

Providing structural equation modeling of organizational trust effects on behaviors of employees' counter-productive via mediated effects of organizational citizenship behavior - Case study: Isfahan Tuka Steel Company

Masoumeh Lajevardi¹, Reza Ebrahimzadeh^{1,2*}

1. Department of Industrial Engineering, Najafabad Branch, Islamic Azad University, Najafabad, Iran.
 2. Faculty Member of Humanities Science, Department of Cultural Management and Planning, Isfahan (Khorasgan) Branch, Islamic Azad University, Isfahan, Iran.
- *Corresponding author email: ebrahimzadeh2020@gmail.com

Abstract: The present study is aimed at identifying the effects of organizational trust on the Counter-Productive Behavior of the staff and it was conducted by considering the Organizational Citizenship Behavior to be a moderating variable. To do so, a number of standard questionnaires, including organizational trust, organizational citizenship behavior, and counter-productive behaviors were adopted to measure these variables. After the validity of the measurement tools was secured by explanatory analysis, the reliability of the questionnaire for the organizational trust –based upon Chronbach’s alpha coefficient – (0/819), organizational citizenship behavior with Chronbach’s alpha coefficient (0/940) and organizational counter-productive behaviors (with Chronbach’s alpha coefficient 0/890) were estimated and were distributed among a sample consisting 370 people out of 741 working staff in Tuka Steel Company of Isfahan. The present research methodology is of descriptive type, based on the method of structural equation modeling, which is used by classification sampling. The results from the research model indicate that according to the proposed model of the analysis, the Organizational Trust influences the Counter-Productive manner of the company staff via Organizational Citizenship Behavior. This influence is regarded as significant and it is equal to -0/23. Eventually, with respect to the direct impact of organizational trust and the Organizational Citizenship Behavior on the reduction of counter-productive behaviors, a number of proposals have been provided to the managers in order to both strengthen and to enhance the influence of organizational trust and Organizational Citizenship Behavior.

Keywords: Organizational Citizenship Behavior, Organizational Trust, Counter-Productive Behavior , Organization

Introduction

Commitment causes a lot of efforts and cooperative behaviors and plays an important role in many of the interpersonal relationships. Organizational trust is: the desire of a group or association to vulnerable against the other group based on expectation or belief that another group is reliable and worry (Javahery, 2009). The study of organizational literature indicates that trust is a vital factor for individual and organizational success (Argyris, 1973, Kavi, 1990, Likret, 1967, McGregor, 1961).

The high level of trust within the organization compensate the weakness in other necessity sources for improving productivity. The high level of organizational trust is equal to improving job satisfaction, organizational commitment, atmosphere of trust between employees, increasing cooperation and consultation, sharing information, problem solving, facilitating empowerment, the ability to change, learning and organizational innovation, decreasing the psychological pressure, reducing uncertainty about future, resolving conflicts and finally creating a framework for

Organizational productivity. Low organizational trust will typically follow increasing conflict, organizational instability, desertion, reducing motivation, gossip strikes and unsolved, obstacles over goals (Hart, 2001, Dirks & Ferrin, 2001, Fox, 1974, Laport, 1997, Korsgaard, 2002).

In recent years, two important variables have attracted attention of industrial and organizational psychologists and these two variables are organizational citizen's behaviors and behaviors of counter-productive. Citizenship behaviors are defined as intentional behavior and the desire of employees which are voluntary and typically not rewarded, but can improve the performance of organizations (Organ, 1988; Schnake, 1991).

Organizational researchers have shown that some of their employees participate beyond their roles in the health and organizational effectiveness (Muchinsky, 2006).

This idea is taken into consideration that confidence is as the main potential factor in workplace causes the improving the organizational performance and can be one of the Sources of competitive advantage in the long run (Pucetaite & Lamsa, 2008). Reinforcing the trust and organizational citizenship behaviors improve the performance and efficiency of organizations and will ensure their long-term survival (Shirazi, 2012). Therefore regarding to the issues raised, it can be concluded that confidence and organizational citizenship behavior can have a direct impact on reducing counter-productive behaviors and employees' deviant behavior in their organizations.

