

© 2015, TextRoad Publication

ISSN: 2090-4274

Journal of Applied Environmental
and Biological Sciences

www.textroad.com

The Effect of Time Management on Human Resources' Productivity Social Security Organization of Yazd

Amir Ehsan Eshaghieh¹, Saeed Eslami^{2*}

^{1, 2}Department of Management, College of Humanities, Yazd Science and Research Branch, Islamic Azad University, Yazd, Iran

^{1, 2}Department of Management, Yazd Branch, Islamic Azad University, Yazd, Iran

Received: May 14, 2015 Accepted: August 27, 2015

ABSTRACT

Appropriate response to time wasters with regular time planning and coordination is called time management. Time management is providing scientific and effective practices to save and control time in order to achieve greater success in work and life. These practices include goal setting, setting priorities and respect them. Practical time management is planning to do a series of actions and decisions which are built base on efficient use of time and time saving. Time Management is an effective measure in the road of improving organizational activities and increasing staff productivity. The aim of this study is to investigate the effect of time management on productivity of human resources in social security organization of Yazd city. At the beginning, we tried to determine the relationship between these two variables by enumerate all the constituent variables of time management and productivity of human resources. This research is applicable in purpose and uses descriptive survey method for data collection. In order to test the hypotheses, a questionnaire was used and the spectrum of the five-option Likert was used to assess the assumptions. Random sampling method was used and using Cochran formula, 290 employees of the Social Security (Department of Health) of Yazd city were studied. For final assessment, Cronbach's alpha coefficient was used. Data were analyzed by SPSS and Smart-PLS. At first, time management criteria were categorized in three main categories of individual, organizational and environmental (in the form of 55 items) and productivity (in the form of 23 items) factors by factor analysis, and then Partial least squares were used to examine the relationship between these variables with employee productivity. The results showed that at 95 percent confidence level, there is a positive and significant relationship between personal, environmental, organizational and time management factors and employee productivity. That is, at 95 percent confidence level, time management has a positive impact on employee productivity and by increasing the use of time management, employee productivity increases.

KEYWORDS: Time Management, Productivity, Human resource, Structural Equational Modeling.

1. INTRODUCTION

Productivity in the economy is more efficient and effective use of economic resources in the production so that a society reaches its maximum potential capacity.

But productivity is not just limited to economics. Today, productivity is not even the proportion of manufactured goods to used resources; rather, it is an intellectual vision which tries to improve everything that has been and everything there is and by this vision, does today's job better than yesterday and tomorrow's job better that today. According to the Japan Productivity Center, productivity is to maximize the use of resources, human resources, facilities and etc. in a scientific manner and reduce the cost of production (cost of service), expanding markets, increasing employment, efforts to increase real wages and improve living standards in a way beneficial to workers and consumers (Clients of administrative organizations) (Ostadzade, 2008).

Involvement of staff in work and their conscious and deliberate efforts with discipline can be effective on productivity and training to improve productivity especially in a turbulent environment coupled with insecurity. The spirit of improving the efficiency should be blown into the body of the organization, which has the human resources as its central core. Since one of the most important goals in any organization is improving productivity, and also given that human resources play a central role in development of productivity, their demands leaves a key effect in the organization (Ostadzade, 2008).

To improve and increase staff efficiency means optimal use of their talents and potentials on the route of personal development and improving organizational productivity.

Due to the position of increasing efficiency of employees in improving organization efficiency, evaluating the reasons for staff performance reduction is important. In terms of application, it should also be noted that planning for the future of an organization, capacity development, correcting errors, improving procedures, etc. all need knowing the current status of the organization, and assessment of reduced performance causes is one of the main axes in this context (Pourkazemi & Heydari, 2002).

Today, knowledge and capital alone are not enough for business success. One thing that makes the success achievement better is efficient use of time as one of the organization's resources. Neglecting time value causes people not to feel the need for proper utilization of time, and therefore do unnecessary and unhelpful work. Failure to adhere to the time in different parts of life, especially in work life, leads to many social or economic damages (Rajaeipour et al. 2008).

In determining factors affecting human resources productivity, different opinions exist and each scientist and Researcher has identified affecting factors. In brief, factors such as continuous job training of managers and employees, enhancing motivation among employees to work better and create more appropriate areas for innovation and creativity for managers and staff, establishing appropriate performance-based payment system and establishing a system of punishment and encouragement, work conscious and social discipline, changes in systems and methods that have key roles, strengthening governance and dominance of organization policies on affairs and saving as national duty are effective in productivity.

