

## Explain and Design a System Model of Factors Affecting Organizational Citizenship Behavior

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### Abstract

**Introduction:** This study aimed to explain and design a system model of factors affecting the organizational citizenship behavior of medical universities in 2019.

**Methods:** The research method was applied based on the purpose; in terms of data collection, it was a mixed method of qualitative and quantitative design. The statistical population of the research in the qualitative part includes academics, managers, and experts in behavioral and educational topics who were purposefully selected; in the quantitative part, we included the staff of the universities of medical sciences in the south of the country (Shiraz, Yasooj and Bushehr universities of medical sciences). The final 33 components of organizational citizenship behavior were obtained from 57 components extracted from reviewing the literature and similar research and three rounds of the repetition of the Delphi method, which are systematic in the form of effective factors (inputs) with components: 1- individual factors: managerial factors, organizational factors, and job characteristics; 2- process (organizational citizenship behavior), and 3- results or consequences with components. Individual and organizational outcomes were categorized. The proposed model was analyzed by confirmatory factor analysis in structural equation modeling and Smart PLS software and the final model was presented.

**Results:** The results showed that the conceptual model fit was well based on the indices of acceptable and significant values of path coefficients, factor loads, and variance. Also, the results confirm all research relationships based on the impact of individual factors at 0.527, managerial factors at 0.377, organizational factors at 0.507, job characteristics at 0.448 on organizational citizenship behavior, and also the impact of organizational citizenship behavior on individual outcomes. The rate was 0.502, and the organizational outcomes of medical universities were 0.552 at a 99% confidence level.

**Conclusion:** To increase organizational citizenship behaviors, it is recommended that attention should be paid to organizational justice, organizational commitment, job satisfaction, and leadership style because these factors play a significant role in the success of the organization. Therefore, it is suggested that organizations should prioritize the establishment of organizational justice and organizational commitment in their policies.

**Keywords:** Organizational citizenship behavior, Medical University, Management factors, Organizational factors, Individual outcomes, Job characteristics, Mixed research method

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### Introduction

These days, organizations must provide organizational conditions so that they make maximum use of human and material resources. To achieve such a situation, organizations must strive to convince their employees to serve the organization beyond traditional bureaucratic frameworks and requirements. Such cross-role behaviors are introduced as organizational citizenship behavior (1). Organizational citizenship behavior promotes effective organizational performance.

In addition, the consequences of not paying attention to organizational citizenship behavior in organizations can cause many destructive effects such as a lack of motivation in employees, reduction in the level of exploitation in the organization, creation of an unfavorable political climate, unhealthy competition, and even animosity among employees of an organization (2). Meanwhile, organizational citizenship behavior is one of the important sociological aspects of educational organizations, including universities. Academic staff can play an

important role in improving the quality of their university through altruistic and conscientious behaviors. In other words, organizational citizenship behavior is one of the indicators that improves the employees' performance and causes the organization to achieve its goals (3). In fact, universities and institutes of higher education are continuously considered the highest centers of thought and production of science in society with the presence and thoughtful activity of thinkers, researchers, scholars, and students in scientific advancement and direct intellectual, religious, and cultural movements. Also, the politics of society play a fundamental role. In the meantime, university staff can play an important role in improving the quality of their university; in other words, organizational citizenship behavior is one of the indicators that can improve the employees' performance and cause the organization to achieve its goals. On the other hand, in universities, as the highest scientific and cultural organizations in society, the behavior and attitude of its staff can be a model for other organizations and institutions; due to the positive and direct impact of organizational citizenship behavior on the quality of services provided and consequently on the effectiveness of the organization, paying attention to such behaviors can be one of the ways to increase the effectiveness of organizations; this has not received much attention so far. In simpler terms, educational and academic institutions can create an environment that encourages and facilitates organizational citizenship behavior by determining and examining the dimensions of organizational citizenship behavior; in this environment, facilitators of organizational citizenship behavior increase, and its barriers reduce. Given the concerns of the managers of these organizations about progress and excellence in today's educational and knowledge environment and that the number of people who express citizenship behavior is small, the knowledge of organizational citizenship behavior and factors affecting it is important and can be an effective step in the development of these organizations (4).

