

# The relationship between leadership style and time management in senior and middle nursing managers

*La relación entre el estilo de liderazgo y la gestión del tiempo en gerentes de enfermería de nivel superior y medio*

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## Abstract

**Background and research:** Leadership styles are categorized in different ways, and time management as one of the determinants of leadership success is of great importance. This study aimed to investigate the relationship between the dominant leadership style of nursing managers and their use of time management skills.

**Materials and Methods:** This was a descriptive study. The population of the study consisted of 485 senior and middle managers of Shiraz University of Medical Sciences, among which 182 were selected by simple random sampling method. In this research, three separate questionnaires consist of demographic information questionnaires, the leadership style of Bass and Avolio managers and the time management of Nazem questionnaire were used.

**Findings:** Most of the research units leadership style consist of task oriented, then humanistic and then non-interventional. The task-oriented leadership style at the significance level of 0.05 has the strongest correlation with time management, but the non-intervention leadership style is not correlated with time management.

**Conclusion:** Managers need to pay more attention to time management because their ability to gain individual skills in managing time has a positive effect on organizational skills and as a result of increasing organizational productivity.

**Keywords:** leadership styles; time management; nursing managers.

## Resumen

**Antecedentes e investigación:** los estilos de liderazgo se clasifican de diferentes maneras, y la gestión del tiempo como uno de los factores determinantes del éxito del liderazgo es de gran importancia. Este estudio tuvo como objetivo investigar la relación entre el estilo de liderazgo dominante de los gerentes de enfermería y su uso de las habilidades de gestión del tiempo.

**Materiales y Métodos:** Este fue un estudio descriptivo. La población del estudio consistió en 485 gerentes de categoría media y media de la Universidad de Ciencias Médicas de Shiraz, de los cuales 182 fueron seleccionados mediante un método de muestreo aleatorio simple. En esta investigación, tres encuestadores independientes consisten en cuestionarios de información demográfica, se utilizaron el estilo de liderazgo de los gerentes de Bass y Avolio y el cuestionario de gestión del tiempo de Nazem.

**Resultados:** La mayoría del estilo de liderazgo de las unidades de investigación consiste en tareas orientadas, luego humanistas y luego no intervencionistas. El estilo de liderazgo orientado a la tarea en el nivel de significancia de 0.05 tiene la correlación más fuerte con la administración del tiempo, pero el estilo de liderazgo sin intervención no está correlacionado con la administración del tiempo.

**Conclusión:** los gerentes deben prestar más atención a la administración del tiempo porque su capacidad para adquirir habilidades individuales en la administración del tiempo tiene un efecto positivo en las habilidades de la organización y como resultado del aumento de la productividad de la organización.

**Palabras clave:** estilos de liderazgo; gestión del tiempo; gerentes de enfermería.

The subject of guidance and leadership in management knowledge has always been interwoven with human social life. Leadership, as one of the five main tasks of managers, means influencing the subordinates so that they voluntarily perform pre-defined activities within the framework of certain goals (Bakhsheshi, 2013). Accordingly, organizations seek for effective leaders in order to perform the affairs effectively. Taking specific responsibilities and roles, they demonstrate the values of the organization (Yaghubi, 2009). One of the key roles and responsibilities of nursing managers is nursing leadership in clinical settings. Nursing profession, as any other profession, requires applying necessary changes and coordination in care of people with new knowledge and technology. Nursing management can solve many work environment problems by using management principles; otherwise, the quality and skill of nursing managers in providing community-based health-care services will be reduced (Danham, 2014). Leadership is essential for nursing, since it will allow nurses create an environment in the organization progressing towards positive change and eliminating the health challenges (Chery, 2016). Leadership theories are developed based on different views. Thus, various methods have been proposed for classifying leadership styles. Jagou (1982) divided all leadership theories into two dimensions of a set of characteristics and a set of behaviors (Jagou, 2015). Clarke divided the leadership style of managers into three categories of task-oriented, human-oriented non-intervention. Human-oriented leadership is based on emotional relationships between the leader and the subordinates, while the task-oriented leadership stresses on exchanges between the leader and the subordinates and increasing the motivation of followers.

