

The Assessment of Charismatic Leadership

Validity of a German Version of the Conger-Kanungo Scale (CKS)

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Abstract. This paper examines the psychometric properties of a German version of the Conger-Kanungo Scale (CKS) of charismatic leadership, and compares charismatic leadership with the two leadership paradigms that have dominated theory and practice to date: the transformational/transactional paradigm and the consideration/initiating structure paradigm. An empirical study ($N = 404$) was conducted to explore aspects of reliability and validity of the CKS. In terms of construct validity, it was demonstrated that the translated instrument had adequate factorial validity. In addition, charismatic leadership measured in terms of the CKS showed convergent validity with respect to both transformational and transactional leadership and initiating structure, and divergent validity with respect to laissez-faire and consideration. In sum, the results contribute to leadership theory (e.g., comparing and contrasting several leadership theories) and practice.

Keywords: charismatic leadership, Conger-Kanungo Scale of charismatic leadership, psychometric properties

Introduction

Studies showing strong positive relationships between charismatic leadership and desirable outcome criteria (e.g., Fuller, Patterson, Hester, & Stringer, 1996) have motivated increased research interest in charismatic leadership in recent years. Conger and Kanungo (1987, 1988) were among the first to develop a theoretical model describing charismatic leadership. This model has since been applied in numerous US-based companies, and helped leaders and followers alike to perform more successfully (cf. Conger & Kanungo, 1998). Until now, the Conger and Kanungo Scale (CKS), the standard instrument for assessing charismatic leadership, has only been available in English. Yet multinational companies rely on valid and reliable translations of instruments to be able to conduct global leadership assessments for feedback, training, and performance-based pay purposes. Likewise, cross-cultural research depends on translated instruments with satisfactory psychometric properties. Although large-scale, global research has demonstrated that charismatic leadership is a feature of implicit leadership theories across cultures (Den Hartog, House, Hanges, & Ruiz-Quintanilla, 1999), instruments to assess charismatic leadership in languages other than English are lacking. For these reasons, it is important to provide translations of the CKS with adequate validity and reliability for both practitioners and researchers. Thus, this paper presents evi-

dence that supports the construct, convergent, and divergent validity and reliability of a German translation of the CKS.

Theory of Charismatic Leadership

The Conger and Kanungo theory of charismatic leadership (Conger & Kanungo, 1998) describes leaders' behaviors in organizations. Similar to other leadership theories, the Conger and Kanungo model describes leadership phenomena from the followers' perspective. Charismatic leadership is exerted by leaders and may be described as one role leaders exhibit at work. Conger and Kanungo (1988, 1998) postulated three stages (and 5 factors) of leader's behavior. First, leaders evaluate the status quo of their environment (Factor 1). That is, they look for opportunities to improve the organizational processes. More specifically, leaders assess the resources and constraints of the work-related environment. This is a very active behavior that distinguishes charismatic from noncharismatic leaders. Environmental resources such as technological innovations or constraints and small budgets are used by charismatic leaders to reform established organizational products and processes. Thus, charismatic leaders often act as entrepreneurs. In addition to the assessment of the environment, followers' needs are carefully evaluated (Factor 2). This aspect of Conger and Kanungo's charis-

Table 1. The Conger-Kanungo (1998) Scale (CKS) of Charismatic Leadership: Stages, subscales and sample items

CKS subscale	Leader behavior				
	Stage 1	Stage 2		Stage 3	
Sensitivity to the environment	Sensitivity to member needs	Strategic vision and articulation		Personal risk	Unconventional behavior
Items	4	3	7	3	3
Sample item	Recognizes the abilities and skills of other members in the organization.	Influences others by developing mutual liking and respect.	Provides inspiring strategic and organizational goals.	Takes high personal risks for the sake of the organization.	Uses nontraditional means to achieve organizational goals.

matic leadership theory echoes earlier theoretical developments that emphasized leader's "consideration" or "follower-centered" behaviors (e.g., Stogdill, 1969). In sum, in stage one, the leader knows what processes might be improvable and what his or her followers need in order to achieve desired goals.

On the basis of the information collected in Stage 1, the leader is able to formulate an inspiring vision of the future (Factor 3) in stage 2. Therein, specific environmental resources and constraints are accounted for, as well as followers' interests. In addition, the vision may be described as an idealized goal. These kinds of goals are best characterized as highly desirable, based on commonly-shared values, but also difficult to achieve. Also, the vision includes a desirable and attainable future state that is highly discrepant from the current status quo. Consequently, the leader communicates this vision in an inspiring way to followers, other organizational members, and outside the organization.

