

## **Leader Behavior Inventory: A Test of Measure Equivalence in Germany and the United States**

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Multiple research studies have highlighted the importance of understanding differences in leader behaviors across cultures. The Leader Behavior Inventory (LBI) is one measure of leadership behaviors that has been used to examine leadership in the U.S., Costa Rica, Mexico, and Spain. The LBI is based on five behavioral factors: Visualizing Greatness, Empowering the 'We,' Communicating for Meaning, Managing One's Self, and Care and Recognition. The primary purpose of this research was to assess the equivalence of the LBI across U.S. and German cultures. A secondary purpose of this research was to use the LBI to identify differences between leader behaviors across cultures. The results demonstrate measurement equivalence of the LBI across the two cultures. The results also indicate the American managers scored higher than German managers on each of the five behaviors.

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Few topics are written about more than leadership. Unfortunately, the topic area is rife with personal theories, disparate definitions, and unwarranted musings. The field is so askew that Rost (1991), in his review of the literature, found 190 different descriptions of leadership. One way to focus the discussion is to look at the specific behaviors in which leaders engage that make them effective leaders. That is the question on which this research is based. In this article, the authors look at this question across two different cultures.

Burns (1978) introduced ideas about leadership that changed the way people think about leadership and how leadership is defined. With his *transforming leadership*, Burns changed the conceptualization of leadership; the very idea of leadership as a separate and distinct organizational process took on a new level of interest and importance. Since that time, a number of authors have expended serious effort defining the phenomenon of transformational leadership (Bass, 1985; Bennis & Nanus, 1985; Conger, 1989; Kent, 2005) while others have attempted to

identify the behaviors that comprise transforming leadership<sup>1</sup> (Bass & Avolio, 1990; Kouzes & Posner, 1995).

Kent (1999) created a model that attempts to differentiate between leading and managing. Based on that model, he gathered statements of proposed leadership behaviors—not managing behaviors, according to the model—from scholarly writings (see Bass, 1985; Bass & Avolio, 1994; Bennis & Nanus, 1985; Conger, 1989; Kotter, 1990; Kouzes & Posner, 1995). Using these behavioral statements Kent, Crotts, and Aziz (2001) and Kent (2004) created a measure, the Leader Behavior Inventory (LBI), to assess leaders' transformational leadership behaviors as described by these various leading authors. The LBI is a 5-factor measure of behaviors purported to reflect transformational leadership. It uses subordinate ratings of leaders' behaviors. The copyrighted instrument includes 29 items and is included in the Appendix.

Briefly, the five factors are as follows. Visualizing Greatness involves behaviors related to creating and communicating an inspiring vision. Empowering the 'We' includes behaviors that create a sense of "oneness" among followers. Communicating for Meaning focuses on getting across the value or relevance of important ideas, decisions, and strategies. Managing One's 'Self' is related to the leader sustaining his or her perseverance, focus, and self-discipline. Care and Recognition behaviors demonstrate a genuine concern and gratitude for peoples' hard work and effort.

The LBI is useful in that it aggregates the behaviors that comprise what leading authors describe as transformational leadership within the United States culture. But the question remains, are the behaviors that constitute leadership in the United States transferable to other cultures?

Research suggests that the behaviors observed by the LBI in the United States sample should also be observed in other samples. In particular, the GLOBE study (den Hartog, House, Hanges, & Ruiz-Quintanilla, 1999) was a massive attempt to look globally at what leaders around the world view as important leadership behaviors. The study involved 170 researchers, and it attempted to investigate the relationships between societal cultures, organizational cultures, and transformational leadership. While they found many culturally-specific leadership behaviors (behaviors that facilitated effective leadership in one culture but not in others), their primary finding was that behaviors normally associated with transformational leadership are strongly and universally endorsed across cultures.

In the GLOBE study, middle managers from each of the cultures were asked if specific leadership behaviors contributed to or inhibited effective leadership. The researchers' main hypothesis was that transformational behaviors would be universally endorsed as contributing to effective leadership. This hypothesis was soundly supported by the study, which indicated that transformational leadership behaviors were endorsed in all cultures included in the study.