Problem statement

Organizational literature studies have emphasized on the importance of trust as a prerequisite for organizational effectiveness (Danaiyfar, 2009). Cook and Wall (1980) have identified competence and motivation as the main factors of confidence. Daytz and Hartog (2006) know these four benevolence as the most important elements of trust: competence, integrity, honesty and predictability (Shirazi, 2011).

Organizational trust can causes protecting and improving the efficiency of the employees by improving communication and collaboration between employees and managers (Velez, 2006).

One of the main features of each organization to work in the changing conditions of today, having the people who want to participate in the successful changes of the organization, without formal requirements of job. Some behaviors which go beyond the formal expectations and are so important for survival of organization and defined as the organizational citizenship behavior. Organizational citizenship behavior is one of the important factor which plays an important role in the excellence of organization. Outbreak areas of organizational citizenship behavior needs strong roots and supports that cause such behavior of the staff. If we can strengthen the roots of citizenship behavior, this behavior will lead to prosperity and development (Javaheri Kamel, 2009).

There is no uniting consensus among researchers about the organizational citizenship behavior. However, the next five more have been accepted by researchers, are: 1 - consciousness: it means doing the role behaviors beyond the minimum required functions; 2 - altruism: helping people / partners; 3 - Virtue (civil behavior): participation in the political life cycle of the organization; 4 – manliness: willingness to tolerate the inevitable discomfort condition at work, without complaint and expressed discomfort; 5. courtesy: means behaving with respect to the others (Shirazi, 2012).

The study of organizations and industries personnel antisocial behaviors has a short story than the study of positive behaviors and focused on efficiency and production. Deviant behaviors and counter-productive are behaviors which are voluntary and are important organizational norms and at the same time causing a serious threat to the health of the organization and its staff (Rezaeian and Rahimi, 2008).

Counter-productive behaviors have been studied under different titles, and also based on different theoretical perspectives, such as aggression, bias, retaliation, revenge, anti-social behavior, crime and intimidation.

These conscious behaviors were characterized by the willingly and voluntarily in them. So theoretically, counter-productive behaviors and organizational citizen behaviors are contrast to each other and one of them derive a benefit and the other one damage the organization. Accordingly, based on the structural definitions it can be expected that such employees, who are involved in organizational citizenship behaviors, will tend to be not involved in counter-productive behavior.

The point is that the counter-productive behaviors will reduce the organizational effectiveness by the direct effect that has on how or organization equipment (Ansari 2010).

According to the cases mentioned above, the main objectives of this study are as follows, based on the assumptions this research has been set:

Assessment of the impact of the organizational trust via organizational citizenship behavior on the counter-productive behaviors in Isfahan Tuka Steel Company

Assessment of the impact of the organizational behavior on the organizational citizenship behavior in Isfahan Tuka Steel Company

Assessment of the impact of the organizational citizenship behavior on the counter-productive behaviors in Isfahan Tuka Steel Company

Assessment of the impact of the organizational trust on the counterproductive behaviors in Isfahan Tuka Steel Company

In this study, the main hypotheses is: the organizational trust via organizational citizenship behavior has effect on the counter-productive behaviors in Isfahan Tuka Steel Company and other additional hypotheses are:

Organizational trust has effect on the organizational citizenship behavior in Isfahan Tuka Steel Company

Organizational citizenship behavior has effect on the counter-productive behaviors in Isfahan Tuka Steel Company

Organizational trust has effect on the counter-productive behaviors in Isfahan Tuka Steel Company

As a result, based on current assumptions and literature review, the conceptual model shows the relationships between the main variables of the research and theoretical framework of this study, in Figure 1 will be provided:

