

The Psychometric Features of Lee and Allen's Organizational Citizenship Behavior Scale (2002)

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Abstract

In recent years, the organizational citizenship behavior (OCB) programs have played a basic and important role in increasing the productivity of human resources and therefore, the efficiency and effectiveness of organizations and companies. So, it is important to assess the psychometric properties of most widely used tools such as organizational citizenship behavior. However, this study aimed to investigate the validity of localized version of Lee and Allen's organizational citizenship behavior scale (2002) in order to be used in institutional research in Iran. For this purpose, using simple random sampling, 188 teachers in Zanzan were selected as sample and responded to scale questions. The confirmatory factor analysis results with principal components method confirmed 4 factors for Lee and Allen's OCB scale (2002). Using Cronbach's alpha test, the reliability of Lee and Allen's OCB scale (2002) was determined to be 0.89; this was acceptable. The findings showed that this scale was efficient in evaluating organizational citizenship behavior of employees and could be used in research related to organizations.

Keyword: Organizational Citizenship Behavior Scale, Psychometrics.

1. Introduction

The OCB is a new topic in organizational behavior. It is an extra-role behavior which is voluntary, is not designed by organization, and leads to improved effectiveness and efficiency. The organizational citizenship behaviors include organizational obey, organizational loyalty, and organizational participation and its components include social customs, altruism, work ethic, sportsmanship, and courtesy. Among the ways to strengthen and promote organizational citizenship behavior in organizations are through recruitment and selection, training and development, performance evaluation and compensation, and unofficial roles. The OCB is also proposed in Islamic religious teachings. In Islamic literature, it is emerged in concepts such as kindness and forgiveness, courtesy, love, brotherhood, help, and assistance (Hoseini, 2010).

One of the basic definitions that have been accepted by many researchers is provided by Organ (1988): the organizational citizenship behaviors are the discretionary behaviors of employees which are not part of their official duties and are not considered directly by the formal reward system of organization, but they increase the overall effectiveness of organization (Borhani Nejad, 2010).

The concept of organizational citizenship behavior has been the subject of many research in the last 20 years and its importance continues to grow. The conducted studies are mainly three types. Some research has focused on prediction and experimental tests of factors creating organizational citizenship behavior such as job satisfaction, organizational commitment, organizational identity, organizational justice, trust, and etc. Although the term of organizational citizenship behavior was first used by Organ and his colleagues in 1983, some researchers such as Katz and Kahn distinguished between role function and innovative and spontaneous behaviors before him in seventies and eighties and before them, Chester and Bernard considered this issue by proposing the concept of willingness to cooperate in 1938. Organ considers the organizational citizenship behavior as positive measures of employees to improve the efficiency and cohesion in workplace which are beyond the organizational requirements (Moghimi, 2005).

The three components which are proposed in Organ's definition are as follows:

1. Discretionary and not compulsory behavior
2. Have multi-facetnature
3. It is a behavior which is very important to organizational performance and operational success.
4. It is a behavior which is not directly rewarded and is not appreciated by organization structure (Moghimi, 2005).

Graham (1991) argues that the organization citizenship behavior has three types:

1. Organizational obey: This includes behaviors which are necessary and reasonable such as respect to organizational rules, fulfillment of duties, and conducting responsibilities considering the human resources.
2. Loyalty (A- individuals, B- organization): The loyalty to organization is different from loyalty to yourself, other People, units, and organizational sections. It refers to dedication of staff to organizational resources and protection and defense from organization.
3. Organizational participation: It refers to involvement in organization such as voluntary participation in meetings, sharing the beliefs with others, and awareness of current problems in organization.

Graham believes that these behaviors are directly influenced by the rights which are given by organization to individuals. In this context, the organizational citizenship rights include employment justice, assessment, and addressing the complaints of employees. Accordingly, when employees see they have organizational citizenship rights, they are very likely to show obedience. The organization's social rights include fair treatment with employees such as increasing compensation and social positions. This is also the case about employee behavior. When employees see that they have organizational social rights, they will be loyal to organization. Finally, when employees see their political rights are respected and they are given the right to participate and make decision in policy making areas of organization, they will show participation behavior (Islami et al., 2007).

