

## A study on the effect of workaholism on human resource productivity: A case study of managers of East Azerbaijan Water and Waste Water Company

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### ABSTRACT

These days, work is considered as an integral part of the human life and many people spend significant amount of their time in different organizations and departments to earn income. Unlimited organizational pressures and demands facing people have made them allocate much of their time on working. Because of these pressures, people are becoming increasingly subject to workaholism. On the other hand, leaders and managers are trying to improve performance and activities of their respective organizations. Therefore, different concepts such as productivity are turned to the major subject of the management and organizational studies within the same organizations. Note that today changeable and competitive environment and the available limited resources and facilities have turned the concept of productivity into one of the most important preoccupations of management within modern organizations. In view of the limited studies and information available in Iran on workaholism and its adverse consequences, the present research intends to investigate and identify the impacts of workaholism components on human resource productivity. In the present, research the descriptive-survey research method is used and where statistical community includes 130 managers of the East Azerbaijan Water and Waste Company. Using the correlation coefficient and linear regression technique the research tries to investigate the relationships between the concepts of workaholism and human resource productivity and demonstrates how they are applied in above-mentioned community.

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## 1. Introduction

Since his creation human being has always been trying to make maximum use of the available resources given the time and space constraints. The human being has never enjoyed unlimited resources and given the growing population and limited production capacity even in the industrialized states optimum use of the existing capacities is the best way to promote production (services and goods) and accordingly welfare within the society (Moghli & Azizi, 2011). Productivity as a vital

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element for every state and organization prepares the ground for further economic growth. It improves gross domestic product and competitiveness leading to quality and quantity promotion of life. In fact, productivity has always been attended to and discussed in all economic and political systems since the emergence of various societies and it has always been one of the primary objectives of all human beings.

On the other hand, work is a pressing necessity for living and the human being needs to work due to outer or inner reasons. Attending the work environments and spending a significant amount of the day at the workplace have created motivations for many people to voluntarily and purposely devote a significant amount of on their job. Therefore, it is very likely for these people to suffer from physical and/or mental problems because of working conditions. The approach adopted by these people is called workaholism and the people are called as workaholics. Workaholism is considered as new subject in the field of human resource management and there are not many studies carried out in this respect. According to the official report of the Asian Productivity Organization (APO), human resource productivity does not contribute in the Iranian gross national product, sufficiently. This share is 10% in Iran while it is 42% in India, 47% in China, 43% in South Korea, 53% in Japan and 46% in Bangladesh. These figures show that no practical measure has been adopted in Iran for proper implementation of the labor for promotion of the national gross domestic product (Wilkes et al., 2011). On the other hand, based on the comparison made on the productivity growth in some Asian states Iran maintains the lowest productivity growth rate, which is about 7% and the highest rates belong to South Korea and China (Moghli & Azizi, 2001). In addition, the productivity indicator of total production factors that is indicative of the total performance of economies on the optimum use of the production resources for Iran was found close to zero (Wilkes et al., 2011).

The proposed study of this paper examines the workaholism status and its effects on human resource productivity among managers of East Azerbaijan Water and Waste Water Company.

## **2. Research theoretical framework**

In the present section, employing the existing theories and viewpoints, the researchers attempt to introduce concepts of workaholism and human resource productivity and the related dimensions. On the same basis, after defining the variables and their fields of study in the final part, background and conceptual model of the research have been discussed.

### *2.1 Workaholism*

Work includes major part of human life. Work meets physical and psychological needs of human beings. At the same time, the ups and downs of the business world inflict great pressures upon businessmen in various fields. Today, organizations are experiencing implementation of downsizing policies and restructuring programs to increase expectations of workers and increase their working hours (Schaufeli et al., 2009).

Oates (1971) first used the word “workaholism” where the word considers a person who has the uncontrolled feeling that he is enforced to work. Although “workaholism” has presently been used by the relevant experts but very limited experimental researches have been carried out for improvement and promotion of people understanding of such a phenomenon. Therefore, there is a little consensus about its meaning and dimensions, which is the same in Iran.

