



Guidelines for the Use of

GLOBE

Culture and Leadership Scales

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On this Web site, you will find three documents in addition to this form:

- Form Alpha, consisting of all *Organizational Culture Values and Practices* items and 56 *Leadership* items.
- Form Beta, consisting of all *Societal Culture Values and Practices* items and an additional 56 *Leadership* items.
- Syntax for the use of GLOBE culture and leadership scales.

Important Guidelines for the Use of GLOBE Societal and Organizational Scales

As discussed in Chapter 8 of the 2004 book (House, Hanges, Javidan, Dorfman, & Gupta, 2004), as well as further detailed in Hanges & Dickson (in press at *The Leadership Quarterly*), the GLOBE culture scales were developed in a theory-driven manner. That is, we first defined the various culture constructs that we wanted to measure, as well as specified the general nature of these constructs before items were written. The selection and definitions of the culture dimensions were developed after a review of the culture literature.

We developed the scales with the expectation that the measured constructs would have a convergent-emergent nature. These constructs are *convergent* because the responses from people within organizations or societies have been shown in the GLOBE research to have high inter-rater agreement represented by scale means. They are called *emergent* because even though the origin of these constructs is a function of the cognition, affect, and personality of the survey respondents, the properties of these constructs are actually manifested at the aggregate—or group—(e.g., organization or society) level of analysis. This process was also essentially followed when developing the GLOBE Culturally Endorsed leadership scales (see Chapter 8, Hanges & Dickson, and Chapter 21, Dorfman, Hanges, & Brodbeck in the 2004 book).

Consistent with this definition of our constructs, we performed a variety of statistical analyses to assess the psychometric properties (e.g., rwg, ICCs, multilevel confirmatory factor analyses, reliability analysis) of our scales. Overall, these statistical analyses supported the following conclusions:

- Respondents converged in their descriptions of organizational and societal culture.
- Scales were unidimensional at the organizational and/or societal level. (It should be noted that due to sample size issues at the aggregate level of analysis and our desire to confirm the constructs that were previously identified qualitatively, we performed the factor analyses one scale at a time).
- Scales were reliable at the organizational and/or societal level.

As described in Chapters 8 and 9 of the 2004 book (House et al., 2004), the construct validity of the culture scales was confirmed by examining the correlations between the GLOBE scales with independent sources (e.g., Hofstede's culture dimensions, Schwartz's value scales, World Values Survey, and unobtrusive measures).

We suggest that researchers who want to use these scales in independent research consider the following:

The GLOBE scales were designed to be psychometrically sound at the organizational and societal levels of analysis. This means that the scales were designed to explain “between-organization” differences or “between-society” differences. The scales were not designed to explain “between-individual” differences. The reliability of the scales is a joint function of inter-rater agreement and inter-item consistency.

***Caveat Emptor:* It is unreasonable to expect that these scales will show the same psychometric properties at the individual level of analysis as they did at the aggregate levels. This is because the scales were not designed to explain “between-individual” differences.**

This can be clarified by the following example. Let us assume that a researcher uses the GLOBE societal culture scales in a study in which participants only come from a single country. The researcher in this example has empirically eliminated any between-society differences. Thus, the GLOBE societal scales which were designed to measure “between-society differences” are now being used in a data set with no “between-society” variance. The researcher’s statistical analyses will indicate how well the scales explain differences between people in this single country. It should be noted that while other researchers have hypothesized the existence of isomorphic constructs (i.e., constructs that operate across several levels of analysis), rigorous evidence for such constructs has not as of yet been obtained. Frequently, different constructs are needed to explain differences among societies, organizations, or individuals. We remind all researchers to be cognizant of the ecological and reverse ecological fallacy.

Given the organizational or societal focus of the GLOBE culture scales, it is important that the researcher collect a sufficient number of observations within each organization or each society to ensure reliable estimation of organizational or societal averages.

