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# THE LEADERSHIP CHALLENGE

# research

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THE MOST TRUSTED SOURCE ON BECOMING A BETTER LEADER

**TITLE** Examining the Validity of The Leadership Challenge Inventory: The Case for Law Enforcement

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**OBJECTIVE** The purpose of this study was to examine the validity of the Leadership Practices Inventory with a sample of law enforcement officers.

## METHODOLOGY

The sample consisted of 83 police managers attending the Administrative Officers Course of the Southern Police Institute at the University of Louisville during the years 2005–2007 and their constituents (N = 492). These police manager students completed the student version of the Leadership Practices Inventory and selected their constituents to complete the Student LPI-Observer. The sample was overwhelmingly male (83%) and Caucasian (84%). The mean level of rank for managers was captain but the largest percentage of the respondents was sergeants (25%). The typical educational level was a college degree (47%), the average age of the respondents was 40, and the average number of years as a sworn police officer was 13.8 years.

## KEY FINDINGS

Internal reliability for the Student LPI (Self) was .64 Challenging, .76 Modeling, .80 Enabling, .81 Inspiring, and .86 Encouraging. For the LPI-Observers, internal reliabilities were .64 Challenging, .78 Modeling, .80 Inspiring, .81 Enabling, and .87 Encouraging.

Using CFA (confirmatory factor analysis) the authors examined several measures of fit. They found the confirmatory fit index (CFI) to be acceptable (0.99), as was the root mean squared error of approximation (RMSEA)(0.07), and also the standardized root mean of the residual (SRMR) (0.01). “These indicate acceptable fit of the model to the data. Overall, these statistics indicate that the model fits the data well. This means that the results from this model are valid. From a theoretical perspective, the model fitting the data is our first indication that LCI [the Student LPI] is a valid instrument for this sample” (p.11).

The authors report that:

the factor loadings for each of the observed measures used to indicate the latent measure. All of the factor loadings are all above Kline’s (2004) 0.50 cutoff for large factor loadings. Further, each of the factor loadings, except challenge, were statistically significant. For identification purposes, one measure has to be set to unity (ie, 1) for the measurement model (see Kline for a complete explanation of the identification process). In this model, the measure that was set to unity was challenge. Thus, the measure cannot be examined for statistical significance. The other measures were tested for statistical significance and their factor loadings are: inspire (0.85); enable (0.72); model (0.89); and encourage (0.77). This indicates that the factor loadings are good indicators of the latent measure. The large factor loadings provide the last piece of information suggesting that the LCI is a valid instrument for understanding leadership capabilities in this particular sample as Kouzes and Posner (1998) have argued. The combination of model fit and large factor loadings provides evidence of discriminant and convergent validity for the LCI using this sample (p. 11)

In conclusion, the authors assert:

In our view, the results of validity are more telling of the model than the internal consistency. This suggests that law enforcement agencies that wish to understand and assess the leadership capabilities of their personnel may use the Leadership Challenge model, understanding that it has been shown to be valid. With this information, it is important that we investigate whether differences in the perception of leadership performance exist (p. 13).