Further, using the LBI, Quesada, Gonzalez, and Kent (2008) found few differences between United States leaders and leaders in Costa Rica, Mexico, and Spain. In this study, the investigation of leadership across cultures was extended by comparing leadership behaviors in Western Europe—specifically in Germany—to leadership behaviors in the United States. Three of the authors' university, the College of Charleston, has strong student and faculty exchange programs with a number of European universities and receives a number of German students into

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<sup>1</sup> Bass, 1985, first used the word *transformational* to describe Burns' transforming leadership; and that has become the accepted language for depicting the leadership processes in question. Transformational leadership will be used throughout the remainder of this paper to refer to Burns' idea of transforming leadership.

its School of Business. Hence, we decided to study German leaders so that we could relate these findings to our numerous German students.

One might not expect to find differences between German and United States leaders based on the previous assessments of the similarities and differences between the two cultures. Hofstede's work suggests more similarities than differences between the cultures. Table 1 describes the nature of the two cultures using Hofstede's four cultural dimensions: power distance, individualism, masculinity, and uncertainty avoidance. The table was excerpted from Adsit, London, Crom, and Jones (1997) and shows sameness between the two cultures, German and United States, on three of the four dimensions. The only difference between the two cultures was in the area of uncertainty avoidance. In Hofstede and Hofstede's (2005) work, they found the same results except that the uncertainty avoidance dimension had the opposite from Adsit et al.'s results. Hofstede found the German culture to be more avoidant than the United States culture while Adsit et al. found the United States culture to be more avoidant.

Table 1: Differences and Similarities Between German and United States Cultures on Hofstede's Four Cultural Dimensions.

	Power Distance	Individualism	Masculinity	Uncertainty Avoidance
Germany	Low 42/44	High 15	High 9/10	Medium 29
United States	Low 38	High 1	High 15	Low 43

<sup>2</sup>

Thus, the question remains: do managers across various cultures behave as leaders in similar or different ways? The first purpose of this study is to see if the 5 factor structure of the LBI observed in a U.S. sample extends to a German sample. The second purpose is to see if there are mean differences between the German sample and the U.S. sample on each of the 5 dimensions. Our hypothesis is that there will be no differences between the UNITED STATES results and the German results in either the factors identified (i.e. the leadership model) or in the scores on those factors.

## Methods

### *Participants*

In general, all participants in both countries were survey respondents who used the LBI to describe their managers' leadership behaviors. The nature of the managers' organizational roles varied between the country samples and within the German sample.

*U. S. sample.* The leaders in the U.S. study were deans of schools at a southeastern university and supervisors and managers of employees at a manufacturing plant that produced welding machines and components. Those completing the surveys were 114 faculty members and staff who reported to those deans and 90 factory employees in various functions.

To administer the LBI at the university, deans met with faculty and staff and informed them of the research and its purpose. They also told the faculty and staff that they would be

<sup>2</sup> Excerpted from Adsit et al.

receiving a copy of the questionnaire in inter-campus mail. Faculty and staff were advised both verbally by the deans and in writing that their participation was entirely voluntary and confidential. Further, the researchers sent the questionnaire with a letter reiterating the purpose of the research and the voluntary and confidential nature of participation to each faculty and staff member. Those who completed the questionnaire returned it via inter-campus mail to the researchers with no identifying information on the questionnaires. No demographic information was collected from the deans or their faculty and staff.

To administer the LBI to the manufacturing employees, supervisors and managers asked their employees to go online and complete the survey. The employees were told that no one at the company would see their individual responses to the survey.

*German sample.* The participants in the German study were working adults studying for their Diplom at the Mainz University of Applied Sciences. All participants were studying management and business administration and were “working adults” who have gone through three years of education in the German dual education system. For example, banking clerks take a “vocational” education program that covers at least 70% of the content of a United States undergraduate program in business. After graduating from this dual system, which does not exist in the United States, the participants continue their education as part-time students while working as lower, sometimes middle level, managers. The study program is a five-year program with the degree of “Diploma,” which is a degree with a level somewhere between the United States undergraduate and master’s level. So the expression “undergraduate” used in an American context would not describe the educational level and the daily experience of these employees in their working environment.

That aside, we surveyed 337 participants within classes. The students were given instructions that were approved with a cover letter signed by institutional. These instructions attempted to provide a process that insured anonymity. Questionnaires were hand carried by the survey team comprised of a student assistant, our German co-author, an American co-author, and German faculty colleagues.