According to Snir (2008), workaholism is the individual’s continuous and considerable dedication of time to work-related activities and thoughts and it is measured as time invested in work or cognitive considerable allocation of time to work related activities. In other definition, workaholism is defined as obsessive dedication of time to work related activities and thoughts. The other definition is devoted to a personal reluctance to disengage from work evidenced by the tendency to work. Note that workaholism is not the same as hard working because of the following reasons:

1. Hard workers normally consider their work as an obligatory task, which can meet their physiological requirements while a workaholic is a person who believes his workplace as a safe haven wherein he/she can be free from unwanted feelings and obligations.
2. Hard workers know how to split their times between their work and their family and friends as well as leisure activities but a workaholic person dedicates the highest priority to his/her work since the work requirements do not let him/her allocate sufficient time to his/her family and friends.
3. Physiologically, workaholic people are reporting release of adrenaline in their bodies to deal with the work necessities and hard working conditions but hard working people do not have such a feeling.
4. Hard workers are able to control their desires to work but workaholic ones cannot do this. A workaholic person is always thinking of his/her work even when he/she is playing golf or he/she is watching a theatre in the school of his/her child.

Views of experts on workaholism vary because of various reasons and while some are in favor of such a phenomenon, some are not in its favor rejecting this phenomenon (Snir, 2004). Some people classified three patterns for workaholism including compulsive-dependent, perfectionist, and achievement-oriented and stipulated that a compulsive-dependent workaholics could be suffering from physical and mental problems because of their work. It is likely that compulsive-dependent workaholism is positively associated with anxiety, stress, physical and psychological problems; and negatively associated with job performance, and job and life satisfaction. Perfectionist workaholics are facing some serious physical and mental problems and suffering from the difficulties including conflict with their co-workers and inefficient implementation of time at work. The perfectionist workaholism is normally positively associated with levels of stress, physical and psychological problems, and hostile interpersonal relationships. Finally, achievement-oriented workaholics are considered as competitive personalities and they suffer from low life and job satisfaction, mental and physical problems, low job performance and voluntary turnover and absenteeism. Spence and Robbins (1992), based on an extensive literature review, distilled three workaholism items and developed reliable measures of each, which are as follows,

1. Work involvement,
2. Feeling driven to work because of inner needs not external demands,
3. Work enjoyment.

In workaholics, there is high degree of work involvement people are very desirous and feeling driven to their works (Piotrowski & Vodanovich, 2008). Therefore, it can be admitted that workaholism may be followed by both positive and constructive consequences such as promotion of organizational citizenship behaviors and negative consequences such as burnout among employee. Therefore, all managers of organizations are normally required to manage such a phenomenon in a desirable way in order to avoid its negative consequences and promote its positive ones.

## 2.2 Productivity

The history of productivity goes back to over 230 years and there have been various activities on productivity seriously (Taheri, 2007).

Today, the increase of productivity has been turned into one of the major preoccupations of all managers to that extent that many countries now are making their planning based on the increase of productivity factor, which has resulted to the increase of productivity in the entire world up to 45 folds (Khaki, 2004). The word "productivity" means the ability to produce, generate or yield (Moghli & Azizi, 2011). Table 1 summarizes some of the mostly known definitions of productivity,

**Table 1**  
Definitions for “productivity”

Definition	Source
Changes taking place in the output of the production due to use of resources	Asenso-Okyere et al., 2011
Perpetual ratio between output and input	Forcheh & Fako, 2007
Clear ratio of the output relating to the production operation	Cuthbertson & Piotrowicz, 2011
Total productivity factors that is the ratio of tangible output to tangible input	Soltani, 2008
Productivity means how much the organization utilizes the production resources in return for a certain amount of product	Anyaegbunam et al., 2010
To maximize use of sources, manpower and other measures based on scientific methods in order to reduce costs and meet desires of the staff, managers and consumers	Aghazadeh, 2007
Productivity is a culture, a wise approach towards work and life that intends to make the activities smarter for having a better and more active life	Moghli & Azizi, 2011
Productivity is to maximize use of resources, manpower, facilities, etc. in scientific way and to reduce production costs, develop markets, creation more jobs, to increase real salaries and to improve living standards in favor of the staff, management and all consumers.	Gibson, 2011; Douglas, & Morris, 2006
Relation between output of a production system and with input resources used up in process of production (land, capital, labor force, etc.)	Gibson, 2011; Beaudreau, 2009
Manpower productivity is the maximum use of manpower in favor of objectives of organization in the shortest possible period and with the least costs	Jajri & Ismail, 2010
Ratio of the production output to the resources consumed unit that is compared and used with a similar ratio of the base period	Lin, 2010; Korminia et al., 2011

