

## Studying the Relationship between Time Management and Mental Health of Employees

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### ABSTRACT

This research studies the relationship between time management and mental health of employees in Rafsanjan medical university. In this regard dimensions of time management include: goals and priorities, regularity and organizing, control on time, mechanic of time management. Also dimensions of mental health include: physical health, disorder in social function, anxiety and depression. Results of this research show that components of time management have a positive relationship with mental health in which regularity and organizing, mechanic of time management have the most effect respectively and control on time has the least relationship. Regarding the positive relationship between time management and mental health it is suggested to hold related classes in this field to increase time management of managers and they can have higher health and increase some factors such as anxiety and depression.

**KEYWORDS:** Management, Time management, Health, Mental health.

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### 1. INTRODUCTION

Generally time management can be defined as the way in which one can manage the time towards achieving important goals in the life (Katie, 2001). Mental health is a state of well-being in which one can perceive his/her ability, dominate life ordinary stresses and work efficiently (Kirbrm& colleagues 2012).

Mental health is so important in all life stages, before birth to death, from home to workplace and society (Lashkari, 2002). The problem of defining mental health exactly results from that there is still no correct and accepted definition for normality. But according to social conditions and positions, traditions and cultures there are many definitions and points for normality. Doctors and people who regard this problem from a medical view, define normality and well-being as noting have disease signs and in other words they put health and disease in two opposite poles and to make sick a healthy person he/she should move to opposite pole from healthy pole (Milanifar,2009).

So, to promote mental health of organization employees, it is necessary to consider some factors which cause to change the side. One of these factors is focusing on time management. Time management will be increased by a correct planning for time (Lashkari, 2002). Having good time management skills, one can make a balance between work and personal life in time control (Manta, 2001) and time management is also more about decreasing unvalued activities and adding a new value. The main purpose is vanishing activities which make detailed results (Alice, 1998); so it results positive results in organization.

However it is expected that correct time management causes to promote employees mental health and naturally personal and organizational success (Jacks, 1999). Because of this necessity and importance of time is an important structure in organizational psychology (Dehshiri, 2004) that is an important way to decrease anxiety and depression. Importance of time management relates to that how well one can manage his/her time (Manta, 2001). Generally time management belongs to management term and it aims to prevent time waste and regulate work time (Orgenstern, 2000).

To study time management it is necessary to consider following four components (Hashemi zadeh, 2009):

1) Assembling goals and priorities: because regulating goals determines an effective time management in life (Allen, 2007).

2) Mechanic of time management: mechanic of time management, a method of planning and timing and providing works which are going to be done (Hashemi zadeh, 2009).

3) Control on time: because increasing the skill of controlling time one feels more happiness and finally more self-confident (Javaheri, 2005).

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4) Regulating and organizing: because time management also includes regular time planning and coordinating in addition to suitable interaction against time wasters (Javaheri, 2005).

In other words dimensions of mental health can be summarized in following four components:

1) Physical healthy: physical healthy results from proper organs functions. Biologically, proper functions of cells and organs and their coordination show a sign of physical health (Shamloo, 2011).

2) Anxiety: people who think they aren't able to work socially. Other psychological abnormal samples such as nervous state and unhappiness are also considered as mental diseases. Although these cases produce anxiety rather than inability (Lore man, 2006).

3) Disorder in social function: as someone faces some disorders and problems such as wrangling, social isolation and indifference in his/her job and individual relations (Ghasemi, 2000).

4) Depression: depression includes increasing state of sadness along with feeling of pessimism. Depression is so varied and there is a difference from low depression to high disappointment (Mansourian, 2001).

According to close relationship between mental health and time management in several workplaces, this research aims to study the relationship between time management and mental health of employees in Rafsanjan medical school and also study the relationship between components of time management and their mental health according to mediator variables (education, sex, age, marriage and years of service). Performing this study it is expected to provide valuable information for managers and experts to solve probable problems.

## MATERIALS AND METHODS

Statistical society of this operational research which is a correlation one includes all employees in Rafsanjan medical school containing 2480 people. To determine sample size Cochran formula was used in which:

Z: level of standard normal sub-curve based on 0/05 Alpha equals to 1/96,

$\rho$ : related property ratio in society equals to 0/5.