The instructions asked each employee to anonymously describe his or her particular leader or manager and the leader’s specific behaviors. The employees were asked to respond to each of the LBI questionnaire items and to describe that behavior by circling the number on the scale that most accurately reflected how often their leader demonstrated that behavior. The questionnaires were completed during class periods. While completing the questionnaire was voluntary, 100% of the students participated by completing the surveys. They completed the LBI questionnaires in hard copy to describe their leaders. Of those completing the questionnaire, 54.6% were female and 45.4% were male. The leaders who were described by the participants were from mostly large organizations: 13.6% were from organizations of less than 100 people, 16.3% were from organizations of 100-499 people, and 69.8% were from organizations made up of 500 or more people. These leaders were from almost every type of industry. Only two industries were represented by more than 10% of the sample: banking made up 25.6% and other services made up 18.5%. Table 2 lists the various industries represented and the percent of representation for each industry. Virtually all of the leaders’ organizations were wholly domestic German organizations; 98.5% of the organizations were domestic while the remaining were international or global. The leaders being described by the participants were 20.2% female and 79.8% male.

Table 2: Various Industries Represented by the Sample and Percent of Representation

Industry	Percent
Automobile	5.6
Chemical	10.5
Pharmaceutical	9.9
Steel	1.2
Construction	1.2
Other Manufacturing	6.2
Retail and Wholesale Trade	3.1
Banking	25.6
Insurance	4.6
Transportation	4.3
Information Technology	3.1
Public Sector	5.9
Other Services	18.5

### *Leadership Behavior Inventory (LBI)*

The Leadership Behavior Inventory (LBI) was developed (Kent, et. al., 2001, Kent, 2004) to assess individuals' engagement in transformational leadership behaviors. The inventory measures behaviors in five factors and is completed by "subordinates" of the leader who report on how often a leader employs specific behaviors. The LBI employs an 8-point Likert scale in which 1 (*rarely*) and 8 (*very often*). The LBI includes 29 items.

The English version of the LBI was translated into German separately by two German colleagues at the Fachhochschule Ludwigshafen am Rhein. This work was retranslated back into English by an American German language faculty member at a U.S. university. This work was continued until the translators could agree that the intent and meaning of the LBI had been accomplished in the German version. Further, at Mainz University, a German student assistant initially verified that the German translation properly represented the intent of the LBI. When translating the questionnaire to German, problems may occur since there are expressions like "mission" and "vision" in the English language whose meanings may be slightly different in the German cultural environment. It is suspected that "vision," for example, is seen closer to a religious context than in the American culture. Furthermore, when talking about managing and leading, there is a difficulty related to German history (i.e., "leader" is literally translated as "Furher" which was a synonym for Hitler.) Thus, the words "leader" and "leading" still are difficult to use in a German context. "Leading" has more recently lost a lot of its stigma while "leader" still cannot be used in a questionnaire.

Taking these and other problems of translation into consideration and verifying the translation with both our German co-author and in turn his two colleagues, the questionnaires were distributed to 337 participants. Since the questionnaires were completed within a classroom setting, all of the questionnaires were returned, yielding a response rate of 100%. For the majority of the respondents, all of the LBI and demographic items were completed. However, in some instances, participants either left items blank or used indecipherable handwriting. Three methods were employed to deal with missing data in this study: expectation maximization imputation, list-wise deletion, and pair-wise deletion. In instances in which only one response was missing from the LBI items, expectation maximization imputation was employed as a

method that produces a relatively accurate estimation of the value of the data in comparison to other estimation techniques (Switzer & Roth, 2002). In estimation maximization imputation, the parameter estimates are the focus of the estimation, whereas the missing data points are the focus of other methods. In the current study, estimation maximization imputation was conducted using SPSS 15.0.

In one case, more than one response was missing. The case was deleted list-wise from the dataset; thus, the data from this case was not included in any of the study analyses. Finally, in 49 instances, data were missing for demographic items. Such data was addressed with pair-wise deletion. That is, the cases were deleted from any analyses involving the specific demographic items, but the case was included in all other analyses (Switzer & Roth, 2002).

