

Is Similarity in Leadership Related to Organizational Outcomes? The Case of Transformational Leadership

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In this study, 213 supervisors from two public administration offices rated their own leadership behavior as well as their leaders' behavior on the MLQ. The relationship between own self-rated transformational leadership and perceived transformational leadership of the direct superior was examined. Furthermore, the relationship between perceived similarity between subordinate and supervisor in transformational leadership and leadership specific outcomes (extra effort, efficiency, and satisfaction with the leader), as well as organizational outcomes (commitment, overall satisfaction, organizational citizenship behavior, achievement orientation, stress, and irritability) was analyzed. Separating the participants into four groups with regard to their type of similarity/dissimilarity (similar low transformational leadership / similar high transformational leadership / dissimilar high transformational leadership of leader / dissimilar low transformational leadership of leader) led to differential correlations with the outcomes. Whereas a pattern close to the expected pattern was found for leader specific outcomes, very different patterns emerged for organizational outcomes including commitment, overall satisfaction, organizational citizenship behavior, stress, and absenteeism.

Research into leadership and similarity has generally concentrated on the effects of demographic similarity (Liden, Wayne, and

Stilwell, 1993; Tsui & O'Reilly, 1989; Vecchio & Bullis, 2001), and value similarity (Ashkanasy & O'Connor, 1997), and on relationship quality (such as Leader-Member Exchange; Dansereau, Graen, & Haga, 1975). It has been shown that similarity between leader and follower exerts a positive influence on the relationship and on outcome variables.

However, little is known about similarity in the leadership behavior of leader and supervisor, and how this affects the outcomes of leadership. The perception of similar behaviors, strategies, etc., may be of importance for subordinates' attitudes and performance. One might assume that behavior congruence supports mutual acceptance and understanding, and also serves as a confirmation, which is an important basis for successful cooperation. On the other hand, obvious differences may cause dissonance and a greater need for negotiation, which in turn can reduce positive assessments and efficiency. As some leadership styles, such as transformational leadership behaviors, are strongly related to performance, it is particularly interesting to investigate similarity in this area of behavior. Additionally, the kind of difference perceived by subordinate leaders may cause a difference in the evaluation of outcomes. It can be assumed that leaders serve as role models that are emulated when there is a positive discrepancy. However, when leaders receive lower performance ratings than the self-rating of the subordinate leaders (negative discrepancy), negative consequences for performance

evaluation may be expected. Therefore, we examined the importance of perceived similarity in transformational leadership for specific outcome variables.

Transformational and transactional leader behavior and effectiveness

Transformational leadership (Bass, 1985) has been shown to be effective with respect to different performance measures in several studies, as meta-analysis show (Lowe, Kroek & Sivasubramaniam, 1996; Fuller, Patterson, Hester, & Stringer, 1996). Originally regarded as antagonists by Burns (1978), transformational and transactional leadership behaviors have recently been regarded as complementing one another to a certain degree (e.g., Bass & Avolio, 1993). Whereas transactional leadership is regarded as successful in itself, (additional) transformational behavior can lead to extraordinary performance on the part of the followers. This is known as the augmentation effect (Hater & Bass, 1988).

Effects of similarity on success of leadership

In leadership research, similarity between leader and subordinate has been shown to influence the relationship between leader and follower. In a longitudinal study, Bauer and Green (1996) focused on the development of Leader-Member Exchange (LMX). They found that similarity of personality leads to a good quality relationship between leader and member (see also Phillips & Bedeian, 1984).

Supervisors who perceive themselves as similar to their leaders develop a better relationship (e.g., in the sense of LMX, as Bauer & Green, 1996, showed) with them than supervisors who do not perceive such similarity. This positive relationship leads to good organizational outcomes, as Gerstner and Day (1997) showed in their meta-analysis of Leader-Member Exchange.

Direct support for the assumption that similarity of leadership behavior is associated with perceived supervisor success can be found in Weiss' study (1977). In the context of organizational learning, Weiss used similarity in initiating structure and consideration behaviors among supervisors and their leaders. He found

that similarity of leadership behavior is correlated to supervisors' ratings of their leaders' success. Whereas in some studies (Sosik & Megerian, 1999; Judge & Bono, 2000) the relationship between different perspectives - those of leader and follower - reflecting on the same behavior was examined, our approach was based solely on the followers' perception reflecting on different behaviors. In this way, we considered similarity as a result of the follower's evaluation process that compares his / her own and perceived others' behaviors. Resulting discrepancies or similarities were supposed to affect attitudes and behaviors. Thus, we expected similarity to be related to perceived outcome variables.

