

# Validity of the Chinese version of the LOC scale

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## Abstract

The aim of this study was to evaluate the reliability and validity of the Chinese version of the LOC scale, and especially to examine the feasibility of the Chinese version of the LOC scale. The test had 306 full-time employees and 120 students in China. The Chinese version of the LOC scale was a single-factor test. The scale had acceptable reliability, good construct validity, and empirical validity. The Chinese version of the LOC scale was a reliable and valid measure of LOC among Chinese employees and students. The results showed that the Chinese version of the LOC scale was a reliable and valid measure of LOC among Chinese employees and students.

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Reflection. Locusts have been historically a major pest of agriculture (Sect, 1988).

### 1.1. Measurement of LOC

Since the cost of LOC is high, many have been developed to measure it (Rett, 1966)



Wallerstein, Gelles, and Wall (1979) and Finkelhor, Sadka, and Beil (1992) used a 6-item scale to measure individualism. It is a 7-item scale (1 = strongly disagree to 7 = strongly agree). The total score ranges from 6 to 42. Higher scores indicate higher individualism. In the present study, the internal consistency coefficient was .78.

Ma and Liang (1997) used Chinese version of Herzog and Rokeach's (1972) scale to measure individualism. It is a 6-item scale (1 = completely disagree to 6 = completely agree). The total score ranges from 11 to 66. Higher scores indicate higher individualism. In the present study, the internal consistency coefficient was .89.

The job satisfaction scale adopted by Ekerdt, Fee, and Giese (2000). It is a 7-item scale (1 = strongly satisfied to 7 = strongly dissatisfied) with 10 items. The total score ranges from 10 to 70. Higher scores indicate higher job satisfaction. In the present study, the internal consistency coefficient was .78 (for "general job satisfaction"), .87 (for "satisfaction in pay") and .87 (for the whole scale).

The general adjustment scale has been used by Meyer, Allen, and Smith (1993) and Cheung and Falcous (2003). It is a 7-item scale (1 = strongly disagree to 7 = strongly agree). The total score ranges from 6 to 42. Higher scores indicate higher general adjustment. In the present study, the internal consistency coefficient was .91.

The individualism scale has been used by Gerstl, Peccei, and Thoma (1993) and Pridemore, Gerstl, and Gao (2001). It is a 7-item scale (1 = strongly disagree to 7 = strongly agree). The total score ranges from 3 to 21. Higher scores indicate higher individualism. In the present study, the internal consistency coefficient was .73.

Job performance was measured with 20 items from Gorman and Spector's (1999) measure. It is a 7-item scale (1 = strongly disagree to 7 = strongly agree). The total score ranges from 20 to 140. Higher scores indicate higher job performance. In the present study, the internal consistency coefficient was .89 (for "acknowledgment"), .86 (for "attention"), and .79 (for "concentration").

### 3. Results

#### 3.1. Item analysis

First, we conducted item-to-total analyses. The results showed that the item-to-total correlations were all significant, with the lowest correlation being .18 to .56. We elected to delete the item with the lowest correlation, which was item 27 (see Muthén & David, 2005). We then conducted item-to-total correlations for the remaining 18 items. As shown in Table 1, items 18 and 23 received the lowest item-to-total correlations and were deleted (because their  $r$  values were .30 and .28, respectively).

#### 3.2. Structure validity

We conducted exploratory factor analysis (EFA) on the 21 items. Case missing data were deleted listwise. Results showed that the single-factor solution was the best fit:

$\chi^2(df = 189) = 258.26, p < .01, GFI = .92; AGFI = .91; CFI = .89; \text{ and } RMSEA = .036.$  The e

### 3.5. Criterion-related validity

Criterion-related validity is the extent to which the scores on the self-efficacy scale (r(303) = -.23,  $p < .001 < .01$ ), the job satisfaction scale (r(221) = -.19,  $p = .004 < .01$ ), the organizational acceptance scale (r(306) = -.36,  $p < .001 < .01$ ), high internal

Table 2

Gender differences in locus of control

Variable	Gender	N	M	SD
Gender	Male	182	8.55	4.27
	Female	120	10.42	3.58
Education	Undergraduate	139	8.68	4.03

### 3.8. Chinese employees' locus of control

The results of the present study are consistent with the findings of Rotter (1966) and others (e.g., Wang, 1991; Wang & Wang, 1991; Wang & Wang, 1991; Wang & Wang, 1991). Chinese employees have a higher score on the external locus of control than American employees (Wang & Wang, 1991). The results of the present study are also consistent with the findings of Wang (1991) and Wang & Wang (1991) who reported that Chinese employees have a higher score on the external locus of control than American employees (Wang & Wang, 1991). The results of the present study are also consistent with the findings of Wang (1991) and Wang & Wang (1991) who reported that Chinese employees have a higher score on the external locus of control than American employees (Wang & Wang, 1991).

Although the present study is a cross-sectional design, it provides some insight into the locus of control of Chinese employees. The results of the present study are consistent with the findings of Wang (1991) and Wang & Wang (1991) who reported that Chinese employees have a higher score on the external locus of control than American employees (Wang & Wang, 1991). The results of the present study are also consistent with the findings of Wang (1991) and Wang & Wang (1991) who reported that Chinese employees have a higher score on the external locus of control than American employees (Wang & Wang, 1991).





Le c f o l (LOC) i a i m a t e a l i t a t i b d i k e t t g . I t i o e l a d d  
i h m a g a i a i t a l a d m e , a d i i e c e d b c l t e . I C h i a , m e a i g e m k e e '  
L O C i a e f l a t d e a d i d i d a l b e h a i a d a d m e . I t i a l e f l a t e k e

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