### *Analyses*

Multiple steps are necessary in order to examine the invariance of the LBI across the two samples. The examination of equivalence is conducted based on the general methods recommended by Vandenburg and Lance (2000). That is, two analyses are conducted in order to verify the equivalence of the measure. The first analysis examines congeneric equivalence, or whether the number of underlying factors is equivalent across the two groups (Model 1). If Model 1 is not supported, then it will be concluded that the LBI is not an equivalent measure in the two cultures and no other analyses will be conducted. The second analysis examines tau equivalence, or whether the pattern of factor loadings is equivalent across the two groups (Model 2). The Joreskog tradition of measurement invariance suggests that a third analysis should be conducted examining the equivalence of the structural parameters across multiple groups. However, Byrne (1998) noted, "The equality of error variances and covariances is probably the least important hypothesis to test (p. 261)." Thus, in this study, it was considered to be important to demonstrate invariance in factor loadings (Model 1) and factor variance/covariance structures (Model 2), but not to demonstrate invariance in the structural relations among the 5 factors.

Similar to the methods used by Woehr, Arciniega, and Lim (2007), equivalence is evaluated using the multi-groups function in LISREL (Jöreskog & Sörbom, 2004). Both Model 1 and Model 2 are evaluated based on the 5-factor structure demonstrated in previous research examining the LBI (Kent, 2005). Model 1 was a measure of congeneric equivalence, or whether the items represented the same basic factor structure across the two samples. More specifically, in order to examine congeneric equivalence, each item is set to load on a specific factor, but the factor loadings are free to vary. If the results indicate that the data do not represent an acceptable fit to the data for Model 1, then additional analyses will be inappropriate given a lack of equivalence of the factor structure.

Model 2 represents a test of tau equivalence, or whether the factor loadings are equivalent for the LBI in the two cultures. In order to examine tau equivalence, the factor loadings are set as equal in the two samples. If the fit for Model 2 is significantly different than the fit for Model 1, then the items will be thought to vary in the degree to which they indicate each dimension. Again, further analyses will not be warranted if Model 2 proves to be substantially different from Model 1.

Model fit and examinations of differences in fit between the two models is based on chi-square analysis. The  $\chi^2$  provides an estimate of how closely the proposed model matches the structure of the data. Because the goal of this study is to demonstrate that the a priori five-factor model provides an acceptable fit to the data, an insignificant  $\chi^2$  demonstrates that the structure of

the a priori model is no different than the structure of the actual data. Thus an insignificant  $\chi^2$  indicates that the a priori model provides a good fit to the data. Because the  $\chi^2$  has a tendency to be significant even when no significant difference exists, the fit of the model is examined based on multiple other fit indices: Root Mean Square Estimation Approximation (RMSEA; Steiger, 1990), Comparative Fit Index (CFI; Bentler, 1990), McDonald's (1989) Noncentrality Index (NFI), and the Gamma Hat index (Steiger, 1989). The RMSEA is an overall goodness-of-fit measure that takes into account model complexity. Browne and Cudek (1993) suggested that values of .05 or less represent good fit to the model, whereas values up to .08 represent acceptable model fit.

While there are a number of fit indices available for evaluating model fit and differences in fit between models, Cheung and Rensvold (2002) suggested that CFI, NCI, and Gamma Hat are appropriate fit indices for gauging the difference between models when examining multiple groups. CFI and NFI values range from 0.0 to 1.0, with values closer to 1.0 representing better fit and values greater than .90 representing acceptable fit to the data. In discussing the interpretation of model fit when examining the equivalence of measures between two groups, Cheung and Rensvold suggested that the CFI between the two models should not exceed 0 .01, the difference in NCI should not exceed 0.02, and the difference in Gamma Hat should not exceed 0 .001.

## Results

Means, standard deviations, and correlations for the study variables are reported in Table 3.

Table 3: Means, Standard Deviations, Correlations, Reliability Estimates, and Difference Tests for the German and United States Samples

Variable	German Sample							U.S. Sample							<i>t</i> <sup>a</sup>	<i>df</i>
	<i>M</i>	<i>SD</i>	1	2	3	4	5	<i>M</i>	<i>SD</i>	1	2	3	4	5		
1. Visualizing Greatness	4.75	1.61	.92					5.52	1.93	.97					-4.82*	378.22
2. Empowering the “We”	4.95	1.59	.62	.87				5.59	2.02	.81	.98				-3.88*	363.36
3. Communicating for Meaning	4.82	1.53	.62	.78	.90			5.59	1.90	.83	.90	.96			-4.92*	366.12
4. Managing One’s Self	5.52	1.44	.65	.54	.62	.87		5.93	1.89	.90	.81	.84	.97		-2.68*	353.20
5. Care and Recognition	4.17	1.74	.55	.71	.68	.49	.84	5.69	1.99	.73	.83	.83	.76	.99	-9.10*	394.02

<sup>a</sup>Levene’s test for unequal variances indicated that the two groups had unequal variances on each of the 5 dimensions. Therefore, Student’s *t* statistic based on the assumption of unequal variances was used.

