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ORIGINAL PAPER

Followers' Motives as Moderators of the Effects of Transformational Leadership Behaviors on Follower Outcomes and Leaders' Influence

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Abstract

The present paper reports three studies that were based on the general proposition that the effectiveness of transformational leadership (TL) depends on whether the displayed TL behaviors match the followers' motives. Specifically, inspirational motivation should be effective with followers high on the power motive, intellectual stimulation should be effective with followers high on the achievement motive, and individual consideration should be effective with followers high on the affiliation motive. In study 1, in order to confirm the hypothesized conceptual relationships between TL and motives, we systematically analyzed the TL literature ($N = 139$ papers) for motive content and found, as predicted, that descriptions of inspirational motivation, intellectual stimulation, and individual consideration were associated with power, achievement, and affiliation motive content, respectively. Study 2, a vignette study, confirmed that participants' ($N = 113$) motives determined their preferences for the respective TL behaviors. In study 3 ($N = 116$), we manipulated TL behaviors with video clips and confirmed the predictions that followers' affiliation [power] motive moderated the effects of individual consideration [inspirational motivation] on leaders' influence and followers' task performance. Mixed results were obtained regarding the expected moderating function of followers' achievement motive on the effects of intellectual stimulation. Findings are discussed with respect to their importance in establishing TL as a motivation theory.

Keywords Transformational leadership behaviors · Follower motives · Individual consideration · Inspirational motivation · Intellectual stimulation · Leadership effectiveness

Introduction

Transformational leadership (TL) theory is, in essence, a motivation theory. This is obvious from several statements made by the pioneers of TL theory. Burns (1978), for example, asserted that "the transforming leader looks for potential motives in followers, seeks to satisfy higher needs, and engages the full person of the follower" (p. 4). Bass (1985) took up this notion and postulated that a transformational leader is someone "who motivates us to do more than we originally expected to do" (Bass, 1985, p. 20). House (1977) again found it essential to study the effects of leaders on their followers' motive arousal and subsequent intrinsic motivation (see also House, 1996). A few years later, along with Shamir, he became even more specific and asserted, "Leaders selectively arouse follower nonconscious achievement, affiliation and power motives" (House & Shamir, 1993, p. 91).

Subsequently, several authors have added their views on the relationships between TL and follower motivation (e.g., Bass, 1998; Bono & Judge, 2004; Gagné et al., 2020; House & Shamir, 1993), but no prior research has directly examined the links between TL and followers' motives (for a notable exception, see Jacobsen & House, 2001).

The present research was aimed at closing this research gap by merging TL research and research on motives, two research disciplines that have been developed in largely separate literatures. Based on McClelland's (1985) classification of motives, we focused on followers' three "big motives": power, affiliation, and achievement. In order to examine the conceptual relationships between these three follower motives and TL, we took up the call announced by several researchers to disentangle TL and analyze its

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subdimensions (e.g., Deinert et al., 2015; van Knippenberg & Sitkin, 2013). We conducted three studies. First, we content-analyzed the research literature on TL for its underlying motive content in order to empirically demonstrate conceptual overlaps between the motives of power, achievement, and affiliation and the transformational leadership behaviors (TLBs) of inspirational motivation, intellectual stimulation, and individual consideration, respectively. Second, we conducted a vignette study to demonstrate that a follower's preference for a specific TLB depends on the follower's underlying motives. Finally, we conducted an experiment to test the prediction that the positive effects of different TLBs in terms of a leader's influence and a follower's task performance are selectively moderated by the follower's motives.

Theoretical Background and Hypotheses

Conceptual Relationships Between TLBs and Motives

From a thorough discussion of some of the problems of TL research, van Knippenberg and Sitkin (2013) concluded that "there is no basis to group different aspects of leadership into one construct, measurement, or experimental manipulation" (p. 45). The authors recommended that the umbrella concept of TL be disentangled and that its subdimensions be inspected separately (cf. Deinert et al., 2015; Kehr & Weibler, 2010). We view this as an important step in the exploration of the conceptual relationships between TL and motives.

We concentrated our research on the behavioral dimensions of TL: inspirational motivation, intellectual stimulation, and individual consideration. Consequently, we left the attributional subdimensions of TL (i.e., attributed influence and perceived charisma) out of the analysis. In doing so, we followed the recommendations of several researchers (cf. Bass, 1998; van Knippenberg & Sitkin, 2013): Attributed influence and perceived charisma are in essence the *effects* of leadership on followers and should thus be clearly separated from the leadership behaviors that may have caused these effects. In support of this idea, Shamir (1991) cautioned that a leader's behaviors should not be lumped together with attributed influence. Avolio et al. (1999) agreed and added that including both behavioral and attributional scales "potentially trades-off the behavioral purity" (p. 444) of transformational leadership research.

Earlier this century, scholars began examining the relationships between motives and composite measures of transformational leadership (Jacobsen & House, 2001), but the literature does not indicate which specific motives are related to which TLBs. Therefore, and based on prior work (Kehr & Weibler, 2010), we inspected the separate literatures on motives and transformational leadership to identify hints about conceptual relationships that we could then use as a starting point for our empirical analyses.

Most leadership researchers who have explored the relationships between leadership and motives adopted McClelland's (1985) classification of the three "big motives": power, affiliation, and achievement (e.g., Bass, 1998; House & Shamir, 1993). So did we. But how are these three motives related to inspirational motivation, individual consideration, and intellectual stimulation, the three separable TLBs (Bass, 1985, 1998)?

The *power motive* is a need for impact, status, social influence, and control (Winter, 1987). It is related to gaining and exerting social influence (Winter, 1987). In organizations, goal setting (Locke & Latham, 1990) and leading with vision (House & Shamir, 1993) are important ways to influence and inspire employees. In TL, setting high performance standards (i.e., goals) and leading with vision are the key elements of *inspirational motivation* (Bass, 1999). Therefore, we propose a conceptual relationship between the power motive and inspirational motivation. Presumably, a leader's use of inspirational motivation interacts with a follower's power motive in that a follower high on the power motive will react favorably to a leader displaying inspirational motivation.

The *affiliation motive* is a need for establishing and maintaining close interpersonal relationships (Heyns et al., 1958). The affiliation motive is particularly relevant in social situations and is related to intimacy and warmth (McClelland, 1975). Leaders high on the affiliation motive often develop mutually rewarding relationships with their followers and often take their followers' needs into consideration. This closely matches the descriptions Bass (1999) provided for the TLB of *individual consideration.* In sum, the affiliation motive and individual consideration seem to be aligned. Consequently, we asserted that individual consideration interacts with a follower's affiliation motive in that employees high on the affiliation motive will be motivated if their leader uses individual consideration.

Finally, the *achievement motive* is a need to excel with respect to a personal standard of excellence associated with the intent to do things better or in a more efficient way (McClelland, 1975) and a predilection to engage in creative and inventive tasks. Similarly, the TLB of *intellectual stimulation* is associated with stimulating people to view old problems from new perspectives and find creative solutions (Bass, 1999). Therefore, we see conceptual similarities between the achievement motive and intellectual stimulation. We thus inferred that a leader displaying high amounts of intellectual stimulation interacts with a follower's achievement motive in that followers high on the achievement motive will be motivated if their leader shows a high level of intellectual stimulation.

At the onset of our research, we intended to empirically examine the predicted relationships between the three TLBs and follower motives by analyzing the research literature on TLBs for motive content. On the basis of the discussion above, we expected:

Hypothesis 1. Descriptions of the three TLBs in the research literature will contain different motive content. Specifically:
Hypothesis 1A. Individual consideration descriptions will comprise more affiliation motive content than (a) motive content of the other motives and (b) the descriptions of the other TLBs.
Hypothesis 1B. Inspirational motivation descriptions will comprise more power motive content than (a) motive content of the other motives and (b) the descriptions of the other TLBs.
Hypothesis 1C. Intellectual stimulation descriptions will comprise more achievement motive content than (a) motive content of the other motives and (b) the descriptions of the other TLBs.

Followers' Motives and Preferences for TLBs

Motives have been defined in terms of dispositional preferences for certain types of incentives (McClelland, 1985; Schultheiss & Köllner, 2021). For instance, a person with a high power motive may have a preference for power-related incentives such as status symbols, prestigious positions, or public attention (Kehr et al., 2022). It seems likely that the leadership behavior of one's supervisor can also constitute an incentive, inasmuch as it matches the subordinate's motives.

By applying our reasoning above regarding conceptual similarities of motives and TLBs, we can expect that a leader's use of inspirational motivation constitutes an incentive for a follower high on the power motive, but not necessarily for a follower high on the affiliation or the achievement motive. Since a motive constitutes the preference for matching incentives (Schultheiss & Köllner, 2021), a follower high on the power motive will have a preference for inspirational motivation, but no preference for the other TLBs. Conversely, a follower high on the affiliation motive will have a preference for individual consideration, and a follower high on the achievement motive will have a preference for intellectual stimulation.