Researchers should also be aware of the following methodological issues related to conducting cross-cultural research. These include but are not limited to:

1. Cultural response bias when using survey research instruments
2. Measurement and functional equivalence
3. Sampling of aggregate units and generalizability of findings
4. Difficulties in translation
5. Conceptualizing culture
6. Rival hypothesis confound
7. Culturally generalizable vs. culturally specific constructs and research approaches
8. Method bias
9. Ecological and reverse ecological fallacy
10. Statistical power and the need for a sufficient number of aggregate units

These issues have been fully explained in the first GLOBE book (House et al, 2004). The GLOBE instruments are intended primarily for scholarly, nonprofit, noncommercial purposes.

The GLOBE instruments can also be made available to individuals or organizations for commercial (i.e., nonacademic) purposes. In such instances, a representative of the GLOBE Foundation will negotiate with the individual or organization requesting use of the GLOBE instruments with respect to terms of conditions for the use of the instruments.

We welcome researchers to use the GLOBE scales. Our simple request is that you cite Chapter 8 and the 2004 GLOBE book in your publications. We also request that you and your research team carefully consider the levels of analysis issue when designing your research. Finally, the GLOBE team would appreciate receiving reports and/or publication copies of your research findings. Please send these to Mansour Javidan at javidanm@t-bird.edu.

Based on the above information, you and your research team should clearly understand that the GLOBE instrument was designed to be used at the aggregated level of analysis. Any use at the individual level of analysis may be problematic and result in the scale psychometric properties that differ considerably from the original GLOBE results.

Important Guidelines for the Use of GLOBE Leadership Scales

To use the GLOBE leadership scales, researchers need to consolidate the 56 leadership items in Form Alpha and the 56 leadership items in Form Beta to create an instrument with 112 items.

Consistent with the measurement approach used by implicit leadership theory researchers (e.g., Foti & Lord, 1987; Lord, Foti, & DeVader, 1984; Lord & Maher, 1991a, 1991b), the GLOBE leadership items consisted of behavioral and trait descriptors (e.g., autocratic, benevolent, nurturing, and visionary) along with brief definitions of these descriptors. The items were written to reflect a variety of traits, skills, abilities, and personality characteristics potentially relevant to leadership emergence and effectiveness. Items were rated on a seven-point scale that ranged from a low of “This behavior or characteristic greatly inhibits a person from being an outstanding leader” to a high of “This behavior or characteristic contributes greatly to a person being an outstanding leader.”

In the GLOBE project, we were interested in identifying leadership attributes that were culturally endorsed. Thus, similar to the analyses conducted for the culture dimension scales, a variety of statistical analyses were conducted to determine whether people from organizations or societies agreed in terms of their rating of leadership attributes. Specifically, we used James and colleagues' (1984; James, Demaree, Wolf, 1993) $r_{wg(J)}$ and ICC(1) to determine whether aggregation was justified. Second, we calculated ICC(2) (Shrout & Fleiss, 1979) to assess the reliability of our culturally endorsed scales at the organizational or societal level of analysis. Finally, we conducted a series of confirmatory factor analyses to determine whether the factor structure of our scales was operating appropriately at the aggregate level of analysis. Indeed, these analyses revealed that the leadership scales were unidimensional (average CFI was .92). Thus, all analyses indicated substantial support for the culturally endorsed nature of the leadership scales.

It should be noted, however, that we do not know the psychometric properties of these scales at the individual level of analysis. Indeed, since the underlying theory driving this aspect of the GLOBE project (i.e., implicit leadership theory) is an individually focused theory, it is possible that the items could be useful for measuring individual level leadership schemas. It is entirely reasonable, given constraints of sample size, to conduct analysis of the leadership scales at the individual level within a particular society. However, the same *caveat emptor* applies. The GLOBE project has **NOT** demonstrated the usefulness of using the leadership scales at the individual level of analysis within a society. Future research efforts will have to assess the utility of doing this.

References

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