\**p* < .05.

### Test of Equivalence

Two models were evaluated in order to determine measurement equivalence across the German and United States cultures. Fit indices for each of the two models are displayed in Table 4. The first model examined whether the LBI demonstrated an equivalent 5-factor structure across the two cultures (Model 1). As with the sample based only on German data, the chi-square was significantly different from zero. However, the RMSEA, CFI, and NFI indices indicate that the model provides an adequate to good structure for the data (RMSEA = .08, CFI = .98, NFI = .97). The second model examined whether the LBI items demonstrated equivalent factor loadings across the two cultures (Model 2). On one hand, the change in chi square between the two models is significant ( $\Delta\chi^2(29) = 122.29, p < .01$ ), and the  $\Delta$ Gamma Hat value exceeds the recommended values ( $\Delta$ Gamma Hat = .012) (Cheung & Rensvold, 2002). On the other hand, the NCI and CFI values for the two models are identical. Cheung and Rensvold (2002) noted that when examining invariance between two groups, “A value of  $\Delta$ CFI smaller than or equal to -0.01 indicates that the null hypothesis of invariance should not be rejected” (p. 251). As the CFI and NFI values were the same for the two models, the null hypothesis was not rejected.

Table 4: Results for the Leader Behavior Inventory Measurement Invariance Tests for a German ( $N = 355$ ) and American ( $N = 112$ ) Sample

Model	<i>df</i>	$\chi^2$	$\chi^2$ Diff.	RMSEA	CFI	CFI Diff. <sup>a</sup>	NFI	NFI Diff. <sub>a</sub>	Gamma Hat	Gamma Hat Diff. <sub>a</sub>
Model 1: Same factor structure	734	1947.25	--	0.08	0.98	--	0.281	--	0.963	--
Model 2: Same factor loadings	763	2046.73	99.48	0.08	0.98	0.00	0.252	0.029	0.951	0.012

<sup>a</sup>Represents the difference between Model 1 and Model 2.

As the LBI demonstrated configural invariance and may also demonstrate metric invariance in the German and U.S. cultures, additional analyses were conducted in order to examine similarities and differences on the dimensions of the LBI across the two cultures. Correlations and internal consistency estimates for each of the dimensions of the Leader Behavior Inventory based on the German data and the American data are presented in Table 3. For both cultures, reliability estimates on each of the five dimensions are acceptable. As displayed in Table 3, the American managers were rated as demonstrating better behaviors in each of the five dimensions.

### Discussion

The results show that five factors of the LBI apply to German leaders as well as to U.S. leaders. That is, we can say that German followers can differentiate between their leaders using these five factors. Said another way, the five factors—Visualizing Greatness, Empowering the “We,” Communicating for Meaning, Managing One’s Self, and Care and Recognition—are useful categories for describing leadership behaviors and for differentiating between leaders in both the United States and in Germany. It can also be said that the five factors can be expected to yield similar results reliably over time, all things being equal.

Having said that, it should be noted that the various fit indices were not unanimous in their suggestion of equivalence. However, given that the a priori model was based on a 5-factor