$\alpha = 0/05$ : error or probability to make first kind of error.

$d = 0/05$ : the most accepted estimate error principally equals to 0/05.

$N=2480$ : is society sample. So, 332 people were selected as sample size. In this research random-classified sampling method proportionate to society size (medical school includes 11 units that every unit was sampled randomly and proportionate to number of employees) was used.

In order to gather needed data two questionnaires were used in this research. Time management questionnaire which was designed by Makin (Foster & colleagues) and sending questionnaires to some management professors and then using validity-content method its validity was obtained by researcher and reliability was used by 0/96 Cronbach Alpha method. This questionnaire includes four sections and 33 questions in which questions 1 to 10 relate to component of determining goals and priorities, questions 11 to 20 relate to mechanic of time management (timed program), questions 21 to 28 relate to regulating and organizing and questions 29 to 33 relate to setting a control on time. Based on Likert standard, questions were designed by five options of completely agree (5), agree (4), don't agree (3), disagree (2) and completely disagree (1).

Second questionnaire is also GHQ-28 standard questionnaire which was designed by Goldberg (Orgenstern, 2000) in which validity and reliability for Iranian populations were computed by Torabi (2011) (Torabi, 2011). This 28 questions questionnaire includes four parts which every part contains 7 questions. The first part relates to physical health, second part relates to measuring anxiety rate, third part relates to measuring disorder rate in social function and last part relates to people depression rate.

Questions of this questionnaire are designed based on Likert spectrum as five options of completely agree (5), agree (4), don't agree (3), disagree (2) and completely disagree (1).

To analyze data resulted from completing above questionnaires SSPS software, copy 14 and statistical tests of Pierson and Spearman correlation coefficient were used.

## RESULTS

Out of 332 studied people 177 (53/3%) were male, 155 (46/7%) were female. Also out of 332 studied people 55 (16/6) had diploma degree, 42 (12/7%) associate of art degree, 169 (50/9%) B.A degree, 47 (14/2%) A.M degree and 18 (5/4%) Ph.D degree.

To study the relationship between time management and mental health of employees and also between one by one components of time management and mental health of employees Pierson and Spearman correlation coefficient was used. Based on results of the correlation coefficient in table 1, there is a positive and meaningful relationship between time management and all components except the component of control on time with mental health.

Table1: Pearson and Spearman correlation coefficient between time management and its components one by one with mental health of employees

a) Time management with mental health rate of employee

Kind of relation	Relation	Number	Meaningfulness (p-value)	Correlation coefficient	Correlation statistics
Direct	Yes	332	**0/001<	0/277	Pearson Spearman
Direct	Yes	332	**0/001<	0/359	

b) Component of control on time with mental health rate of employee

Kind of relation	Relation	Number	Meaningfulness (p-value)	Correlation coefficient	Correlation statistics
-	No	332	0/181	0/051	Pearson Spearman
-	No	332	0/073	0/102	

c) Component of goals and priorities with mental health rate of employees

Kind of relation	Relation	Number	Meaningfulness (p-value)	Correlation coefficient	Correlation statistics
Direct	Yes	332	**0/001<	0/262	Pearson
Direct	Yes	332	**0/001<	0/319	Spearman

d) Component of time management mechanic with mental health rate of employees

Kind of relation	Relation	Number	Meaningfulness (p-value)	Correlation coefficient	Correlation statistics
Direct	Yes	332	**0/001<	0/290	Pearson
Direct	Yes	332	**0/001<	0/349	Spearman

e) Component of regulation and organizing with mental health rate of employees

Kind of relation	Relation	Number	Meaningfulness (p-value)	Correlation coefficient	Correlation statistics
Direct	Yes	332	**0/001<	0/295	Pearson
Direct	Yes	332	**0/001<	0/388	Spearman

\*in 0/01 meaningful level • \*\*in 0/05 meaningful level

To compare opinions related to time management in Rafsanjan medical school statistical test was used in several education levels in which results show a meaningful difference. In this regard employees with M.A degree have higher time management to others (Table2).