Experts have mentioned various levels for productivity including individual level, working group level, organizational level, field level (trade, service, industrial and agricultural), economic level, global level, etc. (Moghli & Azizi, 2011). Although different levels have been mentioned for productivity but it goes without saying that among all these levels individual level is considered as the based level for all other levels and accordingly more productivity at the individual level gives rise to more productivity at all other levels (Abtahi & Kazemi, 2004). Staff within an organization, all individuals working in organization including workers, employers, etc., is considered as the major factor positively influencing productivity within every organization (Moghli & Azizi, 2011). In view of the fact that talented labor is the most valuable asset and wealth for every state (Korminiya, 2011), the present research considered human resource productivity as the major subject of its discussion. There have been extensive studies for identifying human resource productivity dimensions. In terms of the dimensions of human resources productivity, vast amount of researches and surveys have been carried out. According to Wilkes et al. (2011), human resource productivity consists of seven dimensions as follows,

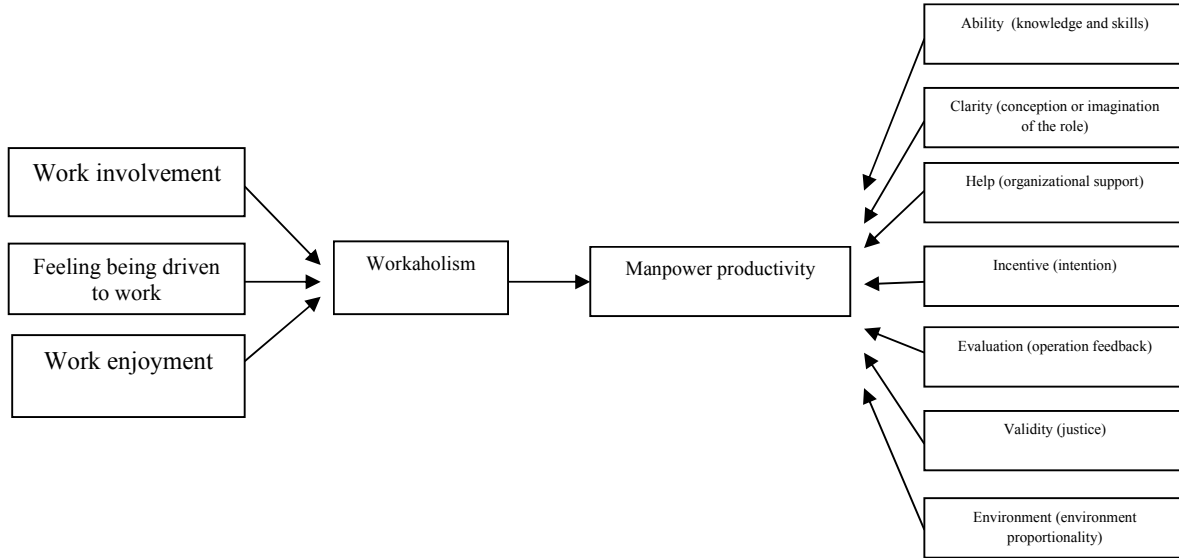
A- Ability (knowledge and skills), C- Clarity (conception or imagination of the role), H- Help (organizational support), I- Incentive (intention), E- Evaluation (operation feedback), V- Validity (justice), E- Environment (environment proportionality).