This knowledge is more important for educational and health centers such as medical universities that are an effective factor in the health development process because this behavior provides the necessary flexibility for unpredictable situations and helps the employees

of the organization to be together. In fact, if the managers of educational and health centers such as universities can provide a suitable environment for employees, the possibility of organizational citizenship behavior by its employees will increase so that increasing organizational citizenship behavior in the university will increase job satisfaction among employees and professors. In this regard, the present study, as a study in the field of organizational citizenship behavior in the higher education system, especially universities, is an attempt to provide a more comprehensive view of the concepts, principles, applications, components, and consequences of organizational citizenship behavior with a native approach. Therefore, according to the above points, the present study sought to explain and design a system model of factors affecting organizational citizenship behavior. Han et al. (2019) conducted a study entitled "Committed leadership examines how organizational citizenship behavior for the Workplace in China". The results showed that a sense of commitment to constructive change fully mediated between committed leadership and organizational citizenship behavior in the workplace. The results also showed a positive interaction between committed leadership and sincere behavior between supervisors and subordinates on a sense of commitment to constructive change, and then an indirect effect of committed leadership on organizational citizenship behavior for the workplace through a sense of commitment to constructive change (5).

The higher the level of intimate behavior between the supervisor and the subordinates, the stronger it became. Arar and Abu Nasir (2019) used leadership style, job perception, and organizational citizenship behavior in the Arab education system. The results showed that transformational and exchange leadership had no direct effect on organizational citizenship behavior; also, job perception had an indirect effect on the relationship between transformational leadership and organizational citizenship behavior, as well as job perception on the relationship between exchange leadership and organizational citizenship behavior. It had no mediating role (6). Epoglu (2016) presented the organizational citizenship behavior of university staff in Northern Cyprus. The results of this study showed that there was organizational citizenship behavior among the faculty of the

Faculty of Economics and Science Management (7). Despite partial results, the study is still ongoing. Pavalche (2014) in a research entitled "Provided organizational citizenship behavior, job satisfaction, and employee personality traits" shows that people who are satisfied with their working conditions frequently tend to adapt and synchronize their organizational citizenship behaviors (8). Such behaviors are related to self-efficacy, self-esteem, and the duration of this service in the organization. In corporations and public organizations, access to overtime behaviors in the workplace is much more restricted than in private corporations, and people have a high level of education to receive voluntary behaviors.

Yildirim (2014) in research entitled "The effect of organizational communication on organizational citizenship behavior" revealed that organizational communication was considered an important issue in fostering the organizational citizenship behavior of employees. Effective communication not only is necessary to create the right channels between managers and employees but also is implicitly used to contribute to the overall performance of the organization (9). Okurame (2012) in a study entitled "The Study of the Impact of Job Growth Perspectives and Formal Support Systems on Organizational Citizenship Behavior" concluded that job growth perspectives were effective on the dimensions of chivalry, conscience, and civic behaviors of citizenship behavior. Formal support systems also affect the dimensions of chivalry, courtesy, and altruism. The results also show that the effect of formal support systems on the chivalry dimension of organizational citizenship behavior is greater than that of job growth perspectives on this dimension (10). Azimzadeh et al. (2015) in their research on the factors affecting organizational citizenship behavior with a meta-analysis of existing studies showed that leadership style (with an effect size of 0.60), organizational commitment (with an effect size of 0.51), and perceived organizational support (with an effect size of 0.50), respectively, had the greatest impact on organizational citizenship behavior (11). Falahatgar et al. (2017) in research on organizational citizenship behavior and the study of the factors affecting it according to the role of social support and consumer satisfaction variables revealed that Information and emotional support significantly influenced

citizenship behavior through consumer satisfaction by providing company feedback, advice, and assistance to other consumers (12). In addition, informational and emotional support from companies and other consumers has different effects on consumer satisfaction.

