

## **Investigating the Relationship between Organizational Citizenship Behavior and Intellectual Capital: a Case Study of State Universities in the West of Iran**

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### **Abstract**

The aim of the present study was to investigate the prediction of intellectual capital through the components of OCB in state medical and non-medical universities in the west of Iran. To collect the statistical data, the OCB questionnaire, based on the model of Podsakoff et al. (2000) and Bontis' intellectual capital model (2000), were used. The statistical sample included 352 full-time faculty members in academic year 2012-2013 employed in the above-mentioned universities. The findings showed that the correlation between intellectual capital components and OCB components was 0.6 and the coefficient of projection of intellectual capital on OCB was 0.36. The Regression Analysis showed that the effectiveness of the components of OCB on the components of human, structural, and customer capitals were 0.34, 0.30, and 0.29 respectively. The results of the study showed that OCB reinforcement between faculty members of state medical and non-medical universities in the west of Iran leads to the improvement in intellectual capital.

**Key words:** OCB, intellectual capital, state universities, west of Iran

### **Introduction**

One of the reasons of the success of modern organizations is hiring employees whose behaviors are not limited to the official roles and play their roles beyond the pre-determined tasks. Considering this view toward the world of business as well as the enhancement and necessity of the organizational effectiveness in such conditions, their needs to a valuable generation of employees, whom are called organizational soldiers, have increased (Tabarsa & Raminfar, 2010). The presence of OCB in universities and among faculty members has a significant correlation with job satisfaction and organizational development (Jamali, Poorzahir & Salehi, 2009) and the presence of these behaviors in organizational enhancement is so important and desired that they result in achieving results such as effective communication (Mahdad & Mehdizadegan, 2010).

The study by Bolio et al. (2002) showed that the more the cooperative relations increase, the more intellectual capital, especially human components increase. Bontis (1999) argues that the social citizenship of employees has a significant correlation with sharing knowledge, makes the organizational structures and procedures acceptable (structural capital) and the civic virtues cause the employees to advertise for the external customers regarding the exclusive capabilities of the organization. Yang and Farn (2007) believe that OCB results in transmitting the employees' implicit knowledge to various parts of the organization and increasing the employees' capabilities simultaneously, as well as raising the customer capital through the distinguished products and

services which the organization offers to the stakeholders. Moghimi (2006) argues that OCB increases the customer capital of an organization. Accordingly, the present study aims at investigating the relationship of OCB components (based on the seven-component model of Podsakoff et al. (2000)) in intellectual capital prediction (human, structural and customer) in state universities in the west of Iran.

## **Theoretical framework**

### **OCB**

The main research with especial focus on the concept of OCB and its entering the field of organizational behavior refers to the early eighties when Organ and Bateman introduced this expression by the same name (OCB). By coining this expression, these researchers conceptualized it into two frames:

1. Offering positive help to others and doing affairs more beyond what is defined as an individual's tasks
2. Avoiding damaging and disturbing the colleagues and the organization (Moghimi, 2006).

Describing his principles, Organ (1990) refers it to Bernard's management theory in which the basic conditions for the organization are described and the employees are ready to do beyond what they are expected to do.

Organ (1998) defines OCB as individual behaviors which are discretionary and conscious and are not directly and obviously identified by the organizational reward systems and the organizational performance assessment system, which have a direct relation to the organizational effectiveness. Borman and Motowidlo (1997) view it as underlying behaviors which are not supported by their professional and official conditions and are dependent on the organizational **breadth** and the social and psychological environment of the organization. Bolino and Turnley (2003) believe that OCB is defined by its nature and has two general states; the first is that they cannot be reinforced directly (for example, technically it is not necessary for them to be a part of the individual's job) and the second is that they are due to extraordinary efforts which the organization expects from its employees to achieve its success. This set of behaviors which are discretionary and arbitrary, although they are not part of an official job; is done by employees and causes the improvement in the tasks and roles in the organization (Apple Baum et al, 2004). In other words, this set of behaviors is actions which support the behaviors of core tasks (Earhart, 2004) and enjoy arbitrariness because they are not part of the official job description (Moorman & Blakely, 1995). Binestok et al. (2003), during their comparative investigations, state that during the last two decades, OCB has been explained by recent researchers by adopting concepts such as extra-role behavior (van Dyne, Commings & Parker, 1995), prosocial behavior (Brief & Motowidlo, 1986; George & Benthouse, 1990), organizational spontaneity (George & Brief, 1992; George and Jones, 1997) and contextual performance (Borman and Motowidlo, 1993).