H1: Perceived similarity between superiors and their leaders with respect to transformational leadership is: a) positively related to positive outcomes, and b) negatively related to negative outcomes.

Taken together, perceived similarity between superiors and their leaders was supposed to influence outcomes. But how far-reaching is this effect? If similarity is of theoretical and practical use, it should contribute uniquely to the explanation of variance in outcome variables. Usually, perceived leadership predicts outcomes. Thus, similarity should explain variance, in addition to variance that is only explained by perceived leadership.

H2: In addition to perceived leadership, perceived similarity between superiors and their leaders explains unique variance in outcome variables.

Another issue concerns the kind of difference between self-rated and perceived leadership. Two types of dissimilarity can be considered with respect to transformational and transactional leadership: either the leader is perceived as being more transformational than the follower or the follower rates him-/herself as more transformational than the leader. The first group is called dissimilar high transformational leadership of leader (DHTL); the second group is called dissimilar low transformational leadership of leader (DLTL). With respect to similarity, two groups can be differentiated: the group that rates both own and perceived behaviors in transformational leadership as similarly high (SHTL) and the group that rates

itself as similarly low in transformational leadership (SLTL).

Although we expected that transformational leadership of the leader would be positively related to outcomes in all four groups, we expected differences between the groups: the highest correlation between transformational leadership and outcomes was expected to be found for SHTL, as similarity is a good basis for acceptance and influence of the leader. SLTL and DHTL were expected to show the next highest correlation. The group showing the lowest correlation was expected to be DLTL. In the last group, it was thought that the subordinates might prefer a different leadership style. This might reduce the acceptance and influence of the leader.

H3: The correlations between transformational leadership and outcomes can be ranked as follows: SHTL – SLTL / DHTL – DLTL.

Method

Sample

The sample consisted of 213 administrative officers with leading functions. They belonged to two public organizations: 54 participants came from a finance administration (25.4%) and 159 worked in a city council administration office (74.6%). These employees were in so-called “sandwich positions”, that is, the employees were subordinates and supervisors at the same time. They were responsible for leading subordinates and, simultaneously, were led by higher-level leaders.

Ninety-two of the participants were female (43.6 %) and 119 male (56.4%). All participants worked full-time. For age categories and tenure, see Table 1.

Table 1: Age categories and tenure of participants

Age	Frequency	Percentage	Tenure	Frequency	Percentage
Up to 25 years old	5	2.3	Up to 5 years	16	7.9
26 to 35 years old	28	13.1	5 to 10 years	45	22.2
36 to 45 years old	88	41.3	10 to 20 years	44	21.7
46 to 55 years old	67	31.5	More than 20 years	98	48.3
Older than 55 years	25	11.7			
Total	213	100.0	Total	203	100.0

Procedure

Prior to the distribution of the questionnaires, the management informed all participants about the study. The questionnaires were distributed by internal mail and collected by the work council. The aim of the study was explained on the first page of the questionnaire. The participants were assured confidentiality.

The participants were asked to provide self-ratings and ratings of their leaders concerning transformational leadership, as well as ratings of outcome variables.

Instruments

Transformational leadership was assessed using the Multifactor Leadership Questionnaire (MLQ; Bass & Avolio, 1995; adapted for use in Germany by Felfe & Gohl, 2002). The MLQ consists of five transformational subscales:

idealized influence attributed, idealized influence behavior, inspirational motivation, intellectual stimulation, and individualized consideration. The scale ranges from 1 (*‘never’*) to 5 (*‘frequently, if not always’*). The internal consistencies (Cronbach’s alpha) of the transformational subscales for the version assessing perceived leadership behavior were $\alpha = .89$, $\alpha = .76$, $\alpha = .85$, $\alpha = .83$, and $\alpha = .79$, respectively. The internal consistencies (Cronbach’s alpha) of the transformational subscales for the version assessing own leadership behavior were $\alpha = .70$, $\alpha = .70$, $\alpha = .83$, $\alpha = .71$, and $\alpha = .67$, respectively.

Several outcomes were included in this analysis. First, outcome scales of the Multifactor Leadership Questionnaire (MLQ) were employed as leadership specific criteria. Second, affective organizational commitment,

overall satisfaction, civic virtue, altruism, irritability, and stress were included as reflections of positive and negative experiences and attitudes towards work.