The elements of human-oriented leadership style include attraction and charisma, behavior, inspiration, stimulation, and individual considerations. The elements of the pragmatic leadership style include contingency bonus, active management based on exceptions, and passive management based on exceptions. In non-intervention leadership style, considered as passive leadership style (unlike task-oriented and human-oriented which are active leadership styles), the leader behaves indifferently in the events and does not pay attention to the needs of subordinates (Brigham, 2013). The important point is that no particular style can be considered ideal for all organizations and it is selected based on organizational maturity and the business nature of the organization. The results of many studies have proven the relationship between the styles adopted by managers and their perceptions by followers and various factors, such as attitudes, personal characteristics, weaknesses, and skills of them in affairs such as time

management (Borron, Stephen W., et al. 2017). Nowadays, time management, as a factor determining the success, has become increasingly important, and acquiring relevant skills by managers has become more evident than before (Meng, 2017). Time management was introduced by Macan in the late 1950s. This method involves skills to meet short-term goals, the way of implementing and achieving these goals quickly, the way of prioritizing and planning the work, and the way of preventing lag in the works (Ayun, 2017). Experts believe that the implementation of time management is one of the requirements for the effectiveness of managers. Lockett (1994) considers time management as key for self-control and effectiveness (Kucur C, Özbay İ, Topuz MF, Erdoğan O, Oğhan F, Güvey A, et al. 2017). Moreover, other experts doing research especially in field of time management, such as Mackenzie, Lakein and Haynes believe that the most important and precious asset of an organization is its employees and their most valuable asset is the time (Cortina, 2015, Zafrula, 2016 and Roshnow, 2011).

Thus, time is among the resources that will make major changes in all organizational structures, if used properly. In this regard, we should not ignore the role of organizations' leaders with different types of leadership styles for management of time. The goal of time management is to avoid waste of time and to give order for working time, specify the needs and demands, categorize them based on the priorities, and allocate the needed time and resources for them (Ayun, 2017). The dynamicity of care systems and the necessity of continuous interaction with the external environment also emphasize on the importance of acquiring time management skills by nursing managers. The time issue has particular importance in nursing, so that it makes the individual spend much time on necessary affairs and avoid duplication. One of the factors causing stress in nursing managers is high work load and less time. This stress is exacerbated by inappropriate time management. Time management skill in different leadership styles is crucial to enhance the organizational and individual productivity (Ellis, 2015 and Davidson, 2015). As the goal of any hospital is to achieve its goals, manager of each unit should have required skill and ability in addition to accurately applying five specialized management processes, including planning, organizing, leadership, monitoring, and evaluation in order to achieve the organizational goals. Four resources of recent resources can be investigated in a number of ways, but the invisible resource of time is unique since it is limited and its value cannot be added (Ellis, 2015). Based on what was stated above, the question is that which styles are used by nursing managers in the leadership of the staff and if there is a relationship between the dominant leadership style of nursing managers and their use of time management skills. Thus, we hope that this research to provide promising results for growth of the public organizations through finding the appropriate response to the above mentioned questions and providing appropriate strategies for applying time management.

**G**iven the research subject, which is evaluation of the relationship between leadership styles and time management in nursing managers of Shiraz University of Medical Sciences, a correlational descriptive method was used in 2016. The research population included 485 top and middle managers of Shiraz University of Medical Sciences, working as supervisor head nurse. Based on the similar studies, the sample size was determined to be 182 people. Sampling in this study was conducted through the list provided by the nursing office of the province. Out of them, 403 qualified individuals were selected as the final sample, and 182 were randomly selected. Research inclusion criteria included having at least two years of management experience and willingness to participate in the research and the exclusion criteria of research included lack of willingness to fill up the questionnaires or work employment history less than 2 years. In this research, the researcher obtained the introduction letter from research deputy and entered the research environment. He provided adequate explanation and obtained the oral and written consent of the samples. He ensured the samples their data will remain confidential. The data related to samples were analyzed using MedCalc software and with test power of 80% and error of 5%.