Finally, in stage 3, the leader aims at implementing the vision and therefore motivates followers. Two strategies are included into the Conger and Kanungo model of charismatic leadership for this final stage. First, the leader takes personal risk (Factor 4) in order to motivate followers by personal example. Followers are more likely to believe in the leaders' vision if the leader engages in active, personal risks that demonstrate the importance of desired goals. For example, personal risks could include potential financial loss or the potential loss of organizational power or positions. Next, leaders engage in unconventional behavior (Factor 5) that demonstrates the importance of the articulated vision. Also, unconventional behavior conveys important goals that are part of the vision and demonstrates means to achieve these goals. As a consequence of leader's unconventional behavior and personal risk, the followers buy into the leader's vision, develop trust in the leader and, ultimately, show enhanced levels of motivation to achieve the goals articulated.

Although the three stages are theoretically assumed to be consecutive, Conger and Kanungo (1998) admit that, in reality, leaders typically engage in all three stages simultaneously, and that the stages of activity for different goals may overlap. Table 1 summarizes the stage model of charismatic leadership.

The Conger-Kanungo Scale of Charismatic Leadership

Based on the theoretical considerations outlined above, Conger and Kanungo developed a 20-item instrument to assess charismatic leadership. Several empirical studies (Conger, Kanungo, & Menon, 2000; Conger, Kanungo, Menon, & Mathur, 1997) have confirmed that the CKS is a valid and reliable measure of the 5 factors hypothesized by Conger and Kanungo (1998). The first goal of the present study was to examine the construct validity of a German version of the CKS. More specifically, confirmatory factor analyses were performed to test whether the original 5-factor solution of the CKS could be replicated in a German-speaking context. Second, the convergent and divergent validity of the CKS was examined. To this end, charismatic leadership as measured by the CKS was compared with two established theories of leadership: the transformational/transactional leadership paradigm (Bass, 1985) and the consideration/initiating structure paradigm (cf. Fleishman, 1973).

Development of Hypotheses

It was hypothesized that subscales of CKS would show convergent validity with respect to transformational leadership (H1). In transformational leadership, leaders emphasize higher motive development, and arouse followers' motivation and positive emotions by creating and representing an inspiring vision of the future (Bass, 1997). From a theoretical point of view, transformational and charismatic leadership share many attributes (e.g., representation and articulation of a vision). Previous research has demonstrated the convergent validity of measures of transformational and charismatic leadership ($.27 < r < .72$, cf. Conger & Kanungo, 1992; Conger et al., 1997).

Transactional leadership, on the other hand, relies simply on a set of clearly defined exchanges between leader and follower. Leaders become active only if they observe exceptions or deviations from standards. From a theoretical perspective, charismatic leadership reflects the extraordinary side of leadership behavior, whereas transactional leadership reflects the daily work routine (Goodwin, Wofford, & Whittington, 2001). Although the subscales of CKS

do not cover transactional leadership per se, transactional behaviors such as influencing and rewarding are alluded to in the wording of the CKS items. Against the theoretical background, and given the lack of empirical data available, we hypothesized that subscales of CKS would show divergent validity with respect to transactional leadership (H2).

Finally, a laissez-faire leadership style is best described as the absence of leadership behavior, which clearly does not coincide with the definition of charismatic leadership (Conger & Kanungo, 1988, 1998). Thus, we hypothesized that subscales of CKS would show divergent validity with respect to laissez-faire leadership (H3).

The psychometric properties of the CKS were also assessed with respect to the consideration/initiating structure paradigm (cf. Fleishman, 1973), which was the prevailing model prior to the 1980s. Conger and Kanungo (1988, 1998) developed their theory of charismatic leadership to describe leadership behaviors that had not been tapped by prior theories of leadership, and two independent studies have demonstrated that charismatic leadership is indeed distinct from earlier approaches such as task-oriented leadership (i.e., initiating structure, $-.20 < r < .13$) and people-oriented leadership (i.e., consideration, $.03 < r < .14$) (Conger & Kanungo, 1994; Conger et al., 1997). Against this background, we hypothesized that subscales of CKS would show divergent validity with respect to initiating structure (H4) and consideration (H5).

