

The Relationship between the First Line Managers' Practices of Delegation Process and Their Time Management and Productivity among the Selected Health Sectors

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Abstract:

Background: The ability to delegate safely and effectively is essential for all nurses; however, it is vital for the nurses in a leadership position. Delegation is one of prime supports to effective time management. The ability to manage time makes any job easier, improve performance and increase productivity. Very little research related to this subject has been done in health care settings in this country. The comparison of the results of the different types of settings and samples will allow a better understanding of the relationship between delegation process, time management and productivity and thus help to determine if delegation process is worth the extra effort. **Aim:** The present study aimed to identify the relationship between the first line managers' practices of delegation process and their time management and productivity among the selected health sectors. **Methods:** A convenient sample of 89 first line managers was included in the study. This study was conducted at three hospital affiliated to the following selected three sectors (1) University, (2) Private and (3) Ministry of health and population (MOHP) sector. Data were collected by three tools. First, productivity (Curtine, 1984), second one, time management questionnaire (University Advising Center, 1999) and the last one, delegation process self assessment (College of St. Scholastica, 2003). **Results:** The present study concluded that, there were a highly statistically significant difference among the selected sectors regarding the practice of the delegation process by the first line managers, their time management and productivity. Also, First line managers' age, years of experience and continuing education were highly statistically significant correlated to their delegation, time management, and productivity. As well as, there was a highly statistically significant correlation between the delegation process which practiced by the first managers, their time management and productivity. **Conclusion:** The first line managers' understood the importance of practices of the delegation process and identified that delegation process can be beneficial in their time management and productivity in nursing practice. **Implications and recommendations:** Further study should identify the barriers to effective delegation in different sectors.

Key words: First line managers, Time management, productivity, delegation process.

Introduction

Delegation is a major element of directing function of nursing management (Swan burg & Swansburg, 2002). The ability to

delegate safely and effectively is essential for all nurses; however, it is vital for nurses in a leadership position (Hansten & Washburn, 1992).

Delegation defined as directing the performance of one more individuals to accomplish organization goals (**Marquis & Huston, 2009**). Delegating effectively save time, increases productivity and enhances the meaning fullness and challenge of particular job assignments for staff members (**Boille, Trygstand & Cordoni, 1989**).

With effective delegation, the delegator will be able to devote more time to those tasks that can not be delegated .With more time available the delegator can develop new skills and abilities, facilitating the opportunity for career (**Sullivan & Decker, 2005**). When a nurse manager learns to accept the principles of delegation, they become more productive and enjoy the relationship with the nurses (**Swanburg & Swansburg, 2002**). In an era of increasing competition and scarce resources, improving productivity is the critical issue for every nursing unit (**O'Grady, 1994**).

Productivity is defined as the contribution toward an organizational end result in resources consumed (**McNeeseSmith, 1997**). To enhance effectiveness and productivity the principles of time management were designed (**Gillies, 1994**). Time management is the use of personal and professional management tools and strategies to assure that investment in activities leads toward achieving a desired high priority goal (**Wise, 2007**). Delegation is one of the prime supports to effective time management and its leadership and management strategy designed to maximize time management (**Ales, 1995 & Huber, 2000**).

With the increasing emphasis on

efficiency and effectiveness in health care, how a nurse manages her time is an important consideration. Whilst time management is recognized as an important component of work performance and professional nursing practice (**Waterworth, 2003**).

Maximizing nursing productivity by minimizing time spent on non-nursing activities more effectively uses nursing resources and helps ensure that patients receive high-quality care. Many nurses are spending time on support service tasks--and forgoing time with patients. Increasing nurse time with patients also has positive financial implications for hospitals through improved patient satisfaction, decreased hospital-acquired infections, and increased nurse retention (**Thompson et al. 2009**).

Support service functions, including food and nutrition services, environmental services, clinical technology services, laundry and linen services, and patient transportation, are areas that have demonstrated an ability to absorb many non-nursing tasks. Training support services staff to perform their duties in collaboration with nursing fosters an environment that enables a stronger patient care team (**Thompson et al. 2009**).

