Analysis of the Reliability of the Leadership Practices Inventory in the Item Response Theory Framework

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**METHODOLOGY**

The Leadership Practices Inventory (five-point scale) was administered to MBA students (mostly line and middle managers) in six countries from five continents: U.S., India, Nigeria, South Korea, Argentina and Slovenia. The first three were administered in English and the latter three in their native languages. Sample sizes ranged from 110 in the U.S. to 162 in Argentina, for a pooled total of 801 respondents. Forty-five percent were older than 30 years, 33 percent had more than 10 years of work experience, 53 percent had less than 10 years and 15 percent had no work experience. Females represented 39 percent of the sample. Reliability (Cronbach’s alpha) for the LPI ranged between .62 and .72.

“The LPI exhibited a high degree of structural equivalence. An instrument shows structural equivalence if it measures the same contract in different cultural groups. Previous research suggests that both the instructions and its items are easily understandable and easily translatable into different languages (Kouzes & Posner, 2002; McNeese-Smith, Yan & Yan, 2000), and that ‘...there are no statements that directly reflect American cultural values that could potential confuse respondents from other nations’ (trend, 2000, p. 93). Results of the multi group confirmatory factor analysis (CFA) performed on the sample showed that the five factor structure emerged in all nations studied and that most of the items that were supposed to load on a particular factor did load on that factor. Out of 180 loadings (6 groups x 30 items, 175 loadings were significantly different from 0. Furthermore, most of the factor loadings (for 21 out of the 30 items) were equal (showing no statistically significant differences) across cultures studied” (p. 184).

**KEY FINDINGS**

“There are several implications of these findings. The LPI does not seem to be the appropriate instrument for selecting or promoting high-quality leaders. In this case, one focused on the higher level of leadership ability scale, where the LPI is unable to reliably discriminate between good and excellent leaders. However, the LPI is suitable for ‘screening’ out bad or inferior leaders. Because its accuracy is stable over a wide range of leadership ability it can be used for leadership...
development purposes, especially for lower and middle management where one would not expect a disproportionately high number of excellent leaders. In this case, it can reasonably well identify the leadership strengths and weaknesses of the person involved, compare their score with reference group scores and measure their progress in leadership ability (as a result of leadership development intervention or on-the-job learning)” (p. 189).