But almost all authors in this field agree that just one reason for increasing productivity cannot be proposed, rather it's the result of combination of different factors.

Time Management is one of the effective measures in improvement of organizational activities and increasing staff productivity. One factor that can improve the efficiency of human resources is reforming procedures and teaching efficient use of available time in the organization. In most cases we are involved with time problem because we really don't know what to do in difficult and sensitive conditions. In this case, what is the key problem? Is it lack of time? It can be said that, considering available facilities, our main problem is not lack of time, but it is the way we use time.

Due to advances in developed countries such as Japan, Germany and America, this collective consciousness on the famous sentence, time is gold, is clearly seen, but in communities where there is not much originality and development, time is usually not a scarce and rare resource. On time action depends on social relations. In some situations managers work hard, but since they don't know how to finish the job in normal hours, they feel fatigue and soreness, and when their time is limited, they become anxious and concerned and finish the job in hurry. In such circumstances it is clear that the job quality wouldn't be good. When it comes to improving the efficiency of staff, it means optimal use of abilities, talents and potentials of staff for personal development and improving the efficiency of the organization (Taheri, 2003). Since organization efficiency is dependent on the performance of the staff, assessing the causes of reduced performance is very important.

Today, professionals and practitioners in the field of management discuss a new topic named effective management, since in our time, efficiency and higher productivity is the most valuable goal of all managers. Everyone seeks greater efficiency and higher productivity and their efforts are formed in this direction (Hafezi, 2008). In this new approach, experts believe that one of the necessary conditions for effectiveness of managers is applying time management. Time control is vital for any manager who wants to reach the main result in his work.

Experts who in particular study in the field of time management believe that the most important and expensive asset of one organization is its employees and the most expensive asset of every person is the time he has in his life. Therefore, time is one of the rarest resources in life and if we use it properly, it makes timely changes in all organs of the organization (Moein, 1994).

Time management is one of the effective ways to improve performance which recently has received more emphasis in the field of organizational behavior. This type of management helps avoid unnecessary work, organization, delegation and finally increases efficiency. Time management is not something distinct and separate from management in a general sense and its purpose is to avoid wasting time and discipline work time (Hashemizade, 2006).

Seyed Umar Farouq (2000) in his article titled "Time Management: the art of improving efficiency and effectiveness" says that time is the one commodity that is given to everyone equally. Time always passes with the same fixed speed, but it seems that people are always short of time.

Lack of time management and time wasting refers to those times that managers and staff are apparently working but nothing gets done; like the time spent finding the documents. Sometimes, time wasting is not explicit; like the time spent on doing non-essentials and non-important work. Factors of time wasting in an organization must be precisely identified. The exact identification of these factors directs managers to implement a documented strategy for time management.

2. LITERATURE REVIEW

Time management is one of the effective ways to improve efficiency and books of management and organizational behavior place great emphasis on it. This type of management helps avoid unnecessary work, organization, delegation and finally increases efficiency. Time management is not something distinct and separate from management in a general sense and its purpose is to avoid wasting time and discipline work time (Hashemizade, 2006). In fact, time wasting is one of the main reasons for reduced performance of staff and especially managers in the work environment and it should be analyzed in the field of time management. When

it comes to time wasting, the time spent on relaxing or entertainment comes to mind. But, in fact, these times are not wasted; rather they are opportunities for relaxation and recuperation in order to prepare to work (Bagheri & Yousefinezhad, 2012).

Time wasting refers to working hours during which the manager appears to work, goes by without a goal, like the time spent on checking the desk for files. Of course not all time wastes are apparent like this. Most of the time a manager, without realizing, spends his time doing unnecessary work (Negahban, 2005).

Taheri and Haghighi (2011) have examined the relationship between time management and productivity of Telecom executives of Shiraz. In this study which is correlational, two questionnaires were used. The first questionnaire measures the amount of time management skills and its six dimensions, and the second questionnaire measures the productivity of human resources. The results of this research indicate that there is a significant direct relation between time management skills (targeting, prioritization of goals, operational planning and delegating, managing contacts and meetings) and productivity of managers.

Gharamaleki with hajloo and Nouri (2011) conducted a study to investigate the relationship between loyalty, tenacity and preferring organization with time management. Three hundred students were selected by random cluster sampling from Mohaghegh Ardebili University and answered questionnaires of Barling time management, Calve and Chong, loyalty subscales of the Five-Factor Inventory of Neocaska & McCrae, subscale of tenacity, scales of time styles of Yosunier and Walt Florance, sub-scale of organization preference and time management behavior scale of Makan et al.during a correlation study. The results of Ali modeling (path analysis) showed that better time management can be foreseen directly by higher grades of loyalty, tenacity and preferring organization.