Leadership specific outcomes were assessed using the outcome scales of the Multifactor Leadership Questionnaire (MLQ). The three dimensions were: extra effort, effectiveness, and satisfaction with the leader. The participants rated their own readiness to put more effort into their work than they would have expected, the efficiency of their supervisors' leadership behavior, and their satisfaction with their leaders. The scales ranged from 1 ('never') to 5 ('frequently, if not always'). The internal consistencies (Cronbach's alpha) of the outcome subscales for the version which was used to assess perceived leadership behavior were $\alpha = .86$, $\alpha = .90$, and $\alpha = .90$, respectively. The internal consistencies (Cronbach's alpha) of the outcome subscales for the version which was used to assess own leadership behavior were $\alpha = .83$, $\alpha = .80$, and $\alpha = .79$, respectively.

Organizational outcomes were assessed using different instruments. For the measurement of commitment, a subscale for affective organizational commitment with 5 items was selected from an instrument that was used to assess multiple facets of Commitment (Felfe, Six, & Schmook, 2002). The instrument is based on Meyer and Allen's (1997) multidimensional concept, which divides entities (organization, occupation) and types (affective, continuance, normative) of commitment. The scale ranged from 1 ('not at all true') to 5 ('completely true'). The internal consistency (Cronbach's alpha) for this sample was $\alpha = .86$.

Overall satisfaction was measured using a single item employing a Kunin scale (Kunin, 1998). Although many problems are related to one-item measures, practical reasons (the length of the questionnaire) made it necessary to use a short instrument. Wanous, Reichers, and Hudy (1997) found satisfactory levels of reliability for one-item measures of job satisfaction; therefore, it was decided to use a short measure for this construct in this research.

Organizational citizenship behavior (OCB) was assessed using a combination of the subscales civic virtue, courtesy, conscientiousness, and altruism, by means of an instrument developed by Six, Felfe, Schmook, and Knorz (2001). The questionnaire was based on the instrument used by Podsakoff, Ahearne, and MacKenzie (1997). Deviating from their original concept, the subscale sportsmanship was excluded, as it did not have sufficient reliability. Each scale contained four items. The scale ranged from 1 ('not at all true') to 5 ('completely true'). The internal consistencies (Cronbach's Alpha) of the subscales were $\alpha = .65$, $\alpha = .75$, $\alpha = .70$ and $\alpha = .67$. The internal consistency of the combined measure (Cronbach's alpha) was $\alpha = .82$.

Achievement orientation was measured using a short scale (Felfe, Resetka & Liepmann 1994). The scale contained five items and ranged from 1 ('not at all true') to 5 ('completely true'). The internal consistency for this sample was $\alpha = .85$.

Negative work experience was measured using a short version of an instrument developed by Felfe, Resetka and Liepmann (1994, original instrument by Mohr, 1986). The two subscales reflected on stress as a feeling of being overburdened, caused by a high workload, and irritability, caused by conflicts and anger. The scale used to measure irritability contained three items and the stress scale consisted of five items. The scales ranged from 1 ('not at all true') to 5 ('completely true'). The internal consistency of the scale stress was $\alpha = .79$ and of the scale for irritability, $\alpha = .78$.

Results

Preliminary analysis

The relationship between the self-rating of leadership and the rating of perceived leadership ranged from $r = .16$ (for intellectual stimulation and idealized influence attributed) to $r = .38$ (for inspirational motivation, see Table 2).

Table 2: Means, standard deviations, alphas, and correlations of the scales

	M	SD	1a	1b	1c	1d	1e	2a	2b	2c	2d
1. Transformational leadership (self)											
a) idealized influence attributed	3.69	.58									
b) idealized influence behavior	3.88	.71	.67** *								
c) inspirational motivation	3.48	.78	.54** *	.67** *							
d) intellectual stimulation	3.99	.57	.55** *	.68** *	.63** *						
e) individualized consideration	4.02	.61	.55** *	.56** *	.45** *	.61** *					
2. Transformational leadership (supervisor)											
a) idealized influence attributed	2.95	1.06	.16*	.18	.32**	.21**	.21**				
b) idealized influence behavior	3.11	.97	.14*	.22**	.32**	.28** *	.28** *	.74** *			
c) inspirational motivation	3.11	.99	.16*	.23** *	.38** *	.32** *	.28** *	.67** *	.78***		
d) intellectual stimulation	3.07	.92	.10	.16*	.31** *	.27** *	.20**	.80** *	.74***	.69** *	
e) individualized consideration	2.95	.93	.13	.14*	.29** *	.21**	.16*	.82** *	.72***	.69** *	.83***