From the above, we hypothesized:

Hypothesis 2. A follower's motives will affect their preference for a particular TLB. Specifically:
Hypothesis 2A. Followers high on the affiliation motive will prefer individual consideration over other TLBs.
Hypothesis 2B. Followers high on the power motive will prefer inspirational motivation over other TLBs.
Hypothesis 2C. Followers high on the achievement motive will prefer intellectual stimulation over other TLBs.

Followers' Motives as Moderators of the Effects of TLBs

In a representative review of 15 years of TL research, van Knippenberg & Sitkin (2013) identified 58 moderators of the effects of TL on 37 dependent variables. Among other follower characteristics, followers' locus of control (De Hoogh & Den Hartog, 2009) and followers' positive and negative affectivity (Epitropaki & Martin, 2005) have been found to moderate different TL effects. However, followers' motives were not among the moderators identified by van Knippenberg & Sitkin (2013).

Van Knippenberg & Sitkin (2013) also pointed out that current knowledge about moderators of TL is seriously flawed in that all prior research has used the umbrella construct of TL instead of inspecting specific moderators of the different subdimensions of TL. In response to their call, we aimed to explore follower motives as specific moderators of each of the TLBs.

A basic tenet of motivational psychology is that arousing people's motives fuels their intrinsic motivation and leads to higher performance (Kehr, 2004). Indeed, applied studies have shown that follower motive arousal is associated with intrinsic motivation (cf. McClelland, 1975), follower engagement, and commitment (Bass, 1999; Herold et al., 2008). In turn, follower intrinsic motivation is positively associated with follower performance (Piccolo & Colquitt, 2006).

According to Lang et al. (2012), follower performance can be roughly differentiated into task performance and contextual performance. According to these authors, task performance "captures core required job activities" (p. 2012), and contextual performance refers to "job-related behaviors that contribute to the organization's social and psychological climate" (p. 1202). In our research, we were primarily interested in task performance (with conceptual overlaps with what Campbell & Wiernik (2015) termed *technical performance*).

From the above, we expected high follower motivation and task performance inasmuch as the TLBs which a transformational leader displays match the follower's motives. And because leadership is defined as "the process of influencing others" (Yukl, 2006, p. 8), we also expected transformational leaders who use TLBs that match their followers' motives to be more influential than those who do not. In support of this notion, Shamir et al. (1993) suggested that leaders' TLBs can be influential by changing followers'

perceptions of their work environment (for an elaborated view, see Bono & Judge, 2004; Piccolo & Colquitt, 2006).

Our theorizing reflects a contextual approach to leadership (Dinh & Lord, 2012; Zaccaro et al., 2018) such that followers' motives provide a context for transformational leaders. More specifically, and in accordance with the notion that leadership should match its performance requirements (Zaccaro et al., 2018), followers' motives act as performance requirements or affordances through which effective leadership can unfold.

From the discussion above concerning the conceptual relationships between specific TLBs and follower motives, we expected that the effects of inspirational motivation would be particularly strong for followers high on the power motive. Such followers should prefer leaders who develop a compelling vision, set ambitious goals, and provide opportunities to grow. Next, we expected that the effects of individual consideration would be particularly strong for followers high on the affiliation motive because such followers would prefer interaction partners who frequently develop mutually rewarding relationships that involve taking the other person's individual needs into consideration. Finally, we expected that the effects of intellectual stimulation would be particularly strong for followers high on the achievement motive because these followers should prefer leaders who allow them to strive for perfectionism and efficiency and to reach and possibly surpass their own standard of excellence.

From the above, we hypothesized:

Hypothesis 3. The positive effects of a specific TLB in terms of a leader's influence and a follower's task performance will be selectively moderated by the follower's motives. Specifically:

Hypothesis 3A. The effects of individual consideration on a leader's influence and a follower's task performance will be moderated by the follower's affiliation motive.

Hypothesis 3B. The effects of inspirational motivation on a leader's influence and a follower's task performance will be moderated by the follower's power motive.

Hypothesis 3C. The effects of intellectual stimulation on a leader's influence and a follower's task performance will be moderated by the follower's achievement motive.

Study 1

Method

Literature Search

Study 1 was conducted to empirically strengthen the notion that TLBs are conceptually related to specific motives. Thus, we systematically examined and content analyzed the recent research literature on TLBs for their underlying motive content. We conducted a literature search in the *PsycINFO* database on January 7, 2013. *Transformational leadership* was used as the main search term within article Titles. Depending on the TLB, as a search term, *individual*, *inspiration*, or *intellect* was further added within Abstracts. To ensure consistently high standards for the texts that were to be analyzed and to limit the range of results, we included only peer-reviewed documents written in English.

With these restrictions, the first search (*individual**) returned 126 articles, the second (*inspiration**) returned 34 articles, and the third (*intellect**) returned 42 articles. Abstracts that mentioned multiple search terms counted toward each term. The next step was to identify the parts of the articles in which the leadership dimension of interest was described. Therefore, two independent coders who were blind to the hypotheses manually searched the documents for descriptions of individual consideration, inspirational motivation, or intellectual stimulation. The overall interrater reliability between the two raters was ICC = 0.98. Articles with no descriptions of any of the TLBs were excluded. Finally, 76 articles for individual consideration, 25 articles for inspirational motivation, and 38 articles for intellectual stimulation remained. All documents are listed in the reference list. Descriptions of the TLBs were extracted from the articles and randomly listed for the content analysis. The mean length of the descriptions was 44.62 words ($SD = 54.97$) for individual consideration, 54.08 words ($SD = 43.56$) for inspirational motivation, and 107.11 words ($SD = 122.68$) for intellectual stimulation.

Content Analysis

The content analysis was applied according to the guidelines provided in Winter's (1994) *Manual for Scoring Motive Imagery in Running Text*: Two coders who were blind to the hypotheses independently categorized the descriptions of the TLBs with respect to their affiliation, power, and achievement motive content using a dichotomous presence (1) or absence (0) scale. Affiliation is scored whenever a TLB description was related to establishing, maintaining, or restoring friendly relations. Power was scored whenever a TLB description was related to having an impact on others through strong forceful actions to control, influence, help, impress, or elicit strong emotions in others. Achievement was scored whenever a TLB description was related to a standard of excellence as indicated by positive evaluations of goals and performances, unique accomplishments, competition with others, or winning or when the character expresses disappointment about failure.

The two coders were trained using materials from Winter's (1994) manual before coding the TLBs. The trained coders had an 85% agreement rate on the training materials.

Table 1 Means, standard deviations, and confidence intervals (95%) for motive scores in each TLB description

TLB	Motive	*M*	*SD*	95% CI	
				Low	High
InCo	Affiliation	1.59	1.49	1.25	1.93
	Power	0.22	0.60	0.09	0.36
	Achievement	0.96	1.16	0.70	1.23
InMo	Affiliation	0.12	0.44	−0.06	0.30
	Power	1.20	0.71	0.91	1.49
	Achievement	0.68	0.75	0.37	0.99
InSt	Affiliation	0.18	0.56	0.00	0.37
	Power	2.03	1.73	1.46	2.60
	Achievement	2.34	1.77	1.76	2.93

M mean, *SD* standard deviation, *TLB* transformational leadership behavior, *InCo* individual consideration, *InMo* inspirational motivation, *InSt* intellectual stimulation

In line with Winter, 25% of the TLB descriptions were randomly chosen and rated by both raters to examine interrater reliability. In the present study, interrater ICCs were excellent (0.94 for affiliation content, 0.91 for power content, and 0.95 for achievement content).

Analyses

To test hypothesis 1, the *z*-scored motive scores from the content analysis of the TLB descriptions in 139 different documents were subjected to a 3 × 3 (TLBs × motive themes) within-between ANOVA, with repeated measures on the second factor. Next, by running simple main effects and within-subject contrasts, we compared the motive content within each of the descriptions of each TLB. Finally, we compared motive scores across different TLB descriptions by running simple main effects of the TLB descriptions within each of the single motive domains. We used the Greenhouse–Geisser correction whenever sphericity assumptions were violated, Welch's *F* test for simple effects, and the Games-Howell correction for post hoc tests whenever Levene's test of equality of error variances was violated.

Results

Descriptive Statistics

Mean motive scores for each TLB were obtained by summing up the motive scores across all descriptions of this TLB and then dividing this sum by the total number of respective TLB descriptions (for means, standard deviations, and 95% confidence intervals for raw motive scores; see Table 1). Because all but one correlation between the word count for the TLB descriptions and the obtained motive scores were significant (all but one $r > 0.63$, all but one $p < 0.01$), we followed Schultheiss & Pang's (2007) suggestions and controlled for the influence of text length on the motive scores by regression. The residuals were then converted into *z* scores (see Cohen et al., 2003) to be used in the analyses.

Hypothesis Testing

A 3 × 3 (TLBs × motive themes) ANOVA revealed a significant interaction between TLB and motive theme, $F(3.43, 232.88) = 36.11$, $p < 0.001$, $\eta^2 = 0.35$, indicating that the motive themes varied as a function of the TLBs (see Fig. 1).