Materials and Methods

Sample

The study was conducted in an energy supply company in Germany. Of the total $N = 683$ employees in the company, 404 employees responded (i.e., response rate = 59.2%). These participants rated the leadership style of their respective supervisor. Overall, 3.2% reported to top executives, 8.4% to upper management, 30.0% to middle management, and 58.4% to first-level supervisors. The mean age of the participants was 41.8 years ($SD = 8.8$); 78.5% were male, and 21.5% were female.

Translation

Following established guidelines for test translation and adaptation (e.g., Hambleton, 2001; cf. www.intest.com.org), the Conger-Kanungo Scale (CKS; Conger & Kanungo, 1998) was carefully translated from English to German by a professional and then back-translated by an Eng-

lish native speaker, both experts in the field of organizational psychology. Virtually no differences were discerned between the two English versions of the CKS; thus, the German version was deemed appropriate for the purposes of this study. The final instrument is freely available on the internet (http://www.psy.uni-muenster.de/imperia/md/content/psychologie_institut_2/ae_hell_cks.pdf). Additional items for the assessment of charismatic leadership were implemented in the present study but were not included in the analyses.

Instruments

For the assessment of supervisors' leadership styles, three instruments were implemented. First, the newly translated German version of the CKS was utilized to assess charismatic leadership behaviors. Second, a German version (Rowold, 2004) of the Multifactor Leadership Questionnaire (MLQ-5X; Bass & Avolio, 2000) was used to assess transformational (20 items), transactional (10 items), and laissez-faire (4 items) leadership.¹ Multiple-sample research has shown the psychometric properties of this translation of the MLQ-5X to be satisfactory (Rowold, 2005). Finally, items from a German version (Fittkau-Garthe & Fittkau, 1971) of the Supervisor Behavior Description Questionnaire (SBDQ; Fleishman, 1953) were used to assess initiating structure (5 items) and consideration (6 items). For each of these items, participants rated the frequency of observed supervisor's behavior on a 5-point rating scale (1 = never, 5 = always).

Procedure

Questionnaires were administered during work time; anonymity was assured. All $N = 404$ participants completed both the MLQ and the CKS. Due to time limitations, only a subsample of $n = 134$ participants completed the SBDQ.

Results

Intercorrelations and Reliability

Table 2 summarizes descriptive statistics, internal consistency estimates (Cronbach's α values), and intercorrelations. All 5 CKS subscales showed good levels of internal consistency (i.e., $.71 < \alpha < .88$). The median intercorrelation was $r_M = .64$, slightly higher than that observed by Conger and Kanungo (1998; p. 105, Table 3.15) in their own research ($r_M = .48$ and $r_M = .50$).

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Table 2. Means, standard deviations, intercorrelations, and internal consistencies of the variables under investigation

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10
1. Laissez-faire	2.57	0.86	.75									
2. Transactional leadership	2.93	0.50	.02	.69								
3. Transformational leadership	3.03	0.64	-.22*	.71**	.93							
4. Initiating structure	2.82	0.58	-.25**	.36**	.69**	.75						
5. Consideration	3.48	0.78	-.37**	.17	.46**	.45**	.86					
6. CKS: Sensitivity to environment	2.95	0.82	-.23**	.65**	.80**	.71**	.52**	.79				
7. CKS: Sensitivity to members' needs	3.04	0.78	-.28**	.58**	.78**	.56**	.55**	.71**	.74			
8. CKS: Strategic vision & articulation	2.89	0.74	-.26**	.63**	.83**	.61**	.18*	.71**	.74**	.88		
9. CKS: Personal risk	2.68	0.82	-.06	.47**	.52**	.32**	-.13	.44**	.47**	.69**	.83	
10. CKS: Unconventional behavior	2.77	0.75	-.04	.55**	.62**	.53**	.18*	.53**	.53**	.74**	.58**	.71

Note. CKS = Conger-Kanungo Scale of charismatic leadership. Values along the diagonal represent internal consistency estimates (Cronbach's α values); $N = 404$ except for initiating structure and consideration, where $N = 136$, * $p < .05$, ** $p < .01$.

Table 3. Results of confirmatory factor analyses ($N = 404$)

Model	χ^2 (p)	<i>df</i>	GFI	AGFI	NNFI	CFI	SRMR	CAIC	$\Delta\chi^2$	Δdf
(1)	14208.69 (.00)	190	—	—	—	—	—	14348.72	13119.69***	30
(2)	1693.27 (.00)	170	.968	.961	.977	.981	.083	1973.32	604.27***	10
(3)	1089.00 (.00)	160	.979	.973	.997	.982	.066	1439.07		

Notes. Model 1 = independence model; Model 2 = 1-factor model; Model 3 = 5-factor model (target model). $\Delta\chi^2$ was defined as the difference between the χ^2 of the respective model and the χ^2 of the target model; *** $p < .001$.