Note. M = Mean; SD = Standard deviation; TL = Transformational leadership; N = 211 - 213

No differences were found between male and female participants on self-rated and perceived transformational leadership. No significant correlations emerged for perceived transformational leadership and age or tenure. The correlations between self-rated transformational leadership and age were all significant (ranging from $r = .17$ for age and inspirational motivation to $r = .23$ for age and idealized influence attributed). Some correlations between self-rated transformational leadership and tenure were significant (ranging from $r = .15$ for tenure and intellectual stimulation to $r = .25$ for age and inspirational motivation). Furthermore, for discrepancies between self-rated and perceived transformational leadership, no systematic effects occurred for sex, age, and tenure.

Test of hypotheses

In order to test H1a (Perceived similarity between superiors and their leaders with respect to transformational leadership is positively related to positive outcomes), a correlational analysis was conducted. An absolute difference score¹ was calculated in advance and used for further analyses. High values indicate high

dissimilarity. The correlations for the leadership specific outcomes ranged from $r = -.33$ (e.g., for inspirational motivation and efficiency) to $-.63$ (e.g., for individualized consideration and efficiency). Negative correlations mean that small differences are associated with high outcome assessments. H1a was supported for the leadership specific outcomes (see Table 3). Negative correlations also appeared for affective organizational commitment (with the exception of intellectual stimulation) and overall satisfaction, although they were not significant and some were very low. The highest negative correlations were found for inspirational motivation ($r = -.11$ and $-.17$, respectively). Therefore, H1a was not fully supported for commitment and overall satisfaction. In contrast to our hypothesis, the relationships between organizational citizenship behavior and similarity, and between achievement orientation and similarity, were positive. Thus, individuals who experience dissimilarity have more achievement orientation and display more OCB. H1a was thus not supported for organizational citizenship and achievement orientation behavior. As these results are based on single-source data there might be the concern for a

common method bias. For example, employees who are dissatisfied with their working conditions perceive their contribution higher as a way to rationalize their opinion. To exclude this alternative explanation additional correlations were conducted. We found OCB and job satisfaction to be uncorrelated ($r = .05$). Additionally, task content (interesting, varied) as a central working condition for satisfaction and well-being in the work place was uncorrelated

with OCB ($r = .06$), and even positively correlated with achievement orientation ($r = .19^*$). Accordingly, the correlations between similarity and OCB remain unaffected when task content and job satisfaction are controlled in a partial correlation. Thus, there is no evidence that OCB ratings are contaminated by other variables in a way that explains the reversed finding for similarity and OCB and achievement orientation.

Table 3: Means, standard deviations, alphas, and correlations of the scales

	M	SD	1a	1b	1c	1d	1e	2a	2b	2c	3a	3b	3c	3d	3e
1. Transformational leadership (differences, absolute)															
a) idealized infl. attributed	1.04	.85													
b) idealized infl. behavior	1.00	.86	.68***												
c) inspirational motivation	.84	.67	.47***	.52***											
d) intellectual stimulation	1.02	.82	.71***	.62***	.43***										
e) ind. consideration	1.21	.87	.62***	.55***	.33**	.69***									
2. leader specific outcomes															
a) extra effort #	2.70	1.05	-.52***	-.53***	-.36***	-.54***	-.56***								
b) efficiency #	2.84	1.05	-.62***	-.53***	-.33***	-.58***	-.63***	.80***							
c) satisfaction #	2.93	1.17	-.61***	-.53***	-.37***	-.55***	-.63***	.76***	.85***						
3. organizational outcomes															
a) Achievement ##	4.18	.69	.11	.17*	.21*	.12	.07	.21**	.15	.14					
b) Org. Commitment ##	3.48	.98	-.10	-.05	-.17	.03	-.09	.22	.26*	.29*					
c) Overall Satisfaction ##	3.81	.83	-.09	-.05	-.11	-.05	-.04	.28*	.35*	.50**		.54**			
d) OCB ###	3.83	.53	.30*	.30*	.12	.30*	.27*	.01	.01	.03		.23	.05		
e) Irritability #	2.71	.96	.26***	.13	.03	.22**	.19**	-.21**	-.34**	-.35***	-.14	-.06	-.37**	.03	
f) Stress #	2.99	.92	.26***	.16*	.07	.13	.24***	.04	-.26***	-.32***	-.19*	-.31*	-.43**	.23	-.59***

Note: M = Mean; SD = Standard deviation; TL = Transformational leadership; # N = 213, ## N = 161, ### N = 54.