To test hypotheses 1A(a), 1B(a), and 1C(a), we compared the motive content in each of the TLB descriptions. The analyses revealed a significant simple effect of motive theme,

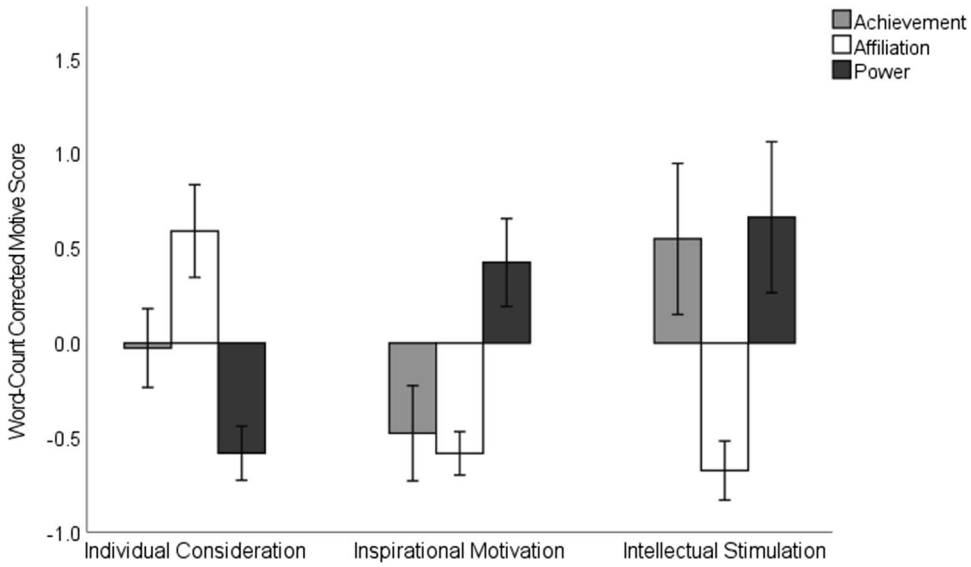

Fig. 1 Motive score means (achievement, affiliation, power) in each TLB. Note. Motive scores are expressed as *z*-standardized residuals. Error bars represent 95% confidence intervals

$F(1.62, 121.33) = 29.63$, $p < 0.001$, $\eta^2 = 0.28$, $(1-\beta) = 1.00$. In individual consideration descriptions, there was more affiliation ($M = 0.59$, $SD = 1.07$) than power ($M = -0.58$, $SD = 0.63$) or achievement ($M = -0.03$, $SD = 0.91$) content ($p < 0.001$). Concerning inspirational motivation, the simple effect of motive theme was also significant, $F(2, 48) = 38.46$, $p < 0.001$, $\eta^2 = 0.62$, $(1-\beta) = 1.00$; there was more power ($M = 0.43$, $SD = 0.56$) than affiliation ($M = -0.58$, $SD = 0.29$) or achievement ($M = -0.48$, $SD = 0.61$) content ($p < 0.001$). Finally, with respect to intellectual stimulation, the simple effect of motive was also significant, $F(2, 64) = 24.84$, $p < 0.001$, $\eta^2 = 0.40$, $(1-\beta) = 1.00$. Contrasts demonstrated that there was significantly more achievement ($M = 0.55$, $SD = 1.21$) than affiliation ($M = -0.67$, $SD = 0.48$) content ($p < 0.001$). However, against our predictions, there was slightly but not significantly more power ($M = 0.66$, $SD = 1.21$) than achievement ($M = 0.55$, $SD = 1.21$) content in the intellectual stimulation descriptions.

To test hypotheses 1A(b), 1B(b), and 1C(b), we compared the motive content across the three TLB descriptions. Regarding affiliation content, the simple effect was significant, Welch's $F(2, 86.31) = 42.41$, $p < 0.001$, $\eta^2 = 0.35$, $(1-\beta) = 1.00$. A planned contrast (individual consideration = 2.00; inspirational motivation = −1.00; intellectual stimulation = −1.00) was also significant, $t(96.41) = 9.24$, $p < 0.001$. Games-Howell-corrected post hoc tests showed that there was more affiliation content in descriptions of individual consideration ($M = 0.59$, $SD = 1.07$) than in descriptions of inspirational motivation ($M = -0.58$, $SD = 0.28$) or intellectual stimulation ($M = -0.67$, $SD = 0.48$; $p < 0.001$).

Concerning power content, the univariate simple effect of TLBs was significant, Welch's $F(2, 57.05) = 38.88$, $p < 0.001$, $\eta^2 = 0.34$, $(1-\beta) = 1.00$. A planned contrast (individual consideration = −1.00; inspirational motivation = 2.00; intellectual stimulation = −1.00) was also significant, $t(60.57) = 2.50$, $p = 0.02$. Games-Howell-corrected post hoc tests confirmed that there was more power content in inspirational motivation ($M = 0.43$, $SD = 0.56$, $p < 0.001$) than in individual consideration ($M = -0.58$, $SD = 0.63$). However, contrary to our expectations, the power content of inspirational motivation and intellectual stimulation ($M = 0.66$, $SD = 1.21$) were not significantly different ($p = 0.78$).

For achievement content, the univariate simple effect of the TLBs was also significant, $F(2, 136) = 9.13$, $p < 0.001$, $\eta^2 = 0.12$, $(1-\beta) = 0.97$. Further, a planned contrast (individual consideration = −1.00; inspirational motivation = −1.00; intellectual stimulation = 2.00) was also significant, $t(136) = 4.19$, $p < 0.001$. In line with our predictions, Bonferroni-corrected post hoc tests showed that there was more achievement content in the descriptions of intellectual stimulation ($M = 0.55$, $SD = 1.21$) than in the descriptions of individual consideration ($M = -0.03$, $SD = 0.91$) or inspirational motivation ($M = -0.48$, $SD = 0.61$; $p < 0.01$).

Discussion

By and large, content analyses of the research literature on TLBs empirically confirmed the initial expectations that led to hypothesis 1: Different TLB descriptions in the literature contained specific motive content. As hypothesized, there was more affiliation content in descriptions of individual consideration and more achievement content in descriptions of intellectual stimulation than in descriptions of the other two TLBs. Also in line with predictions, we found that descriptions of individual consideration contained more affiliation than power or achievement content and that descriptions of inspirational motivation contained more power than affiliation or achievement content. However, and contrary to our expectations, we also found that descriptions of intellectual stimulation comprised marginally more power than achievement content and that their power content was even slightly higher than the power content in descriptions of inspirational motivation, even if both of these differences were not significant. Taken together, the findings of study 1 empirically supported the notion that TLBs and motives are conceptually related.

Study 2

Method

Sample and Procedure

Study 2 was conducted to examine whether followers' motives determine their preference for a specific TLB as predicted in hypothesis 2. One hundred thirteen[1] participants were recruited via diverse mailing lists from German student associations, whose average age was 23.94 ($SD = 4.41$; range: 19–49); 59.30% ($n = 67$) were women.

Measures

Motive Measurement and Coding Research in motivational psychology has shown that implicit motives, in contrast to explicit, self-ascribed motives, are the motivational drivers of subsequent behavior (Kehr, 2004; McClelland et al., 1989; Schultheiss & Köllner, 2021). Because

[1] For study 2, after an anonymous reviewer asked about the sample size, we ran a post hoc power analysis ($\alpha = .05$ and $1-\beta = .80$) by cautiously applying a rather small expected effect size ($f^2 = .10$) obtained from mixed research findings on main effects of implicit motives. Results suggested a sample size of 114 participants.

transformational leaders intend to have an impact on their followers' behaviors (rather than only on their attitudes), House & Shamir (1993) explicitly postulated that transformational leaders arouse their followers' "unconscious" (p. 91) (i.e., implicit) motives. In line with this notion, we were interested in participants' *implicit* motives rather than in their explicit motives. However, to keep it simple, and because this research was not about further differentiations of the "motive" construct, we use the term *followers' motives* in the remainder of this article instead of *followers' implicit motives*, unless the specification seems necessary.

Implicit motives and their measurement with the Picture Story Exercise (PSE) have a long research tradition (Lang, 2014; McClelland et al., 1989; Schultheiss & Pang, 2007). The PSE asks participants to write imaginative stories about ambiguous pictures, which are then content-coded for motive imagery. Schultheiss & Pang (2007) summarized that implicit motives respond preferentially to nonverbal, pictorial stimuli, and they predict spontaneous as well as long-term motivation and behavior better than self-report measures do (Spangler, 1992).

Despite its good predictive validity (Schultheiss & Pang, 2007; Spangler, 1992), the PSE has been criticized for its low reliability (e.g., Entwisle, 1972; Lilienfeld et al., 2000). However, a meta-analysis by Schultheiss & Pang (2007) revealed that the PSE has test–retest reliabilities that are similar to those of self-report measures of personality (Roberts & DelVecchio, 2000). Additionally, by using dynamic system theories of motivation (Atkinson & Birch, 1970; Carver & Scheier, 1998) with a dynamic Thurstonian item response model to model the PSE and its response format, Lang (2014) found evidence that the PSE has good reliability.