## Methods

This research is an applied goal and a hybrid analytical approach based on the Delphi method as well as structural equations using SmartPLS software for confirmatory factor analysis and conceptual model. The statistical population of the research in the qualitative part included academics, managers, and experts in behavioral and educational topics who were purposefully selected; in the quantitative part, the staff of the universities of medical sciences in the south of the country (Shiraz, Yasuj and Bushehr universities of medical sciences) were selected using a relative sampling method. The method of conducting the present study is summarized in the following steps:

**Step 1:** Based on documentary research and library studies, inputs, processes, and consequences were identified.

1- inputs: individual factors; managerial factors, organizational factors, and job characteristics;

2- process: organizational citizenship behavior-process and

3- consequences: Individual and organizational consequences.

**Step 2:** Application of the Delphi technique in the final selection of extracted components and subdivisions

**Step 3:** Review and confirm or reject the identified indicators and sub-indicators and fit the conceptual model of structural equations and smart plus software

**Step 4:** Conclusions and suggestions

## Results

The Delphi technique was used for the final selection of the extracted indicators and sub-indicators of effective indicators and consequences of organizational citizenship behavior; the results as the questions and answers were summarized in the final round of Delphi, as shown in the following Table.

Out of the 57 components extracted from the literature and suggestions, finally, 33 components remained at the end of the Delphi stage with

**Table 1:** Effective indicators and consequences of organizational citizenship behavior

Dimensions	Components	t	Significance level	Assurance distance		CVR	Fitness index	
				Under bound	Upper bound			
InPuts	Individual factors	Personality characteristics	7.429	0.000	0.81	1.42	85%	92%
		Job Satisfaction	5.892	0.000	0.58	1.19	85%	92%
		Organizational Commitment	5.952	0.000	0.63	1.29	92%	96%
		Social responsibility	4.9	0.000	0.49	1.2	100%	100%
		Social awareness and empathy	6.845	0.000	0.73	1.35	92%	96%
		Belonging to employees	6.338	0.000	0.65	1.27	92%	96%
	Managing factors	Transformational Leadership	6.374	0.000	0.68	1.32	100%	100%
		Management control	5.222	0.000	0.54	1.23	92%	96%
		Management style	5.571	0.000	0.58	1.26	85%	92%
	Organizational factors	Organizational Culture	7.429	0.000	0.81	1.42	77%	88%
		Organizational support	8.323	0.000	0.96	1.58	85%	92%
		Social capital	4.6	0.000	0.45	1.17	69%	85%
		Organizational trust	7.994	0.000	0.83	1.4	92%	96%
		Organizational structure	5.912	0.000	0.6	1.24	85%	92%
		Organizational atmosphere	6.325	0.000	0.62	1.22	77%	88%
Job aspects	Importance of duty	5.436	0.000	0.62	1.38	85%	92%	
	Job independence	11.177	0.000	0.94	1.36	100%	90%	
	Occupational environmental conditions and facilities	15.281	0.000	0.97	1.31	91%	87%	
Process (organizational citizenship behavior)	Work conscience	11.009	0.000	0.85	1.27	95%	90%	
	Organizational loyalty	17.444	0.000	0.93	1.22	95%	90%	
	Tolerance	10.723	0.000	1.14	1.73	82%	90%	
	Literature	16.672	0.000	1.53	1.95	80%	90%	
	Altruism	16.48	0.000	1	1.29	93%	87%	
	Organizational information	10.156	0.000	0.86	1.29	100%	90%	
	Participation	12.447	0.000	1.05	1.47	78%	80%	
Consequences and results	Individual	Creativity	3.620	0.004	0.63	1.15	50%	71%
		Improve staff morale	7.429	0.000	0.81	1.42	77%	88%
		Improve individual effectiveness	14.335	0.000	1.11	1.43	99%	90%
		Citizenship performance	6.15	0.000	0.59	1.19	85%	83%
	Organizational	Organizational performance	12.227	0.000	0.71	1	100%	90%
		The quality of service	10.81	0.000	1.35	1.92	82%	90%
		Improving the organizational atmosphere	16.48	0.000	1.02	1.29	93%	87%
		Client satisfaction	10.77	0.000	1.3	1.9	89%	91%

the agreement of experts; all indicators had a significance level of less than 0.05 and a CVR of more than 0.42 (minimum value). The value of Cronbach’s alpha coefficient for the third round was 0.813 and the results showed that all the remaining indicators were significant and valid; as a result, the three Delphi rounds can be terminated.