Table 2: Results of one-side variance analysis for opinions about time management in Rafsanjan medical school based on education

Value -p	F(4,326)	Standard deviation	Average	Education
<0/001*	3/656	0/48	3/96	Diploma
		0/46	4/04	associate of art degree
		0/55	4/00	B.A degree
		0/35	4/07	A.M degree
		0/54	3/56	Ph.D degree

(p<0/05)\* in meaningful level of

Comparing opinions about mental health in Rafsanjan medical school is shown in table 3 based on demographic variables. Based on written numbers in this table, men have higher mental health than women. Also singular people have higher mental health to marriage people. People with M.A degree and Ph.D degree to others and also adult people to younger people have higher mental health.

Table3: Results of one-side variance analysis for opinions about mental health in Rafsanjan medical school based on education, age and service years

Value -p	F(4,326)	Standard deviation	Average	Education
<0/001*	11/113	0/68	3/73	Diploma associate of art degree
		0/39	4/13	B.A degree
		0/44	4/18	A.M degree
		0/41	4/32	Ph.D degree
		0/85	4/31	
Value -p	F(2,329)	Standard deviation	Average	Age
0/028*	3/614	0/57	4/00	<b>Under 30 years</b> <b>Between 31 and 40</b>
		0/51	4/14	<b>Above 41</b>
		0/54	4/20	
Value -p	F(2,320)	Standard deviation	Average	Service years
0/22	1/137	0/56	4/05	<b>Under 10 years</b> <b>Between 10 and 20</b>
		0/47	4/15	<b>Above 20</b>
		0/63	4/17	

Results of two-sample t analysis (independent) for opinions about mental health in Rafsanjan medical school based on sex and marriage

Value -p	Freedom degree	t	Standard deviation	Average	Sex
<0/001*	330	4/075	0/48	4/24	<b>Man</b>
			0/58	4/00	<b>Woman</b>
Value -p	Freedom degree	t	Standard deviation	Average	Marriage
0/262	330	1/124	0/26	4/21	<b>Single</b> <b>Married</b>
			0/58	4/11	

(p<0/05) in meaningful level of 0/05\*

Based on the same regression results of time management components on mental health, two components of regulation and organizing and time management mechanic anticipate mental health directly and have increasing effect, while the component of control on tome anticipates mental health negatively and has decreasing effect. In addition, the component of goals and priorities isn't meaningful that is it can't anticipate mental health so it doesn't enter regression model (table 4).

Table 4: regression results of time management on mental health

R <sup>2</sup> <sub>(adj)</sub>	R <sup>2</sup>	R	P	t	Standard coefficient Beta	Non standard		Anticipating variables
						Standard error	Coefficient B	
0/159	16/60	408/0	*	/446	-	0/223	3/225	Stable
			<0/001	3	0/293	0/079	0/301	Regulation and organizing
			<0/001	3	0/293	0/079	0/301	Control on time
			<0/001	4	0/343	0/069	0/292	Time management mechanic

Base variable: organizational success  
0<05(p<0/05) \*in meaningful level of

## DISCUSSION

This research aims to study the relationship between time management and mental health of employees. Also some variables such as sex, education, age, marriage and service years are examined. Results show that there is a positive and meaningful relationship between time management and mental health of employees. These results are along with the results of researches focusing on the relationship between time management and mental health (Gorge, 2002). Explaining this relationship according to obtained results show that time management promotes mental health rate of employees in organizational level and decreases rate of anxiety, depression and disorder in their functions.

Results of this research show that among studied people dimension of regulating and organizing time management has the most effect on mental health. Regulation and organizing is considered as one of the most important organizational duties and protect people from misleading in organization. Results of the research by Shokravi and colleagues confirm this relation (Shokravi, 2010). Results of this research also explain that there is a positive and meaningful relationship between the dimension of time management (timed programming) and mental health. This finding shows that people having high timed programming have good mental health. This finding confirms research results of Neemati and Parsaie. They concluded that increasing motive and function and decreasing costs of mental health people having correct timed programming and making balance among job and home applications cause their mental health and organizational efficiency (Neemati and colleagues, 2009).

