

Running head: LEADERSHIP STYLES

The relationship between leadership styles and relevant organisational outcome criteria in a snowball sample

Lars Borgmann

Jens Rowold*

University of Münster

*Corresponding Author. PD Dr. Jens Rowold, Institute of Psychology, University of Münster, Fliegerstrasse 21, 48149 Münster, Germany. Email: rowold@psy.uni-muenster.de

On the relationship between leadership styles and relevant organisational outcome criteria in a snowball sample

Over the past fifty years, a substantial body of research has advanced leadership theories (Walumbwa, Avolio, Gardner, Wernsing, & Peterson, 2008; Yukl, Gordon, & Taber, 2002). Numerous theories were proposed and tested in thousands of empirical studies (Bass & Avolio, 1990). This research has explored the effects of different leadership styles on organisational outcome criteria like job satisfaction, commitment or job performance. Leadership researchers are still interested, if specific leadership behaviours are more effective than others or which leadership style is the most effective. Although a great body of research on leadership exists, these issues are still unexplained (Yukl, 1999; Yukl, 2002; Yukl, Gordon, & Taber, 2002). Despite the need for integrated research, that test the relationship of various leadership styles, studies, investigating different leadership styles or theories, are nearly non-existent (House & Aditya, 1997).

There is meta-analytical support for the existence of positive relationships between leadership styles and several indicator of leadership effectiveness. However, these meta-analyses focus on one isolated leadership theory and therefore research on coherences and comparisons of the different leadership styles is still absent. For example, Judge, Piccolo and Ilies (2004) supported the notion that initiating structure and consideration are positively related to performance. Additionally, a meta-analysis on the relationship between transformational and transactional leadership and performance also confirmed positive correlations (Judge & Piccolo, 2004). Although, there exist more than one hundred empirical studies, we still do not know which leadership styles has the strongest relationship to outcome criteria such as performance.

For psychologists, practically working in management or consulting, it is important to know, which leadership is most important for leadership selection, training, or feedback interventions. From a theoretical perspective it is unsatisfying not to have a complete comparison and contrasting of the different leadership constructs in order to further advance leadership theory. For example, the overlap in relative criterion-oriented validity of various leadership styles could yield insight into the processes that underlie the relationships between leadership styles and criteria of effective leadership such as followers' performance.

From a theoretical point of view it is precarious, that there are several separated leadership theories. No theory existed that aimed at unifying these separated theories. Various researchers (Judge, Piccolo, & Ilies, 2004; Keller, 2006; Rowold & Heinitz, 2007; Yukl, 2002) claim, that one of the central issue in leadership research is to investigate the

similarities and differences between the different leadership styles (construct validity). Thus, the present research analyses the relationships of seven leadership styles (transformational and transactional leadership, instrumental leadership, laissez-faire, initiating structure and consideration, leader-member-exchange and ethical leadership). Also, this study addresses the question, which leadership style is more effective than others (criterion validity).

Within the present work, three constructs had been selected as indicators for the different facets of effective leadership. First, job satisfaction was included as an indicator of satisfied followers. Next, followers' affective commitment has important implications for their intention to stay within the respective organization and other positive, work-related attitudes (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). Third, job performance is a highly important indicator of effective leadership. At least one of these three indicators have been included in a large number of leadership studies and meta-analyses (Dumdum, Lowe, & Avolio, 2002; Judge et al., 2004; Judge & Piccolo, 2004). Consequently, these three indicators of effective leadership were included into the present study.

Method

Samples and Procedures

The sample was recruited using the method of snowball sampling. Snowball sampling relies on referrals from initial subjects to generate additional subjects, in the manner of pyramid selling. This procedure yielded a sample $N=100$ participants. These participants rated the leadership style of their respective supervisor. The mean age of the participants was 29.91 years ($SD= 13.17$); 67.7 per cent were female, 42.3 per cent were male employees.