Hence, we administered a standard PSE (Pang & Schultheiss, 2005) to assess participants' power, affiliation, and achievement motives. The PSE set used in this study consisted of the Pang & Schultheiss (2005) six-picture set (i.e., the boxer, women in a laboratory, ship captain, couple by a river, trapeze artists, and nightclub scene; each presented for 10 s). The order of pictures was randomized for each participant. After each picture was shown, participants were instructed to write an imaginative story about whatever came to their minds and to describe what was supposed to be happening in the picture (Pang & Schultheiss, 2005; Smith, 1992). They were given 5 min to write their story.

As in study 1, two independent coders blind-content-coded the picture stories for power, affiliation, and achievement motive content according to the *Manual for Scoring Motive Imagery in Running Text* (Winter, 1994). Specifically, the generated stories were divided into sentences, and the coders categorized each sentence from each story in terms of its motive content using a dichotomous presence (1) or absence (0) scale. In general, a sentence could include no motive content, single motive content (e.g., affiliation), or multiple motive content (e.g., affiliation and power). For example, the sentences "two friends get together and prepare a party," "they go one step further with their new stunt," and "when he finds out that this captain saved more than 100 lives during a storm, he excitedly begins to investigate the matter" would be coded as each having single motive content: affiliation, achievement, and power, respectively (Schönbrodt et al., 2021). Kehr et al. (2022) illustrated how John F. Kennedy's famous visionary speech provides an example of a single sentence that should be coded as having multiple motive content. Interrater ICCs were good (0.83 for affiliation content, 0.86 for power content, and 0.69 for achievement content).

TLB Preference Measurement We assessed participants' preferred TLBs using a forced-choice format. Participants had to choose their preferred TLB from three verbal TLB descriptions that had been assembled from a German version of the MLQ by Felfe & Goihl (2002). Specifically, participants were asked to imagine a leader in a work-related context using one of the three TLBs specified in the respective descriptions. Then they were asked to indicate which of the three TLBs they would prefer. The first option was a description of a leader displaying inspirational motivation, the second was a description of a leader displaying individual consideration, and the third was a description of a leader displaying intellectual stimulation. Descriptions of the TLBs are found in Table 5 in Appendix.

Analyses

To test hypothesis 2, multiple multinomial logistic regressions were run with the participants' preferred TLB as the dependent variable and each corresponding motive, controlled for word count, and *z*-transformed, as the independent variable. For each motive, the associated TLB was chosen as the reference category for comparison with the two other TLBs.

Results

Descriptive Analyses

The mean raw scores of the motives were $M = 4.25$ for the affiliation motive ($SD = 2.28$), $M = 4.20$ for the power motive, ($SD = 2.43$), and $M = 2.65$ for the achievement motive ($SD = 1.75$). The average word count was 500.88 ($SD = 136.22$). As in study 1, word count was significantly correlated with the obtained raw motive scores (for affiliation: $r = 0.39$, $p < 0.001$; for power: $r = 0.46$, $p < 0.001$; for achievement: $r = 0.24$, $p < 0.05$). Therefore, we controlled for the effect of story length on motive scores as in study 1.

Hypothesis Testing

Before testing the hypotheses, we checked for potential effects of age and gender on the results. Neither age nor gender had a significant impact on the results reported below. However, we reran the analyses with age and gender as control variables but did not find any significant deviations in the results. Thus, these variables were not taken into consideration in the results reported below.

Results from the multiple multinomial logistic regressions showed that, in line with our predictions, the higher a follower's affiliation motive, the higher the odds that they preferred individual consideration over inspirational motivation, $b = -0.94$, Wald $\chi^2(1) = 6.23$, $p < 0.05$, $OR = 0.39$ (95% CI [0.19, 0.82]) and over intellectual stimulation, $b = -1.50$, Wald $\chi^2(1) = 6.00$, $p < 0.05$, $OR = 0.22$ (95% CI [0.07, 0.74]). Moreover, the higher a follower's achievement motive, the higher the odds that they preferred intellectual stimulation over individual consideration, $b = -1.72$, Wald $\chi^2(1) = 10.18$, $p = 0.001$, $OR = 0.18$ (95% CI [0.06, 0.52]) and over inspirational motivation, $b = -1.78$, Wald $\chi^2(1) = 8.89$, $p = 0.003$, $OR = 0.17$ (95% CI [0.05, 0.54]). Finally, the higher a follower's power motive, the higher the odds that they preferred inspirational motivation over individual consideration, $b = -1.89$, Wald $\chi^2(1) = 18.06$, $p < 0.001$, $OR = 0.15$ (95% CI [0.06, 0.36]) and over intellectual stimulation, $b = -3.03$, $p < 0.001$, Wald $\chi^2(1) = 14.50$, $OR = 0.05$ (95% CI [0.01, 0.23]).

Discussion

The results from study 2 clearly corroborated hypothesis 2: A follower's motives affected their preferences for a particular TLB—the higher a follower's affiliation (power, achievement) motive, the higher the chances that they preferred individual consideration (inspirational motivation, intellectual stimulation) over the other TLBs.

Study 3

Method

Sample and Procedure

Study 3 was conducted to experimentally test hypothesis 3, according to which a follower's motives selectively moderate the effects of the three TLBs in terms of a leader's influence and a follower's task performance. A total of 116[2] students studying at a German university participated in this study in exchange for course credit. Their average age was 23.35 ($SD = 3.47$; range: 18–40). The sample comprised 78 female students and 38 male students; 26.50% ($n = 31$) of the students worked part-time.

First, participants' motives were assessed with the PSE (Pang & Schultheiss, 2005). Next, participants were given a brief standardized introduction to goal setting (Locke & Latham, 1990) as an important technique in leadership. They were then randomly assigned to one of three experimental conditions: individual consideration ($n = 37$), inspirational motivation ($n = 40$), or intellectual stimulation ($n = 39$).

Each participant saw one of three versions of a video clip. In all three video clips, a superordinate male manager (leader) explained to his male subordinate, a team leader (follower), why the team leader should use goal-setting interviews regularly with his team members. The same people appeared in the same roles in each clip. In all video clips, the subordinate team leader had to admit that he had previously failed to use goal-setting with his team members even if this was their company's general policy. Participants were asked to adopt the role of the follower in the video sequence. In each of the manipulations, the leader used one of the three TLBs to convey his message. Film clips were approximately the same length (7 min) and had already been used in earlier pilot studies (Dislich et al., 2011; Kehr et al., 2012).

After the manipulation, we assessed the dependent variables, followers' task performance and leaders' influence. Finally, participants answered demographic questions and were subsequently fully debriefed and thanked.

TLB Manipulation and Manipulation Check

Film clips were used to manipulate the three TLBs. In the individual consideration condition, the leader conveyed his message by using the TLB individual consideration. For example, the leader knew all employees who directly reported to his follower by name, he knew and valued the predilections of his follower, he showed emotional support for his follower, and he assessed the needs of his follower and then made need-compatible suggestions. In the inspirational motivation condition, the leader conveyed his message by using the TLB inspirational motivation. For example, the leader spoke about his early years in the company and

[2] In order to determine the sample size, we relied on our experiences from conducting our own pilot studies on the combined effects of followers' motives and TLBs on leaders' evaluations (Kehr et al., 2012) as well as on other published research on interaction effects involving motives (Job & Brandstätter, 2009). Kehr et al. (2012) and Job and Brandstätter (2007) reported similar effect sizes of about $f^2 = .17$. We ran a post hoc power analysis with the estimated effect size of $f^2 = .17$ ($\alpha = .05$, $1 - \beta = .80$) after an anonymous reviewer asked about the sample size. The power analysis resulted in a slightly smaller suggested sample size ($N = 82$) required to detect the expected interaction effects than the sample size we used in study 3.

the difficulties he had to overcome, he explained how these experiences eventually led to a personal vision, he described his vision in vivid language, and he used the vision to derive goals for his follower and talked about how to achieve them. In the intellectual stimulation condition, the leader conveyed his message by using the TLB intellectual stimulation. For example, the leader indicated to the employee that he felt good about the follower's competence, he asked the follower to find solutions for difficult problems, and he encouraged the follower to see problems from different perspectives.

Immediately after the film clip, we administered a manipulation check to test whether our participants perceived that the leader's behavior reflected individual consideration, inspirational motivation, or intellectual stimulation. The manipulation check consisted of three items, one for each TLB, selected from the German version of the MLQ (Felfe & Goihl, 2002; cf. Bass & Avolio, 1995). For individual consideration, we used the item "The leader in the video treated the follower as an individual rather than just a member of a group." For inspirational motivation, we used the item "The leader in the video talked enthusiastically about what needed to be accomplished." For intellectual stimulation, we used the item "The leader in the video got his follower to look at problems from many different angles." Participants had to assess the statements on a 5-point Likert scale (1 = *never*, 5 = *regularly or always*).