structure in the United States data, the authors decided to treat the measure as equivalent for research purposes. Nevertheless, additional research is recommended in order to further examine the factor structure of the German culture on the LBI. Assuming, however, that the LBI is a useful, reliable instrument to assess leadership in the United States and in Germany, the authors looked at the differences in performance on the factors among German and U.S. leaders. A test of the difference between the two samples on each of the five factors indicates there is a significant difference on the five factors between the United States and German samples. Specifically, subordinates in the United States gave their managers higher scores on all five dimensions than did subordinates in Germany. There does not seem to be a cultural explanation for this difference based on Hofstede's four values. Table 1 suggests that the two cultures are quite similar on three of the four Hofstede values. The one value in which there may be a difference between the two cultures is the Uncertainty Avoidance value. High uncertainty avoidance occurs within organizations that create a stressful work environment by punishing deviation and errors, and where rules and procedures must be adhered to. Low uncertainty avoidance occurs in organizations that encourage innovation and experimentation. Some items that make up the LBI may reflect Uncertainty Avoidance. For example, within the Empowering the "We" LBI factor, there are these items: "Experiments, innovates, and takes risks to find new or better ways;" and "Is willing to challenge the system." Within the Managing One's Self LBI factor, there is the "Believes anything can be done," "Has a 'can do' attitude," and "Strengthens people by giving power away, developing their competence, and assigning critical tasks to them." Finally, the Care and Recognition factor includes these items: "My leader publicizes peoples' successes," "My leader celebrates the team's accomplishments," "My leader strengthens people by developing their competence and assigning critical tasks to them," and "My leader genuinely cares about others."

It may be that these and other items were sufficient to create the mean differences found in this study and that these items were actually, in this case, a measure of Uncertainty Avoidance. As mentioned earlier, Adsit et al. (1997) found uncertainty avoidant behaviors to be lower among German managers than among U.S. managers, while Hofstede concluded that uncertainty avoidant behaviors were higher among German managers.

To say the least, the results are certainly not what might be expected based on previous work as described earlier. Further, one would not expect these few items, which may or may not be related to one of the four cultural values posited by Hofstede, to be sufficient to cause the differences found in this study.

The differences may be, in part, due to the nature of the samples themselves. The German leaders were mostly from business organizations. The U.S. leaders were made up of mostly senior managers from an academic setting. Clearly, much work needs to be done to, first, verify that there are differences between United States and German leaders as suggested by this research, and second to see if different industries or organizational types develop or breed different leadership styles.

### *Limitations and Directions for Further Research*

Although these findings are interesting, there are several limitations associated with the outcomes observed in this study. First, this study was based on a sample of a small group within each of two very large nations. Although it is possible that the sample used here is representative of a larger cultural difference, the samples are too small to draw final conclusions. Future

research is necessary, which will examine measurement equivalence based on a larger sample from each nation and also cultural differences between the two groups.

Second, the German sample was based on students enrolled in college classes. Like samples used in many studies, this sample was convenient. However, though the students were working individuals employed full time by their organizations, it is unclear whether the scores on the inventory in the German culture are representative of an older, more experienced population. Furthermore, the differences observed between the two cultures on the care and recognition dimension were based on just one dimension. In order to draw firm conclusions about potential differences between the two cultures in the area of care and recognition, an extensive study is necessary. Specifically, research would need to be conducted examining managerial care and recognition based on multiple inventories.

Third, the U.S. subjects as a whole may appear to be quite diverse being subordinates of deans at a university and subordinates of manufacturing supervisors and managers. However, the data indicate that the LBI holds together despite this diversity. Also, the German sample is drawn from various industries though there are no academic institutions among the employers of the German respondents. While this is an issue to keep in mind, it does not appear to have caused any major problems with the outcomes of the LBI instrument.

Despite these limitations, this study makes several contributions to the leadership literature. First and foremost, the results of this study suggest that the LBI is potentially a feasible measure of leader behavior in both Germany and the United States and thus can be used as a tool for comparing components of each of the two cultures. In this study, when the measure was used to compare leader behaviors in Germany and the United States, an interesting question was raised regarding differences between the two cultures in subordinate care and recognition. If this difference exists in the larger population, what is it about these two cultures that makes them different regarding these specific behaviors? In the United States during the past few decades, there has been an increased focus on rewarding and praising behavior—specifically rewarding the performance of children. Perhaps this is behind the differences, in that managers are being educated and/or trained to also give more recognition to subordinates in the workplace. Clearly, there are research questions to be dealt with regarding the nature and cause of differences between the two cultures on this factor. It could just be an anomaly in the data that should be investigated through replications of the study.

Finally, this type of research—investigating the nature of similarities and differences in leadership behaviors across cultures—must be extended dramatically. Work has already begun to study leader behaviors using the LBI in India and in China. As well, it would be interesting to look at differences in leader behaviors across industries as well as across organizational size within cultures.

The LBI should be further developed as a measure of transformational leadership. Extensive validation and reliability studies must be carried out.