The employees had a mean tenure of 5.36 years ($SD=7.88$) within the Agency. 4.0% of this sample had a Primary High School graduation, 47.5% a Secondary High School graduation and 48.5% an university degree. 39.4% of the rated leaders were female; according to this 60.6 % were male. The leaders had a mean tenure of 14.28 years ($SD=9.68$). 55.6 of the direct supervisors were part of the Middle or Top Management.

Instruments

Transactional and transformational leadership. Four items from a German validated version (Heinitz & Rowold, 2007) of the Transformational Leadership Inventory (Podsakoff, MacKenzie, & Bommer, 1996; TLI; cf. Podsakoff, MacKenzie, Moorman, & Fetter, 1990) were utilized to assess transactional leadership (sample item: "...provides me with positive

feedback if I perform well”). Also, 22 items from the TLI were utilized for the assessment of transformational leadership (sample item: “...has inspiring plans for the future”).

Instrumental leadership. A German validated version of Antonakis and House’s Instrumental Leadership Scale (Lit) was utilized in the present study to assess instrumental leadership. One of the 16 items was : “...develops specific policies to support his/her vision”.

Laissez-Faire. For the assessment of Laissez-Faire, four items were newly designed (sample item: “...tries to avoid decisions”).

Consideration and initiating structure. The leadership style of consideration was assessed by 22 items from a German validated version (Fittkau-Garthe & Fittkau, 1971) of the SBDQ (Fleishman, 1953) (sample item: “...shows interest in the individual well-being of his/her subordinates”). Initiating structure was assessed by 12 items from the same questionnaire (sample item: “...assigns specific tasks to his/her subordinates”).

LMX. For the assessment of leader-member exchange, a German validated version (Schyns, 2002) of Graen and Uhl-Bien’s (1995) LMX scale was used (7 items, sample item: “I trust my coach enough to defend his/her decisions.”).

Ethical leadership. The ten items from the Ethical Leadership Scale developed by Brown (Brown, Trevino, & Harrison, 2005) were utilized to assess ethical leadership (sample item: “...sets an example of how to do things the right way in terms of ethics”).

Job Satisfaction. Seven items from Neuberger and Allerbeck’s (1993) scale for the assessment of job satisfaction were implemented in the present study (e.g., “I am satisfied with my colleagues”).

Affective Commitment. Eight items from a German validated version (Schmidt, Hollmann, & Sodenkamp, 1998) of Allen and Meyer’s questionnaire (Allen & Meyer, 1990) were utilized to assess affective commitment (e.g., “I really feel as if this organization’s problems are my own”).

Job Performance. Four items were newly constructed in order to assess subordinates self-rated performance (e.g., “My job performance is high”).

Results

Table 1 shows the descriptive statistics and intercorrelations of the different leadership styles and outcome criteria. With except for three correlations concerning the organisational

outcome criterion job performance, all correlations are statistically significant. The results revealed strong positive correlations of the assessed leadership styles.

Table 1

Descriptive Statistics, Internal Consistency Estimates, and Intercorrelations

	M	SD	TF	TA	LF	C	IS	LMX	EL	JS	AC	JP
TF	3.28	.69	.92									
TA	3.38	1.02	.74**	.90								
LF	2.14	.75	-.45**	-.34**	.78							
C	3.64	.70	.63**	.61**	-.40**	.93						
IS	3.44	.49	.76**	.56**	-.56**	.51**	.75					
LMX	3.48	.74	.82**	.70**	-.51**	.75**	.66**	.92				
EL	3.42	.70	.78**	.73**	-.46**	.79**	.64**	.80**	.89			
JS	3.70	.68	.58**	.50**	-.40**	.59**	.37**	.70**	.55**	.79		
AC	3.26	1.05	.58**	.50**	-.28**	.60**	.33**	.69**	.59**	.68**	.93	
JP	4.03	.60	.29**	.18	-.22*	.08	.30**	.26**	.15	.08	.24*	.81

Note. Estimates of internal consistency (Cronbach's Alpha) are presented along the diagonal;

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

Discussion

The present studies documents that all leadership styles are associated with job satisfaction and affective commitment. The organisational relevant criterion job performance was found to be uncorrelated with transactional leadership, consideration and ethical leadership.