Construct Validity

Several confirmatory factor analyses (LISREL) were first performed to test the construct validity of the CKS, and to determine whether Conger and Kanungo's (1998) 5-factor model of charismatic leadership explains more variance in the data than other theoretically possible models. Thus, we tested whether the 5-factor target model (Model 3, cf. Table 1) fit the data better than an independence model (Model 1) or a 1-factor model (Model 2). In the 5-factor target model, each CKS item was assigned to its respective factor (cf. Table 1). In the 1-factor model, all items loaded on the same factor (labeled "charismatic leadership"), based on the idea that charismatic leadership can be parsimoniously described by a single factor. Finally, in the independence model, the items did not load on particular factors. From a methodological perspective, this model can be viewed as a reference (null) model representing the simplest model possible.

In each of the three independent LISREL analyses, the method of unweighted least squares was used to analyze the covariance matrix (Kline, 1998). The results of the confirmatory factor analyses are summarized in Table 3. Both the 1-factor and the 5-factor model fitted the data well, but both absolute and incremental fit indices were higher for the 5-factor model than for the 1-factor model. Likewise, the Corrected Akaike Information Criterion (CAIC) and the χ^2 -difference test suggested that the 5-factor model was superior to the other models tested.

Convergent and Divergent Validity

In this section, correlations from Table 2 will be utilized to test hypotheses regarding convergent and divergent validity. In addition, in order to test whether one Construct A would be stronger associated with another Construct B (convergent validity) than with a third Construct C (divergent validity), the Z-test (Meng, Rosenthal, & Rubin, 1992) was utilized. It should be noted that the approach that was developed by Meng and colleague's controls for the correlations between B and C and, thus, represents an advancement to earlier approaches to the Z-test.

With regard to the present study, it was tested whether the correlation between one construct and one specific CKS

Table 4. Results of Z-test analyses

CKS subscales	TF/TA	TF/LF	TF/IS	TF/C
Sensitivity to the environment	0.90	9.35***	0.71	2.17**
Sensitivity to member needs	0.66	9.17***	0.49	2.16*
Strategic vision and articulation	1.10	9.22***	0.74	1.73*
Personal risk	2.20	8.96***	1.02	0.38
Unconventional behavior	1.02	9.69***	0.46	0.95

Notes. Values represent Z-values; it was tested whether one respective CKS subscales was more strongly correlated (cf. Table 2) with the first construct that was given in the respective column heading than with the respective second construct; * $p < .05$, ** $p < .01$, *** $p < .001$.

subscale would be equal to the correlation between the respective CKS subscale and transformational leadership (i.e., evidence for convergent validity). In contrast, if the correlation between one construct and one specific CKS subscale would be significantly smaller than the correlation between the respective CKS subscale and transformational leadership, this was interpreted as evidence for divergent validity. The results for the Z-tests were summarized in Table 4.

Comparing CKS and MLQ

As shown in Table 2, transformational leadership (MLQ-5X) was positively related to all 5 subscales of charismatic leadership (CKS), thus confirming Hypothesis 1. Transactional leadership was also positively related to the 5 CKS subscales. Z-test-analyses revealed that all five CKS subscales were as strongly related to transactional as they were to transformational leadership. Thus, Hypothesis 2 had to be rejected. Finally, laissez-faire leadership showed divergent validity to the 5 CKS subscales. That is, for all 5 CKS subscales, the correlation with laissez-faire was significantly smaller than the correlations with transformational leadership. Thus, Hypothesis 3 gained support from the data.

Comparing CKS and SBDQ

The 5 subscales of charismatic leadership were positively related to initiating structure. Z-test analyses demonstrated that the correlations between each of the five CKS subscales with initiating structure were as high as the correlations with transformational leadership. As initiating structure demonstrated convergent validity to subscales of charismatic leadership, H4 was not supported.

As for consideration, this leadership style was positively associated with 4 subscales of charismatic leadership. However, Z-tests revealed that three CKS subscales (i.e., sensitivity to environment, sensitivity to members' needs, and strategic vision and articulation) showed significantly smaller correlations with consideration than with transformational leadership. In contrast, the two CKS subscales of personal risk and unconventional behavior were as strongly related to consideration as they were to transformational leadership. In sum, only 3 CKS subscales were divergent to consideration. Thus, Hypothesis 5 was only partially supported.

