,

Wirth, & Stanton, 2004) or pictures (Shantz & Latham, 2011), but not by verbal cues, which arouse explicit motives (e.g., Engeser & Baumann, 2014; Schultheiss, 2001). How long the effect of arousal lasts is yet unknown. Looking at applied rather than laboratory settings, leaders are constantly faced with stimuli arousing their need for power while completing their jobs. If we are right to assume motive arousal to feed back in one's motive disposition, *n*Pow may become more dominant in leaders' motive hierarchy on the long haul. Exploring this assumption is an exciting way for future research.

Finally, irrespective of the field of application, scholarly efforts are to be made to turn the assessment of implicit motives more economic. It takes experienced coders more than 80 hours to code the stories 100 participants produce in response to four to eight PSE pictures (Schultheiss, 2013). Given this labor-intensity, researchers might back off from assessing implicit motives (Schultheiss, 2013) and rather assess the easily accessible explicit motives, answering different questions. To further stimulate research on sub-conscious motives, initial attempts (e.g., Schultheiss, 2013; for an overview see Blankenship, 2010) to facilitate and computerize the processing and reliable coding of PSE material urgently need to be pursued. These attempts should also account for motive profiles across picture cues. Given that these profiles suggest under which circumstance and in which manner one enacts a given motive, they help to draw a more detailed picture on how motives relate to effective leadership.

Conclusion

Showing implicit motives to interact in energizing leaders' behaviors, stressing the value of the need for affiliation in corporate leadership nowadays, and revealing implicit motives to become manifest in certain leadership behaviors, the present work contributes to closing open fields in research on the relation of implicit motives and effective leadership and thus to a better prediction of managerial success based on implicit measures. Adapting LMP theorizing to current times of organizational upheavals and changing leadership requirements,

the work entails important implications for theorizing on implicit motives and their relation to managerial success, for basic as well as applied research, and for organizational settings. Providing various points for future research it also nurtures the current resurgence of (scientific) interest in the fascinating field of implicit motivational processes underlying a leader's effectiveness.

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Statement of Authorship

Hiermit erkläre ich, dass ich die vorliegende Dissertation "*The role of the need for affiliation and the behavioral manifestation of implicit motive in effective leadership – A dimensional approach*" weder in der gegenwärtigen noch in einer anderen Fassung einer anderen Fakultät vorgelegt habe oder hatte.

Ich versichere, dass ich die Dissertation selbstständig und ohne unerlaubte Hilfe angefertigt sowie unter ausschließlicher Verwendung der von mir angegebenen Quellen verfasst und wörtlich oder sinngemäß aus der Literatur entnommene Textstellen kenntlich gemacht habe. Ferner bestätige ich, dass ich den federführenden Beitrag zu den unter gemeinschaftlicher Autorenschaft entstandenen Manuskripten geleistet habe.

Bielefeld im August 2016