Satchi and Rezaei Behbahani (2010) investigated the relationship between time management and work-family conflict with staff productivity. By sampling and testing on 217 of them, they concluded that there is a significant relationship between predictor variables (time management and work-family conflict) and Criterion variable (productivity). Other results of this study was that among subscales of time management, only prioritization of objectives and delegation were predictive of productivity and among subscales of work-family conflict (conflict based on time, difficulty and behavior, and among subscales of work-family conflict (conflict based on time, difficulty and behavior) all three were predictive of productivity.

Charmian and Javaherizade (2009) investigated the relationship between time management and managers' skills and their personal characteristics in the Islamic Azad University. The results of this study that reviewed over 201 senior and junior managers of Islamic Azad University indicates that the there is a weak correlation between technical and human skills and time management, but there is a significant correlation between cognitive skills of the manager and his time management. At the end the conclude that it seems the relationship between cognitive skills and time management underscores the importance of time management in running affairs and meeting goals of the organization and it should be noticed as one of the most important management skills effecting other activities. In fact, it shows that time management has a relationship with manager's general and systematic overview. In fact, since the competence and quality of managers in terms of management skills is one of the most important factors in continued success of the organization, and since Managers need to have basic skills in order to be efficient, one of their most important cognitive skills is time management.

Khodam and Kalagari (2009) investigated the effect of time management skills training workshop on its application by supervisors. They say that time management skills are determinant factor of successful managers. Improving the capacity and performance of nurses in time management is a necessity and requirement of improving of human resources in the health sector. Data analysis showed that after training, the amount of using time management in goals, organization and time control increased. According to the results of employees' improvement, they realized the importance of time management skills in nursing management system. Teaching these skills through continuous training programs is essential in improving the supervisors.

Rajaeipour et al. (2008) investigated the relationship between time management and the performance of secondary school principals in Kerman. In this study, the performance of school principals in each educational, cultural, administrative and supervision and guidance dimension, as well as the difference between time management in terms of their demographic characteristics, gender, years of management and degree were examined. The results of the study show that the correlation between time management and the performance of school principals in educational aspects and dimensions was not significant and the correlation in administrative and supervision and guidance was significant. They finally offer valuable conclusions and state that since time management is an ecessity for all school principals, education authorities should provide necessary training for principles by holding time management classes. It is better that school principals set a weekly program which includes specific objectives, actions, predicted time for implementation and priorities for each action.

Amiri et al. (2014) count ten principles for time management:

1. Planning: The most important factor inefficient use of time is planning. There should be a clear program for time management. This program should be arranged based on individual personality traits.

- 2. Identifying Purposes: The first step in planning is to identify the goals we want to achieve.
- 3. Daily schedule: a detailed list of daily activities to be done should be provided.
- 4. Prioritize: One of the skills that will lead us to increase the efficiency of daily activities is prioritizing. It means to pre-specify which activities must be carried out sooner than the others.
- 5. Energy boundaries: One of the characteristics of a good program is its fitness with emotional situations and physical abilities of individuals. Individuals' energy to do things is different during the day.
- 6. Set deadlines: an important factor in daily planning is determining the time of its completion in order to increase the effectiveness of every activity.
- 7. Flexibility: the best amount of performing what we have in mind is 60 to 70 percent. We should be flexible in performing programs.
- 8. Personal management: each person should be able to administer personal affairs in this context.
- 9. Operating the program: practice, assessment and control are effective parts of time management. We should be patient in runtime and endure.
- 10. Evaluation and Control: As mentioned, all steps should be evaluated and monitored.

They investigated the effect of time-management components on productivity of economic and capital enterprises in their research. In this experimental-descriptive study, 300 employees of the organization were chosen as samples and were studied. They finally found a strong relationship between the two components. Their practical recommendations emphasize that managers should be aware of spending and using their time in the organization; identify time wasting behaviors and enhance time control skills. Effective time management will benefit everyone in the organization.

By managing their time, managers can spend more time discussing more important issues with their subordinates and in this way, improve the productivity of their human resources. These people are viewed positively by their senior officials. Other interests are hidden behind proper time management and one of them is balance between work and family life.