H1b (Perceived similarity between superiors and their leaders with respect to transformational leadership is negatively related to negative outcomes) was tested in the same way as H1a. Except for inspirational motivation, negative experience (stress and irritability) correlated significantly with perceived similarity in transformational leadership (see Table 3). Dissimilarity was related to greater experience of stress and irritability. Thus, H1b was supported.

In order to test H2, a hierarchical regression analysis was conducted. In order to control for the possible effects of demographic variables, gender and age were entered first in the regression. As hypothesized, perceived similarity had a significant additional impact on achievement orientation, job satisfaction, and OCB. For commitment, stress, and irritability, only perceived leadership served as a predictor. H2 was partly supported.

Table 4: Regression Analyses: Predicting Outcome Variables

	Step 1: Demographic variables			Step 2: Perceived leadership		Step 3: Similarity		Full equation		
	β		ΔR^2	β		ΔR^2	β	ΔR^2	R^2	R
	sex	age								
Achievement orientation	.11	-.10	.02	.47***	.02	.51***	.14***	.17	.41	
Commitment	.02	.19	.04	.25	.07*	-.04	.001	.11	.37	
Job satisfaction	-.14	.23	.12*	.67***	.16**	.40*	.08*	.36	.60	
OCB	-.11	.13	.03	.34	.01	.50*	.12*	.19	.43	
Irritability	-.08	-.02	.01	-.25	.07***	.02	.00	.28	.08	
Stress	-.02	.01	.01	-.22	.05**	.001	.00	.22	.05	

In order to test H3 (The correlations between transformational leadership and outcomes can be ranked as follows: SHTL – SLTL / DHTL – DLTl) different forms of dissimilarity were compared. Following Atwater and Yammarino (1992), we established four groups of evaluators: Group One consisted of participants who judged themselves to be higher in transformational leadershipⁱⁱ than they judge their leaders (DLTL); Group Two consisted of participants who judged their leaders to be higher in transformational leadership than they judged themselves (DHTL); Groups Three and

Four judged themselves to be similar to their leaders concerning transformational leadership; Group Three regarded both as being high (SHTL); and Group Four regarded both as being low (SLTL). In order to establish the groups, the participants were divided into two equally large groups with respect to self-rating on leadership (low and high). The same was done with the leaders' rating on transformational leadership. The four groups mentioned above were then manually coded. The frequencies of the groups and the means with respect to self-ratings and to leaders' ratings are given in Table 5.

Table 5: Frequencies of the groups

Group	SHTL	SLTL	DHTL	DLTL
Frequency	65	42	43	63
Mean self-rating	4.24	3.33	3.40	4.16
Mean leader rating	3.88	2.37	3.54	3.54
Percentage	30.5	19.7	20.2	29.6

We then computed the correlations between perceived transformational leadership and the different leader outcomes separately for the above-mentioned groups (see Table 6). All but one of the correlations between perceived transformational leadership and the leadership specific outcomes were significant. This pattern is partly consistent with our hypothesis. In accordance with H3 the highest correlations were found for the SHTL group, followed by SLTL. For DLTl and DHTL, a reversed ranking was obtained. Thus, H3 was partly supported for the leader specific outcomes. For the other outcomes, only achievement orientation, stress, and irritability were considered, as the number

of group members was very low for some of the groups. For achievement orientation, the order of correlations was SLTL, SHTL, DHTL, and DLTl. Although stronger relationships were obtained for similarity, all the correlations were low and not significant. Thus, there was some confirmation of H3 with respect to achievement orientation. For irritability, the pattern was SLTL, SHTL, DLTl, and DHTL. Again, stronger (negative) correlations were found for similarity than for dissimilarity. Here, also, the correlations were low and not significant. Though, to some extent, these findings point in the expected direction, H3 was not supported for irritability. Partly in line with our assumptions,

the correlation pattern for stress was that SHTL showed the highest correlation, followed by DLTL and DHTL. Contrary to H3, SLTL

showed the lowest correlation. The correlations were not significant. Thus, H3 was not supported for stress.