In order to collect data, three separate questionnaires, including demographic information questionnaire, leadership style questionnaire, and time management questionnaire were used. In this research, the leadership style score of managers was assessed based on their answer for multi-factor 36-item leadership style questionnaire with 5-point Likert (almost never = 1, rarely = 2, sometimes = 3, usually = 4, almost always = 5). Each of the sub-scales consists of 12 items. The subjects should state their agreement or opposition to each of the items. By calculating the subject's score in 3 sub-scales, the subjects' leadership style is determined. In other words, the sub-scale in which the subject has obtained the highest score reflects his or her leadership style. In this research, the task-oriented, human-oriented, and non-intervention leadership style were determined by this questionnaire (Olive, 2004).

Reliability and validity of this questionnaire were confirmed by Ahmadi et al. (Gholami, 2011). To evaluate time management, a 44-item questionnaire developed by Nazem was used. To answer questions, 4-point Likert scale (always = 3, usually = 2, rarely = 1, never = 0), was used. The questionnaire consists of 7 sub-scales, including Planning (Questions 1-8) Prioritizing the tasks (Questions 9-12), delegation of authority (Questions 13-20), management of meetings (Questions 21-26), phone conversations (Questions 27-32), and admission of clients (Questions 33-38) and personal affairs (Questions 39-44). The reliability of

the questionnaire was found to be 0.90 using Cronbach's alpha method, which is at good level and shows a strong internal consistency among the items of the questionnaire. The content validity was used to confirm the validity of questionnaire. First, the original text was translated and provided for 10 faculty members. A score between 0 and 44 suggests poor time management, a score between 44 and 88 reflects moderate time management, and a score between 88 and 132 reflects strong time management (Nazem, 2007). To analyze the collected data based on the goals of the study, they entered into the SPSS (Version 17) software. To describe the collected data for demographic expression of information, the statistical indices of frequency and percentage of frequency were used, and to examine the relationship between leadership styles and time management, Spearman correlation test was used.

## Results

**T**he results of this research conducted on 82 top and middle nursing managers showed that most of the research subjects were women. Their mean employment history is 19.5 years. Most of them have a bachelor level of education and most of them are aged between 20 and 30 years (the relevant content is presented in (Table 1).

**Table 1: Demographic information**

Personal characteristics		F (%)
gender	female	78(2.95%)
	male	4(8.4%)
education	Bachelor	72(88%)
	Master	10(%12)
Employment history	10-20 years	38(46%)
	20-30 years	44(%54)

The data showed that most of the subjects had, task-oriented leadership style, followed by human-oriented and then non-intervention styles, respectively (The relevant content is presented in (Table 2).

**Table 2: The mean classes of leadership style**

Leadership styles	frequency	Percentage of frequency
Human-oriented	52	5.28
Task-oriented	104	2.57
Non-intervention	26	3.14
total	182	100

The results of the correlation test of leadership style and time management showed that the task-oriented leadership style at the significance level of 0.05 has the strongest correlation with time management but non-intervention leadership style showed no correlation with time management.

The results of Spearman correlation test showed that the task-oriented leadership styles had the strongest correlation with the scheduling component ( $r=0.71$ ,  $p=0$ ) and the human-oriented leadership style showed the highest correlation with management of meetings ( $r=0.43$ ,  $p=0.01$ ) (The relevant content is presented in (Table 3).

**Table 3: Correlation between time management variables and leadership styles**

leadership styles	Task-oriented		Human-oriented		non-intervention	
	r	sig	r	sig	r	sig
scheduling	71.0	00.0	32.0	01.0	71.0	19.0
Prioritization of works	68.0	01.0	39.0	01.0	83.0	18.0
Delegation of authorities	62.0	01.0	41.0	02.0	02.0	25.0
Management of meetings	54.0	00.0	43.0	01.0	72.0	22.0
Phone conversations	58.0	00.0	37.0	02.0	63.0	23.0
Admission of clients	65.0	00.0	33.0	00.0	69.0	17.0
Personal affairs	63.0	11.0	41.0	00.0	30.0	23.0
Total	63.0	01.0	38.0	02.0	21.0	78.0

The total score of subjects obtained from time management test showed that the number of top and middle nursing managers had moderate skills in time management (Table 4).