Craig and Steven (2014), two researches in clinical department of Boston University in America, wrote an article in their unspecialized field about time management. In their relation with physicists, they concluded that lack of time management by physics researchers of medical department leads to increased workload and decreased job satisfaction. They concluded that effective time management can actually increase productivity, job promotion, reduce burnout and increase job satisfaction. By reviewing the existing literature on time management in medical and non-medical science, they divided components of time management into four categories:

- Short-term and long-term goals
- Determining priority for responsibilities
- Planning and scheduling of activities
- Minimize time wasters

Then, they identified short-term and long-term goals, responsibilities and time wasters of medical physics and expressed their management ideas by categorizing them. For example, they categorize ten time wasters:

- Phone calls
- Email
- Physical stops
- Repetitive tasks
- Irregularities
- Evasion
- Meetings
- Useless expectations
- Unnecessary communication

Saeedi, Kouhandel and Bahari (2014) investigated the relationship between time management and organizational effectiveness and different styles of coping with stress. First, they point out that today, time management is one of the most effective ways to understand staff reactions to stressors and has an important role in controlling it. They investigated the relationship between time management and organizational effectiveness by comparing different styles of coping with stress. In this study, a standard questionnaire was used to evaluate time management. The results of the Pearson correlation coefficient and multiple regression coefficients show that there is a significant relationship between coping styles and time management in men in the organization. The best predictor of ways of coping with stress is time management. They mentioned time management factors as follows:

- Meeting management
- Communications Management
- Planning
- Prioritize
- Setting a goal

- delegation of authority
- Organize
- Decision making
- Internal communication between employees
- Job Satisfaction

Ulysses and Ayo (2009) realized the role of three factors in job performance: time management, effectiveness and job motivation. According to their research, employees and managers who use their work time properly are more satisfied about their performance and success in the organization. They found a direct relationship between the criteria listed.

Row (2007) reviewed time management literature. This review showed that time management behaviors are positively correlated with time control, job satisfaction and health, and are negatively correlated with stress. The association of work and academic performance is not clear. Also, teaching time management improves time management skills but this doesn't automatically improve performance.

Edwin and polich (2004) have an interesting review of time management literature. Although they refer to common content about time management, they also introduce eight reasons for managers' tendency towards time management which is seen in few similar articles. They state that effective time management skills are considered critical for successful managers because:

- Reduction of power and flatting of organizational structures leads to increased field of management control and it is necessary to improve their productivity in the views of larger number of employees by effective time management.
- 2. Increasing the field of management control not only increase the number of staff under their control, but also increase their responsibilities and duties. Meanwhile, by removal of some staff, their duties place upon managers.
- 3. Increasing the field of management control leads to increase in horizontal communication and limited vertical communications through some official channels are removed. Proper management of quality and duration of communication between managers and employees is necessary.
- 4. Learning the skills of new style of leadership will be a time-consuming activity. Managers need to change their leadership style from command in order to have staff commitment in flat structures. This style of leadership needs good hearing, convincing and help of the staff which takes a lot of time.
- 5. Career development in the new structures will increase the burden of duties and responsibilities of managers and makes the need for effective time management more clear.
- 6. In order to motivate those managers who are in new flat structures, some organizations use career development. This makes the job more challenging and they have to perform complex tasks during the same time or even less time than before.
- 7. Organization managers have to manage organization's human resources more effectively. This includes time use approaches, planning, recruitment, training and development of human resources. They should use these goals in order to realize objectives of the organization strategy.
- 8. Legal actions have made paperwork more obvious in today's organizations which uses a lot of time. This paperwork has made managers to manage most of their time.

According to given materials and the review of the available literature about time management, it can be concluded that one of the most important factors that affects the efficiency of human resources is time. Managers and employees can achieve optimum use of time by managing their time at work and home. Meanwhile, the concept of time management can be used as an organizational strategy.

Time Management can be effective on work life of individuals from different dimensions: Factors related to individual and his personal characteristics, factors related to organization and structure of relationships and activities, and finally, factors effecting time from outside the control of individuals. In this study we try to evaluate the effect of each of these variables on productivity of human resources. Therefore, the conceptual model of the study is formulated as follows:

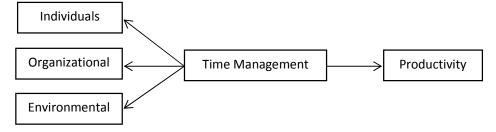


Figure 1: Conceptual Modeling

3- RESEARCH METHODOLOGY

The purpose of this study is practical and its method is descriptive survey. In this study, productivity and time Management variables were assessed by using a questionnaire. To measure the efficiency of human resources, we used standard questionnaire of manpower productivity which is presented based on Achio model by Heresy and Goldsmith in 1980. This questionnaire investigates 7 dimensions of manpower productivity with 26 questions and likert spectrum. Three questions were eliminated by social security experts and the remaining 23 questions were used.