Table 6: Correlations between perceived transformational leadership and outcomes for the four groups

Perceived TL and	SHTL	N	SLTL	N	DLTL	N	DHTL	N
Extra effort	.72***	65	.59***	63	.58***	43	.43**	42
Efficiency	.72***	65	.68***	63	.63***	43	.48**	42
Satisfaction with leader	.64***	65	.50***	63	.64***	43	.27	42
Achievement orientation	.07	51	.10	42	-.01	37	.03	29
Irritability	-.09	65	-.15	63	.03	43	.01	42
Stress	-.20	65	.04	63	-.15	43	-.15	42

Summary and Discussion

The study presented here focused on the relationship between similarity in leadership behavior and organizational outcomes. We expected a positive relationship between similarity with respect to transformational leadership and leadership outcomes, such as efficiency, extra effort, and satisfaction. The results supported our hypothesis. When supervisors consider themselves to be similar to their leaders, they also perceive these leaders as being more successful. This result can be explained by a process of socialization, in the sense that supervisors who perceive their leaders as successful adopt their leaders' leadership behavior (see Weiss, 1977). A contrasting explanation should also be considered: supervisors consider their own leadership behavior to be successful in overestimation of their performance, and perceive their leaders as successful when they display the same leadership behavior.

Commitment and overall satisfaction did not correlate significantly with similarity. However, most correlations were in the expected direction. Organizational commitment might be influenced by many other factors in addition to similarity to the leader, such as satisfaction with co-workers or the task itself. The low correlation between similarity and job satisfaction may be due to the assessment of job satisfaction. Although Wanous, Reichers, and Hudy (1997)

argue for the validity of single-item job satisfaction measures, use of this kind of measurement may have lowered the correlation. With respect to organizational citizenship behavior, the correlations with similarity in transformational leadership were not all significant, but all were positive. This is contrary to our hypothesis, as it suggests that people who experience dissimilarity show higher OCB. One possible explanation is that people who rate their leaders differently than themselves - and in most cases, the leaders are rated lower - may consider themselves to be better models for their subordinates than these leaders, and they consequently exhibit higher OCB to compensate for this perceived lack in their leaders. Additionally, processes of social comparison might cause this effect. To support and stabilize one's own self-concept and self-esteem, there is a tendency to devalue others and a self-serving bias for self-evaluation for performance related measures.

As a similar (and also unexpected) result was found for achievement orientation, we may see a pattern here: whereas similarity seems to satisfy people, dissimilarity stimulates them to work harder for the organization and for their own careers. This could mean that the dissimilar subordinates are trying to leave the leader-member dyad.

We expected stress and irritability to be negatively correlated to similarity. This was supported. It seems that supervisors who do not consider their leaders to be similar to them suffer

more from stress and irritability. Setting this in line with the result mentioned above on OCB and achievement orientation, future research should look at the effect similarity in leadership behavior has on turnover intentions (at least with respect to the leader-member dyad). Furthermore, it was shown that similarity contributes additional variance to the prediction of achievement orientation, job satisfaction, and OCB.

In order to overcome the problem of difference scores (see Cronbach & Furby, 1970), we divided our participants into four groups according to the level of similarity they had with their leaders. With respect to leader specific outcomes, the order of correlations was almost as expected. Thus, employees who rate themselves just as high in transformational leadership as they rate their leaders also show the highest correlation between transformational leadership and their leaders' success. This is logical as the employees apparently make use of this behavior to a high degree. Consequently, similarity seems to support the leader's influence. Several reasons, such as acceptance, less negotiation, and mutual reinforcement may be of importance here. The group members who rate themselves higher in transformational leadership than they rate their supervisors show the lowest correlation between transformational leadership and their leaders' outcomes. Those leaders exert less influence as their acceptance is relatively low.

The relationships between transformational leadership and irritability, as well as stress and achievement orientation, only partly confirmed our assumption. We found higher correlations for similarity than for dissimilarity, but not the expected ranking within these groups. Furthermore, the correlations were quite low for all groups. Transformational leadership does not seem to play an important role here. It can be assumed that the experience of stress is more related to the characteristics of the task, such as time pressure or low control. In addition, it was considered whether or not transformational leaders demand too much of some subordinates (Felfe & Schyns, 2002), thereby increasing their levels of stress. With respect to achievement orientation, it can be assumed that it is a stable characteristic of the person and is not easily influenced by recent experiences. Some authors

even see it as being a part of the Big Five (Jackson, Paunonen, Fraboni, & Goffin, 1996).