Measures

Followers' Motives Followers' motives were assessed with the PSE by using the same procedures used in study 2. Interrater ICCs were 0.77 for affiliation content, 0.83 for power content, and 0.79 for achievement content. The mean raw scores for the motives were $M = 5.29$ for the affiliation motive ($SD = 2.55$), $M = 3.41$ for the power motive ($SD = 2.09$), and $M = 2.82$ for the achievement motive ($SD = 1.99$). As in study 2, word count was significantly correlated with the raw motive scores. Thus, we controlled for the effect of story length on motive scores.

Followers' Task Performance We assessed followers' task performance with Friedman and Förster's (2001) idea generation task, which has been used to assess creativity (Friedman & Förster, 2001; Rietzschel et al., 2007). However, in line with other researchers (Diehl & Stroebe, 1987, 1991; Paulus & Yang, 2000; Stam et al., 2010), we used the task to measure performance.

The task was introduced as a creativity task. Participants had to generate ideas for convincing their fictitious future team members to use goal-setting interviews. Participants had 4 min to come up with as many ideas as they could. The number of responses each participant generated were counted by a rater who was blind to the hypotheses and experimental conditions (cf. Stam et al., 2010). Unfinished or incomprehensible responses were not counted. The final score consisted of the number of valid ideas each participant had entered ($M = 4.32$, $SD = 1.62$).

Leaders' Influence We assessed leaders' influence with two measures, an in-tray exercise and a direct measure of participants' subjective evaluation of the importance of goal-setting interviews. First, participants had to complete an in-tray exercise as such exercises are frequently used in assessment centers (Gill, 1979). Participants had to prioritize 10 important tasks that they would have to deal with during the upcoming working day. All tasks were presented on the screen in a randomized order, and participants had to indicate their priorities by clicking on the respective task, beginning with the most important task. One of these tasks was "Conducting a goal-setting interview." The dependent measure was the priority ranking of the goal-setting interview task (from 1 = *highest prioritization* to 10 = *lowest prioritization*), which was recoded. This measure was based on the idea that the higher the priority of the goal-setting interview in relation to the other tasks, the higher the influence of the leader and his video message. On average, "Conducting a goal-setting interview" was ranked in a middle position ($M = 4.56$, $SD = 2.26$).

Second, the single-item measure "In my working life, I will use goal-setting interviews with my followers as one leadership technique" was used to assess leader influence by measuring how deeply the participants (who had adopted the role of followers) had internalized the topic raised by the leader's video message. Participants answered this question on a 7-point Likert-type scale (1 = *strongly disagree*, 7 = *strongly agree*). On average, they agreed with this statement to a moderately high degree ($M = 5.19$, $SD = 1.75$).

Analyses

For the manipulation checks, we ran three general linear models, one for each TLB condition. In each of these, condition was the independent variable, and all three manipulation check items were the dependent variables. In these analyses, Welch's test was used to test for simple effects, and the Games-Howell correction was used for post hoc tests whenever Levene's test of equality of error variances was violated.

To test hypothesis 3, we ran six (3 conditions × 2 dependent variables) hierarchical regression analyses with contrast coding. The specific TLB (contrast coded), the corresponding motive (power, affiliation, achievement), and the interactions between each TLB and corresponding motive were the predictors, and followers' task performance and leaders' influence were the dependent variables. In addition, because

the third dependent variable, leaders' influence on followers' prioritization of goal-setting interviews, was ordinally scaled, we computed three Spearman-Brown rank correlations, one for each experimental condition, between the corresponding motive and priority ranking as the dependent variable.

Results

Manipulation Check

As a manipulation check, we compared the three conditions with respect to their effects on each of the three manipulation check items. Results demonstrated that the conditions (TLBs) had different effects on the individual consideration item, Welch's $F(2, 71.42) = 8.77$, $p < 0.001$, $\eta^2 = 0.13$, $(1 - \beta) = 0.97$. Post hoc tests confirmed that the individual consideration condition resulted in significantly higher scores on the individual consideration item than both the inspirational motivation and the intellectual stimulation conditions ($p < 0.01$). Further, the univariate simple effect of condition on the inspirational motivation item was also significant, $F(2, 113) = 10.39$, $p < 0.001$, $\eta^2 = 0.16$, $(1 - \beta) = 0.99$. Post hoc tests demonstrated that the inspirational motivation condition resulted in significantly higher scores on the inspirational motivation item than the individual consideration condition ($p < 0.001$), albeit not significantly different from the effects of the intellectual stimulation condition ($p > 0.05$). Finally, concerning the intellectual stimulation item, the univariate simple effect of condition was also significant, $F(2, 113) = 13.55$, $p < 0.001$, $\eta^2 = 0.19$, $(1 - \beta) = 1.00$. Post hoc tests demonstrated that the intellectual stimulation condition resulted in significantly higher scores on the intellectual stimulation item than the inspirational motivation condition ($p < 0.001$) but not significantly different than the effects of the individual consideration condition ($p > 0.05$). In sum, because the directions of the differences in the manipulation check items were always in line with expectations, even if the differences were not always statistically significant, we concluded that our manipulations worked.

Hypothesis Testing

Before testing the hypotheses, we checked for potential effects of age and gender on all variables. Neither age nor gender had a significant impact on the results reported below. As in study 2, we reran all analyses with age and gender as control variables and did not find significant changes from any of the results reported here.

In order to examine interactive effects of the individual consideration condition and the followers' affiliation motive on followers' task performance and leaders' influence in terms of participants' subjective importance of goal-setting interviews, we first defined contrast 1 (individual consideration as the TLB of interest = 2; inspirational motivation = − 1; intellectual stimulation = − 1) and contrast 2 (individual consideration = 0; inspirational motivation = 1; intellectual stimulation = − 1) and then entered both contrasts and the followers' affiliation motive in step 1 of the regression analysis. Step 2 additionally contained the two interaction terms (contrasts × affiliation motive).

Table 2 summarizes the results. In line with our predictions, we found a significant effect of the interaction between contrast 1 and followers' affiliation motive on followers' task performance ($b = 0.14$, $p < 0.05$, $f^2 = 0.04$) and on leaders' influence in terms of subjective importance of goal-setting interviews ($b = 0.21$, $p < 0.00$, $f^2 = 0.09$).

As is shown in Fig. 2 (left panel), in the individual consideration condition, participants high on affiliation motive produced significantly more ideas than in the other conditions, $b = 0.19$, $t(112) = 2.00$, $p < 0.05$, but participants low on the affiliation motive did not produce significantly more or fewer ideas in any of the conditions, $b = -0.09$, $t(112) = -0.97$, $p = 0.34$.

Further, Fig. 2 (right panel) shows that in the individual consideration condition, participants high (low) on affiliation motive placed a significantly higher (lower) subjective value on goal-setting interviews than in the other conditions, $b = 0.21$, $t(112) = 2.50$, $p = 0.01$; $b = -0.21$, $t(112) = -2.40$, $p = 0.02$.

To examine interactive effects of the inspirational motivation condition and followers' power motive, we defined contrast 1 (inspirational motivation as the TLB of interest = 2; individual consideration = − 1; intellectual stimulation = − 1), contrast 2 (inspirational motivation = 0; individual consideration = 1; intellectual stimulation = − 1) and then performed hierarchical regression analyses.

Table 3 summarizes the results. In line with predictions, we found significant interaction effects between contrast and the followers' power motive in predicting both followers' task performance ($b = 0.18$, $p = 0.01$, $f^2 = 0.07$) and leaders' influence in terms of subjective importance of goal-setting interviews ($b = 0.21$, $p < 0.00$, $f^2 = 0.11$).

As is shown in Fig. 3 (left panel), in the inspirational motivation condition, participants low on the power motive produced significantly fewer ideas than in the other conditions, $b = -0.21$, $t(112) = -2.39$, $p = 0.02$. Also, participants high on the power motive had a tendency to produce more ideas in the inspirational motivation condition than in the other conditions, but this tendency was not statistically significant, $b = 0.14$, $t(112) = 1.58$, $p = 0.12$.