They have been many studies around the world to understand employees' motivation and thereby, provide a solution to improve the efficiency and effectiveness of employees' operations. Undoubtedly, today's world is the world of organizations and the people are the custodians of

these organizations. Therefore, the human resources are the most valuable resource of organizations. They shape the organizational decisions, provide solutions, and solve the problems of organizations. Therefore, it is necessary that the organizational citizenship behavior to be measured correctly. In Iran, most research have used Lee and Allen's OCB Scale to measure OCB. This scale has frequently used by researchers; this shows the importance of conducting data-driven research in this field. On the other hand, due to extensive changes in structure and functioning of organizations and created mentality among employees by expansion of communication world, this scale should again be psychometrically evaluated. However, this study aims to investigate the validity and reliability of this scale in Iran and answer this question: To what extent the Alan and Lee's organizational citizenship behavior scale (2002) has the necessary standards to evaluate the organizational citizenship behavior and is capable of explaining the objective experiences?

2. Methodology

This was applied descriptive-analytic study. The population consisted of all primary school teachers in areas 1 and 2 in Zanjan in 2015 (N= 1492). Using Cochran's Formula and simple random sampling method, 188 teachers were selected as sample and completed Lee and Allen's OCB Scale (2002). The data were analyzed using SPSS software Version 22.

The Lee and Allen's Organizational Citizenship Behavior (2002) has 16 items. All questions are directly scored and evaluate the organizational citizenship behavior in 5 Likert scale: Never =1, rarely = 2, Sometimes = 3, often = 4, always = 5. The reliability of this questionnaire was determined by Khosroshahi and others (2009) to be 0.83; this shows that its reliability is high. Using Cronbach's alpha, its reliability in this study was determined to be 0.89.

3. Findings

The confirmatory factor analysis test was used to assess the validity of Lee and Allen's Organizational Citizenship Behavior Scale (2002). The results of KMO and Bartlett's test which investigate the adequacy of sample size are provided in following table:

Table 1: Data of KMO and Bartlett's test to investigate the adequacy of sample size

Index	KMO value	Bartlett's test		
		Chi square	Degree of freedom	Sig.level
Organizational citizenship behavior	0.861	1382.958	120	0.00

As it can be seen, the KMO value for this scale with 120 degrees of freedom is 0.86 and Bartlett's test is significant at level 0.00. Therefore, according to data in table above, the sample size is adequate and the data are able to be operational. Also, the Scree plot shows the number of identified factors in factor analysis in the form of continuous lines as following:

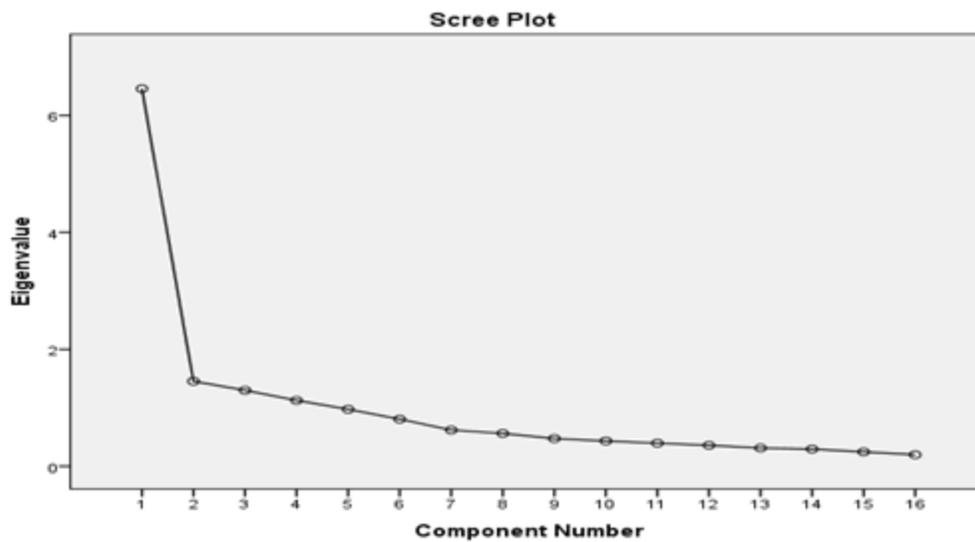


Figure 1: Number of identified factors in factor analysis

According to figure above, 4 factors are identified for this variable. The tables 2 to 4 report these factors along with their factor loadings.