Limitations, future research, and conclusions

All data reported here came from one source, although different objects of evaluation were considered. This is clearly a limitation within the study. For example, one might argue that common method bias could be the reason for some relationships we found. While this is intended for the relationships between subordinates' self-rated leadership behavior and the perception of their leaders' behavior, we cannot completely exclude that the relationship between perceived similarity and performance indicators, such as OCB, is influenced by other variables. As pointed out above, employees who are not satisfied with their job might tend to overestimate their OCB in order to rationalize their opinion. However, additional analysis could show that the correlation between OCB and similarity is not affected by working conditions or job satisfaction. Besides, correlations between perceived similarity and outcomes are rather low and, for some variables, even near zero. This is an argument against a common method bias. Nevertheless, it would be useful for future research to test the relationship between perceived similarity with respect to transformational leadership and organizational outcomes that are assessed in a more objective way (e.g., using the ratings of peers or customers, or using objective measures of performance).

Another limitation of the study is the sample size. Although some of the correlations were in the hypothesized direction, they were not significant due to sample size. Future research should try to replicate the results using larger samples. It would also be interesting to see if the results regarding similarity in transformational leadership can be replicated considering a sample of higher-level superiors in relation to their subordinates.

One methodological limitation is the partial use of difference scores. We used them only in the correlation analyses, but these results could, nevertheless, be lower due to the use of difference scores (Williams & Zimmerman,

1996). We did, however, find quite high effect sizes and therefore it can be assumed that this methodological problem is not relevant in this study.

Despite these limitations, we believe that this study adds to the understanding of transformational leadership and its relationship to outcomes, as well as to the knowledge of the effects of similarity in the context of leadership.

References

- Ashkanasy, N. M. & O'Connor, C. (1997). Value congruence in leader-member exchange. Journal of Social Psychology, 137, 647-662.
- Atwater, L. E. & Yammarino, F. J. (1992). Does self-other agreement on leadership perceptions moderate the validity of leadership and performance predictions? Personnel Psychology, 45, 141-164.
- Bass, B. M. (1985). Leadership and performance beyond expectations. New York: The Free Press.
- Bass, B. M. & Avolio, B. (1993). Transformational leadership: A response to critiques. In M. M. Chemers & R. Ayman (Eds.), Leadership theory and research: Perspectives and directions (pp. 49-88). San Diego, CA.: Academic Press.
- Bass, B. M. & Avolio, B. (1995). MLQ Multifactor Leadership Questionnaire. Redwood City, CA.: Mind Garden.
- Bauer, T. A. & Green, S. G. (1996). Development of leader-member exchange: A longitudinal test. Academy of Management Journal, 39, 1538-1567.
- Burns, J. M. (1978). Leadership. New York: Harper & Row.
- Cronbach, L. J. & Furby, L. (1970). How should we measure "change" - or should we?! Psychological Bulletin, 74, 68-70.
- Dansereau, F., Graen, G., & Haga, W. J. (1975). A vertical dyad linkage approach to leadership within formal organizations: A longitudinal investigation of the role making process. Organizational Behavior and Human Decision Processes, 13, 46-78.
- Den Hartog, D. N., van Muijen, J. J., & Koopman, P. L. (1997). Transactional versus transformational leadership: An analysis of the MLQ. Journal of Occupational and Organizational Psychology, 70, 19-34.
- Felfe, J. & Gohl, K. (2002). Transformational Leadership and Commitment in different organizational contexts. In J. Felfe (Ed.). Organizational development and leadership (pp. 87-124). Frankfurt am Main, Germany: Peter Lang.
- Felfe, J., Resetka, H.-J., & Liepmann, D. (1994). Skalen zur Organisationsdiagnose (Diagnosis of Organizations). Free University of Berlin, Germany: Internal Report.
- Felfe, J. & Schyns, B. (2002). The Relationship between employees' occupational self-efficacy and perceived transformational leadership - Replication and extension of recent results. Current Research in Social Psychology, 7, 137-162. [<http://www.uiowa.edu/~grpproc/crisp/crisp.html>]
- Felfe, J., Six, B., & Schmook, R. (2002). Fragebogen zur Erfassung von affektivem, kalkulatorischem und normativem Commitment gegenüber der Organisation, dem Beruf/der Tätigkeit und der Beschäftigungsform (COBB) (Questionnaire for the assessment of affective, calculative, and normative commitment concerning organization, profession, and type of occupation). In A. Glöckner-Rist (Hrsg.). ZUMA-Informationssystem. Elektronisches Handbuch sozialwissenschaftlicher Erhebungsinstrumente. Version 5.00. Mannheim: Zentrum für Umfragen, Methoden und Analysen.
- Fuller, J. B., Patterson, C. E. P., Hester, K., & Stringer, D. Y. (1996). A quantitative review of research on charismatic leadership. Psychological Reports, 78, 271-287.
- Gerstner, C. & Day, D. V. (1997). Meta-Analytic review of leader-member exchange theory: Correlates and construct issues. Journal of Applied Psychology, 82, 827-844.
- Hater, J. J. & Bass, B. M. (1988). Supervisors' evaluations and subordinates' perception of transformational and transactional leadership. Journal of Applied Psychology, 73, 695-702.
- Jackson, D. N., Paunonen, S. V., Fraboni, M., & Goffin, R. D. (1996). A five-factor five-factor model of personality structure. Personality and Individual Differences, 20, 33-45.
- Judge, T. A. & Bono, J. E. (2000). Five-factor model of personality and transformational leadership. Journal of Applied Psychology, 85, 751-765.
- Kunin, T. (1998). The construction of a new type of attitude measure. Personnel-Psychology, 51, 823-824