Discussion

Our analyses supported certain aspects of the validity and reliability of the German version of the CKS. More specifically, the 5-factor model of charismatic leadership was substantiated in a German context, as was the construct

validity of the CKS. The 5 subscales of CKS had adequate internal consistency estimates (i.e., Cronbach's α). One disadvantage of the CKS is that its subscales are highly intercorrelated. This problem is entailed in virtually all instruments designed to assess "new" leadership constructs (Podsakoff, MacKenzie, & Bommer, 1996; Rowold & Heinitz, in press; e.g., Yukl, 1999). Nevertheless, it seems worth retaining the five subscales of charismatic leadership for purposes of feedback, training, and development.

How are the CKS subscales embedded into the nomological network of other leadership styles? As expected, subscales of charismatic leadership showed strong and positive relationship to transformational leadership. This result is in line with theoretical work that subsumed both charismatic and transformational leadership theories under the heading of "new" leadership styles (Yukl, 1999, 2002).

Interestingly, transactional leadership was positively related to all subscales of charismatic leadership (i.e., convergent validity). One possible explanation for the unexpected positive relations between transactional and charismatic leadership might be that transactional processes are alluded to in the wording of the CKS items. For example, the item "[the leader] builds mutual trust" ("sensitivity to members' needs" subscale) might imply the kind of fair, give-and-take relationship between leader and follower that is typical of transactional leadership.

As could be expected, the five CKS subscales were negatively related to absence of leadership (i.e., laissez-faire). Laissez-faire is characterized as a highly passive behavior, whereas the CKS subscales include only items for active leadership behaviors. Thus, laissez-faire showed divergent validity to charismatic leadership.

Theory of charismatic leadership was developed in the 1980s in order to establish a new leadership paradigm that would be distinguishable from the former (i.e., pre-1980) initiation structure and consideration leadership paradigm. The results of the present study revealed that initiating structure showed convergent validity to the five CKS subscales. These results are in contrast with Conger and Kanungo's (1994; Conger et al., 1997) own research. Thus, it appears that the theory of charismatic leadership (CKS) is not entirely independent from initiating structure, as was proposed by Conger and Kanungo (1998). Consistent with earlier research, however, was the divergent validity of three charismatic leadership scales and consideration. However, two CKS subscales (i.e., personal risk and unconventional behavior) showed convergent validity to consideration. Thus, it appears that in the cases of personal risk and unconventional behavior, Conger and Kanungo were not able to create leadership constructs that were distinct from earlier approaches to leadership (i.e., initiating structure and consideration)

In sum, these results further clarify the nomological network of leadership theories. A considerable overlap between charismatic leadership and (a) transformational leadership, (b) transactional leadership, and (c) initiating structure have been observed. However, on average, these

constructs shared 37.3% of variance (cf. Table 2), meaning that charismatic leadership was not entirely redundant to these other leadership constructs. Moreover, charismatic leadership was divergent to laissez-faire and – in the case of three of five CKS subscales – consideration. Thus, Conger and Kanungo's theory captures its own piece of the leadership phenomena.

To date, two leadership paradigms have dominated theory and practice: the transformational/transactional paradigm and the consideration/initiating structure paradigm. The results of the present study suggest that a further paradigm, charismatic leadership, might be relevant for understanding leadership. It may therefore be worthwhile including charismatic leadership, as assessed by the CKS, in further research and practice. The Conger and Kanungo model extends previous approaches to leadership, and, thus, can advance research efforts to assess a "full range of leadership behaviors" (Antonakis & House, 2002; Avolio & Bass, 2002).

Finally, we outline some limitations of the present study and suggest possible lines of inquiry for future research. First, future research should assess the stability of charismatic leadership. Second, the theoretical assumption of three (consecutive) stages in the leadership process (cf. Table 1) should be tested empirically. Thus, longitudinal research is necessary. Third, to establish criterion-oriented validity, outcome criteria such as employees' or organizational performance should be collected in future research. This avenue of research would allow for a critical analysis concerning the relative effectiveness (i.e., criterion-oriented validity) of rival leadership theories. Finally, while the present research made a first attempt to compare and contrast charismatic, transactional, and transformational leadership as well as consideration and initiating structure, comparisons with other approaches to leadership, such as leader-member exchange (LMX) theory (Graen & Uhl-Bien, 1995), are also warranted. This kind of research would further contribute to our understanding of the nomological network of competing, yet overlapping, leadership theories.

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