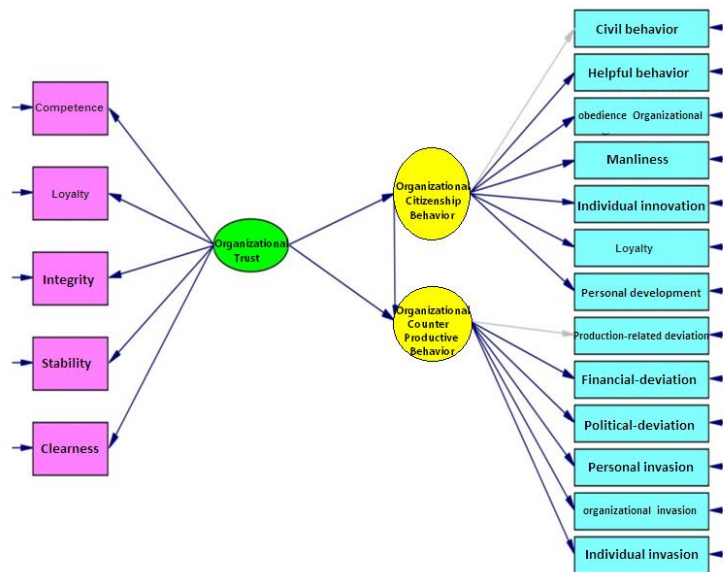


Figure 1. shows the conceptual model of the research hypotheses

Research methodology

As the major objective of this study is to investigate the impact of organizational trust on counter-productive behaviors through organizational citizenship manners, the current study is practical in terms of its objective, it is found to be descriptive based on correlation method and data collection, and it is considered to be structural equation modeling.

Instrument for collecting information

Standard questionnaire has been used for measuring the dimension of organizational trust, organizational citizenship behavior and organizational counter-productive behavior. For measuring the reliability 30 questionnaire were pretested, and then the range of reliability were calculated by the method of chronbach alpha and for each variable was obtained 0.889 for organizational trust, 0.940 for citizenship behavior, and 0.890 for organizational counter-productive behavior. These numbers show that the questioners have the reliability. In this study questioners were investigated by the using exploratory factor analysis and confirmatory factor analysis. The results shows that all questionnaires fitness test samples with greater than 0.5 and Bartlett test results are significantly higher than 1.96. These results in Table 1 are shown. It is worth mentioning some of the questions because of the low rate of participation asymmetry in factor structure have been removed.

Table1. The results of exploratory and confirmatory factor analysis

The name of the main area and the number of questions	The name of factors according to the importance of variance	Variance	The results of confirmatory factor analysis
The questionnaire of organizational trust (12 question)	Competence (205.15), loyalty (434.13), integrity (958.10), stability (531.10) and clearness (572.9)	59.699	χ^2 /df=1.057, GFI=0.97, AGFI=0.96, RMSEA=0.014
The questionnaire of organizational citizenship behavior(24 question)	Civil behavior (006.11), helping behavior (043.9), obedience organizational (531.8), manliness (012.7), individual innovation (017.6), loyalty (632.5) and personal development (015.5)	52.257	χ^2 /df=2.302, GFI=0.92, AGFI=0.91, RMSEA=0.065
The questionnaire of organizational counter-productive behavior(29 question)	Production-related deviation (980.10), the financial deviation (631.9), political deviation (566.8), personal invasion (029.7), organizational invasion (226.6) and individual invasion (707.5)	48.139	χ^2 /df=1.079, GFI=0.92, AGFI=0.91, RMSEA=0.016

The population and sampling method

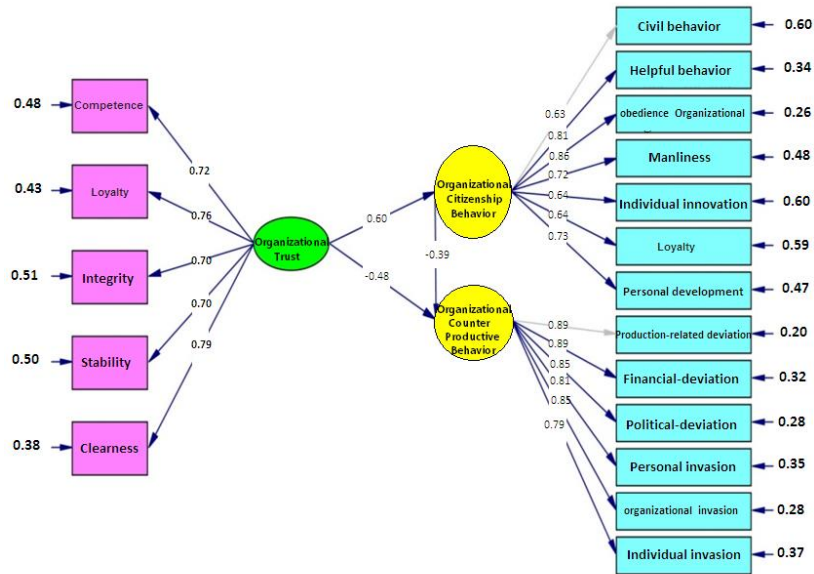
The statistical community of this study encompasses the entire staff working in Tuka Steel Company of Isfahan in 2015, which are statistically 741 people. On the other hand, according to the results of the research done on the relationship between the impact of organizational trust over the counter-productive behaviors through organizational citizenship behavior , it is indicated that these demographic variables including the level of education , gender , and job history can be influential on organizational counter-productive behaviors. In order for the researcher to be able to investigate these effects in his studies and to examine them more accurately, s/he uses a sampling method known as " classification sampling " , and the statistical samples have been extracted from different educational levels , various jobs with background histories less than 5 years or over 20 years both extracted from male and female groups. Accordingly, the researcher attempted to collect necessary information after he referred to the company and estimated the total number of 370 samples based on Cochran sampling formula , and then he began to distribute the questionnaire using the classification sampling which was adopted regarding the sampling framework. The main characteristics of demographical variables used in the study are shown in great details in Table 2. Eventually, 313 questionnaires were collected with good return rate of %85 . In order for the researcher to collect the questionnaires,she attended in Tuka Steel company for three consecutive months and has managed to distribute his questionnaires and has also collected the required data.