Many nurses are reluctant to delegate may be due to poor time management skills (**Ameduri & Halland, 1990**). The ability to manage time makes any job easier, improve performance and reduce job stress (**Rue & Byars, 2001**).The nurse manager who practices effective time management skills acts as role model to both staff and peers. Greater job satisfaction is achieved through work being accomplished .Improvement of time management skills will increase

productivity which in turn reinforces sound habits of time management (Marrelli,1997).

Aim of the study:

The present study aimed to identify the relationship between the first line managers' practices of delegation process and their time management and productivity among the selected health sectors.

Research question:

What is the relationship between the first line managers' practices of delegation process and their time management and productivity?

Subjects and Methods:

Study design:

A descriptive correlation design was used for this study. Correlation is a procedure for quantifying the relationship between two or more variables. It measures the strength and indicates the direction of the relationship (Munro, 2001).

Setting:

This study was conducted at six hospitals affiliated to the following selected three sectors (1) University, (2) Private and (3) Ministry of health and population (MOHP) sector.

Sample:

A convenient sample of 89 first line managers who have the responsibility for managing administrative activities in the different units/wards and not included in direct patient care were included in this study. The study sample included only those who are having more than one year experience

of nursing practice in the study setting to avoid any bias. The subjects had different educational levels.

Tools of data collection:

Three tools were utilized to obtain data pertinent to the study:

1. ***The professional productivity checklist (Curtine, 1984).*** This tool was designed to measure professional productivity by means of three measures:

- A. ***Objective measures of efficacy:*** which include information about qualification, getting of certificate about training and skill courses, and years of experience in nursing.
- B. ***Objective measures of effectiveness:*** which include the following items: demonstrated ability to execute job-related procedures, correctly prioritized activities, performance according to professional and legal standards, appropriate information clearly concisely recorded, and cooperative working with others.
- C. ***Objective measures of efficiency:*** which include the following items:- promptness, attendance, reliability, adaptability, and economically disposition of resources.

Scoring system: The measures of effectiveness and efficiency will be done by checking the items by "yes" or "no", response were scored "1"and "0", respectively. The researcher made three observations of the performance for each nurse related to objective measures of effectiveness and efficiency, and scored each item as done (yes) if two of the three incidences met the criteria, and as

"not done (no)" if only done once or not at all. Nurse Manager's productivity was determined by using the mean number of all observations for each manager.

2. **The time management questionnaire (University Advising Center, 1999):** It consisted of 25 items which measure self perception of time management by first line managers. **Scoring system:** Responses were always = 2, some times =1 and never = 0. The total scores were as the following: out of control = ≤ 19 , moderate time control = 19-34, high time control = 35-50.
3. **The delegation process self assessment (College of St. Scholastica, 2003): Scoring system:** The scale consists of 25 items, responses were yes =2, no = 1 for each item. The total scoring system was as the following: excellent practice of delegation = 20-25, adequate practice of delegation = 15-19, weak practice of delegation = 14 and below.

Pilot study:

A pilot study was carried out before starting the actual data collection. The purpose of the pilot study was to ascertain the clarity, and applicability of the study tools, and to identify the obstacles and problems that may be encountered during data collection. It also helped to estimate the time needed to fill in the questionnaire. Based on the results of the pilot study, modifications, clarifications, omissions, and rearrangement of some questions were done. The pilot study was done on 7 nursing personnel working in different units and wards,

and these were not included in the total sample of the research to ensure stability of the answers.

Ethical and administrative design:

Before any attempt to collect data, a formal letter was issued from the faculty of nursing/ Menoufyia and Cairo University, to obtain an official approval from the administrators of the hospital where the data were collected to conduct the study. The researcher introduced herself to the respondents, and explained the aim and objectives of the study to the head nurses in the study setting. Each participant was notified about the right to refuse to participate in the study, before taking her verbal consent. Anonymity and confidentiality of the information gathered was ensured.

Field work:

The designed questionnaire was distributed to the respondents, with instructions about its filling. This was repeated in each units/wards of the study hospital. They were asked to fill them out throughout the different shifts. The researcher was present all the time to clarify any ambiguity. The time taken for every questionnaire to be completed was about 30- 40 minutes for each head nurse. As well as the subjects professional productivity was observed for three times over three successive weeks.