OCB can be better understood through its constituent dimensions. Podsakoff et al. (2000) believes that the components of OCB are as follows:

- a. altruism: (helping colleagues to do their tasks well)
- b. Civic virtue: (the conscious presence at the service of organizational objectives)

- c. Organizational loyalty: (adherence to the brand and aspirations of the organization)
- d. Organizational compliance: (doing well and self-guiding in solving the job problems)
- e. Self-development: (attempting to update the individual knowledge and skills)
- f. Sportsmanship: (following justice and forgiveness in organizational ups and downs)
- g. Individual initiative: (loyalty and self-control in doing tasks)
- h.

### **Necessity of Paying Attention to OCB in Universities**

Today, the role of faculty members has substantially changed, and they are expected to engage in extra-task activities such as doing tasks well, changing in the way of doing tasks and being responsible to the society and etc. for maintaining and enhancing the effectiveness of their respective institutions. This issue leads to the matter that the durability of universities and educational institutions are dependent on the presence of teachers and faculty members with high organizational commitment and their interests to do extra-job behaviors. Investigating OCB of faculty members is important for four reasons:

1. It minimizes the contradictions due to the ambiguity in job expectations.
2. It decreases the need to appropriation of rare resources by focusing extra-job behaviors.
3. Educational institutions can create an environment which facilitates the encouragement and update of OCB, increases the facilitators of OCB and decreases the impedimenta.
4. It gives opportunity to managers of higher education to have more profound understanding of OCB factors and respective job and organizational variables (Izhar, 2009).

### **Intellectual capital**

Intellectual capital is the combination of properties and intangible activities of an organization which allow transference, transformation, combination, integration and regulation of materials, financial and human resources to create a system appropriate to the shareholders' values (EU, 2006).

Ross et al. (1997) views intellectual capital as including all process and properties which usually are not shown in balance sheets and also includes all intangible properties (like trademarks, the right of registration and exploitation of products and brand names), which are not paid attention to in the modern accounting methods. According to these researchers, intellectual capital refers to the sum of knowledge of the members of the organization and application of their knowledge. Organization for Economic Cooperation and Development (OECD)(1999) in its componential definition of intellectual capital, views it as the organizational capital (structural), human capital (including all persons within the organization) and persons around the organization, customers and providers.

### **Human capital**

Human capital shows the availability of knowledge of individuals within an organization (Bontis, 2000) which includes competencies, learned implicit experiences and employees' knowledge basis in the whole organization whose absolute valuation is problematic (Bontis and Serenko, 2009). This kind of capital indicates the employees' perception, particularly their knowledge which they produce through competency and intellectual agility (Ross et al. 1997). Competency includes

individual skills and education, while attitude includes employees' behavioral component. Intellectual agility enables a person to change procedures and thought regarding creative solutions of problems. The nature of human capital includes the genuine intelligence of the members of the organization (Bontis, 1998) and the main element for performing the functions related to intellectual capital. The mentioned capital represents the employees' capability as a continuous resource of recreation and innovation for the organization in which the employees have the understanding of perceiving issues and are able to create advantage from the experience they achieve (Longo, 2007).

### **Structural capital**

Structural capital refers to structures and processes in an organization which employees use and by which they adopt their knowledge and skills (Vargauwen&VanAlem, 2005). This capital includes mechanism and structures whose main role in supporting employees is for achieving optimum intellectual performance and optimum performance in business. In fact, this capital includes all non-human knowledge repositories in an organization like databases, processes, strategies and organizational charts which offer the organization the value more than physical properties (Ross et al. 1997).

### **Customer capital**

This capital emphasizes all resources which are related to extra-organizational communications. In this form, issues like all communicative networks and agreement with organizational beneficiaries particularly customers, the specific distinguishing characteristics like brands and also components of understanding which organizational beneficiaries have of the organization are categorized. In this component of intellectual capital, all communications and interactions, which lead to strength and stability of relations between customers, are concentrated and this component covers issues like contracts and agreements, customers' satisfaction and their loyalty (Khavankar et al., 2009).

Stewart (1997) argues that customer capital refers to market data to be used in attracting and keeping customers and its main subject is the knowledge existing in marketing channels and relations with customers. Sanchez and Elenas (2006) view this component as resources related to extra-organizational communications like customers, suppliers, Research & Development groups and states in higher education. In their view, customer or relational capital includes activities and relations between university and non-academic members, firms, non-beneficial organizations, public authorities, local states and society in general.