Combining all the seven letters makes up the word ACHIEVE introduced by Beaudreau (2009). The dimensions of this model are defined below:

- Ability (knowledge and skills): It refers to the knowledge and skills of the followers in performing a task successfully, which includes the knowledge associated with the task, experience related to the task and merits related to the task.
- Clarity (conception or imagination of the role): It corresponds to the conception and acceptance of the work method, place and the way to deal with the job. This conception requires clarity in objectives and distinct way in reaching them.
- Help (organizational support): Some of the organizational supports incorporate human resources, budget, facilities, accessibility of products and the quality.
- Incentive (intention): People by nature are inclined to follow those tasks end up in rewards and refrain from other tasks. Rewards can be palpable or impalpable.
- Evaluation (operation feedback): Evaluation is considered to be the daily actions feedback and occasional assessments. If people are not aware of their shortcomings, improvement of their actions cannot be expected.

- Validity (justice): It is referred to proportionate and realistic decisions made by the manager for the human resources.
- Environment (environment proportionality): It is referred to those foreign agents that could influence actions even when having necessary capability, clarity, support, and incentive. The key environment components are competition, changes in market conditions, government regulations, preparations and ... (Bordbar et al., 2009).

The subject of the present research was found to be new among the researches made inside and outside the country. Therefore, recognition of such an effect and relationship was set as the prime target of the research with “Effect of Workaholism on Human Resource Productivity, Case study: Managers of East Azerbaijan Water and Waste Water Company” as its title.



**Fig.1.** Research conceptual model

In the preset research, there is one main hypothesis and three secondary hypotheses. The main hypothesis set as “workaholism affects human resource productivity”. Based on the main hypothesis three secondary hypotheses are set as follows:

- 1- Work involvement affects human resource productivity,
- 2- Feeling being driven to work affects human resource productivity,
- 3- Work enjoyment affects human resource productivity.

### 3. Methodology

Given to its prime objective, the research is applied and for collecting the required data, the descriptive-survey method was employed. As it was already mentioned the “Hersey and Gold Smith” Model, due to its universality and attention to recognition of components which are effective in providing human resource productivity has been utilized as the significant ground for the exploration of the dimensions of human resource productivity in this proposal. On the other hand the “Spence & Robbinse model” was used for assessment of workaholism due to its acceptable validity. Thematic scope of the present research set as the effect of Workaholism on human resource productivity among managers of East Azerbaijan Water and Waste Water Company. The statistical community included managers of the above-mentioned company consisting of 130 individuals. Using binomial sample size formula for finite communities the sample size was set for 97 individuals based on the following,

$$n = \frac{N \times z_{\alpha/2}^2 \times p \times q}{\varepsilon^2 \times (N - 1) + z_{\alpha/2}^2 \times p \times q}, \quad (1)$$

where  $N$  is the population size,  $p=1-q$  represents the yes/no categories,  $z_{\alpha/2}$  is CDF of normal distribution and finally  $\varepsilon$  is the error term. Since we have  $p=0.5$ ,  $z_{\alpha/2}=1.96$  and  $N=130$ , the number of sample size is calculated as  $n=97$ . Given the level of the research (managerial level) and visible difference between members of the statistical community, for sampling the cluster sampling method was used. The research conducted in 2013 and its main data collection tool was the questionnaire distributed among the statistical community members. Out of 97 questionnaires distributed 89 returned. Validity of the questionnaire was investigated and confirmed by use of the standardized test. The reliability of the questionnaire was calculated at 0.873 based on the Cronbach alpha method. The data was analyzed by use of linear regression analysis model (SPSS software) and the correlation coefficient technique.

#### 4. Data analysis

For analysis of the collected data different kinds of statistical sampling analyses and tools were utilized. For analysis of the research hypotheses, the inferential analysis was employed. In this part and with the purpose of investigating secondary hypotheses of the research and impact of independent variable dimensions upon the dependent variable the multiple linear regression analysis and SPSS software were utilized. Table2 displays outcome of the analysis.