**Table 4: Time management score in top managers**

Time management (score)	poor (0-44)	Moderate (44-88)	Strong (88-132)
Number of managers in each class	28	89	65
percentage	%4.15	%49	%6.35

The results of the study in (Table 5) showed that the mean of time management components in top and middle managers was at strong level in the scheduling dimension and at poor level in the dimension of admission of clients.

**Table 5: The frequency and percentage of the frequency of score of subjects in components of time management in managers**

Time management dimensions		poor	moderate	Strong
Scheduling	Frequency	.....	53	129
	Percentage of frequency	.....	1.29	9.70
Prioritization of works	Frequency	.....	93	89
	Percentage of frequency	.....	51	49
Delegation of authorities	Frequency	25	81	76
	Percentage of frequency	7.13	5.44	75.41
Management of meetings	Frequency	51	108	23
	Percentage of frequency	02.28	3.59	63.12
Phone conversations	Frequency	31	92	58
	Percentage of frequency	03.17	54.50	86.31
Admission of clients	Frequency	24	86	72
	Percentage of frequency	2.13	25.47	56.39
Personal affairs	Frequency	.....	123	59
	Percentage of frequency	.....	58.67	41.32

## Discussion

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uman leadership is a part of nursing roles and leadership style is an important part of leadership (Malazamian, 2012). Recognizing the relationship between leadership style and time management increases the effectiveness of leadership in the organization and increase the knowledge about the effect of time management as one of the essential skills as a leader. The results of this research, conducted with the aim of evaluating the relationship between different leadership styles and time management showed that nursing managers significantly pay more attention to the task-oriented leadership style in comparison with the human-oriented and non-intervention leadership style. In other words, the leadership style of most nursing managers in the present study is task-oriented, followed by human-oriented and non-intervention styles, respectively. The results of the present study are consistent with those of research conducted by Ershad on the task-oriented style of physical education and ministry of education authorities. Ershad examined the leadership styles and some personal and personality traits of the physical education and ministry of education authorities of Tehran, Rey and Eslamshahr cities. The results showed that human-oriented leadership style of most of the managers is at good and excellent level. In the studies conducted by Nazari et al. with the aim of evaluating the role of communication skills in choosing the leadership style of sports media managers in Isfahan province, the results showed that the physical education experts used pragmatic and transformational leadership style significantly more than non-intervention leadership style (Nazari, 2013).

The results of the research conducted by Soltanipour Zandi with the aim of examining the role of communication skills in choosing the leadership style of sports media managers in Isfahan province showed that the sports managers used human-oriented leadership style more than the non-intervention leadership style, which is consistent with the results of this study (Poursoltani, 2008). Bass and Rigor state that adding transformational leadership to pragmatic leadership style increases the efforts of followers. As a result, they will show excellent performance. Therefore, the use of all dimensions of the transformational and pragmatic leadership style for nursing managers can be considered as an advantage (Bass and Rigor, 2006). In addition, the results revealed a relationship between the human-oriented and task-oriented leadership style and time management ( $p<0.05$ ), but no relationship was found between time management and non-intervention leadership style ( $p=0.78$ ). Comparing the human-oriented leadership style with task-oriented leadership style, the task-oriented leadership style has a stronger relationship with time management. Then, people who use a task-oriented leadership style can better manage their time. In

a study conducted by Saeedipour et al. who investigated the relationship between managers' leadership style and the use of time management skills in public organization of Kermanshah province, it was revealed that there was a reverse relationship between human-oriented manager and the rate of time management. There was also reverse relationship between the task-oriented manager and rate of targeting the organizational skill and type of prioritizing the goals and. However, there was no relationship between human-oriented manager and the rate of delegation of authority of organizational skill and management of time management organizational skill (Saeedipour, 2014).