### **Methodology**

The present study is a correlational study and its population includes all full-time faculty members of non-medical and medical state universities in the west of Iran (Loristan, Ilam, Kermanshah, Hamidan). The population comprises 1972 individuals among whom 352 participants were selected using stratified sampling method proportionate to the total size as the sample. Among the questionnaires sent to these participants, 327 questionnaires were returned to the researchers. To collect the data the researchers used the OCB researcher-made questionnaire based on the Seven-factor model of Podsakoff et al. (2000) and the questionnaire based on intellectual capital model of

Bontis (2000). The data of the mentioned questionnaire were scored base on Likert scale. Accordingly, score 1 was assigned to the option "totally disagree" and score 5 was assigned to the option "totally agree". The reliability coefficients of the OCB questionnaire and intellectual capital based on Cronbach's Alpha equaled 84% and 88% respectively.

## Statistical Results

### Research Hypothesis

There is a correlation between the components of OCB (altruism, civic virtue, organizational loyalty, organizational compliance, self-development, sportsmanship and individual initiative) and the components of intellectual capital (human, structural and customer) in state universities in the west of Iran.

The statistical analysis of the data collected from the sample group shows that there is a positive and significant correlation between OCB and intellectual capital. Table 1 indicates the mentioned correlation coefficient.

Table 1. The results of Pearson's correlation coefficient of the relation between OCB and intellectual capital in state universities in the west of Iran

Resource	Frequency	r	Effect size	Significance level
OCB and intellectual capital	327	0.60	0.36	0.001

As observed in table 1, the observed  $r(p \leq 0.001)$  shows a positive and significant correlation (0.60) between OCB and intellectual capital in state universities in the west of Iran. The effect size between OCB and intellectual capital is 0.36.

Table 2. The results of Pearson correlation coefficient of the relation between OCB with intellectual capital in state universities in the west of Iran

Variable	Human capital	Structural capital	Customer (relational) capital
altruism	=0.29r =0.001p	=0.21r =0.001p	=0.17r =0.001p
civic virtue	=0.51r =0.001p	=0.41r =0.001p	=0.41r =0.001p
organizational loyalty	=0.42r =0.001p	=0.41r =0.001p	=0.41r =0.001p
organizational compliance	=0.46r =0.001p	=0.44r =0.001p	=0.44r =0.001p
self-development	=0.24r =0.001p	=0.31r =0.001p	=0.32r =0.001p
sportsmanship	=0.11r =0.04p	=0.10r =0.06p	=0.12r =0.03p
individual initiative	=0.34r =0.001p	=0.37r =0.001p	=0.25r =0.001p

As the results of the table 2 shows, the observed r shows a positive and significant correlation between human capital and the components of altruism, civic virtue, organizational loyalty,

organizational compliance, self-development, and individual initiative ( $p \leq 0.001$ ) and sportsmanship ( $P \leq 0.05$ ), between structural capital and the components of altruism, civic virtue, organizational loyalty, organizational compliance, self-development, and individual initiative ( $P \leq 0.001$ ) and customer (relational) capital and the components of altruism, civic virtue, organizational loyalty, organizational compliance, self-development, and individual initiative ( $P \leq 0.001$ ) and sportsmanship ( $P \leq 0.05$ ), of OCB.

Table 3. The results of the regression coefficient prediction of the components of human capital based on the components of OCB in state universities in the west of Iran

Resource	SE	Regression coefficient	t value	Coefficient of determination	Significance level
altruism	0/12	0/04	0/75	0/08	0/45
civic virtue	0/12	0/31	4/78	0/34	0/001
organizational loyalty	0/11	0/16	2/98	0/35	0/001
organizational compliance	0/13	0/25	3/87	0/34	0/001
self-development	0/13	0/02	0/32	0/08	0/75
sportsmanship	0/07	0/13	2/75	0/34	0/006
individual initiative	0/14	0/12	2/07	0/34	0/04

As the table 3 shows, the component of human capital is under the influence of components of civic virtue, organizational loyalty, organizational compliance ( $p \leq 0.001$ ), sportsmanship ( $P \leq 0.006$ ), individual initiative ( $P \leq 0.05$ ) and in case that the mentioned components are available in the state universities, it can be predicted that human capital would be improved in the universities as well. Coefficient of determination shows that the amount of influence of these components on the component of human capital is 0.34. However, the component of human capital is not influenced by the components of altruism and self-development. This relation can be stated as follows:

**Human capital** = civic virtue (0.57) + organizational loyalty (0.19) + organizational compliance (0.50) + sportsmanship (0.20) + individual initiative (0.28)