**Table 2**

Result of coefficients equations test and linear regression of the secondary hypothesis

Statistical hypothesis	Variables	T0	T1	Linear regression equation
1 <sup>st</sup> secondary hypothesis	Significant value	4.839	3.31	$Y=2.006+0.35X_1$
	P-Value	0.000	0.001	
2 <sup>nd</sup> secondary hypothesis	Significant value	5.398	4.274	$Y=1.889+0.4X_2$
	P-Value	0.000	0.000	
3 <sup>rd</sup> secondary hypothesis	Significant value	9.272	5.150	$Y=2.183+0.345X_3$
	P-Value	0.000	0.000	

In order to identify and to assess the extent of effect of workaholism on human resource productivity among managers of the East Azerbaijan Water and Waste Water Company the following statistical hypothesis testing was used. Based on this method after calculating value of the correlation relationship between the relevant variables (by use of software calculations) the relevant coefficients should be investigated and verified through correlation coefficient significance testing. For this purpose, a general statistical hypothesis on the workaholism and manpower implying "There is significant relationship between the workaholism and human resource productivity" was produced in order to calculate the significance level of this relationship by use of the collected data. On the same basis the statistical hypothesis was produced as follows:

$H_0: \rho_{XY}=0$        $H_0$ : There is significant relationship between human source productivity and workaholism.

$H_1: \rho_{XY} \neq 0$        $H_1$ : There is significant relationship between human source productivity and workaholism.

Results of this analysis have been displayed in Table3 and Table4.

**Table 3**

Correlation coefficient and statistical secondary hypotheses testing (based the secondary questions of the research)

	Work involvement	Feeling being driven to work	Work enjoyment
Manpower productivity	0.334	0.417	0.483
Two-tailed significance level	0.001	0.000	0.000
Degree of freedom df	89	89	89
Coefficient of determination $r^2$	0.112	0.174	0.234

**Table 4**

Correlation coefficient and the main hypothesis testing (based on the main question of the research)

Item	Workaholism
Manpower productivity	0.498
Two-tailed significance level	0.000
Degree of freedom df	89
Coefficient of determination $r^2$	0.248

Outcome of the SPSS software analysis implied that the correlation coefficients were significant, therefore, all statistical hypotheses (main and secondary) have been found to be confirmed. In fact, all relationships between variables of the research could be explained with help of the correlation coefficients. On the same basis, all resulted correlation coefficients (for variables relating to the statistical hypotheses) were found to be significant confirming the relationship between the workaholism and the human resource productivity among managers of the East Azerbaijan Water and Waste Water Company.

## 5. Discussion and conclusion

In view of the outcome of the present research hypotheses and the existing relationships between independent and dependent changeable components it could be asserted that work enjoyment is of more growing positive effect on workaholism as compared with other dimensions. This means that some workaholics make more efforts in doing their work responsibilities and show more commitment to their work because of their love for their work and because they enjoy it. Feeling being driven to work stands next and work involvement stands 3<sup>rd</sup>. In fact, although the present research has investigated the relationship between all three dimensions and the human resource productivity but it is worth mentioning that lack of either of the two components would not lead to total elimination of its existence. However, it would reduce the effect of the workaholism upon the human resource productivity. Therefore, investigation of each of the said dimensions is a positive step towards promotion of human resource productivity. It is noticeable that workaholism can be followed by adverse consequences and impact upon human life like stress that goes beyond the framework of the present research; the research that limited itself to its effect upon human source productivity. On the same basis and given the outcome of the present research the following is recommended to be adopted:

- 1-To make every effort to promote human resource productivity in order for all employees to be able to enjoy their work; for this purpose the staff feedback on the outcome of their activities, creation of friendly relations within the workplace, assessment of the performance and giving rewards can be of very positive impact.
- 2- To promote feeling of the staff for being driven to work; to this end use of relevant techniques including job development and job enrichment can be taken into account.
- 3- To adopt mechanisms for promotion of work involvement; to this end individuals shall be appointed to organizational posts and jobs based on their desires and knowledge leading to their further independence in the job decision making processes.

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