*Test the Conceptual Model of Research*

After obtaining agreement and consensus of the participants and extracting the final effective indicators and consequences of organizational citizenship behavior, to validate this model and before entering the test phase of the conceptual model research, to ensure the accuracy of the models for measuring exogenous and endogenous

variables is necessary. This was done through confirmatory factor analysis. In this section, the conceptual model was tested. Figure 1 shows the conceptual and final model of the research in the case of estimating the standard coefficients of structures.

According to the results obtained from the test of estimating standard coefficients and significant values, all model constructs including effective factors, processes, results, and consequences of organizational citizen behavior showed to be significant at the level of 99% confidence and play a significant role in measuring their structures.

Therefore, all finalized components of Delphi were also confirmed in the factor analysis technique. In addition, since the values of T-statistic were significant for each of the paths

**Table 2:** Subscription values and R to check the fit of the final research model

Component	Subscriptions	R Square Amounts
Individual factors	0.5651	0.0000
Manage factors	0.8226	0.0000
Organizational factors	0.5689	0.0000
Job aspects	0.5523	0.0000
Organizational citizen behavior	0.3913	0.5326
Work conscience	0.8373	0.2816
Organizational loyalty	0.8341	0.6710
Tolerance	0.8401	0.4201
Courtesy	0.8500	0.6335
Altruism	0.8245	0.6227
Organizational information	0.7028	0.6710
Participation	0.6283	0.4168
Individual consequences	0.5335	0.2532
Organizational consequences	0.5119	0.3049
Average	0.6759	0.4807

and factor loads and the GOF index was also a good value, it shows a good fit of the conceptual and final model of the research.

After analyzing the data in the present study, the results were obtained. In this section, an attempt was made to interpret the results and structures accurately.

### Discussion and Conclusion

The present study, as a study in the field of organizational citizenship behavior in the higher education system, especially universities, was an attempt to provide a general and comprehensive view of the concepts, principles, applications, components, and consequences of organizational citizenship behavior with a local approach (appropriate to social conditions) and draw economic, political, environmental, capabilities, etc. as a system model, which is presented as follows.

#### *Factors Affecting the System Model of Organizational Citizen Behavior as Inputs*

In a system model, some inputs affect the processes of a system that ultimately lead to the output and its consequences. These influential factors included individual, managerial and organizational factors, and job characteristics. Hypotheses related to the effects of these factors on organizational citizen behavior were also reviewed and confirmed. Individual factors, at the rate of 0.527, had a positive and significant effect on organizational citizenship behavior in medical universities. Personal factors, characteristics, and traits related to the person included personality traits, job satisfaction,

organizational commitment, self-management, social responsibility, social awareness and empathy, and employee engagement. Padsakoff et al. (2005) divided the factors influencing the occurrence of organizational citizenship behaviors into employees' attitudes and personalities, leadership, and environmental factors (13).