Also, in order to assess the time management dimensions, researcher designed questionnaire was used which is a combination of Javaherzadeh's standard questionnaire and Makon which included 55 questions to measure three aspects of individual, organizational and environmental time management. In order to be sure about the validity of research, comments of supervisors and advisers were used and necessary amendments were considered. In this study, given that based on the presented conceptual model two variables existed, questionnaire was also divided into two parts in order to assess these variables. The following table shows these 2 variables, the relevant questions and their alpha coefficients. In the first step, by analyzing the data of 35 experts, through statistical software SPSS.20, Cronbach's alpha coefficient of the questions was determined 0/909. Thus, it can be said that the questions of the survey have appropriate and desirable reliability.

Table 1: Cronbach's alpha coefficient of the questions

Variable	Number of questions	Cronbach's alpha		
Time Management	55	0.891		
Individuals	18	0.880		
Organizational	30	0.911		
Environmental	7	0.831		
Productivity	23	0.871		

In this study, a random sampling method was used. This means that 290questionnaires were given to experts and staff.

4- Analysis

4-1- investigating personal and organizational information of respondents

According to 290 people who completed the questionnaire, 51% of respondents were male and 49% were female. Almost 42% of respondents were aged between 30-40 years and almost 57 percent have a BA. Most respondents, about 45 percent of them have an experience between 1-5 years and 15% of them have more than 20 years of experience in social security organization.

4-2- Classification of criteria using factor analysis

The result of SPSS analysis for confirmatory factor analysis has six outputs. The first output is the value of KMO index, the test statistic of Bartlett test (which is an approximation of chi-square test), degree of freedom and test sig.

Table 2: Bartlett test

Kaiser-Meyer-Olkin Measure of	.834	
Bartlett's Test of Sphericity	s's Test of Sphericity Approx. Chi-Square	
	df	1485
	Sig.	.000

Since KMO index value is close to 1, number of samples is sufficient for factor analysis. Also, Bartlett test sig value is less than 5% which shows that factor analysis is appropriate to identify the structure and assumption of correlation matrix recognition is rejected. The final output shows the components matrix which includes factor loads (factor scores) of each variables in remaining factors. But since interpreting factor loads is not easy without rotation, we rotate the factors to increase their interpretation capacity.

Table 3 shows the rotated matrix of elements, which include factor loads of each variable in remaining variables after rotation. The higher the absolute value of these coefficients, the role of relevant factor in total changes (variance) of the variable is more.

Table 3: rotated matrix of Time Management elements

	Factor						
	1	2	3				
TM1	.493	.118	.263				
TM2	.519	.054	.339				
TM3	.385	.117	.290				
TM4	.489	.338	.093				
TM5	.409	.184	.182				
TM6	.439	.297	.298				
TM7	.426	.389	.341				
TM8	.587	.410	.074				
TM9	.585	.276	.137				
TM10	.344	074	.133				
TM11	.426	.099	.125				
TM12	.577	.229	.118				
TM13	.481	.247	.181				
TM14	.616	.341	.107				
TM15	.498	.161	.163				
TM16	.425	001	.029				
TM17	.434	.076	.123				
TM18	.433	.156	.113				
TM19	.337	.362	.230				
TM20	.408	.204	.118				
TM21 TM22	.310	.332	.305 .219				
TM22	.256 .262	. 271 .304	.410				
TM23	.184	.268	.580				
TM24	.192	.138	.375				
TM25	.447	.233	.233				
TM27	.349	.127	.231				
TM28	.398	.487	.195				
TM29	.071	.074	.344				
TM30	.417	.472	045				
TM31	.410	.537	.052				
TM32	.192	.569	.031				
TM33	.438	.304	019				
TM34	.270	.441	.113				
TM35	111	.277	.273				
TM36	.155	.755	.142				
TM37	.070	.684	.146				
TM38	.309	.562	.336				
TM39	.375	.491	.208				
TM40	.209	.389	.263				
TM41	.194	.479	.266				
TM42	034	.564	.358				
TM43	.343	.435	.383				
TM44	.260	.456	.306				
TM45	.212	.342	.302				
TM46	.059	.176	.579				
TM47	.180	.484	.408				
TM48	.130	.488	.435				
TM49	.157	.249	.583				
TM50 TM51	.091 .301	.111 .341	.613				
TM51 TM52			.446				
TM52 TM53	.345	.409 036	.542 .558				
TM53 TM54	.263 .266	.030	.558				
	.367	.334					
TM55	.30/	.334	.362				

There is no requirement that each variable gets attached to a factor with regard to large correlation with that factor. Sometime, according to literature, the variable can be linked to other factors. According to SPSS software output, variables (questions of the questionnaire) are classified as follows:

Group I: questions 1 to 18

Group II: questions 19 to 48

Group III: questions 48 to 55

Naming components:

Thus, With regard to the literature, we categorize and name questionnaire variables as follows:

- Since the questions 1 to 18 are variables related to identified individual factors of time management, these variables are called individual factors of time management.