Table 4. the results of regression coefficient of prediction of the component of human capital based on the components of OCB in state universities in the west of Iran

Resource	SE	Regression coefficient	t value	Coefficient of determination	Significance level
altruism	0.15	0.13	2.21	0.30	0.03
civic virtue	0.15	0.17	2.51	0.30	0.01
organizational loyalty	0.14	0.13	1.94	0.30	0.05
organizational compliance	0.16	0.23	3.49	0.30	0.001

compliance					
self-development	0.15	0.06	1.10	0.07	0.27
sportsmanship	0.09	0.13	2.56	0.30	0.01
individual initiative	0.17	0.18	3.07	0.30	0.002

Table 4 shows that the component of human capital is influenced by the components of altruism, civic virtue, organizational loyalty, self-development, sportsmanship ( $p \leq 0.05$ - $0.01$ ) and ( $p \leq 0.002$ ) and in case these components are available in state universities in the west of Iran, it could be predicted that structural capital would be improved in these universities. The Coefficient of determination shows that the amount of influence of these components on the component of human capital is 0.30. However, the component of structural capital is not influenced by the components of self-development. This relation can be stated as follows:

**Human capital**= altruism (0.32) + civic virtue (0.38) + organizational loyalty (0.26) + organizational compliance (0.57) + sportsmanship (0.24) + individual initiative (0.53)

Table 5. The results of regression coefficient prediction of the component of customer (relational) capital based on the components of OCB in state universities in the west of Iran

Resource	SE	Regression coefficient	t value	Coefficient of determination	Significance level
altruism	0/14	0/17	2/81	0/29	0/005
civic virtue	0/14	0/24	3/51	0/29	0/001
organizational loyalty	0/12	0/18	2/94	0/29	0/003
organizational compliance	0/15	0/28	4/15	0/29	0/001
self-development	0/13	0/15	2/65	0/29	0/008
sportsmanship	0/08	0/11	2/28	0/29	0/02
individual initiative	0/16	0/006	0/11	0/07	0/92

Table 5 shows that the component of customer (relational) capital is influenced by the components of altruism ( $p \leq 0.005$ ), civic virtue, organizational compliance ( $P \leq 0.001$ ) organizational loyalty ( $p \leq 0.003$ ), self-development ( $p \leq 0.008$ ), sportsmanship ( $p \leq 0.05$ ) and in case these components are available in state universities in the west of Iran, it could be predicted that customer (relational) capital would be improved in these universities. The coefficient of determination shows that the amount of influence of these components on the component of customer (relational) capital is 0.29. However, the component of customer (relational) capital is not influenced by the components of individual initiative. This relation can be stated as follows:

**Customer (relational) capital** = altruism (0.37) + civic virtue (0.48) + organizational loyalty (0.19) + organizational compliance (0.61) + self-development (0.35) + sportsmanship (0.19)

## Discussion

The components of OCB, if available and improved by the managers, will lead to the consideration of the organization as a civic community in which each employee assists the organization in doing his tasks and developing his and others' job affairs in a bidirectional interaction and hence, it improves human capital. This set of behaviors provides the ground for improving structural capital and the organizational behavior through adhering to organizational outlooks and respecting organizational structure. Customer or relational capital of the organization is shaped due to external customers' interactions and recipients of services or products of the organization. If faculty members, in their relations to customers (students and recipients of scientific and research services), show an admissible and distinguished face of the organization, they will help improve and create customer capital.

In explaining objectively the obtained results, it can be imagined that if the faculty members of state universities in the west of Iran assist their colleagues to dominate their job tasks, they have active participation in the issues related to improving the quantitative and qualitative levels of education and research in their field of study, to help update their knowledge and that of their colleagues, and to improve human capital in their respective university. Taking extra-functional measures which flows the processes of management of a university, and active participation in academic circles which enhances the rank of the university, besides forming an enhancing structural capital, causes the university to face an increasing number of customers demanding services and keep the current customers.

## Bibliography

Jamali, A., TaghiPourZahir, A. & Salehi, M. (2009). The relationship between job and organizational factors with the organizational citizenship behavior among the faculty members of Islamic Azad University–Zone 1 branches. *Quarterly journal of educational leadership & administration*. 3, 2, 87-106.

Khavandkar, J., Khavandkar, E., & Mottaghi, A. (2009). Management of intellectual capital, management of development, assessment models. Tehran: Iranian Training and Industrial Research Center.