Further, Fig. 3 (right panel) shows that in the inspirational motivation condition, participants low on the power motive placed a significantly lower subjective importance on goal-setting interviews than in the other conditions, $b = -0.45$,

Table 2 Hierarchical multiple regression analyses predicting number of ideas and subjective importance of goal-setting interviews from affiliation motive and contrasts of transformational leadership behavior

Dependent variables						
	Number of ideas			Subjective importance of goal-setting interviews		
		Model 2			Model 2	
Variable	Model 1 *B*	*B*	CI	Model 1 *B*	*B*	CI
Constant	.00	–.01	–.19, .18	.00	–.01	–.17, .16
Affiliation motive	.16	.18	–.00, .37	–.05	–.01	–.18, .16
Contrast 1	.05	.05	–.08, .18	.01	.00	–.12, .12
Contrast 2	–.00	.00	–.22, .22	–.47**	–.46**	–.66, –.27
Affiliation motive × contrast 1		.14*	.00, .28		.21**	.09, .33
Affiliation Motive × contrast 2		–.01	–.23, .22		–.06	–.26, .14
R^2	.03	.07		.16	.24	
F	1.25	1.61		6.93**	7.02**	
ΔR^2		.04			.09	
ΔF		2.12			6.18**	

$N = 116$. Contrast 1 (InCs as TLB of interest = 2; InMo = −1; InSt = −1), contrast 2 (InCs as TLB of interest = 0; InMo = 1; InSt = −1)

CI confidence interval

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

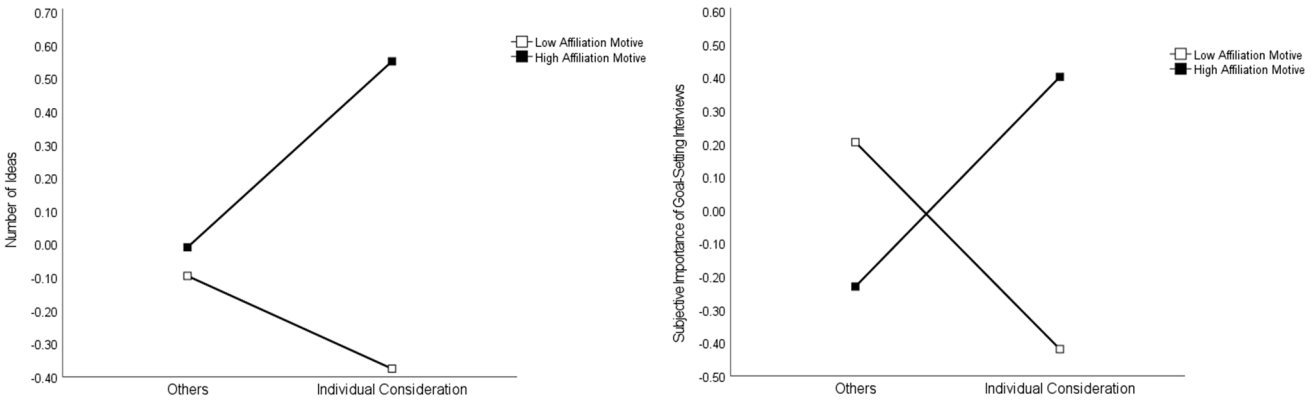

Fig. 2 Relationships of TLBs with the number of ideas (left panel) and the subjective importance of goal-setting interviews (right panel) at high and low levels of the affiliation motive. Note. Both the number of ideas and the subjective importance of goal-setting interviews are expressed as *z* values

$t(112) = -5.55$, $p < 0.001$, but for participants high on the power motive, there were no such significant differences between conditions, $b = -0.04$, $t(112) = -0.45$, $p = 0.65$.

To examine the interactions between the conditions and followers' achievement motive, we defined contrast 1 (intellectual stimulation as the TLB of interest = 2; individual consideration = −1; inspirational motivation = −1), contrast 2 (intellectual stimulation = 0; individual consideration = 1; inspirational motivation = −1). Table 4 shows that, contrary to our expectations, there were no significant interactions between contrast 1 and the achievement motive, neither for idea production ($b = 0.11$, $p > 0.05$) nor for the subjective importance of goal-setting interviews ($b = -0.04$, $p < 0.05$; see Table 4). Thus, simple slopes were not calculated.

Further, in order to test whether leaders' influence on followers' prioritization of goal-setting interviews, the third dependent variable, was more pronounced if the experimental condition matched a participant's motive,

Table 3 Hierarchical multiple regression analyses predicting number of ideas and subjective importance of goal-setting interviews from power motive and contrasts of transformational leadership behavior

Dependent variables						
	Number of ideas			Subjective importance of goal-setting interviews		
		Model 2			Model 2	
Variable	Model 1 *B*	*B*	CI	Model 1 *B*	*B*	CI
Constant	.00	–.02	–.20, .16	.01	–.03	–.19, .14
Power motive	.23*	.15	–.04, .34	.06	–.05	–.23, .12
Contrast 1	–.04	–.04	–.16, .09	–.24**	–.24**	–.36, –.13
Contrast 2	.10	.08	–.14, .30	–.22*	–.25*	–.45, –.05
Power motive × contrast 1		.18**	.05, .30		.21**	.10, .32
Power motive × contrast 2		–.13	–.38, .12		–.28*	–.51, –.05
R^2	.06	.12		.16	.27	
F	2.32	3.13*		7.00**	8.03**	
ΔR^2		.07			.11	
ΔF		4.14*			8.23**	

$N = 116$. Contrast 1 (InMo as TLB of interest = 2; InCs = − 1; InSt = − 1), Contrast 2 (InMo = 0; InCs = 1; InSt = − 1)

CI confidence interval

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

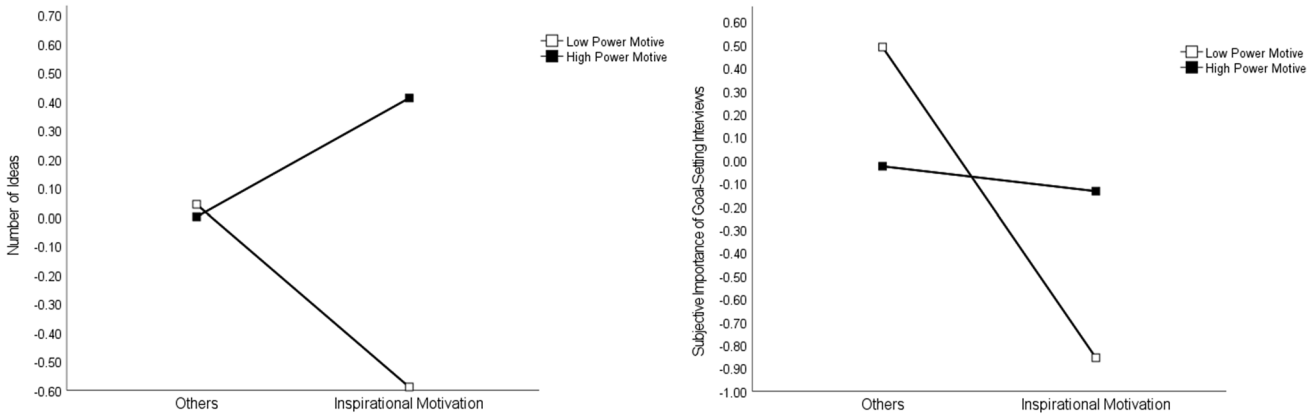

Fig. 3 Relationships of TLBs with the number of ideas (left panel) and the subjective importance of goal-setting interviews (right panel) at high and low levels of the power motive. Note. Both the number of ideas and the subjective importance of goal-setting interviews are expressed as *z* values

we computed Spearman-Brown rank correlations. In the inspirational motivation condition, Spearman's rho correlation coefficients indicated that there was the expected significant positive correlation between the power motive and the priority ranking of goal-setting interviews ($r_s = 0.34$, $p < 0.01$, $N = 40$). Conversely, correlations between the other motives and the dependent variable were either nonsignificant (for the achievement motive: $r_s = 0.23$, $p > 0.05$, $N = 40$) or significant and negative (for the affiliation motive: $r_s = -0.44$, $p < 0.01$, $N = 40$).

In the intellectual stimulation condition, there was the expected significant positive correlation between the achievement motive and the priority ranking of goal-setting interviews ($r_s = 0.28$, $p < 0.05$, $N = 39$). Moreover, the correlations between the other motives and the dependent variable were negative but nonsignificant (affiliation motive:

Table 4 Hierarchical multiple regression analyses predicting number of ideas and ideal-self subjective importance of goal-setting interviews from achievement motive and contrasts between transformational leadership behaviors

Dependent variables						
	Number of ideas			Subjective importance of goal-setting interviews		
		Model 2			Model 2	
Variable	Model 1 *B*	*B*	CI	Model 1 *B*	*B*	CI
Constant	.00	–.00	–.19, .18	.00	.01	–.17, .18
Achievement motive	.10	.08	–.12, .27	.04	.07	–.11, .25
Contrast 1	–.03	–.04	–.17, .10	.23**	.23	.11, .35
Contrast 2	.08	.08	–.14, .31	.25*	.25	.04, .46
Achievement motive × contrast 1		.11	–.02, .24		–.04	–.16, .08
Achievement motive × contrast 2		.06	–.19, .30		–.12	–.35, .10
R^2	.02	.04		.16	.17	
F	.61	.92		6.90**	4.39**	
ΔR^2		.02			.01	
ΔF		1.38			.69	

$N = 116$. Contrast 1 (InSt as TLB of interest = 2; InCs = −1; InMo = −1), Contrast 2 (InSt = 0; InCs = 1; InMo = −1)

CI confidence interval

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

$r_s = -0.24$, $p > 0.05$, $N = 39$; power motive: $r_s = -0.12$, $p > 0.05$, $N = 39$).