- Questions 19 to 48 are variables related to organizational factors of time management and they are called organizational factors of time management.
- Questions 49 to 55 are variables related to environmental factors of time management and are called environmental factors of time management.

Table 4 shows the rotated matrix of element for productivity variable, which include factor loads of each variable in remaining variables after rotation.

Table 4: Rotated Matrix of Productivity factors

	Factor						
	1	2	3	4	5	6	7
pro1	.052	.624	011	.022	.266	057	.063
pro2	.072	.637	.079	.094	.199	.125	034
pro3	.168	.483	.296	.010	.094	.082	024
pro4	.045	086	.029	.144	042	.083	.393
pro5	.423	.370	.045	.061	.006	.263	.047
pro6	.200	.554	.112	.221	034	008	104
pro7	.388	.473	.400	.222	.112	.086	.176
pro8	.245	.131	.103	.236	.230	.081	.475
pro9	.127	.065	.177	.039	.075	.121	.707
pro10	.152	.350	.252	.042	.109	.112	.700
pro11	.567	.397	.193	.159	.238	.066	.097
pro12	.322	.104	.299	.189	.158	.836	.188
pro13	.425	.201	.303	.231	.224	.399	.231
pro14	.546	.080	.366	.116	.319	.137	184
pro15	.200	.406	.262	.081	068	.118	185
pro16	.403	.173	.490	.215	.242	.181	.116
pro17	.334	.126	.544	.081	.236	.245	.326
pro18	.237	.253	.738	.137	.149	.127	006
pro19	.379	.245	.266	.200	.441	.152	.086
pro20	.421	.119	.298	.080	.544	.073	.419
pro21	.235	.332	.184	.129	.856	.121	190
pro22	.102	.172	.093	.964	.067	.048	.120
pro23	.145	.131	.136	.733	.126	.138	.142

Extraction Method: Maximum Likelihood.

Rotation Method: Varimax with Kaiser Normalization.

Factors are identified, approved and classified in 7 categories:

Ouestions 1-3: Ability

Questions 4-7: understanding and realizing Questions 8-10: organizational support

Questions 11-14: Motivation Questions 15-18: feedback Questions 19-21: Reputation

Questions 22-23: Compatibility

Questions about age, gender, education and work experience are about staff features and they are named as demographics and individual variable regardless of software output.

4-3- investigating the relations of conceptual model using path analysis

After charting and implementing structural equation algorithm in Smart-PLS software, some numbers appear on the chart:

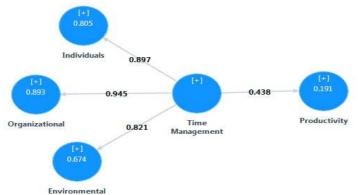


Figure 2: Conceptual Model in Estimation Mode

a. Rotation converged in 8 iterations.

This model in which numbers are between 0 and 1 is called model in estimation mode.

The numbers shown on the route between structures are called route coefficient. These numbers represent standardized beta in regression or correlation coefficient of the two structures. The numbers on the route between structures and reagents in this reflective model indicate factor loading. The numbers inside the circles show R²coefficient of determination of the main structure and its value is always between zero and one. Larger coefficient of determination shows that regression line has better related the changes of dependent variable to the independent variable. This coefficient also represents the ability of model to describe or explain the research structure. Significance of factor loadings appears on software by using BT procedures and statistical t values appear on existing routes in the model as follows:

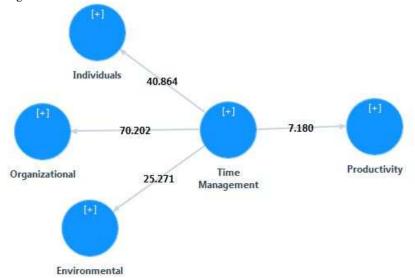


Figure3: Conceptual Model in BT Mode

To confirm a hypothesis at 95% level, the least statistical t is 1/96. Those numbers on routes between latent variables are estimations by using partial least square algorithm. These coefficients in fact answer the research questions.

As you can see, all routes are approved.

