

Adaptation of the organizational culture profile scale into Indonesian: a psychometric study

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Abstract. The Organizational Culture Profile (OCP) is widely utilized to assess organizational culture. However, there has been no documented scientific study on its adaptation to the Indonesian language in reputable international journals. This study aims to adapt the OCP scale to Indonesian and evaluate its psychometric properties. A quantitative methodology was employed, involving 453 participants from government organizations in East Java, Indonesia. Confirmatory Factor Analysis (CFA) utilizing a five-factor model demonstrated that the measurement model met various fit indices, indicating a strong alignment between the model and field data. Additionally, the analysis confirmed the OCP scale's convergent validity. These findings affirm that the Indonesian version of the OCP scale is a valid research instrument.

1 Introduction

The Organizational Culture Profile (OCP) scale is one of the measurement tools that is widely used to reveal organizational culture. There are several studies that use the OCP scale based on the results of searches of various journals indexed by Scopus. Kim Jean Lee and Yu [1] used the OCP scale to uncover the organisational culture of various companies in Singapore. Bellou [2] used the OCP scale to uncover the organizational culture that exists in several public hospitals in Greece. The OCP scale is also used to research on culture in several organizations in France [3]. Next, Zachariadou et al. [4] used the OCP scale to find out the underlying culture of healthcare organizations in Cyprus. Schroeder et al. [5] and Rich et al. [6] used the OCP scale to investigate culture in various organizations in the United States. The OCP scale is also used to understand the culture of organizations in Australia [7-9].

The OCP scale has a history of development over time. This measuring tool (OCP scale) was originally developed by O'Reilly et al. [10] to measure the fit of values between individuals and organizations (person-organization fit). The items contained in the OCP scale are 54, which are grouped into 8 dimensions (innovation and risk-taking, attention to detail, orientation toward outcomes, aggressiveness and competitiveness, supportiveness, emphasis on growth and rewards, collaborative and team orientation, and decisiveness). The measuring tool has been proven to have internal and test-retest reliability and discriminant validity. Windsor and Ashkanasy [11] revise O'Reilly's OCP scale by analyzing the items. As a result, there are 24 items divided into 6 dimensions. These dimensions are respect

for people, outcome orientation, team orientation, innovation, attention to detail, and stability. The Cronbach alpha value for each dimension varies considerably, ranging from .66 to .80. Windsor and Ashkanasy [11] version of the OCP scale was then carried out a factor analysis by Baird et al. [12] and found the same 6 dimensions as the Windsor and Ashkanasy version. However, the items were reduced to 21 items. The reliability value of each dimension ranges from .78 to .90. The OCP scale version of Baird et al. [12] was then revised again by Harrison and Baird [13] into 5 dimensions with a total of 19 items. The five dimensions consist of outcome orientation, respect for people, attention to detail, team orientation, and innovation. The OCP scale version of Harrison and Baird [13] has a reliability range for each dimension ranging from .80 to .93.

The Organizational Culture Profile (OCP) is widely utilized to assess organizational culture. However, there has been no documented scientific study on its adaptation to the Indonesian language in reputable international journals. The search results show that the instrument used to reveal organizational culture in the Indonesian population is the Organizational Culture Assessment Instrument (OCAI) by Cameron and Quinn [14]. Willar et al. [15] used the OCAI to determine the organizational culture in various construction companies in Indonesia. Furthermore, Mubin and Latief [16] used the OCAI in order to find out the organizational culture in several state-owned companies. Based on this background, this study aims to adapt the OCP scale to Indonesian and evaluate its psychometric properties.

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2 Methods

A quantitative methodology was employed, involving 453 participants from government organizations in East Java, Indonesia. The procedures are as follows: Forward translation, forward translation synthesis, backward translation, backward translation synthesis, expert review, and readability test [17]. The research participants involved were four hundred and fifty-three (Mage =39.55, SD = 8.98). Participants worked in several government organizations in East Java, Indonesia. 280 (61.81%) participants were women and 173 (38.19%) were men. Based on the educational background of the participants, 210 (46.36%) were high school graduates, 195 (43.04%) were bachelor's graduates, and the remaining 48 (10.6%) were master's graduates.

3 Result and discussion

The OCP scale is a Likert scale consisting of 5 dimensions. These dimensions are outcome orientation, respect for people, attention to detail, team orientation, and innovation [13]. This scale consists of 19 items, with a score of 1 for not appreciated at all, to 5 for very appreciated. Here is the initial blueprint of the OCP scale:

Table 1. OCP scale initial blueprint.

Dimension	Favorable
Outcome orientation	1, 2, 3, 4, 5
Respect for people	6, 7, 8, 9
Attention to detail	10, 11
Team orientation	12, 13, 14
Innovation	15, 16, 17, 18, 19

The next process is a statistical analysis using CFA to obtain construct validity. Statistical analysis of the results of the CFA measurement tool trial was carried out based on the results of previous studies related to the OCP measurement tool. The results of several previous studies have identified 5 organizational culture factors using the Windsor and Ashkanasy version of the OCP [12], [13]. In addition, previous studies have conducted CFA analysis at the first order level [18]. Based on these findings, the CFA test conducted in this study used a first-order model test. Based on the number of factors analyzed, the CFA test of this study used a five-factor model. The five-factor model is a model that involves five interrelated latent factors. Factors in this context refer to dimensions that are not directly measurable but can be measured through a number of indicators [19]. The following are the results of the first-order model test:

Based on the results of the fit indices values (table 2.), it appears that the model has an adequate fit standard (CFI = 0.961; TLI = 0.953; RMSEA = 0.075; SRMR = 0.027; GFI = 0.98; NFI = 0.948). In addition, the factor loading values of all OCP items (table 3.) are classified as good, which are between 0.645 - 0.928. In addition, the results of the analysis show the chi-square value (563.428) divided by the degree of freedom value (142)

= 3.97 where the value is still acceptable because it is <5 [19]. Another thing that needs to be known is the AVE (Average Variance Extracted) and CR (Construct Reliability) values for each dimension of the measuring instrument. The following are the CR and AVE values for each OCP dimension.

Table 2. Fit indices first order OCP.

Index	Value	Conclusion
CFI	0.961	Fit
TLI	0.953	Fit
RMSEA	0.075	Fit
SRMR	0.027	Fit
GFI	0.980	Fit
NFI	0.948	Fit

Table 3. Factor loading first order OCP.

Dimension	Indicator	Blueprint Number	Factor Loading
Outcome orientation	1	BO1	0.722
	2	BO2	0.846
	3	BO3	0.856
	4	BO4	0.887
	5	BO5	0.894
Respect for people	6	BO6	0.798
	7	BO7	0.872
	8	BO8	0.890
	9	BO9	0.881
Attention to detail	10	BO10	0.881
	11	BO11	0.901
Team Orientation	12	BO12	0.925
	13	BO13	0.928
	14	BO14	0.893
Innovation	15	BO15	0.857
	16	BO16	0.645
	17	BO17	0.904
	18	BO18	0.869
	19	BO19	0.817

Based on table 4., it can be seen that the CR value of the five OCP dimensions ranges from 0.885 to 0.9394. These results prove that the CR value of the five OCP dimensions has met the criteria because it is ≥ 0.7 [19]. The AVE value of the five OCP dimensions has all met the minimum criteria (≥ 0.5). Based on considerations of the factor loading, CR, and AVE values, it can be concluded that the OCP measuring instrument has adequate convergent validity. Convergent validity itself is the extent to which items that are indicators of a particular construct have high convergence or proportion of similarity [19].

Table 4. CR & AVE OCP values.

Dimension	CR	AVE
Outcome orientation	0.9245	0.7111
Respect for people	0.9196	0.74136
Attention to detail	0.885	0.794
Team orientation	0.9394	0.838
Innovation	0.9123	0.678

The next thing to know is the discriminant validity of the OCP measuring instrument. Using the Fornell & Larcker criteria, a measuring instrument is said to have

discriminant validity when the AVE value of a construct is greater than the squared correlation value of the construct with other constructs [19]. Based on the results of the analysis, it can be seen that the majority of the AVE values of the constructs (0.7111; 0.741; 0.794; 0.838) are greater than the squared correlation between the construct and other constructs. Only the AVE value of the innovation construct is lower than the squared correlation between the construct and other constructs (see table 5). These results illustrate that the discriminant validity of the OCP using the Fornell & Larcker criteria has not been met only for the innovation construct. Meanwhile, discriminant validity is the extent to which a construct is truly different from other constructs [19]. From this understanding, it can be interpreted that the innovation construct (dimension) is not significantly different from other constructs on the OCP measuring instrument.