Among the subscales of time management, scheduling, prioritizing tasks, delegation of authority, management of meetings, phone conversations, admission of clients showed significant relationship with task-oriented leadership ( $p < 0.05$ ). However, personal affairs do not have a significant relationship with this type of leadership style ( $p > 0.05$ ). Task-oriented managers have a special ability in scheduling tasks, prioritizing tasks, delegation of authorities, management of meetings, and phone conversations, and admission of clients. However, this class of people has low ability in management of personal affairs. The reason for this result can be justified in this way that task-oriented managers pay less attention to their personal affairs and spend much of their time on administrative affairs and work problems. Moreover, human-oriented leadership style has a significant relationship with the time management, scheduling skills, prioritizing the tasks, delegation of authority, phone conversations, client admission, and personal affairs ( $p < 0.05$ ), but this leadership style does not have a significant relationship with the management of the meetings. In this leadership style, managers have appropriate ability in scheduling, prioritizing the tasks, delegation of authorities, phone conversations, client admission, and personal affairs. However, they show weaker relationship compared to task-oriented leadership and in contrast to the task-oriented leadership style, they have relationship with personal affairs. It seems that these managers are stronger than task-oriented managers in paying attention to humans and needs.

Finally, none of the time management subscales showed significant relationship with the non-intervention leadership style ( $p > 0.05$ ), which can be attributed to the management style of managers who deal indifferently in doing the tasks and time and its management is not important for these managers. The result of this study revealed that the highest number of middle and top nursing managers have moderate level of skills in time management, which might be due to the high number of female managers in this field. Ghafouri et al. also state that physical education teachers are at the moderate level in terms of transformational and pragmatic leadership styles (Ghafouri, 2009). As Mackenzie states, women have been involved in crisis management in recent years. He introduces female managers as "superwomen consequence", and states that while women are excellent housewives, attendants, partners, and mothers, they try to be equal with men.

However, they sometimes perform weaker (Alak, 1991). With regard to time management behaviors, the research subjects were weaker in the phone conversation dimension. In contrast, they were strong in the control of time and prioritizing the tasks. In other words, they has always a specific goal to do any work, they always pre-specify the most important goals, needs, and demands of the work, the time needed to achieve the goals, and they spend time for those works leading to useful and important outcomes.

Given the critical nature of nursing management profession, such a result seems to be completely rational. It suggests that the work goals of nursing managers are always defined and classified according to priority. Time control and management and prioritizing tasks are considered as one of the most important managerial tasks, since they prevent confusion in the organization. Due to their unpredictable nature, phone conversations are among the factors in which the time control and management is at the lowest level. It leads to waste of time for the managers. Long and unnecessary conversations sometimes reduce the level of time management. Managers with different management styles are different in terms of time management skills. Based on the Shiasi, having expertise in management and the theories and theoretical knowledge are not adequate to solve educational problems and management knowledge per se is not adequate to create for the competence of managers and the manager should acquire a set of skills. Most importantly, educational centers of Iran such as universities and higher education centers or in-service centers of the education departments do not pay special emphasis on development of time management skill in managers. In addition, if a manager has an adequate freedom of action in his management history and pays no attention to time management in his management practice or acts based on his behavioral habit in dealing with time problem, with increasing his professional experience, we cannot expect a progress in his time management skill, since his professional experience has not developed this skill (Shiasi, 1993).

## Conclusions

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s a result, given the importance of time management issue, it is essential that educational centers pay more attention to time management since improving the capability of managers in acquiring personal skills of time management has a positive effect on organizational skills of time management, and as a result, increasing productivity of organization. The results of this research can be used as a source of information and statistics for the planning of university authorities. This result of this study can also be used to conduct studies to assess the effectiveness of interventions in order to improve the skill of time management in different leadership styles.

Limitations: In this study, the skills of each subject were not considered before the study. Many people require leadership style correction and time management consolation, which is not provided for these groups.

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