Table 2 Demographic variables used in the research

Variable	Frequency	Variable	Frequency
Bachelor's degree	18/8%	Gender	
Master's degree	4/5%	Male	93/9%
Mediating managers	6/1%	Female	6/1%
Top manager	3/5%	Level of Education	
Working Years		Below diploma	26/2%
Less than 5 years	4/2%	Diploma	25/6%
5-10 years	18/5%	A.A degree	15/3%
10-15 years	55/6%	B.A degree	16/3%
15-20 years	16/6%	M.A degree	15/0%
Over 20 years	5/1%	PhD degree	1/6%
		Occupation	
		Technical expert and worker	67/1%

Research findings

In order to the research hypotheses test that is expressed in the statement of problem part, the structural equation modeling was used. In Figure 2, the output of the software LISREL presents for research hypotheses:



Chi-Square=151.35, df=132, P-value=0.11942, RMSEA=0.022

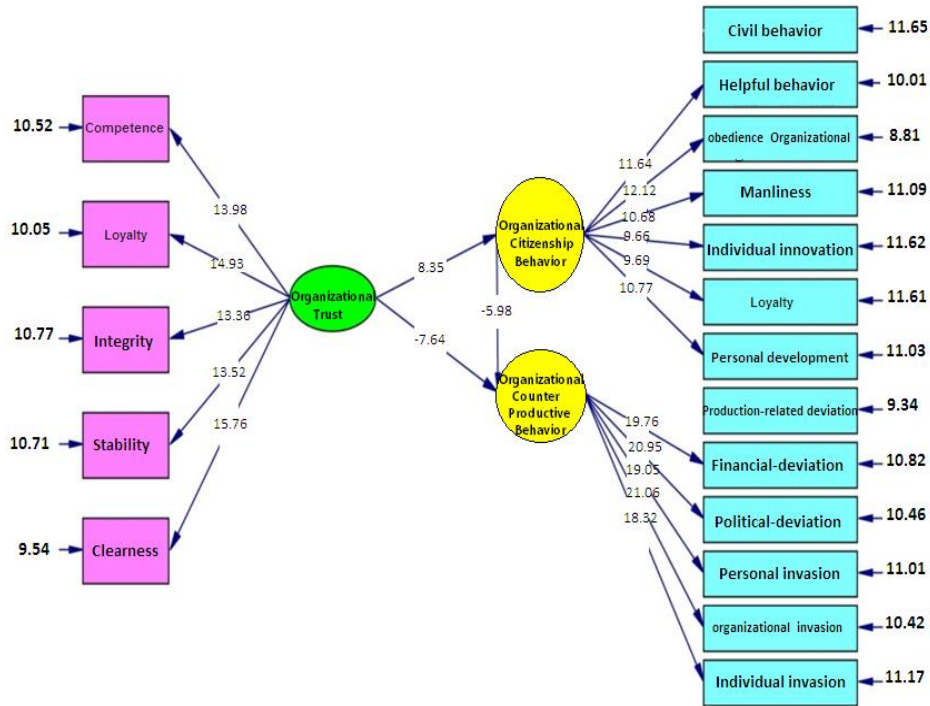
Figure 2. The standardized coefficients model related to research hypotheses