Therefore, the hypotheses of the research are:

- 1. Time management has a positive effect on productivity of human resources.
- 2. Personal factors of time management have a positive effect on productivity of human resources.
- 3. Organizational factors of time management have a positive effect on productivity of human resources.
- 4. Environmental factors have a positive effect on productivity of human resources.

5- Conclusion

As it was stated, the purpose of this study is to investigate the relationship between time management and the productivity of the staff. The findings show that there is a significant relationship at 5% error level between time management and productivity. This means that employee productivity increases by increasing the use of time management.

The path between time management and productivity has 7.18 path coefficient that shows the major effects of time management on productivity.

Factor analysis of the criteria shows that effective factors on time management can be summarized in three categories: environmental, organizational and individual. The results showed that there is a positive relationship between the factors of time management and productivity.

Also the results showed the positive relationship between individual time management factors and productivity. Path coefficient between these two is equal to 40.864 that means the importance of this factor.

By increasing the skills of individual employees in time management, their productivity will increase. This relationship can be justified by the fact that the root of time management is in inherent moods and emotions of individuals. In fact, the concept of time that an individual receives and sends can be influenced by character variables. The high factor load of individual factors in assessing time management by staff shows that factors like individual planning, effective organization of personal responsibilities, self-discipline, strengthening saying no, no hesitation and evasion, meeting management and fulfilling unfinished tasks have an important role in

managing staff time and therefore, increases productivity. According to majority of respondents, time management factor has the most path coefficient (70.202) among organizational factors which shows that responsibilities, planning meetings, effective delegating, avoiding paperwork, hiring competent staff, effective communication, information management and business trips will have the greatest impact on improving the management of staff time.

Of the three individual, organizational and environmental factors of time management, environmental factor has the lowest path coefficient (25.271). Thus, it can be said that although management of phone calls, sudden crises in the organization and management of associations are not ineffective, but have little importance in time waste factors in organizations. Today, having productivity and improving its quality is one of the most important needs of the organization. Human resources as the most valuable resource have an important role in the success of organizations. Therefore, growing organizations always have special attention on continuous quality improvement and the way their staff do their jobs. The result shows that at 95 percent confidence level, tie management has a positive effect on productivity of employees. For optimum use of human resources we need three principles:

- 1. Awareness (Knowledge, experience and expertise, research and investigation)
- 2. Motivation
- 3. Management (Management and organization of natural and human resources) (Arab Bafarani, 1392)

As a result, by understanding effective factors in increasing time management skills and formulating a regular basis, organizations have to make effective use of time. Organization and managers at the top should identify factors facilitating the work in order to increase productivity and try to enhance them. According to the conducted research and its results, the recommendations made in this research are presented in two parts. In the first part, recommendations to improve the efficiency of Social Security Organization are presented and in the second part, future areas of research and suggestions for enhancing future research are presented.

5-1- practical recommendations

It can be deduced that managers and employees can generalized the skills they learn about time management to the new position; i.e. organization's environment, and use them to increase their productivity. It seems that officials and administrators can increase the productivity and ultimately succeed in achieving the goals of the work by selecting managers and employees with a high level of personal time management skills as one of the factors associated with improved employee productivity.

The nature of time management skills, as a set of clear and visible behaviors, makes it a flexible and guidable matter. It is suggested that officials help identify, strengthen and improve individual and organizational skills by educational programs such as workshops of time management training and assessment of the time behavior of managers and employees. Assessment of those behaviors that waste staff time can help them realize behavior and correct patterns by providing feedback atmosphere in the organization.

In order to achieve proper time management among the employees of an organization, it is recommended to design and prioritize goals and responsibilities in a clear and careful way. To control waste time in the organization, in-service training should be provided in the organization. By holding this training on duties and the proper way of working, employee productivity can be increased. Staff should prepare a weekly program which includes clear objectives, actions and predicted time for running the action and priorities of each action.

Staff must prepare a list of what they have done after performing the weekly program in order to discover their bugs in time management and use of time.

Jobs must be designed in such a way that, in addition to having features such as importance of diversity and expertise and meaningfulness of delegation to staff, can provide appropriate feedback. However, in delegation, those managers who pay attention to abilities and talents of subordinates and while taking advantage of them in various activities in order to reduce the time consumption, walk toward increasing the efficiency of organization are more successful. There should be no confusion about assigned roles in delegation, which is considered one of the sources of time waste in organization. Management should have a controlling view toward issues and try to reduce errors and eliminate the barriers in the organization.