Statistical design:

Data were coded for entry and analysis using SPSS statistical software package version 11. Quantitative variables were presented in the form of means and standard deviations, and tested by ANOVA. Moreover Chi-square used to determine the impact of

delegation process on time management and productivity. Chi-square is the appropriate technique when variables are measured at the nominal level. It may be used with one or more groups (Munro, 2001). Statistical significance was considered at p -value <0.05 .

Results:

It is apparent from the findings that the highest percentages of the participants were graduate of secondary technical nursing school (54%), while the minorities were graduates of the nursing faculty (46%). High percentage (30%) of participants, their age ranged between (31-36) years old. The highest percentage of participants (38%) had years of experience in nursing ranged between (11-20) years old. The highest percentage of participants had not evidence of continuing education and staff development (60%).

Table (1): illustrates that, third (29.2%) of the study subjects were in age group (31-36), while the least percent (3.4%) of them were in the age group more than 24 years. According to the level of education, more than half (53.9%) of the study subjects were diploma nurses. While, the rest (46.1%) of them were bachelor degree. In relation to years of experience for the study subjects were found that, more than third (38.2%) of them had experience ranging from (11-20) years, while the least percentage (1.1%) had experience of more than 30 years. Also, 60.7% of the study subjects had received training courses. The majority of the study subjects (75.3%) is working in centralized units and the rest of them (24.7%) working in decentralized units. More than half (52.8%) of the

study subjects had eleven to twenty nurse, while the least percent (10.2%) of them had more than thirty of nurses. Regarding to patients' number, more than third (39.3%) of study subjects had eleven to twenty patient, while the least percent (10.2%) of them had more than thirty of patient.

Table (2): showed that, there was a significant difference among the selected sectors regarding delegation process practiced by the first line managers ($f=38.3$, $p=0.000$). The highest mean score was related to the MOHP sector ($\bar{x}=40.85$, $SD=5.12$) while, the lowest mean score was related to the private sector ($\bar{x}=37.85$, $SD=4.94$). A highly significant difference was found among the selected sectors regarding the first line managers' time management ($f=38.7$, $p=0.000$) with highest mean score of private sector ($\bar{x}=65.40$, $SD=3.29$), while the lowest mean score was related to the MOHP sector ($\bar{x}=47.05$, $SD=4.65$). In relation to the first line managers' productivity, the results revealed that, there was a highly significant difference among the selected sectors ($f=14.82$, $p=0.000$). The highest mean score was related to the private sector ($\bar{x}=28.20$, $SD=3.39$), while the lowest mean score was related to the MOHP sector ($\bar{x}=24.78$, $SD=2.29$).

Table (3): illustrate that, there was a significant difference between the first line managers' age and their practiced delegation process, time management and productivity ($f=19.19$, $p=0.000$), ($f=26.76$, $p=0.000$), ($f=33.70$, $p=0.000$) respectively. Finding revealed that, there was a significant difference between the first line

managers' years of experience in nursing and their practiced delegation process, time management and productivity ($f=18.29$, $p=0.000$), ($f=16.85$, $p=0.000$), ($f=37.58$, $p=0.000$) respectively. While, there was no statistical significant difference between nurse managers' years of experience and their time management.

In addition, there was no statistical significant difference between the first line managers' level of education and their practiced delegation process, time management and productivity. Finding denoted that, there was a significant difference between the first line managers' evidence of continuing education and staff development and their practiced delegation process, time management and productivity ($f=8.03$, $p=0.001$), ($f=8.68$, $p=0.000$), ($f=7.74$, $p=0.001$) respectively.

Table (4): clarified that, there was a highly significant difference between the practiced delegation process by the first line managers and their time management ($X^2 = 38.78$, $p=0.000$). The first line managers who practiced excellent delegation process had the highest mean scores of time management ($\bar{x} = 60.9$, $SD=7.87$), while, the first line managers who practiced weak delegation process had the lowest mean scores of time management ($\bar{x} = 58.5$, $SD=8.21$).

Table (5): as well as, a highly significant difference was found between the practiced delegation process by the first line managers and their productivity ($X^2 = 14.82$, $p=0.001$). The first line managers who practiced excellent delegation process had the highest mean scores of

productivity ($\bar{x} = 29.58$, $SD=3.47$). While, the first line managers who practiced weak delegation process had the lowest mean scores of productivity ($\bar{x} = 24.95$, $SD=2.54$).