According to the LISREL output ratio to square degrees of freedom is calculated equal to 1.147. Despite the lower ratio indicates a good fit model. Also, the presenting model is a suitable model. According to following results which are obtained from LISREL outbreak: RMSEA =0.022, P_value=0.119, DF=132, $\chi^2 =51.35$, the P value is more than the significance level ($\alpha=0.05$), so this model is suitable. All indicators to assess model fit is presented below with their values and reflects the goodness of fit for the model. Before the exploitation of results, it is needed to be investigated the model parameters as Table 3 and after confidence of model research hypotheses should be investigated:

Table 3. The model indexes of research hypotheses by LISREL

The name of index	The amount of standard index	The amount of index in this model	Conclusion
χ^2/df	1.3	1.147	The model is fit
P value	More than 0.05	0.119	The model is fit
GFI	More than 0.9	0.95	The model is fit
AGFI	More than 0.9	0.93	The model is fit
NFI	More than 0.9	0.98	The model is fit
CFI	More than 0.9	1.00	The model is fit
RMSIE	less than 0.1	0.022	The model is fit

According to the model and model parameters, significant model coefficients based on T Indicators should be considered. A LISREL output result in Figure 3 is shown:



Chi-Square=151.35, df=132, P-value=0.11942, RMSEA=0.022

Figure3. Corrective index of T model related to the research hypotheses

According to the present results in table (3) the model was fit so according to figure (2) and (3), the reliability of all the hypotheses will be confirmed. Table (4) shows all of the research hypotheses and results:

Table 4. The summary of research hypotheses

Number	The name of relationship	Effects	T value	Results
1	The main hypothesis: the impact of the organizational trust via organizational citizenship behavior on the counter-productive behaviors	-0.23	-5.81	confirmed
2	The sub hypothesis 1: the impact of organizational trust on Organizational Citizenship Behavior	0.60	8.35	confirmed
3	The sub hypothesis 2: the impact of Organizational Citizenship Behavior on counter-productive behavior	-0.39	-5.98	confirmed
4	The sub hypothesis 3: the impact of the organizational trust on counter-productive behavior	-0.48	-7.64	confirmed

Conclusion

In this study, first, data were analyzed by descriptive statistics, such as frequency tables and charts and hypotheses, based on analytical data using software SPSS18 and LISREL, the results are as follows:

The findings of the research hypothesis that 'the organizational trust via organizational citizenship behavior has effect on the counter-productive behaviors in Isfahan Tuka Steel Company, it shows that 'the organizational trust via organizational citizenship behavior has effect on the counter-productive behaviors in Isfahan Tuka Steel Company and the impact factor is -0.23.

The senior managers to prevent anti-production behavior must consider and improve organizational confidence. The above result are consistent with internal investigation (Shirazi et al., 2012) and external investigations (Mishra and Morris, 1990; Ellonen, 2005; Jeon, 2009), based on the positive impact of trust on citizenship behavior and negative impact on counter-productive behavior. The total reason of this impact is that if in an organization, employees rely on each other and their managers and organization, and they think the organization is theirs and they will be sensitive to the issues. Such employees have a keen interest in participation and responsibility in organizational life and eager to help others, especially those who have problems related to their work, cause to improve the overall performance of the organization. Since counter-productive behavior is damaging to the organization, those employees who are engaged in organizational citizenship behaviors, tend to be not involved in counter-productive behavior.

The finding results in sub hypothesis 1 that 'Organizational trust has effect on organizational citizenship behavior' shows that Organizational trust has effect on organizational citizenship behavior, and based on extracted results from structural equation model, the coefficient of direct effect of organizational trust on organizational citizenship behavior was 0.60 and significant coefficient of T was 8.35 that shows that there is a positive and strong effect in organizational trust on organizational citizenship behavior. This results are compliance with internal investigations (Zareie, 2010; Javahere Kamel, 2009; Tabarsa, 2010; Shirazi, 2012) and external investigations (Yelmaz & Atali, 2009; Jeon, 2009), based on positive and strong effect of organizational trust in organizational citizenship behavior.