Meaningful overlap between the leadership constructs was found (i.e., strong convergent validities). These results point out the importance of all leadership behaviours for organisational relevant outcome criteria.

Reference List

- Allen, N. J. & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63, 1-18.
- Brown, M. E., Trevino, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes*, 97, 117-134.
- Dumdum, U. R., Lowe, K. B., & Avolio, B. J. (2002). A meta-analysis of transformational and transactional leadership correlates of effectiveness and satisfaction: An update and extension. In B. J. Avolio & F. J. Yammarino (Eds.), *Transformational and charismatic leadership: the road ahead* (pp. 35-66). Amsterdam: JAI.
- Fittkau-Garthe, H. & Fittkau, B. (1971). *Fragebogen zur Vorgesetzten-Verhaltens-Beschreibung (FVVB)*. Göttingen: Hogrefe.
- Fleishman, E. A. (1953). The description of supervisory behaviour. *Journal of Applied Psychology*, 37, 1-6.
- Graen, G. B. & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: applying a multi-domain perspective. *Leadership Quarterly*, 6, 219-247.
- Heinitz, K. & Rowold, J. (2007). Gütekriterien einer deutschen Adaptation des Transformationale Leadership Inventory (TLI) von Podsakoff. *Zeitschrift für Arbeits- und Organisationspsychologie*, 51, 1-15.

House, R. J. & Aditya, R. M. (1997). The social scientific study of leadership: Quo Vadis? *Journal of Management*, 23, 409-473.

Judge, T. A., Piccolo, R. F., & Ilies, R. (2004). The forgotten ones? The validity of consideration and initiating structure in leadership research. *Journal of Applied Psychology*, 89, 36-51.

Judge, T. A. & Piccolo, R. F. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89, 755-768.

Keller, R. T. (2006). Transformational leadership, initiating structure, and substitutes for leadership: A longitudinal study of research and development project team performance. *Journal of Applied Psychology*, 91, 202-210.

Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior*, 61, 20-52.

Neuberger, O. & Allerbeck, M. (1993). Arbeitsbeschreibungsbogen. In A. Glöckner-Rist (Ed.), *ZUMA-Handbuch Sozialwissenschaftlicher Skalen* (6th ed.,). Mannheim: Zentrum für Umfragen, Methoden und Analysen.

Podsakoff, P. M., MacKenzie, S. B., & Bommer, W. H. (1996). Transformational leader behaviors and substitutes for leadership as determinants of employee satisfaction, commitment, trust, and organizational citizenship behaviors. *Journal of Management*, 22, 259-298.

Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *Leadership Quarterly*, 1, 107-142.

Rowold, J. & Heinitz, K. (2007). Transformational and charismatic leadership: Assessing the convergent, divergent and criterion validity of the MLQ and the CKS. *Leadership Quarterly*, 18, 121-133.

Schmidt, K.-H., Hollmann, S., & Sodenkamp, D. (1998). Psychometrische Eigenschaften und Validität einer deutschen Fassung des "Commitment"-Fragebogens von Allen und Meyer (1990). *Zeitschrift für Differentielle und Diagnostische Psychologie*, 19, 93-106.

Schyns, B. (2002). Überprüfung einer deutschsprachigen Skala zum Leader-Member-Exchange-Ansatz. *Zeitschrift für Differentielle und Diagnostische Psychologie*, 23, 235-245.

Yukl, G. (1999). An evaluation of conceptual weaknesses in transformational and charismatic leadership theories. *Leadership Quarterly*, 10, 285-305.

Yukl, G. (2002). *Leadership in organizations*. (5th ed.) Upper Saddle River, NJ: Prentice Hall.

Yukl, G., Gordon, A., & Taber, T. (2002). A hierarchical taxonomy of leadership behavior: Integrating a half century of behavior research. *Journal of Leadership & Organizational Studies*, 9, 15-32.