- Liden, R. C., Wayne, S. J., & Stilwell, D. (1993). A longitudinal study on the early development of leader-member exchanges. *Journal of Applied Psychology, 78*, 662-674.
- Lowe, K. B., Kroek, K. G., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformational and transactional leadership: A meta-analytic review of the MLQ literature. *Leadership Quarterly, 7*, 385-425.
- Meyer, J. P. & Allen, N. J. (1997). *Commitment in the workplace: Theory, research, and application*. Thousand Oaks, CA: Sage Publications.
- Mohr, G. (1986). *Die Erfassung psychischer Befindensbeeinträchtigungen bei Industriearbeitern (The assessment of negative effect on the well-being of blue collar workers)*. Frankfurt am Main, Germany: Peter Lang.
- Phillips, A. S. & Bedeian, A. G. (1984). Leader-follower exchange quality: The role of personal and interpersonal attributes. *Academy of Management Journal, 37*, 990-1001.
- Podsakoff, P.M., Ahearne, M., & MacKenzie, S.B. (1997). Organizational citizenship behavior and the quantity and quality of work group performance. *Journal of Applied Psychology, 82*, 262-270.
- Schyns, B. (2001). The Relationship between Employees' Self-Monitoring and Occupational Self-Efficacy and Transformational Leadership. *Current Research in Social Psychology, 7*, 30-42, [<http://www.uiowa.edu/~grpproc>].
- Schyns, B. (2002). Geschlecht und Differenzierung von Führung (Gender and the differentiation of leadership). *Wirtschaftspsychologie, 4*, 45-49.
- Six, B., Felfe, J., Schmook, R., & Knorz, C. (2001). *Commitment in neuen Arbeits- und Organisationsformen (Commitment in new forms of work and organizations)*. University of Halle, Germany: Unpublished Report.
- Sosik, J. J. & Megerian, L. E. (1999). Understanding leader emotional intelligence and performance: The role of self-other agreement on transformational leadership perceptions. *Group and Organization Management, 24*, 367-390.
- Tsui, A. S. & O'Reilly, C. A. (1989). Beyond simple demographic effects: The importance of relational demography in superior-subordinate dyads. *Academy of Management Journal, 32*, 402-423.
- Vecchio, R. P. & Bullis, R. C. (2001). Moderators of the influence of supervisor-subordinate similarity on subordinate outcomes. *Journal of Applied Psychology, 86*, 884-896.
- Wanous, J. P., Reichers, A. E., & Hudy, M. J. (1997). Overall job satisfaction: How good are single-item measures? *Journal of Applied Psychology, 82*, 247-252.
- Weiss, H. M. (1977). Subordinate imitation of supervisor behavior: The role of modeling in organizational socialization. *Organizational Behavior and Human Performance, 19*, 89-105.
- Williams, R. H. & Zimmerman, D. W. (1996). Are simple gain scores obsolete? *Applied Psychological Measurement, 20*, 59-69.

ⁱ Difference scores are often regarded as problematic, especially with respect to reliability (e.g., Cronbach & Furby, 1970). Williams and Zimmerman (1996) still regard simple difference scores as intuitively understandable, simply calculated, and unbiased in comparison to other difference measures. They point out that difference scores produce lower values in correlational analysis.

ⁱⁱ As the subscales of transformational leadership are highly correlated, and in order to avoid lack of clarity in the results, the transformational leadership subscales were combined into one scale for the moderator analysis. The perceived similarity (assessed by considering the difference between self-rating and perceived transformational leadership) was also restricted to the combined instrument described above.