The finding results in sub hypothesis 2 that 'organizational citizenship behavior has effect on counter-productive behavior' shows that citizenship behavior has direct effect on deviant behavior and based on extracted results from structural equation model, the coefficient of direct effect of citizenship behavior on deviant behavior was -0.39 and significant coefficient of T was -5.98 that shows the there is a positive and strong effect in organizational citizenship behavior on organizational deviant behavior. This result is compliance with the research result (Dalal, 2005), based on direct and negative effect of citizenship behavior on deviant behavior.

The finding results in sub hypothesis 3 that 'organizational trust has effect on counterproductive behavior' shows that organizational trust has direct effect on counter-productive behavior and based on extracted results from structural equation model, the coefficient of direct effect was -0.48 and significant coefficient of T was -7.64 that shows the there is a positive and strong effect in organizational trust on organizational deviant behavior.

Research Recommendations

Before presenting practical suggestions, according to the research results, it is mentioned that This research has some limitations that researchers should pay attention to them in next researches. The most important limitations are:

This study has been performed only in private industry in Iran (Isfahan Tuka Steel company), and generalizing of the results to other industries and organizations should be done with caution.

Since the study has a quantitative method (cross-correlation), it may not provide accurate results, it is suggested as a limitation of the study, the research should be mixed.

To achieve more accurate results in a structural equation model, the role of moderator variables and confounding should be considered for future research.

To achieve more accurate results, it is best to indicate the limitations of this study in further research that to achieve more accurate results in Steel industry, several industries (Steel Company) considered to achieve more comprehensive pattern.

So, according to results of data analysis and according to direct effect of organizational trust and citizenship behavior in reducing counter-productive behavior, the following preceding should be done to improve the effect of organizational trust and citizenship behavior and prevent from counter-productive behavior:

The leaders of organization induce pride to the members of the organization for their participations and cooperations. The leaders should identify the inhibiting factors to create a culture of participation in organizations and Take the necessary steps to resolve it. Essentially inhibiting factors can be categorized as follows:

A culture of individualism and individualism among employees

Subordinates pessimism about the effectiveness of collaborative management

Belief of some managers to the assumptions of Theory X-

To eliminate obstacles, the managers must act to establish the organization offers.

The administrators of organization should effort regardless of personal desires in order to integrate the management of people and organizations from the perspective of value.

Administrators should collect different people under their intellectual and grow creative people and entrepreneurs. This breed is very effective in growing individual initiatives in organizational citizenship behavior. Inspiration and instill optimistic picture about the future of the organization create the source of inspiration and stimulation to move in the direction of the organization aims to facilitate organizational citizenship behavior in the organization.

Managers should support, guide and train its staffs, and grow and develop their abilities in an orderly process, Because employees who have a high level of individual empowerment, a feeling of more control, more initiative, they feel more responsibility in their work and learn faster.

Promote positive moral values: managers have a duty to institute a set of moral values in the organization. Teams which follow a set of good moral values are healthier, more successful, more productive, consistent, accountable and competent.

Honesty and integrity is the foundation of trust in an organization and it should be formed from the beginning. While promoting honesty and integrity management throughout the organization, it also must show in practice.

Managers should identify ways, to be always available as a director of team members. No responsibility will lead to a lack of trust.

Friendly relations between people in an organization are encouraged and increased willing to work.

Creating a sense of significance, competence, efficiency and reliability to the participants in the organization should be established.

Also according to our results, the following suggestions are necessary for future research:

Investigating the effective factors in counter-productive behavior with the method of meta analysis

Investigating the role of group cohesion in the behavior of counter production

A comparative study of the role of organizational trust in the counter-productive behavior in different organizations

Research conducted meta-analysis method based on research carried out in conjunction with Citizenship Behavior

Investigating the relationship between organizational justice and deviant behavior