In the individual consideration condition, the correlation between followers' affiliation motive and the priority ranking of the goal-setting interviews was positive, in the expected direction, but nonsignificant ($r_s = 0.12$, $p > 0.05$, $N = 37$). At the same time, there were significant negative correlations in this condition between the two other motives and the dependent variable (power motive: $r_s = -0.40$, $p < 0.01$, $N = 37$; achievement motive: $r_s = -0.54$, $p < 0.01$, $N = 37$). Therefore, we inspected the differences between the correlation coefficient involving the affiliation motive and the two correlation coefficients involving the other motives and found that they were statistically significant ($t = 2.36$, $p = 0.02$ for the correlation coefficient involving the power motive; $t = 3.28$, $p < 0.01$ for the correlation coefficient involving the achievement motive). Hence, in the individual consideration condition, leaders' influence on followers' prioritization of goal-setting interviews was significantly higher for participants high on the affiliation motive than for those high on the power or achievement motives.

Discussion

By and large, the results corroborated hypothesis 3: The positive effects of a specific TLB in terms of leaders' influence and followers' task performance were selectively moderated by followers' motives. Most interaction patterns were as predicted. The clearest pattern emerged with respect to inspirational motivation and individual consideration. The effects of these TLBs in terms of leaders' influence and followers' task performance were moderated by followers' power (for inspirational motivation) and affiliation (for individual consideration) motives, respectively. Not quite as robust were the findings for intellectual stimulation. As predicted, followers' achievement motive moderated the effects of this TLB on leader influence in terms of followers' priority ranking. However, the achievement motive failed to moderate the effects of intellectual stimulation on followers' subjective importance of goal-setting interviews, the second indicator of leaders' influence. Further, the moderating effect of the achievement motive on followers' task performance was in the expected direction but failed to reach statistical significance.

General Discussion

Main Findings

In line with a contextual approach to leadership (Zaccaro et al., 2018), we intended to demonstrate that a follower's predominant motive posits a performance requirement for the leader and that a leader who meets this performance requirement by using a TLB that matches the follower's predominant motive will be more successful in terms of the follower's perception of their leader's influence and the follower's task performance. To explore the issue and develop testable predictions, we followed van Knippenberg & Sitkin's (2013) recommendations and disentangled

the umbrella construct of TL into its behavioral components: individual consideration, inspirational motivation, and intellectual stimulation. We then investigated the conceptual relationships between the three TLBs and the three "big motives": power, affiliation, and achievement (McClelland, 1985). We identified conceptual relationships between individual consideration and the affiliation motive, between inspirational motivation and the power motive, and between intellectual stimulation and the achievement motive, respectively. This led to hypothesis 1, which proposed that descriptions in the literature of the different TLBs contain specific motive content. In support of this hypothesis, in study 1, a systematic content analysis of the TL research literature, we found that there was more affiliation content in descriptions of individual consideration than in descriptions of the other two TLBs, and there was more achievement content in descriptions of intellectual stimulation than in descriptions of the other two TLBs. Further, descriptions of individual consideration contained more affiliation than power or achievement content, and descriptions of inspirational motivation contained more power than affiliation or achievement content. A somewhat mixed finding was that intellectual stimulation descriptions were related not only to the achievement motive but also to the power motive.

We then argued that followers should prefer certain TLBs according to their underlying motives, which led to hypothesis 2. Clear support for this hypothesis came from study 2. Findings confirmed that a follower's preference for one of the three TLBs (individual consideration, inspirational motivation, intellectual stimulation) was significantly associated with their motive (affiliation, power, achievement).

Finally, in study 3, we tested hypothesis 3, which proposed that a follower's motives selectively moderates the effects of the three TLBs. For inspirational motivation and individual consideration, the results clearly confirmed the hypothesis that the effects of these TLBs in terms of a leader's influence and a follower's task performance were moderated by the follower's power (for inspirational motivation) and affiliation (for individual consideration) motives. Findings for intellectual stimulation were somewhat mixed as we found the expected moderator effect of the achievement motive for only one of the three indicators we used.

Taken together, the findings of the three studies reported here provide empirical support for the predicted conceptual relationships between the three TLBs and the three motives; they show that preferences for one of the three TLBs depend on the follower's motives; and they indicate that the effectiveness of TLBs in term of a leader's influence and a follower's task performance is moderated by the follower's motives.

Theoretical Contributions

We believe that this research provides an important contribution to the TL literature. The TL theory seeks to explain how leaders can motivate followers to change their behavior and perform beyond expectations (Bass, 1985). To examine this phenomenon, the research perspective needed to be widened from leaders and their tools and behaviors to include the followers (cf. McCann et al., 2006). Further, whereas prominent TL researchers, such as Bass (1985) and House & Shamir (1993), had already speculated about the possibility that the effectiveness of TL rests on a leader's capacity to meet followers' motives, no research has subsequently addressed this notion. This research gap is somewhat surprising because McClelland (1975), a proponent of research on motives, had a similar view, stating, "the more closely he [the leader] meets their [the followers'] needs, the less 'persuasive' he has to be" (p. 260). The research reported here is an attempt to close this research gap by merging the two lines of research on TL and on motives.

To be sure, some scholars have examined relationships between motives and composite measures of TL (e.g., Jacobsen & House, 2001), but there is no indication in the literature about which specific motives are related to the separate components of TL. By addressing this question, our research also tackled a fundamental problem in TL research. One main criticism van Knippenberg & Sitkin (2013) raised was the use of TL as an "umbrella construct" (p. 16). These authors made "a case for different moderators for different dimensions of [TL]" (p. 29) to overcome the crisis of TL research. The findings of the research reported here support their view that it is worth studying the different TL dimensions separately.

According to van Knippenberg & Sitkin (2013), one of the key problems in the endeavor to disentangle the unitary TL construct is that "moderator research typically lacks conceptual analyses that link the moderating influence to each individual dimension" (p. 30). Therefore, we began our research with a conceptual analysis of the to-be-expected relationships between different TLBs and the specific motives, the proposed moderators, and we supported this conceptual analysis empirically by content analyzing TL research literature (study 1). The results of this endeavor now provide empirical support for the long-held notion that TL is indeed a multidimensional construct (Bass, 1985; van Knippenberg & Sitkin, 2013).

A recent meta-analysis by Koh et al. (2019) on the effects of TL on employee creativity illustrates why it may be valuable to disentangle TL into its behavioral components. The

authors found that the positive overall effect of TL on creativity turned into a negative effect when mediators were included in the analyses. The findings of our study 3 may help to shed light on these apparently mixed findings. Study 3 revealed that a follower's affiliation and power motives moderated the positive effects of the respective TLBs (individual consideration and inspirational motivation, respectively) on a follower's task performance, whereas a follower's achievement motive did not have this moderating effect. Hence, in order to assess the overall effects of TL on follower creativity, it may be valuable to first separate each of the behavioral components of TL and to then identify which variables may moderate their effects to the outcome variable in question.

Whereas it is important to inspect the behavioral subdimensions of TL, the findings of our research do not call into question that there also is a positive overall effect of TL on follower motivation. In fact, our research can also be interpreted such that followers whose motives do not fit with the displayed TLB may still be motivated to fulfill their tasks but not to the same degree as when there is a fit. Further, TLBs are only one facet in the complex leadership process, and other leadership behaviors, such as transactional leadership, as well as contextual factors in general (e.g., team climate, perceived fairness) may also play an important role in shaping followers' task motivation. However, our lab findings do suggest that in addition to all other motivational effects of real workplaces, which we experimentally excluded, it is a contextual affordance for transformational leaders to adjust their TLBs to a follower's predominant motive in order to enhance effectiveness.

Practical Significance

From a practical point of view, unfortunately, this study does not solve the enigma of leadership. Quite the contrary, this study epitomizes one of the challenges of leadership. An important implication of our study is that the findings should encourage leaders to attend to, understand, and value their followers' motives. The results of this research also suggest that transformational leaders should use TLBs that are compatible with their followers' motives to increase their followers' effectiveness. At the same time, however, transformational leaders are supposed to remain authentic to "make a fundamental difference" (Avolio & Gardner, 2005, p. 331). Obviously, there is a tradeoff between these requirements. One way to circumvent the problem seems to be to surround the leader with similarly minded followers. In practice, however, matching followers' and leaders' personalities with respect to their motives can be difficult. With an increasingly diverse workforce and dynamic work environments, achieving motive compatibility among leaders and followers may often be impossible due to a lack of resources and may also raise ethical concerns.

Further, even when a match is achieved, there could still be mismatches between other relevant personality variables (e.g., goals, values, or interests), or essential skills and abilities could be lacking. Lastly, and most importantly, results from a meta-analysis by Wang et al. (2019) clearly showed that diversity with respect to personalities and values leads to higher team creativity and innovation, thereby providing a competitive business advantage. The findings from this meta-analysis also demonstrate why it would be unwise to surround leaders primarily with like-minded followers.