Table (6): it is obvious that, there was a highly significant difference between the first line managers time management and their productivity ($X^2 = 24.44$, $p=0.000$). The first line managers who had the highest mean scores of productivity, their time management was highly controlled, ($\bar{x} = 29.73$, $SD=3.23$). While, the first line managers who practiced weak delegation process had the lowest mean scores of productivity, their time management was out of control, ($\bar{x} = 23.85$, $SD=2.13$).

Discussion:

The present study finding revealed that, there was a significant difference among the selected sectors regarding delegation process practiced by the first line managers ($f=38.3$, $p=0.000$). The highest mean score was related to the MOHP sector ($\bar{x} = 40.85$, $SD=5.12$) while, the lowest mean score was related to the private sector ($\bar{x} = 37.85$, $SD=4.94$). In contradiction with this finding, **Abd El-Khalik (1999)** in her study of assessing delegation among different categories of nurses, found that 50% of the nurses directors and head nurses in MOHP and curative organization hospitals delegate to subordinates only sometimes.

Moreover, **Fekry, EL-Molla and AbdEL-Megid (1999)** found that, nurses in different administrative positions had average delegation scores, which means that, sometimes

they do not use the delegation skills in selected units at Cairo University hospitals. The researchers and **Fekry et al. (1999)** believe that, nursing administrators in different positions do not delegate because of understaffing and lacking the skills of delegation as it is learned by trial and errors in the work place, rather than through academic education.

On the same line **Hansten and Washburn (1994)** recommended that, academic staff are responsible for teaching nurses how to delegate responsibility to assistive personnel which can alleviate fear and mistrust. A highly significant difference was found among the selected sectors regarding the first line managers' time management ($f=38.7$, $p=0.000$) with highest mean score of private sector ($\bar{x}=65.40$, $SD=3.29$), while the lowest mean score was related to the MOHP sector ($\bar{x}=47.05$, $SD=4.65$).

This finding is in accordance with **Ibrahim & Rashad (2003)** who found the highest percentage in median score of time management in Menoufia University hospitals. In addition **Hassan, Abd EL-Sayed and Adams, (1994)** reported that, nursing services personnel do not utilize their time economically in Ain Shams University specialized hospital. In relation to the first line managers' productivity, the results revealed that, there was a highly significant difference among the selected sectors ($f=14.82$, $p=0.000$). The highest mean score was related to the private sector ($\bar{x}=28.20$, $SD=3.39$), while the lowest mean score was related to the MOHP sector ($\bar{x}=24.78$, $SD=2.29$).

This findings may be because the resources availability in the private

sector than that found in the MOHP sector. In contradiction to the present finding **Ibrahim & Rashad (2003)** reported that, nurses managers had effectiveness and efficiency in their work productivity at Menoufia University hospitals.

In the present study, there was a significant difference between the first line managers' age and their practiced delegation process, time management and productivity ($f=19.19$, $p=0.000$), ($f=26.76$, $p=0.000$), ($f=33.70$, $p=0.000$) respectively. This finding in agreement with **McNeese -Smith (1997)** who finds that, there was positive relationship between nurse managers' age and their productivity. In contradiction to the present finding, **Ibrahim & Rashad (2003)** reported that, there is no significant difference between time management, productivity and nurse managers' age.

In addition **Ibrahim, Abd EL-Whaab and Abd EL-Fattah (2003)** added that, there is no significant difference between nurse managers' age and their productivity. Finding revealed that, there was a significant difference between the first line managers' years of experience in nursing and their practiced delegation process, time management and productivity ($f=18.29$, $p=0.000$), ($f=16.85$, $p=0.000$), ($f=37.58$, $p=0.000$) respectively. This finding in accordance with **Ibrahim & Rashad (2003)** who found that, there was a significant difference between nurse managers' years of experience and their productivity.

While, there was no statistical significant difference between nurse managers' years of experience and

their time management. In addition, **El Sheimy (2001)** stated that, there was negative significant relation between the first line managers' years of experience in nursing and their practiced delegation process. On the contrary, **Ibrahim et al. (2003)** could not reveal any statistically significant association between the managers' years of experience and their productivity.