Several researchers such as Pavalche (2014) (8), and Podskoff et al (2005) (13) highlighted the personality differences such as heterosexual and heterogeneous employees compared to other employees, or extroverted employees with high conscientiousness (two important personality dimensions) compared to introverted employees with low conscientiousness and sociable employees with high morale. Highly bidding people have more organizational citizenship behavior than non-social employees with a spirit of low bidding or optimistic employees, who hope to improve learning and are confident in their ability to change performance, and reach high levels of organizational citizenship behavior. Another group of factors affecting organizational citizenship behavior, including managerial behavior had a positive and significant effect of 0.377 on organizational citizenship behavior in medical universities. Organizational factors refer to the structural and internal concepts of an organization such as organizational structure, organizational climate, organizational culture, organizational support, social capital, organizational trust, etc., which are effective on the organizational citizenship behavior of employees. According to various researchers

such as Podsakoff et al. (2005) (13), Roshandel et al. (2015) (14), Azimzadeh et al. (2015) (11), Ismail (2014) (15), Lim and Lucimore (2017) (16), typically the levels of organizational citizenship behavior in less structured organizations and organic organizations, with an open, supportive culture; is a more friendly and trusting atmosphere.

For the emergence of organizational citizenship behaviors, variables related to characteristics, roles, and jobs such as the importance of duty, job independence and the conditions and facilities of the job environment, etc. are also important.

In their research, Podsakoff et al. (2000) (13) stated that job characteristics (such as job feedback, job diversity, and job internal satisfaction) were significantly and positively related to various components of organizational citizenship behavior (8).

#### *Organizational Citizen Behavior as a Process*

In a system model, the process is its existential mechanisms that convert effective factors or inputs into outputs and consequences. Process factors in the present study include work conscience, organizational loyalty, chivalry (tolerance), sacrifice, altruism, individual initiative, organizational obedience, and participation. Shaemi et al. (2013) (4), Taghizadeh et al. (2014) (17), Roshandel et al. (2015) (14), Okurame (2012) (10), Tabarsa et al. (2010) (18), have mentioned, work conscience is a kind of inner tendency with which employees tend to work more and better.

#### *Outcomes or Consequences of Organizational Citizen Behavior as a Process*

New research on organizational citizenship behavior focuses on two key issues: employee individual outcomes and their effects on the organization. In a systemic model, inputs or influential factors in the process of organizational citizen behavior lead to output and its consequences. Organizational citizenship behavior had a positive and significant effect on individual outcomes in medical universities. These individual consequences of organizational citizen behavior, when accumulated over time and on individuals, increase employee effectiveness through creativity and innovation, improving employee morale, individual effectiveness, and citizenship performance. For example, the research of Cilla (2011) (19) and Newman et al. (2017) (20) showed that the emergence of

organizational citizenship behavior by employees leads to creative, voluntary, enthusiastic activities, and innovative design for personal improvement beyond organizational expectations. Organizational citizenship behavior of 0.552 had a positive and significant effect on organizational outcomes in medical universities. Organizational consequences of organizational citizenship behavior are manifested in components such as improving organizational performance, quality of services, allocation of scarce resources, organizational climate customer satisfaction, etc. Various studies such as Roshandel et al. (2014) (14), Jafari Fekrat and Hosseini Shakib (2015) (21), and Newman et al. (2017) (20) stated that, due to organizational citizen behaviors, employees performing activities of absent employees and helping those with heavy responsibilities help to stabilize the performance of the work unit. Therefore, in line with the research results, it is suggested that authorities of medical universities are advised to give more authority to people with high levels of self-awareness because empowering people who are able to freely monitor their feelings and emotions, and use them properly, to do their job easier and more easily, will improve the performance of the organization. It is also suggested that the components of organizational citizenship behavior should be used in evaluating the performance of employees to improve their performance. Managers of medical universities are advised to reconsider their organizational structure and move towards decentralization, placing the staff in decision-making positions and delegating the necessary authority to do things.

To this end, managers should occasionally hold informal meetings between employees and managers and encourage them to be aware of current issues and comment on issues that they think are beneficial to the organization. It is suggested that the managers of medical universities should create an atmosphere of altruism in the organization to provide the necessary grounds for the cooperation of employees in the form of organizational teams and to encourage people to establish a sincere relationship with a colleague; in cases where colleagues, especially newcomers, need help, they should help them solve problems related to their work. The managers of medical universities are suggested to promote personal culture and creativity in the organization, the culture of criticism in the organization to

improve the quality of life of employees and improve organizational performance.

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