Table 2: Items and their factor loadings in first factor (Organizational Obey)

No.	Items	Factor loading	Explained variance
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			level
1	I provide ideas for improving the functions and tasks in organization.	.882	40.356
2	I'm looking to keep development of organization.	.669	
3	I dedicate some time to help others in work and non-work issues.	.666	
4	It take measures to protect my organization against potential problems.	.662	
5	When other employees criticize the organization, I defend it.	.416	

According to above table, there are 5 items in this factor. The highest factor loading (=0.882) is related to item (1) and the lowest factor loading (=0.416) is related to item (5). This factor explained 40.35% of variance in organizational citizenship behavior of teachers; this shows high loyalty of teachers to each other.

Table 3: Items and their factor loadings in second factor (Loyalty of coworkers in organization)

No.	Items	Factor loading	Explained variance level
1	I help to those who were absent.	.815	9.085
2	I give my personal properties to others to help them in their work.	.745	
3	With inner satisfaction, I spend my time to help others who have faced work-related problems.	.719	
4	I help others to fulfill their obligations.	.541	

According to above table, there are 4 items in this factor. The highest factor loading (=0.815) is related to item (1) and the lowest factor loading (=0.541) is related to item (4). This factor explained 9.08% of variance in organizational citizenship behavior of teachers.

Table 4: Items and their factor loadings in third factor (Organizational Loyalty)

No.	Items	Factor loading	Explained variance level
1	I adjust my work schedule such that I may address in extra time the request of coworkers	.845	8.115
2	I express my concerns about the reputation and image of organization clearly.	.729	
3	I say welcome to new employees when they enter the working groups.	.615	

According to above table, there are 3 items in this factor. The highest factor loading (=0.845) is related to item (1) and the lowest factor loading (=0.615) is related to item (3). This factor explained 8.11% of variance in organizational citizenship behavior.

Table 5: Items and their factor loadings in fourth factor (Organizational Participation)

No.	Items	Factor loading	Explained variance level
1	I feel pride when representing the organization to others.	.862	7.037
2	I express my loyalty to organization.	.814	
3	I conduct the actions which I have not asked, but I know they will help to achieve the organization's goals.	.506	
4	I show goodwill towards coworkers, even when they try to achieve personal goals.	.493	

According to above table, there are 4 items in this factor. The highest factor loading (=0.862) is related to item (1) and the lowest factor loading (=0.493) is related to item (6). This factor explained 7.03% of variance in organizational citizenship behavior.

In addition, these four factors together explained 64.59% of variance in organizational citizenship behavior which has high validity.

4. Discussion and Conclusion

The confirmatory factor analysis was used to determine the construct validity and reliability of organizational citizenship behavior scale. The Lee and Allen's 4-factor organizational citizenship behavior scale (2002) was the tested hypothesis in confirmatory factor analysis. The confirmatory factor analysis aimed to answer this question: To what extent the assumed or anticipated relationships between variables are consistent with observed actual relationship of data? The factor analysis is distinguished from other traditional studies in these cases: in confirmatory factor analysis, the measurement error is investigated; the reliability of test-retest is measured through measurement error stability over time in factor structure. The factor loadings derived from factor analysis conducted in this study showed that the hypotheses of confirmatory factor analysis were confirmed. Therefore, the findings of this study showed that in general, the Persian version of Lee and Allen's OCB Scale (2002) has proper psychometric properties for measuring organizational citizenship behavior. The reliability, validity, and overall structure of questions were approved. Therefore, this questionnaire may be used as a suitable tool to evaluate organizational citizenship behavior. These were consistent with findings of studies which has been conducted in Iran and other countries to evaluate the validity and reliability of this scale.

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