In addition, there was no statistical significant difference between the first line managers' level of education and their practiced delegation process, time management and productivity. **Ibrahim & Rashad (2003)** supported these finding by revealed that, there was no statistical significant difference between nurse managers' level of education and their productivity. Moreover, **McNeese-Smith (1997)** added that, there was no statistical significant difference between nurse managers' level of education and their practiced delegation process. Finding denoted that, there was a significant difference between the first line managers' evidence of continuing education and staff development and their practiced delegation process, time management and productivity ($f=8.03$, $p=0.001$), ($f=8.68$, $p=0.000$), ($f=7.74$, $p=0.001$) respectively.

In accordance with the present study finding, there was a highly significant difference between the practiced delegation process by the first line managers and their time management ($X^2 = 38.78$, $p=0.000$). The first line managers who practiced excellent delegation process had the highest mean scores of time management ($\bar{x} = 60.9$, $SD=7.87$), while, the first line managers who

practiced weak delegation process had the lowest mean scores of time management ($\bar{x} = 58.5$, $SD=8.21$).

In the same respect **El Sheimy (2001)** and **Hansten & Washburn (1994)** supported the finding by added that, delegation is essential for improves and maximizes the time management, increases efficiency and facilitates professional growth. Managers do not delegate because of the following reasons: a) insecurity, b) fear of being disliked, c) refusal to allow mistakes, lack of confidence in subordinates and perfectionism, and d) they believe it does not worth the time and energy (**Mac Kenzes & Buchen, 1998 & Sullivan & Decker, 2005**).

The current study could prove a highly significant difference was found between the practiced delegation process by the first line managers and their productivity ($X^2 = 14.82$, $p=0.001$). The first line managers who practiced excellent delegation process had the highest mean scores of productivity ($\bar{x} = 29.58$, $SD=3.47$). While, the first line managers who practiced weak delegation process had the lowest mean scores of productivity ($\bar{x} = 24.95$, $SD=2.54$).

These findings are similar to the study results reported by **Swanburg & Swansburg (2002)** as they found that, delegation is essential for improved productivity, which is consistent with the study of **Alex (1997)**, who states that, when nurses are delegated responsibility and concomitant authority by administration, they get more job satisfaction, absenteeism decreases

and quality care seems improved. Moreover **Timm (2003)** concluded that in her study, with a clear understanding and application of sound delegation principles to their daily practice, nurses can experience an increase in job satisfaction and loyalty, high performance, and improved productivity.

In addition, delegation also allows nurses to practice professional nursing. Agencies can better manage limited resources and promote positive patient outcomes by assuring all staff who can delegate to the maximum. In the same domain, delegation increases the efficiency of the staff and the quality of care improves. As team work improves, the organization achieves its goals more efficiently, thus over time and absenteeism decreases, subsequently productivity increases and financial position may improve (**Hansten & Washburn, 1994**).

According to the present study results, there was a highly significant difference between the first line managers time management and their productivity ($X^2 = 24.44$, $p = 0.000$). The first line managers who had the highest mean scores of productivity, their time management was highly controlled, ($\bar{x} = 29.73$, $SD = 3.23$). While, the first line managers who practiced weak delegation process had the lowest mean scores of productivity, their time management was out of control, ($\bar{x} = 23.85$, $SD = 2.13$). This result was supported by **Ales (1995)** and **Ibrahim & Rashad (2003)**.

Conclusions:

1. Delegation process by the first line managers with highest score was related to the Ministry of health and population sector.
2. The first line managers' productivity and time management with highest score were related to the private sector.
3. First line managers' age, years of experience and continuing education were significantly correlated to their delegation, time management, and productivity.
4. There was no significant difference between first line managers' level of education and their practicing of delegation process and time management.
5. Time management and productivity were significantly correlated to delegation process.
6. Time management was significantly correlated to productivity.

Implications and recommendations

1. Encourage practice of delegation by the nurse managers.
2. Developing policies which figure out the delegation procedures.
3. Delegators should be free from liability associated with negative outcomes resulting from delegation.
4. Seminars about delegation and time management must be conducted to raise the nurse managers' awareness.
5. