

## **Elucidating the Organizational Citizenship Behavior-Mediated Relationship Between Human Workforce Job Conscientiousness and Productivity among Aghajari Gas and Petroleum Exploitation Company Human Resources Management Staff**

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**Abstract:** The objective of the current study is to evaluate the relationship between job conscientiousness, organizational citizenship behavior and human workforce productivity. The study population of the present research is comprised of 110 people from Aghajari Gas and Petroleum Exploitation Company human resources management staff. The study sampling method has been based on simple randomized method and the total sample volume of the study reached to a number of 85 individual by taking advantage of Cochran formula. The data required for the present study have been collected by making use of a questionnaire the validity of which had been previously tested by some other researchers. To determine the credibility and the validity of the questionnaire there was made use of content validity test and Cronbach's alpha coefficient and the validity was calculated for the job conscientiousness, organizational citizenship behavior and human workforce productivity which were found to be 0.79, 0.80 and 0.86, respectively. In the present study, the structural relations model was applied to analyze the data. LISREL was used to analyze the data and to perform other calculations and analyses.

**Key words:** Job conscientiousness, organizational citizenship behavior, human workforce productivity, validity, Cronbach's alpha

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### **INTRODUCTION**

Struggling to improve and effectively and efficiently make use of various resources such as workforce, capital, material, energy and information is the goal which is craved for by all of the economical organizations and industrial manufacturing units and service-providing institutions managers. The existence of an appropriate organizational structure, efficient executive methods, sound equipments and tools and instruments, balanced work environment and more importantly the qualified and competent human workforce are among the necessities which should be focused on by the managers to achieve an optimum level of productivity. Nowadays, it comes as no surprise to anyone that productivity is of a great importance and it should be attended to according to the extensiveness of the competition levels, technological complexities and so forth (Mahdi and Parviz, 2001). If the organizations choose to develop and grow, there is a need to naturally focus more on factors such as productivity, particularly human workforce productivity as the most basic and most strategically fundamental resource in every society and the creation of a higher quality life

should be sought for in the light of emphasizing productivity. Human resources development is a tool devised to improve individuals' productivity at work environment. A country's human resources are considered as the most critical factor contributing to the country's development in every direction it is taken into consideration, whether it is regarded by the macro-level decision makers and legislators or by the managers and employees in a micro-level. Furthermore, the organizational managers have always been considerate of two types of behaviors in order for the organization under their supervision to be dynamically active and sublime: first come the generative behaviors which include the task and duty performance and the organizational citizenship performance and second are the counterproductive behaviors such as aggression, sabotage and seclusion behaviors. Regarding the importance of the psychological behaviors, Chester Bernard expresses that the employees should exhibit a sort of interest and desire for contribution to the accomplishment of the efforts in a system. Some of the researchers have suggested that in evaluating the staff performance the other criteria such as extra-role behaviors and counter productive behaviors should be

taken into consideration in the staff besides their task-performance valuation. Considering such a classification, the organizational citizenship behavior concept has been the focus of many of the studies and it is growing in importance on a daily basis. Also, if the human workforce performs its duties and tasks competently, the organizations not only will be able to offer their services more appropriately they will also be able to map plans and strategies for themselves and the society as well and through doing so, they will both achieve their goals and act more successfully in their relations with the environment and their customers and clients. One such fundamental strategy used by organizations to achieve their objectives is the institutionalization of the conscientiousness (Rahimi, 2012). Job conscientiousness is a factor which causes the creation of order at work and sense of duty in the employees. Paying attention to the conscientiousness concept in the organizations is equal to paying attention to human ethics and relations; since ethics create commitment and makes the individual sensitive to their tasks and occupational behavior with the best possible form and without requiring to be controlled by an external factor. The existence of job conscientiousness in an organization makes the productivity level enhanced, sustainable development actualized, cultural evolution happened in the individuals, management stabilized and economical order established. Moreover, job conscientiousness is a force which makes the individual committed to exhibit a series of target-oriented behaviors and it is also known to make different thoughts and tastes to be converged in order for a constructive collective behavior to be shaped. Thus, the present study aims at the investigation of the relationship between job conscientiousness, organizational citizenship behavior and human workforce productivity.

### **Review of literature**

**Job conscientiousness:** Job conscientiousness as a social-psychological phenomenon is regarded among the factors which play a considerable role in cultural development and observing it by the today's societies' individuals is one of the concerns in the developing countries (Saeedyan and Moradi, 2009). Job conscientiousness includes an internal feeling of commitment with the purpose of caring for and observing the requirements agreed upon in respect to one's job. To put it differently, job conscientiousness is intended to be taken as a cordial satisfaction, commitment and practical involvement in the responsibilities which are to be fulfilled by an individual, in such a manner that if the individual finds no supervisor or warden watching his or her

activities and conducts she will continue accomplishing his or her duties flawlessly. Job conscientiousness or having a sense of duty is one of the five personality characteristic considered for the individuals. Without it, many of the problems remain unresolved in the organization. The most important theme which should be taken into consideration regarding job conscientiousness is that job conscientiousness should be taken as a factor contributing to the correct accomplishment of the assignments. Moreover, correctly performing one's tasks can be influenced by various factors such as encouragement, punishment and external control and it can be influenced by job conscientiousness. In this way, it can be defined as "a factor which makes the internally-incited individual do his or her best to fulfill what has been assigned to him or her, in cases that s/he is not controlled or supervised by any external or physical agent". Among the job conscientiousness indicators one can point to performing a task faultlessly, accomplishing the job, unsupervised and uncontrolled job fulfillment, doing things on-time, time and cost-effectiveness, distinguishing useful from unprofitable jobs in favor of the organization, preferring organization over self and the feeling of attachment (Khani, 2002).

Many authors have written things regarding job conscientiousness, including Barrick and Mount (1991) who "regarded conscience as a personality characteristic which has been comprised of two superficial layers of being achievement-oriented and dependability". Job conscientiousness can be divided in to two dimensions of achievement orientation and dependability. Achievement orientation refers to the tendency reflected in the attempt for being successful and competent in doing one's job which incorporates setting high standards for one self's performance and carrying on to reach success. Reliability is suggestive of the degree to which one can be trustable. Such a characteristic includes honesty, self-discipline, respecting the law, being organized and having strong will (Barati *et al.*, 2010; Barrick and Mount, 1991).

**Factors effective on enhancing the job conscientiousness:** Numerous factors are effective on enhancing the job conscientiousness some of which are: social-cultural factors such as the use of cultural tools in the direction of promoting the work culture and effort and introducing the work culture in Islam. In other words, by social-cultural factors we mean the role played by the society and its culture in shaping and creating job conscientiousness in the individuals.

**Individual-personality factors:** Such being purposeful, paying enough attention to planning and correct

programming before initiating an activity, creativity and being capable of offering novel ideas and notions. In other words, individual-personality factors are intended to mean the role played by the individual's talent, capabilities and skills in job conscientiousness formation.

**Familial and nurturing factors:** Such as internalization of the job conscientiousness from the early childhood, creating a sense of duty, the choice of the toys and so forth, by family factors in job conscientiousness we mean the role taken by the parents and the family as a whole in forming the individual's job conscientiousness (Javad *et al.*, 2011).

Besides the aforementioned variables there are a great many of the other factors residing in the heart of the organization which may be of great influence on the organizational staff job conscientiousness (Baquer and Amir, 2004). One such a factor is the organizational atmosphere or climate (Janz and Prasarnphanich, 2003). The organizational climate can be appraised with the perceptions that the employees possess and the way they describe the internal organizational features. The studies show that job conscientiousness leads to high performance only when the psychological and organizational atmosphere are positive; since those high in job conscientiousness need to be highly organized and if the organizational atmosphere is negative or vague they will not be able to perform their tasks correctly.

According to the researchers, besides such factors motivational factors also play a part in the expansion of the job conscientiousness. The issue of motivation and the recognition of the various incitements in human beings and figuring out the ways these factors can be enhanced are among the critical discussions in organizational behavior management plus being a method of augmenting the job conscientiousness level (Astaraki, 2009). Thus, one of the most substantial factors playing a role in inciting the job conscientiousness is motivation. The motivational systems should be in a way that it can be able to create in the individual the expectation to receive various rewards through valuating and giving value to his or her performance and also to be able to create the possibility of appropriate punishment and reward proportionate to the individual's performance. Based on the studies performed by Shafi' Poor Motlagh instructional and educational planning for the staff is another effective factor on job conscientiousness. Therefore, implementation of the educational programs based on the vocational needs and for the purpose of staff sublimation to become satisfied with their jobs can be effective on the staff conscientiousness. Also, another factor effective on the job conscientiousness is the

management performance in evaluating the staff performance based on specified and predetermined methods and their punishment and encouragement accordingly. The inexact and unjust valuation of the staff performance is a very critical factor in discouraging the industrious staff and the encouraging the staff to dodge work and be indifferent (Astaraki, 2009).

**Organizational citizenship behavior:** Organizational citizenship behavior was first introduced to the world of science by Bateman and Organ (1983). Such conducts which usually take place in the work environment have been defined as "the collection of voluntary and optional behaviors which are not envisaged as part of the individual's formal duties but the individual tries doing them and they will effectively improve the organizational responsibilities and roles. For instance, a worker may not need to work overtime and to stay late at work but stays in the organization longer than the formal and regular working hours and help the others to improve the current affair of the organization and facilitate the organizational work flow (Cropanzano and Baron, 1991). The organizational citizenship behavior is of a great importance in the creation of the roles and the evaluations (Podsakoff *et al.*, 1996). Organizational citizenship behavior concept typically refers to the extra-role behaviors exhibited by the staff which can cause an increase in the organizational efficiency and productivity (Bateman and Organ, 1983; Bove *et al.*, 2009) and facilitate organizational objectives fulfillment and enhance the organizational performance (Mardani and Heydari, 2009). Generally speaking, the set of voluntary and arbitrary behaviors which are not directly rewarded by the formal system of the organization but bring about an increase in the organizational performance are called organizational citizenship behavior (Belogolovsky and Somech, 2010; Organ, 1988). Dyne and Graham (1994) recognize the wide and extensive concept of the extra-role behaviors as those behaviors which are useful for the organization and can cause increase profit in the organization and that are optional and extra to the role expected from the employees. Therefore, organizational citizenship behavior functions are comprised of extra-role behaviors and socially agreed-upon behaviors, both individually and in group. Moreover, organizational citizenship behavior is an organizational behavior which implies basic and fundamental cooperation and movement which are not directly pointed out in job descriptions (Korkmaz and Arpaci, 2009).

Some scholars (Organ, 1988; Katz and Kahan, 1966) emphasize that the organizational citizenship behaviors are important to organization's formal job descriptions but

they are not to be used as a scale and norm by the organization for the organizational objectives and organizational accomplishment. This set of behaviors are considered as the important source of progress in the organizational change processes (Rioux and Peer, 2001) and cause the organizational objectives to enhance (Belogovsky and Someck, 2010). Besides the organizational citizenship behavior, other terms such as extra-role behaviors (Burney *et al.*, 2009) and background performance (Romero *et al.*, 2009) have been used to refer to the organizational citizenship behaviors. In short, the social interaction theory is the main premise for expounding the organizational citizenship behavior (Chiaburu and Byrne, 2009).

Organizational citizenship behavior is vital to the organization's survival. According to the perspective of theoreticians including organ, organizational citizenship behavior can maximize efficiency and enhance the effective organizational performance. Citizenship behaviors ordinarily are of two general types: they cannot be directly enhanced (for specimen, there is no need for them to be technically part of the individuals' jobs) and also they result from extraordinary and particular efforts expected by the organizations from the employees for achieving their objectives. Organizational citizenship behavior has been described as those behaviors which are beyond the task-performance and technical skills; to put it differently, they are consisted of the support, confirmation and protection of the organizational environment, texture and psychological and social conditions which act as the original and substantial facilitators of the smooth accomplishment of the tasks and duties. Organizational citizenship behavior is the gold standard for the correct behavior which specifies the importance and sensitivity the of the organization to the ethical principles, fairness and justice and individuals' equalities (Bolino *et al.*, 2002).

#### **Organizational citizenship behaviors typology**

**Obedience:** This term describes those behaviors the necessity and the favorability of which have been identified and they are accepted in a reasonable structure of the order and discipline. The organizational obedience indicators include behaviors such as respecting the organizational codes, perfectly accomplishing the duties and responsibilities and fulfilling the tasks according to the organizational resources.

**Loyalty:** Organizational loyalty differs from the loyalty to one's self, others and the units and departments extant in an organization and it is expressive of the rate the staff

members are ready to sacrifice and devote themselves to the best interest of the organization and protect and support the organization.

**Participation:** This term appears with getting involved in the organizational affairs, among which one can refer to the attendance in the sessions, sharing one's own beliefs and opinions with the others and being aware of the organizational affairs (Bienstock *et al.*, 2003).

**Organizational citizenship dimensions:** Organ states the five dimensions of the organizational citizenship as:

**Sense of duty:** This dimension incorporates various examples and the organization members manifest special behaviors which is beyond the least level of the task and responsibility they are required to perform (Organ, 1988).

**Altruism:** This second dimension refers to the profitable and useful behaviors such as creation of sincerity, empathy and sympathy among the peers which sometimes contributes directly or indirectly to the staff members with work problems (Organ, 1988).

**Civic virtue:** This third dimension includes behaviors such as attending extra-program activities, exactly when there is no need to be present in such programs, supporting the development and the changes made by the organizational managers and tendency to study books, journals and increasing one's general information and caring for installing posters and announcements in the organization to the other's awareness. Based on this, Graham believes that a good organizational citizen should not only be aware of the daily discussions going on in the organization but she also should express and exchange ideas and participate actively in resolving the organizational problems.

**Sportsmanship:** Sportsmanship or tolerance is the fourth dimension of the citizenship behavior which refers to the patience in unfavorable and inauspicious situations, without complaining, dissatisfaction and expressing displeasure.

**Courtesy and veneration:** The last dimension of the organizational citizenship behavior is courtesy and reverence. This dimension is suggestive of the way the individuals treat their coworkers, superiors and addressees. The individuals who respect the others and venerate them are said to possess excellent citizenship behaviors. The scale proposed by Podsakoff *et al.* (1996) includes the following measures:

**Altruism:** Are helping behaviors which are carried out to assist certain other employees in respect to the specific organizational tasks and duties (Shekarkan *et al.*, 2001; Pearson *et al.*, 2000).

**Sense of duty:** Are among the behaviors which guide the individual in conducting his or her responsibilities in levels higher than the expected assigned tasks and duties.

**Courtesy:** Are kind and polite behaviors which prevent work issues and problems from happening.

**Sportsmanship:** Are those manly behaviors which prevent from much of the complaints and displeasures at work.

**Civic virtue:** Are those behaviors which are indicative of the individual's participation in organizational-activities.

**Human workforce productivity:** From the managerial perspective, productivity is the success rate to which a system makes optimum use of the resources. In fact, productivity includes both the concepts of efficiency and effectiveness and in case productivity is defined in a way to include both of such concepts it will be different from concepts such as output, production, profitability, production capacity, performance, cost reduction or extra-work. The objective in productivity is that the human should reach to this opinion or belief that she should be able to perform his or her duties and works better than yesterday and for this to be actualized the person should do his or her best. Productivity is such a concept which is used to indicate the input to output ratio of an individual. It is said in economics that every factor effective on the increase in production other than capital and workforce is thought of as productivity and/or it is interpreted "as the amount of goods or services produced in comparison to the units of energy or work spent without the quality being reduced" (Rahimikya *et al.*, 2011). In other words, productivity is the attainment of the maximum possible profit out of optimum exploitation and use of human workforce potential, talents and skills, land, machinery, money, equipment, time, space and so forth in order for the social welfare to be enhanced. Employees are the valuable assets of every organization. Achieving the organizational objectives necessitates correct management of such expensive and precious resources. Workforce is an important and effective factor in productivity; since if the individual is motivated and enabled she can employ other resources to the best of his

or her interest and in a favorable manner and actualizes various types of productivity. Human workforce productivity is intended to mean the maximization of the human resources use in a scientific way to reduce the costs and keep the staff, managers and customers satisfied and it is also used to mean maximum proper use of the human workforce to move in the direction of the organizational objectives accomplishment in the shortest time and with the least cost (Sarrafizadeh and Alipoor, 2009). Furthermore, it means obtaining the maximum possible profit from the workforce, human workforce potential, talent and skills, land, machinery, money, equipment, time and space. There are various definitions posited for productivity, some of which have been provided as:

- Productivity is defined as a fraction which is obtained from dividing product value or rate by the rate and value of one of the production factors. In this regard, subject matters such as capital productivity, raw material productivity and workforce productivity can be put forth (Organization of European Economic Cooperation, OEEC)
- Productivity is the output to one of the production factors ratio (or to the inputs such as land, capital, workforce and management) (International Labor Organization, ILO)
- Productivity includes efficiency and effectiveness and also it is defined as a collection of processed results with the highest performance level

**Productivity measurement indices:** Productivity can be commonly expressed as one of the below definitions:

**Partial productivity:** It is the production or output to a single factor input ratio, for instance workforce productivity, capital productivity and material productivity. Workforce productivity is the most common productivity index which is obtained via dividing the product value or the value-added by the number of the employees working in production line or by the sum of the man/hour labor dedicated to every production unit.

Total factor productivity is the net product or value-added to the sum of the capital and workforce consumed input values ratio. The total factor productivity indices can be obtained via the following equation:

$$TEP = \frac{VA}{(L.W) + (K.r)}$$

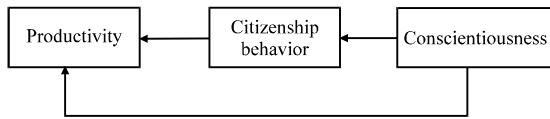


Fig. 1: Conceptual model

Where:

VA = Produced value-added

L = Number of the workforce

W = Wage level

K = Employed capital

r = Capital interest

**Multifactor productivity:** It measures the total product value or the value added per unit of combined inputs.

**Total productivity:** It is obtained via dividing the entire produced goods by the value of the entire consumed inputs.

**Comprehensive total productivity:** It is the result of multiplying the total productivity index by the intangible factors index.

Kopelman (1986) believes that the human workforce productivity is subject to four factors which are individual factors, organizational factors, occupational factors and environmental factors.

Based on the present study literature and the definitions offered in respect to the study variables and their components, the preliminary conceptual model of the study is designed in order to elaborate the relationships existing between the variables and the extant relationships between the studied elements and components will be surveyed through the study hypotheses tests. In the following conceptual model the relationships between the study variables have been taken into consideration (Fig. 1).

#### Study hypotheses:

- There is a significant relationship between conscientiousness and organizational citizenship behavior
- There is a significant relationship between organizational citizenship behavior and human workforce productivity
- There is a significant relationship between conscientiousness and human workforce productivity
- There is a statistically significant relationship between conscientiousness and human workforce productivity by the intermediation of organizational citizenship behavior

## MATERIALS AND METHODS

The present is a causative-applied research according to the objective, since based on the study population characteristics the current study has been conducted in a specified time interval and it has been taken place in a predefined spatial scope and the researcher is seeking to generalize the obtained results to the other units by taking advantage of an applied method. The data required for the hypotheses test has been done via distributing questionnaires. The present is if the correlation matrix or covariance in which structural equations modeling has been used. The study population in the present study includes all of the human resources management staff members working in Aghajari Gas and Petroleum Exploitation Company. The current study sampling method has been based on simple randomized method and there has been made use of Cochran formula which indicated the total sample volume as equal to 85 individuals. The required data for the present study have been collected by the use of a questionnaire the validity of which has been previously verified and confirmed. To determine the validity and credibility of the questionnaire there has been made use of content validity test and Cronbach's alpha method and the Costa and McKerra job conscientiousness reliability coefficient was obtained as equal to 0.79, Organ (1988) organizational citizenship behavior reliability coefficient was found as equal to 0.80 and Heresy and Goldsmith human resources productivity questionnaire reliability coefficient was calculated to be 0.86. In the present study the structural relations model has been used to analyze the data. LISREL was taken advantage of to analyze the data and to test the hypotheses and other statistical tests, as well. Therefore, the measurement model was obtained in the present study after plotting the study analytical model based on the data by the use of Path Diagram through running a program called Perlis which is part of the LISREL Software. The study hypotheses were verified and evaluated by making use of  $\beta$ -coefficients and t-test. It has to be mentioned also that the model fitness indices were automatically calculated through the implementation of the Perlis program.

## RESULTS AND DISCUSSION

**Data analysis:** Firstly, the Chi-square index was calculated for the null hypothesis test suggesting that the study model can be accounted for by the study population statistical results. Statistically significant Chi-square implies that the null hypothesis should be rejected and this is indicative of the absence of the model in the study

Table 1: The study model fitness indices

| Fitness index      | Standard values   | Estimated values |
|--------------------|---|------------------|
| Degrees of freedom | -   | 461              |
| Chi-square         | Being dependent on the study sample volume it is not a good criterion | 461              |
| RMSEA              | 0.05  | 1137.5           |
| NFI                | 0.9   | 0.086            |
| NNFI               | 0.9   | 0.91             |
| CFI                | 0.9   | 0.94             |
| RMR                | 0.05  | 0.95             |
| GFI                | 0.9   | 0.061            |
| AGFI               | 0.9   | 0.74             |

population. GFI and AGFI (LISREL measures) are subject to the study sample volume and they can be of higher values for the models which have been weakly configured.

NFI is the normalized fitness index, if it gives a value ranging from 0.90-0.95 it is regarded as acceptable and values higher than 0.95 are excellent. NNFI: is the not n-normalized fitness index and if it is calculated to be larger than 0.1 it will be considered as equal to 0.1. RMSEA: it is the root mean square error of approximation which is to models and/or 0 and smaller. The models, with a RMSEA equal to or larger than 0.1 are indicative of weak fitness. GFI as well is indicative of a good fitness of the model when approaching to 0.1.

As it is clear from Table 1, the adjustment rate indices or the goodness of fitness indices are all in a relatively acceptable level. The two following diagrams are indicative of the overall models outputted from LISREL Software which simultaneously include both the structural model and the measurement model and these models are going to be analyzed and investigated in detail in the following study (Fig. 2 and 3).

## Hypotheses tests

### First hypothesis

**Researcher's claim:** There is a significant relationship between job conscientiousness and organizational citizenship behavior.

- $H_0$ : there is not a significant relationship between job conscientiousness and organizational citizenship behavior
- $H_1$ : there is a significant relationship between job conscientiousness and organizational citizenship behavior

According to Table 2, the rate of the path coefficient between conscientiousness and organizational citizenship behavior is equal to 0.68 and the amount of the related t-test is in the range  $6.80 > 1.96$  and based on t-test with the critical value of 0.05 it can be stated that the null hypothesis can be rejected in 95% confidence level.

Therefore, the researcher's first claim has been confirmed and it can be said with a 95% confidence that there is a significant relationship between conscientiousness and organizational citizenship behavior.

**Second hypothesis:** There is a significant relationship between organizational citizenship behavior and human resources productivity.

- $H_0$ : there is not a significant relationship between organizational citizenship behavior and human resources productivity
- $H_1$ : there is a significant relationship between organizational citizenship behavior and human resources productivity

According to Table 3, the amount of the path coefficients between organizational citizenship behavior and the human resources productivity is 0.32 and the amount of related t-value is in the range  $3.61 > 1.96$  and based on t-test with a critical value of 0.05 the null hypothesis is rejected in 95% confidence level. Therefore, the researcher's second claim has been confirmed and with a confidence level of 95% it can be said that there is a significant relationship between organizational citizenship behavior and human resources productivity.

**Third hypothesis:** There is a significant relationship between conscientiousness and human resources productivity.

- $H_0$ : there is not a significant relationship between conscientiousness and human resources productivity
- $H_1$ : there is a significant relationship between conscientiousness and human resources productivity

According to Table 4, the amount of the conscientiousness and human resources productivity path coefficient is equal to 0.32 and the related t-value is in the range  $4.17 > 1.96$  and based on t-test with a critical value of 0.05 the null hypothesis can be rejected in 95% confidence level, therefore the third claim made by the researcher has been confirmed and it can be said with a 95% confidence that there is a statistically significant relationship between conscientiousness and human resources productivity.

**Fourth hypothesis:** There is a significant relationship between conscientiousness and human resources productivity through an intermediation role played by organizational citizenship behavior.

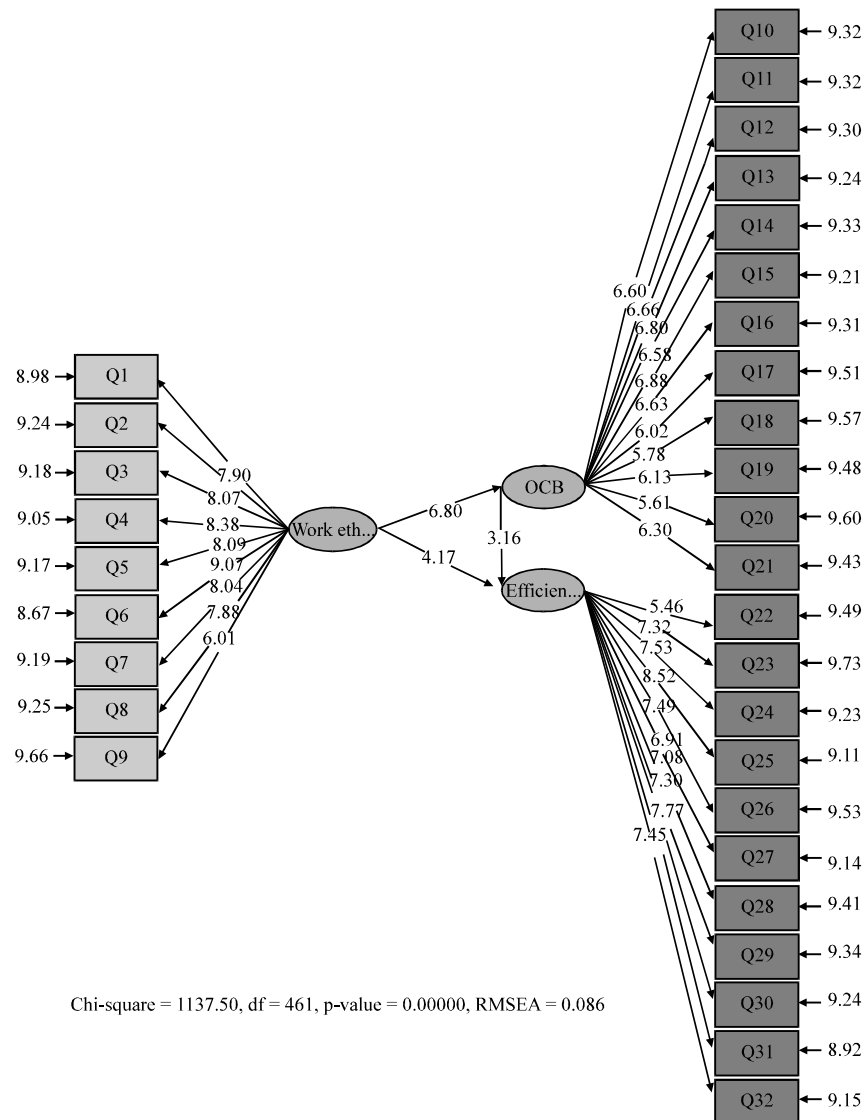


Fig. 2: The basic model along with its path coefficients

Table 2: The standard coefficients and t-value results

| Predictor variable    | Predicted variable                  | Estimated coefficient | t-value |
|-----------------------|-------------------------------------|-----------------------|---------|
| Job conscientiousness | Organizational citizenship behavior | 0.68                  | 6.86    |

Table 3: Standard coefficients results and t-value

| Predictor variable                  | Predicted variable           | Estimated coefficient | t-value |
|-------------------------------------|------------------------------|-----------------------|---------|
| Organizational citizenship behavior | Human resources productivity | 0.32                  | 3.61    |

- $H_0$ : there is not a significant relationship between conscientiousness and human resources productivity through an intermediation role played by organizational citizenship behavior

- $H_1$ : there is a significant relationship between conscientiousness and human resources productivity through an intermediation role played by organizational citizenship behavior

According to Table 5, the indirect relationship between job conscientiousness and human resources productivity intermediated by the organizational citizenship behavior was evaluated through the direct effect exerted by the job conscientiousness on the organizational citizenship behavior and then the organizational citizenship behavior direct effect on the human resources productivity was investigated. If the direct effects are found to be confirmed and statistically significant then the indirect effect can be confirmed as

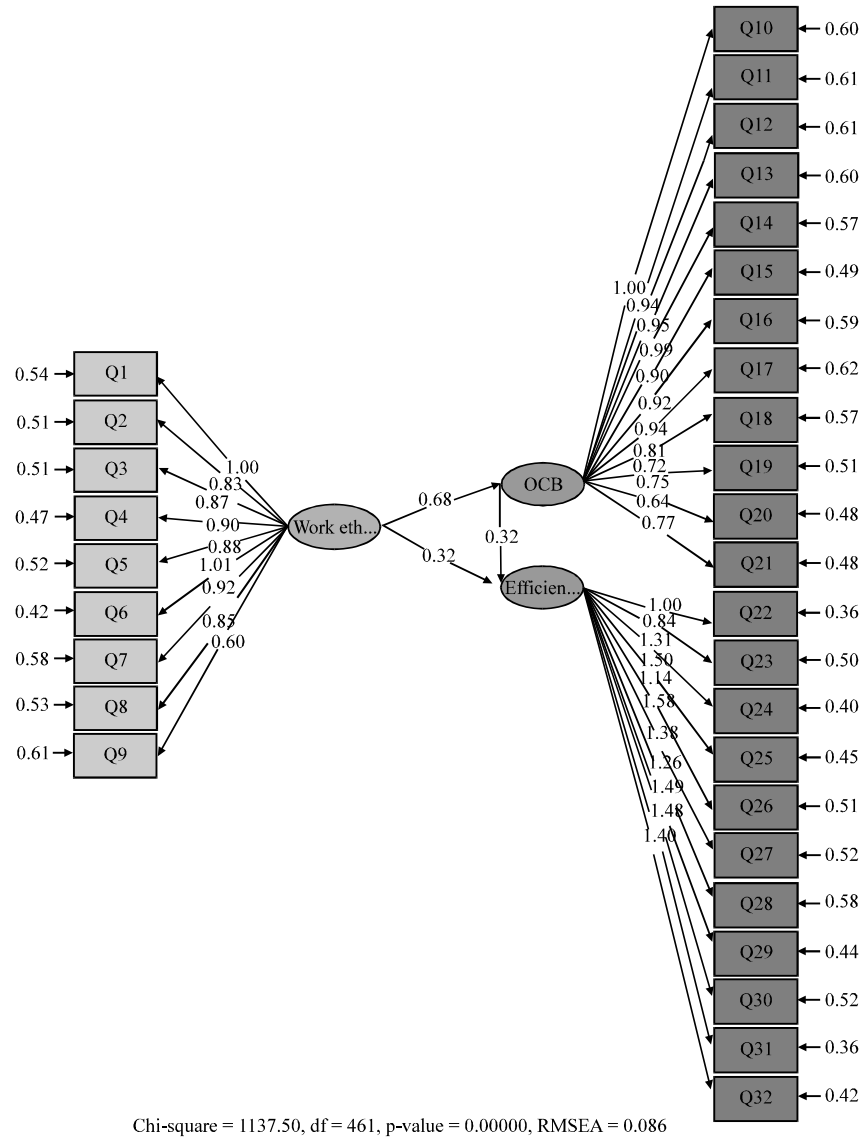


Fig. 3: The basic model along with t-values

Table 4: The standard coefficients and t-value results

| Predictor variable | Predicted variable           | Estimated coefficient | t-value |
|--------------------|------------------------------|-----------------------|---------|
| Conscientiousness  | Human resources productivity | 0.32                  | 4.17    |

Table 5: The standard coefficients and t-value results

| Relationship | Variables  | Estimated coefficients | t-value     |
|--------------|--|------------------------|-------------|
| Direct       | Conscientiousness organizational citizenship behavior            | 0.68                   | Significant |
|              | Organizational citizenship behavior human resources productivity | 0.32                   | Significant |
| Indirect     | Conscientiousness-human resources productivity                   | 0.68×0.32              | Significant |

well. According to Table 5, the indirect effect exerted by conscientiousness and human resources productivity intermediated by the organizational citizenship behavior was equal to 0.21.

**Study findings and results analysis:** The results of the first hypothesis indicated that the path coefficient amount between job conscientiousness and organizational citizenship behavior was equal to 0.68 and the amount of the related t-value was  $6.80 > 1.96$  and based on t-test with the critical value of 0.05 the null hypothesis can be rejected in 95%, therefore the first claim proposed by the researcher has been confirmed and it can be said with a

confidence of 95% that there exists a statistically significant relationship between job conscientiousness and organizational citizenship behavior.

The results of the second hypothesis indicated that the amount of the path coefficient between organizational citizenship behavior and human resources productivity is equal to 0.32 and the amount of the related t-value is  $3.61 > 1.96$  and based on the t-test with the critical value of 0.05 the null hypothesis can be rejected in 95% confidence level, therefore the second hypothesis has been confirmed and with a confidence level of 95% it can be said that there is a significant relationship between organizational citizenship behavior and human resources productivity.

The results of the third hypothesis indicated that the amount of path coefficient between job conscientiousness and human resources productivity is equal to 0.32 and the amount of related t-value is  $4.17 > 1.96$  and based on the t-test with a critical value of 0.05 the null hypothesis is rejected in 95% confidence level. Therefore, the third claim made by the researcher can be confirmed and with a confidence level of 95% it can be stated that there is a significant relationship between job conscientiousness and human resources productivity.

The results of the fourth hypothesis were surveyed according to the data presented in the table. To survey the intermediation role played by organizational citizenship behavior between job conscientiousness and human resources productivity, if the direct effect exerted by the job conscientiousness on the organizational citizenship behavior and then the direct effect of the organizational citizenship behavior on the human resources productivity can be confirmed the intermediary role played by the organizational citizenship behavior between job conscientiousness and human resources productivity can be confirmed as well. The path coefficient between the job conscientiousness on the organizational citizenship behavior was 0.68, t-value was 6.80, error level was 0.05 so the studied variable is statistically significant in 95% confidence level and the path coefficient between organizational citizenship behavior and human resources productivity was 0.32 with a t-value of 3.61 and the error level of 0.05, so it can be claimed that the studied variable is statistically significant in a confidence level of 95%. Thus, the intermediary role played by organizational citizenship behavior between job conscientiousness and human resources productivity was  $0.68 \times 0.32 = 0.21$ , so the claim made by the current study researcher can be confirmed accordingly.

## CONCLUSION

The results indicated that there exists a statistically significant relationship between the variables of the study including job conscientiousness, organizational citizenship behavior and human workforce productivity and the intermediary role played by organizational citizenship behavior in the relationship between job conscientiousness and human workforce productivity was also confirmed.

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