Tabarsa, Gh. & Raminmehr, H. (2010). A model of organizational citizenship behavior. *Public administration perspective*. 3. 103-118.

Moghimi, S.M. (2006). The study of the relationship between OCB and the entrepreneur culture in government organizations. *Culture of Management journal*. 4, 13. 171-192.

Mahdad, A. & Mahdi zadegan, I. (2009). The comparison of OCB and counterproductive behavior among Iranian and Malaysian automobile factory workers. *Journal of new findings in psychology*. 7. 73-79.

Izhar . O. (2009). Organizational citizenship behavior in teaching: the consequences for teachers, pupils and the school. *International Journal of Educational Management*. 23. 5. 375 - 389 .



Podsakoff, P. M. Mackenzie, S. B. Paine, J. B. and Bachrach, D. G. (2000). Organizational citizenship behavior, A critical Review of the theoretical and empirical literature and suggestion for future research. **Journal of Management**. 26, (3), 513-563.

Sanchez, M, P and Elenas. S. (2006). Intellectual Capital in universities improving transparency and internal management. **Journal of Intellectual Capital**, 7. 4.

Moorman,R, and Blakley,G.(1995). Individualism-collectivism as an individual difference of organizational citizenship behavior. **Journal of Organizational Behavior** . 16,2:127-142.

Bontis,N (1998). Intellectual capital : an exploratory study that develops measures and models. **Managing Decision**. 36(2):63-76.

Bontis,N (1999), Managing organizational knowledge by diagnosing Intellectual capital: framing and advancing the state of the field, **International Journal of Technology Management** .18(5/6):433-62.

Bontis,N (2000), Intellectual capital and business performance in Malaysian industries. **Journal of Intellectual Capital**. 1(1):85-100.

Vergauwen ,P .VanAlem ,F.(2005).Annual report Intellectual capital disclosures in the Netherlands, France and Germany.**Journal of Intellectual Capital**.6,1,89-104.

- Bolino, M.C., Turnley, W.H,and Bloodgood, J.M. (2002). Citizenship behavior and the creation of social capital in organizations. **Academy of Management Review**. 27: 505-522.

-Bontis,N, and Serenko,A.(2009). A casual model of human capital antecedents and consequents in the financial services industry. **Journal of Intellectual Capital**.10,1:53-69.

-Stewart.T.A.(1997).**Intellectual capital: the new wealth of organization**. Doubleday Currency. NewYork.NY.

- Longo. M.(2007). A multidimensional measure of employees , intangibles a managerial implementation of the tool. **Management Research News**.30,8:548-569.

European Commission. (2006). Reporting Intellectual Capital to Augment Research (RICARIS), Development and Innovation in SME. Internet device: <http://ec.europa.eu/invest-in-research>

- Organ,D,W.(1990). The motivational basis of organizational citizenship Behavior. **Research in Organizational Behavior**.12:43-72.

- OECD.(1999).**Guidelines and instructions for OECD Symposiom** ,International Symposiom Measuring and Reporting Intellctual Capital:Experience,Issues,and prospects,june,Amesterdam,OECD,Paris
- Roos .J. Roos , G. Dragonetti ,C & Edvinson,L.(1997). **Intellectual capital: navigating in the new bussiness lanscape**, Macmillan,Hound mills,Basingstoke.
- Organ,D.W.(1988). **organizational citizenship behavior: the good soldier syndron**. Lexington,MA:lexington Books.
- Bolino,M,Turnley,w, (2003). Gooing the extra mile: cultivating and managing employee citizenship behavior. **Academy of Management Executive**.17,3:60-71.
- Bienstock ,C .C .Moranville,C.W.and Smith, P.K.(2003).Organizational citizenship behavior and service quality. **Journal of Service Marketing**.17,4/5,375-378
- Yang, S, and Farn, Ch. (2007). "Exploring tacit knowledge sharing intention and behavior within workgroup from the perspectives of social capital and behavioral control.paper presente for 11<sup>th</sup> PACIS 2007. Paper 38:517-530 . available at <http://aisel.aisnet.org/pacis2007/38>
- Borman, W. C, and Motowidlo, S. J. (1997). Task performance and contextual performance: The meaning for personnel selection research. **Human Performance**, 10, 99-109.
- Appelbaum,S.Bartolomucci,N.Beaumier,E.Boulanger,J.Corrigan,R.Dore,I. Girard, Ch, and Serreni, C.(2004). Organizational citizenship behavior :a case study of culture, leadership trust.**Management Decision**.42,1/2:184-191.