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## Appendix

### The Leadership Behavior Inventory Dr. Thomas W. Kent, 2001

Write Leader's name here: \_\_\_\_\_

To complete the questionnaire, think of your Leader (whose name appears above) and his/her behavior in his/her role as leader. Then, using each of the items below, describe that behavior by circling the choice that, in your experience, most nearly describes how often your Leader successfully displays that particular behavior.

For example, suppose the item is "Uses examples that others can relate to." If you think the Leader does this often, you would circle a "5" or a "6" as in the example below. You would circle a "5" if you feel that the situation is closer to "sometimes" than to "very often." You would circle a "6" if you think that the situation is closer to "very often."

#### Example

I would describe my Leader as one who:	Rarely	Sometimes	Often	Very Often
Uses examples that others can relate to.	1-----	2-----	3-----	4-----5-----6-----7-----8

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I would describe my Leader as one who:	Rarely	Sometimes	Often	Very Often
1. Has visions and dreams of what can be.	1-----	2-----	3-----	4-----5-----6-----7-----8
2. Has a desire to make something happen.	1-----	2-----	3-----	4-----5-----6-----7-----8
3. Has a clear image of the future.	1-----	2-----	3-----	4-----5-----6-----7-----8
4. Expresses enthusiasm for his/her future.	1-----	2-----	3-----	4-----5-----6-----7-----8
5. Experiments, innovates, and takes risks to find new or better ways.	1-----	2-----	3-----	4-----5-----6-----7-----8
6. Is willing to challenge the system.	1-----	2-----	3-----	4-----5-----6-----7-----8

Viz. \_\_\_\_\_

7. Lets people (empowers them to) do what they believe is right.	1-----	2-----	3-----	4-----5-----6-----7-----8
8. Gets people involved in decisions that affect.	1-----	2-----	3-----	4-----5-----6-----7-----8
9. Creates in others a sense of ownership in the organization.	1-----	2-----	3-----	4-----5-----6-----7-----8
10. Uses the word "we" constantly instead of "I".	1-----	2-----	3-----	4-----5-----6-----7-----8
11. Enlists the support and assistance of others who have a stake in the vision.	1-----	2-----	3-----	4-----5-----6-----7-----8
12. Involves others who must live with the results.	1-----	2-----	3-----	4-----5-----6-----7-----8
13. Appeals to others' values, interests, hopes, and dreams.	1-----	2-----	3-----	4-----5-----6-----7-----8

14. Strengthens people by giving power away, developing their competence, and assigning critical tasks to them

1-----2-----3-----4-----5-----6-----7-----8

EmpWe \_\_\_\_\_

15. Explains why she/he is doing what.  
she/he is doing

1-----2-----3-----4-----5-----6-----7-----8

16. Knows his/her audience when speaking to.  
them

1-----2-----3-----4-----5-----6-----7-----8

17. Talks about the principles or values behind  
decisions that are made.

1-----2-----3-----4-----5-----6-----7-----8

18. Communicates in ways that inspire and  
motivate others.

1-----2-----3-----4-----5-----6-----7-----8

19. Takes the time needed to explain fully what he/she  
is thinking.

1-----2-----3-----4-----5-----6-----7-----8

20. Sets the example by behaving in ways that are  
consistent with his/her stated values.

1-----2-----3-----4-----5-----6-----7-----8

CommMean \_\_\_\_\_

21. Has a sense of self-determination and self-confidence.

1-----2-----3-----4-----5-----6-----7-----8

22. Keeps his/her own level of energy up high.

1-----2-----3-----4-----5-----6-----7-----8

23. Believes anything can be done; has a "can do" attitude.

1-----2-----3-----4-----5-----6-----7-----8

24. Is a model of persistence and perseverance.

1-----2-----3-----4-----5-----6-----7-----8

25. Maintains focus and constancy of purpose.

1-----2-----3-----4-----5-----6-----7-----8

MOS \_\_\_\_\_

26. Publicizes peoples' successes to all employees.

1-----2-----3-----4-----5-----6-----7-----8

27. Celebrates team accomplishments regularly.

1-----2-----3-----4-----5-----6-----7-----8

28. Genuinely cares about others.

1-----2-----3-----4-----5-----6-----7-----8

29. Celebrates victories.

1-----2-----3-----4-----5-----6-----7-----8

CarNRec \_\_\_\_\_