5-2- limitations and suggestions for future research

This research has also been subject to restrictions, including:

Inattention of respondents in completing the questionnaire due to lack of follow up by managers with regard to the results of previous research, the possibility of bias in completing the questionnaire and lack of cooperation in the field of research by some employees.

On the other hand, due to social and cultural circumstances and social differences, the results of this research are only applicable to similar environments (public service organizations). It is therefore recommended to investigate this study in a more general level and with regard to social and cultural conditions and various groups in the population.

By using ranking, existing standards can be categorized and the most important factors of time management can be identified.

In the present research, the amount of delegation of authority, responsibilities, teaching time management skills and their impact on increasing productivity has not been studied specifically and it is one of the limitations of the research. It is recommended that in other researches, these factors will also be studied. Surveys and statistical analysis can be repeated at specific time periods in order to determine the changes made to eliminating effective factors on productivity in terms of management time and factors that can be elevated and increase productivity.

It is suggested that further research be carried out by using demographic data and the amount of using time skills among various groups such as women and men, different education, different work orders, etc. be measured.

REFERENCES

- Arab Bafrani, S. (2014). Human resource productivity and effective factors. Available at:www.Prozhe.com
- Amiri, Z., Ghobadian, M., Mirzaei, A., (2014). The study of time management factors and their influences on productivity. Kuwait chapter of Arabian journal of business and management review, Vol.3, No.10 (a).
- Bagheri, M. & Yousefinezhad Attari, M., (2012). Designing a model to evaluation of reasons in decreased productivity in managers from time management vision. Management Researches in Iran Journal. Vol.16, Num.3.
- Craig, E., Steven, C. (2014). Recapturing time: a practical approach time management for physicians. Postgrad Med J doi:10.1136/postgradmedj-2013-132012
- Farooq, S.U. (2000). Time management: The art of enhancing productivity and efficiency. Journal of Managerial Science, Vol.2, Number.2.
- Edwin, A., Pulich, M., (2004). Improving productivity through more effective time management. The health care manager, Vol. 23, Number. 1, pp. 65-70.
- Gharamaleki, N., Hajloo, N., Babaei, N., (2014). Time management skills training effect on students negligence. Psychological Models and Methods Journal, Year.4, Num.15, pp. 91-101.
- Hafezi, S., Naghibi, H., Naderi, E., Najafi Mehri, S., Mahmoudi, H., (2008). Analysis of relation between individual skills and time management organizational behavior in teaching managements. Behavioral Science Journal, Vol.2, Num.2, pp.183-192.
- Hashemizadeh, H. (2006). Time management behaviors and job stress analysis in internal and surgery head-nurses of Oloum Pezeshki University hospitals. Psychological Hygienic Science Journal, Year.8, Num.29 & 30. Pp.51-56.
- Javaherizadeh, N., Charmian, A., (2009). Relation between time management and management skills and individual criteria in Azad Islamic University, Strategic Management Research Journal, Num. 43, pp. 153-177.
- Khodam, H., Kalagari, Sh., (2009). Effect of time management trainings on using time management by nurses. Nurses Research Journal. Vol.4. Num.12 &13, pp.63-69.
- Moein, A. (1994). Time management an effective step to increase productivity. Structure and Installation Journal, Vol.3, Num.33.
- Negahban, A. Research method by using questionary SPSS11. Tehran: Jahad Daneshgahi Publication.
- Oleasi, S. H; Ayo, T. Journal Industry Magazine. 2009. 7, 465-471
- Ostadzadeh, M. (2008). Effective factors in increase and decrease of human resource productivity, Training papers.
- Pourkazemi, M. H. & Heydari, K., (2002). Using DEA in performance evaluation of heat powerhouse. Modarres Joural, Vol.6, Num.1.
- Rajaeipour, S., Yarmohamdzadeh, P., Zeinoldini Meymand, F., Zeidabadi, A., (2008). Analysis of relation between time management and management performance in Kerman high schools. Leadership and Teaching Management Journal, Garmsar Branch Azad Islamic University. Year.2, Num.1, pp.43-60.
- Roe, R. (2007). A review of the time management literature. The Journal of Personnel Review, 36(2), 225-276.
- Saatchi, M., Rezaei Behbahani, N., (2010). Analysis of relation between time management and family argument and factory workers productivity. Psychological Research Journal. Num.8, pp.1-20.
- Saeedi, E., Kohandel, M., Bahari, S.M. (2014). The relation between time management and organizational effectiveness and stress coping styles of sport and youth directorate staffs. European Journal of Experimental Biology. 4(1), pp. 203-210.
- Taheri, S. (2003). Productivity analysis in organizations. Tehran: Havaye Taze publication.