Dimension of time management priorities and goals also show a positive and meaningful relationship with mental health of employees. This finding shows that increasing goals and priorities of employees raises mental health of them. So there is a special reason and goal to do every job. The most important goals, needs and desires are always determined and works never done based on circumstances. This finding confirms research results of other scientists (Orgenstern, 2000). It is necessary to explain that goals and priorities dimension is considered as important management duty and in some researches it is the most important dimension (Hashemizadeh, 2009).

In this study the dimension of control on time shows no meaningful statistical effect on mental health of employees. However it is worth to note that management reeducation periods should be considered towards this dimension and determining factors of time waste in workplaces. Controlling time and proper regulating and organizing, organization employees can achieve final goals of organization. The research of Macan et al (1990) shows that students by feeling of control on time have less physical tensions and better mental health (Macan, 1999). In addition, Macan & Foster (2002) in a research show that employees having better control on time have higher mental health than others and experience more job satisfaction (Foster & colleagues, 2002). Other findings of this research show that there is a meaningful difference between opinions about time management in Rafsanjan medical school in several education levels. According to findings of this research, education as a mediator variable can effect on increasing employees time management and people with higher education have higher time management. This can have much effect on employees' functions. The research results of Jahan Sir et al (2007) show that there is a meaningful relationship between time management and employees education development (Jahan Sir & colleagues). In addition Macan (2002) in his research found that time management has an important relation with educational function (Macan, 1999). Also Fathi & Keivani in a research confirm this relation (Fathi & Colleagues).

The results of this study show that there is a meaningful difference between opinions about mental health with the sex. Meanwhile Tayebi (2004) in his research found that there is a meaningful relation between mental health and sex and girls have a mental health level higher than boys (Tayebi, 2002). Rayeb (2002) from the U.S also reported this relation and finally Hogeti (2009) in his researches concluded that there is a meaningful relation between mental health and sex (Hogeti, 2012).

The results of this study show that there is a meaningful difference between opinions about mental health with age and education. In this regard, increasing employees' education raises their mental health and this shows that people with high education consider their mental health more because increasing education level raises their knowledge about mental health and also findings show that increasing age raises mental health. According to this result it can be said that adult people based on their experiences from workplaces and their knowledge in this regard and considering their age and some factors that hurt their mental and physical health, they try to raise their mental health. Other findings explain this relation too. In researches performed in Glasgow university a meaningful relation was explained between education and mental health (Tayebi, 2009). In addition in a research by Frahbakhsh (2007) a meaningful relation was found between age and mental health (Frahbakhsh, 2007).

Other results of this research show that there is no meaningful difference between opinions about mental health with marriage and service years and experiences reveal that marriage and high service years don't have effect on mental health and according to increasing the mental health in society people, single or married are aware in this field and all employees, with high or low service years are trained in this field, so mental health isn't affected by

their singularity or marriage and service years. Frahbakhsh (2007) in his research explains it too and finds that there is no relation between students' marriage and their mental health (Frahbakhsh, 2007). Sadeghi (2010) also finds that there is no meaningful relation between employees' marriage and their mental health (Sadeghi & colleagues, 2010), but in other researches such as Jediri (2009) an opposite relation is approved that there is a meaningful relation between marriage and mental health (Jadiri, 2006). Also Khaghani (2005) concludes that there is no relation between service years and mental health of people (Khaghani & colleagues, 2006).

## Conclusion

There is a positive and meaningful relationship between time management and mental health of employees in Rafsanjan medical school. Results of the study four dimensions of time management show that among studied people dimensions of time management regulation and organization has the most effect on mental health and after that dimension of time management mechanic (timed programming) has a positive and meaningful relationship with mental health. This finding explains that people with high timed programming are in good mental health. Goals and priorities of time management also have a positive and meaningful relationship with employees' mental health. This shows that increasing employees' goals and properties raises employees' mental health. In this study, dimension of controlling time has no statistical meaningful effect on employees' mental health. However, it is worth to note that management reeducating periods this dimension and recognizing time wasting factors in workplaces should specially be regarded.

Relating to mediated variables, education level has a meaningful relation with time management; age, education and gender (sex) also show a meaningful relation with mental healthy level. According to have time management skill in promoting organization efficiency it is necessary that authorities of mental school regard this subject more. Promoting employees' ability leads to acquire time management skill and finally better mental health condition for employees.

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