Table 5. Comparison of AVE values with the correlation squares between OCP constructs.

	1	2	3	4	5
1	0,7111				
2	0,6577	0,741			
3	0,6872	0,7242	0,794		
4	0,6464	0,7225	0,709	0,838	
5	0,6872	0,6178	0,6889	0,65125	0,678

Note: 1=outcome orientation; 2=respect for people; 3=attention to detail; 4=team orientation; 5=innovation.

Following up on these results, a collinearity analysis needs to be conducted to ensure that there is no multicollinearity between the existing dimensions. This is done because the discriminant validity test itself is conducted to prevent multicollinearity problems [20]. The results of the collinearity analysis (see table 6) show that all tolerance values are > 0.1 and VIF values < 10, so it can be said that there is no multicollinearity in the dimensions of the OCP measuring instrument [19].

Table 6. Results of OCP scale collinearity analysis.

Dimension	Collinearity Statistics	
	Tolerance	VIF
Outcome Orientation	0,226	4,424
Respect for People	0,202	4,959
Attention to Detail	0,183	5,465
Team Orientation	0,206	4,854
Innovation	0,233	4,289

Furthermore, a comparison can be made between the results of the previous research analysis with the results of the CFA analysis on the current measurement tool trial according to the criteria of Lloso et al. [21] and Hair et al. [19]. The comparison results can be seen in table 7. The results of the CFA analysis also produce a picture as shown in figure 1.

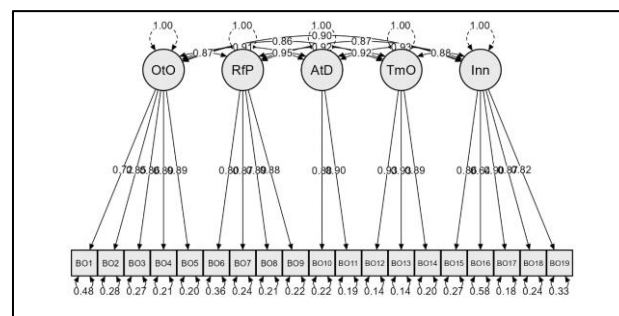


Fig. 1. Five factor OCP (first order) model.

Table 7. Comparison between the results of the CFA analysis of the previous study and the results of the trial.

	CFI	RMSEA	TLI	X2/df	Cronbach's alpha
1	≥ 0.90	≤ 0.10	≥ 0.90	≤ 5	≥ 0.6
2	0.91	0.06	0.89	4.67	0.76
3	0.961	0.075	0.953	3.97	0.974

Note: 1= Criterion Value; 2= Previous CFA results [18]; 3= CFA test results of measuring instruments.

Confirmatory Factor Analysis (CFA) utilizing a five-factor model demonstrated that the measurement model met various fit indices (see table 7), indicating a strong alignment between the model and field data. All CFA test results have met the specified criteria. This reflects that there is a suitability between the measurement model and the data in the field. Additionally, the analysis confirmed the OCP scale's convergent validity. Although the results of the discriminant validity test show that one of the OCP dimension values is inadequate, the results of the collinearity test prove that there is no multicollinearity in the dimensions of the OCP measuring instrument. Based on the finding that the discriminant validity of one of the OCP dimensions is inadequate, researchers must be careful in adding up or interpreting the results of the measuring instrument scores. This is because there is a possibility of overlapping scores for several constructs being measured [22], [23]. These findings affirm that the Indonesian version of the OCP scale is a valid research instrument. The following (table 8) is the blueprint of the OCP measuring instrument after the measuring instrument trial:

Table 8. Blueprint OCP scale after trials.

Dimension	Favorable
Outcome orientation	1, 2, 3, 4, 5
Respect for people	6, 7, 8, 9
Attention to detail	10, 11
Team orientation	12, 13, 14
Innovation	15, 16, 17, 18, 19

This study has several weaknesses. First, the participants involved only came from government organizations. In order to address this weakness, subsequent studies should involve participants from private organizations so that the participants are more heterogeneous. Second, the understanding of each dimension on the OCP scale tends to have a cultural bias because this measuring instrument was developed in a

different cultural context from Indonesia. Based on these reasons, further studies need to be conducted studies using qualitative methods to explore the meaning of each dimension of the OCP scale from the perspective of local Indonesian culture.

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