However, we are convinced that, to some extent, transformational leaders may be able to adapt their leadership behaviors to their followers' motives without having to rely on excessive impression management (cf. Gardner & Avolio, 1998), which might compromise leaders' authenticity. Support could come from transformational leadership training (cf. Barling et al., 1996), which should place a strong focus on the uniqueness of different TL dimensions and include exercises to increase leaders' sensitivity to their followers' motives.

Limitations and Implications for Future Research

A limitation of these studies is that the results of studies 1 and 3 were somewhat mixed for the combination of intellectual stimulation and the achievement motive. In study 1, descriptions of intellectual stimulation in the literature contained not only achievement but also power motive content, and in study 3, the moderating effect of the achievement motive could only be found with respect to one of the three indicators of leadership effectiveness. It is thus possible that the links between intellectual stimulation and the achievement motive are weaker than the other TLB-motive links. However, as Yukl (2006) pointed out, leadership is always about influencing others. Therefore, TL leaders *use* intellectual stimulation to *influence* followers to become more achievement oriented. And influence, per se, is related to the power motive. This may explain why the results for intellectual stimulation and the achievement motive were not clear. Certainly, more research is needed to shed more light on the links between intellectual stimulation and the achievement and the power motives, respectively.[3]

Further, in studies 2 and 3, we used student samples rather than real employees. In both of these studies, the participating students' average age was below 25, and

[3] Note that there are subtle but possibly important differences in research traditions regarding the two motives in question. For instance, in the Heckhausen (1963) scoring key, competing with others would be scored as a power motive, whereas in the Winter (1994) scoring key, this would be scored as an achievement motive.

only a small fraction of these students worked part time. Hence, it is likely that most of the participants had no or at least not any significant work experience. This limits the generalizability of our findings because real employees with work experience may react differently to transformational leaders than inexperienced students. Whereas we do not expect that this potential difference might have systematically distorted our study findings, we certainly recommend that future researchers, in their attempts to replicate the findings and increase generalizability, conduct field studies or laboratory experiments with experienced employees.

Another limitation of study 3 is that it focused on each follower's predominant motive and experimentally isolated it, instead of taking the follower's full motive structure into account. Clearly, people do not only have one predominant motive but instead have several motives. Further, real leadership often happens in a team context rather within dyads, so real transformational leaders have to deal with the complex and diverse motive patterns of their team members. If transformational leaders, willingly or unwillingly, employ leadership behaviors that interact with multiple motives in their followers at the same time, complex interactive motivational and behavioral effects can be expected (Kehr et al., 2022), presumably on both the individual and group levels. However, at present, there is not sufficient research insight to formulate specific predictions about the expected shapes of these interactions. Kehr et al. (2022) reported from a literature search that they could not find any published studies on how followers' motives interact. The only research these authors could find was on combinations of leaders', but not followers', motives (e.g., McClelland & Boyatzis, 1982; Steinmann et al., 2015). Whereas it is debatable whether research findings on interaction effects of a leader's motives can be transferred to a follower, this opens up an interesting field for future research.

Another limitation was that study 2 used a forced-choice format to assess participants' preferred TLB. Even though forced-choice formats may have some strengths in personality assessment (Christiansen et al., 2005), it is obvious that in real organizational settings, preferences for TLBs are not mutually exclusive. Therefore, future research should aim to score preferences for TLBs separately. Further, a limitation of study 3 was that, in line with previous research (e.g., Stam et al., 2010), performance was assessed by measuring the quantity of responses from an idea generation task. But, in order to increase the generalizability of our findings, future research may be well advised to include various types of quantitative and qualitative performance measures.

We circumvented the problem of common method variance, rather common in TL research (cf. van Knippenberg & Sitkin, 2013), in our assessments of participants' motives with the PSE, which is partially intransparent to respondents and thus rather robust against the typical problems of self-assessments (Schultheiss & Pang, 2007). In addition, we used prefabricated vignettes (study 2) and film materials (study 3) to manipulate TLBs rather than relying on followers' subjective assessments of their leader's TLBs and correlating these with motive assessments. Further, our experimental approach in study 3 allowed us to use objective outcome measures for both a leader's influence and a follower's task performance in terms of creativity as in Henker et al.'s (2015) field study.

Clearly, our empirical approach must be replicated and extended. First, laboratory research is needed to strengthen the evidence that specific TLBs differentially interact with followers' motives. In fact, a mediation analysis that directly assesses followers' motive arousal after exposure to the TLB manipulation and that includes the assessment of motivational, affective, and behavioral data would be valuable. Second, future research may analyze how differential follower reactions to leaders whose TLBs do or do not match followers' motives may reciprocally influence leaders' behavior. This would also test propositions emphasizing the active role of followers in the leadership process.

Conclusion

TL theory is, at its heart, a motivation theory. If we are to understand the motivating effect of TL, we need to expand our research focus to include followers' motives, an important source of followers' motivation.

Appendix. Descriptions of transformational leadership dimensions used in study 2

Table 5 Adapted transformational leadership dimension descriptions obtained from an adapted German version of the MLQ by Felfe & Goihl (2002)

Description in German	Description in English*
Beschreibung Führungskraft 1 (inspirierende Motivierung): Diese Führungskraft verfügt über attraktive Visionen und Vorstellungen von zukünftigen Entwicklungen und vermittelt überzeugend, dass sie selber voll und ganz dahintersteht. Dadurch gibt diese Führungskraft den Dingen und Erfordernissen im Alltag eine weitergehende Bedeutung und stellt sie in einen größeren Sinnzusammenhang. Diese Führungskraft begeistert ihre Mitarbeiter für ihre Ziele, indem sie Herausforderungen anbietet und den Mitarbeitern Hoffnung, Vertrauen und Zuversicht vermittelt, dass die Erwartungen erfüllt werden können	**Description of leader 1 (inspirational motivation):** This leader has attractive visions and ideas about future developments and convincingly conveys that they are fully behind their followers. As a result, this leader gives the things and affordances of everyday life a higher significance and places them in a more meaningful context. This leader inspires employees to achieve their goals by offering challenges and giving employees hope, trust, and confidence that expectations can be met
Beschreibung Führungskraft 2 (individuelle Wertschätzung): Diese Führungskraft versteht sich als Coach und Mentor ihrer Mitarbeiter und erkennt deren persönliche Bedürfnisse und Wünsche nach Leistung und Wachstum an. Das Ziel dieser Führungskraft ist es, die Mitarbeiter systematisch zu fördern und ihr Potential schrittweise weiterzuentwickeln. Dazu bietet sie in einem unterstützenden Klima (z.B. durch Delegation) Lernchancen und berücksichtigt die persönlichen Voraussetzungen, indem sie die einen eher ermutigt, anderen mehr Autonomie gewährt oder wiederum anderen klarere Vorgaben oder mehr Struktur gibt. Diese Führungskraft bereit eine intensive, partnerschaftliche Kommunikation mit ihren Mitarbeitern, bei der sie es versteht, effektiv zuzuhören	**Description of leader 2 (individual consideration):** This leader sees themself as a coach and mentor to their employees and recognizes employees' personal needs and desires for performance and growth. The goal of this leader is to systematically support employees and gradually develop their potential. To do this, the leader provides learning opportunities in a supportive climate (e.g., through delegation) and takes into account personal conditions by encouraging some rather than others, granting others more autonomy, or again giving others clearer direction or more structure. This leader prepares an intensive, partnership-based communication with employees, in which the leader knows how to listen effectively
Beschreibung Führungskraft 3 (intellektuelle Stimulierung): Diese Führungskraft regt ihre Mitarbeiter zu kreativem und innovativem Denken an und unterstützt sie dabei, indem sie Annahmen und Voraussetzungen immer wieder hinterfragt, Probleme in neue Zusammenhänge stellt und dazu ermutigt, immer wieder neue Lösungen zu erproben. Fehler werden dabei von ihr toleriert und nicht öffentlich kritisiert. Die Mitarbeiter sind dabei dringend aufgefordert, sich zu beteiligen und selber Ideen einzubringen, auch wenn diese von den Vorstellungen des Vorgesetzten abweichen	**Description of leader 3 (intellectual stimulation):** This leader encourages employees to think creatively and innovatively and supports them in doing so by constantly questioning assumptions and prerequisites, placing problems in new contexts, and encouraging them to keep trying out new solutions. Mistakes are tolerated and not publicly criticized. Employees are strongly encouraged to participate and contribute their own ideas, even if they differ from those of their supervisors

*The descriptions provided in English are translated from German by the authors

Author Contribution Hugo M. Kehr and Dorena Graff contributed to the study conception and design. Material preparation, data collection, and analysis were performed by all authors. The first draft of the manuscript was written by all authors, and Hugo M. Kehr and Cafer Bakaç commented on previous versions of the manuscript. All authors read and approved the final manuscript.

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Code Availability Codes for data analyses for the current study are available from the corresponding author on reasonable request.

Declarations

Ethics Approval All procedures performed in the two studies including human participants were in accordance with the institutional ethical standards and with the 1964 Helsinki declaration and its later amendments. Informed consent was obtained from all individual participants included in the studies.

Conflict of Interest The authors declare no competing interests.

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