References

- Ansari, M A, Mir Ahmadi, S M, Zabihollah, K.(2010). Investigating the relationship between Job stress, job satisfaction, organizational commitment and organizational citizenship behavior, the magazine of human resource management in the oil industry, Volume 4, Issue 13
- Argyris, C. (1973). *On Organizations of the Future*. Beverly Hills, CA: Sage.
- Cook, J., & Wall, T.(1980). New work attitude measures of trust, organizational commitment and personal need non-fulfillment. *Journal of Occupational Psychology* , 53, 39-52.
- Covey, S. R. (1990). "The Seven Highly Effective people". New York: Simone and Schuster.
- Dalal, R. S. (2005). A meta-analysis of the relationship between organizational citizenship behavior and counterproductive work behavior. *Journal of Applied Psychology* 90: 1241–1255.
- Danaiy Fard, H, Rajabzadeh, A, Hasiri, A. (2009). Promoting organizational trust in the public sector: The role of managers in competency management, research management, second year, NO 4.
- Dirks, K. T., & Ferrin, D. L.(2001). "The Role of Trust in Organization Settings". *Journal of Organization Science*, Vol. 12 No. 4, pp.450-467.
- Ellonen, R. (2005). The relationship of organizational cultures, trust and innovativeness. A dissertation, lappeenranta university of technology. 15-19.
- Fox, A. (1974). "Beyond contract: Work, power, and trust relationships". London: Faber & Faber.89.
- Hart, P., & Cooper, C. (2001). "Occupational stress: Toward a more integrative Framework". In N. Anderson, D. Ones, H. Sinangil, & C. Viswesvaran (Eds.), *Handbook of industrial work and organizational psychology* (pp. 91-114). Thousand Oaks, CA: Sage
- Javaheri Kamel, M. (2009). The effect of Organizational justice, leader-member relationship, trust and psychological empowerment on organizational citizenship behavior, twice *Journal of Police Human Development*, sixth year, No 24.
- Jeon, J. H. (2009). The impact of organizational justice and job security on organizational commitment exploring the mediating effect of trust in top management. A dissertation, faculty of the graduate school of the university of Minnesota.38.
- Korsgaard, M. A., Brodt, S. E., & Whitener, E. M.(2002).Trust in the face of conflict:The role of managerial trustworthy Behavior and organizational context. *Journal of Applied Psychology*. 87(2), 312- 319.
- LaPorta, R ., Lopez – de-Silanes, F., Shleifer, A., & Vishny, R.W.(1997)." Trust in Large Organization". *American Economic Review*,87(2),333-338.
- Likert, R. (1967).*The Human Organization*. New York: McGraw- Hill.
- McGregor, D. M. (1961).*The Human Side of Enterprise*. New York:McGraw - Hill.
- Mishra, J., & Morrissey, M. A. (1990). Trust in employee/employer relationships: a survey of west Michigan managers. *Public Personnel Management*, 19, 443-486.
- Muchinsky, P. M. (2006). *Psychology Applied to Work* (8th Ed). Wads Worth, USA.
- Organ, D. W. (1988). Organizational citizenship behavior: The good soldier syndrome. Lexington, MA: Lexington Books.
- Pucetaite, R., & Lamsa, A. M. (2008). Developing organizational trust through advancement of employees' work ethic in a post-socialist context. *Journal of Business Ethics*, 82, 325-337.
- Rezaieyan, A, Rahimi, F.(2008). Investigating the effect of procedural justice on organizational citizenship behavior with regard to the role of organizational trust, No. 29, pp. 87-69
- Schnake, M. (1991). Organizational citizenship: A review, proposed model, and research agenda. *Human Relations* 44: 735–759.
- Shirazi, A, Khodaverdian, AL, Naeimi, M. (2012). The effect of organizational trust on the outbreak of organizational citizen's behavior (case study: gas company of Northern Khorasan), the research of change management, fourth year, NO 7.
- Tabrsa, Kh A, Hadizadeh, A, Koshtegar, A A. (2010). Presenting a model to explain the effective factors on organizational citizenship behavior, public management perspective, Number 1.
- Velez, p. (2006). Effects of Organizational Trust. A Dissertation Submitted to the Faculty of the Hahn Shool of Nursing and Health Science, University of San
- Yilmaz, A., & Atalay, C. (2009). A theoretical analyze on the concept of trust in organizational life. *European Journal of Social Sciences*, 8(2), 341-352.
- Zareie Matin, H, Alvani, S M, Jendeghi, KH R, Ahmadi, F. (2010). Presenting the comprehensive model of the affecting factors on the development of organizational citizenship behavior_ Case Study: National Iranian Oil Company, Tehran University School of Management, *Journal of Public Administration*, Vol. 2, No. 5, pp. 39 to 56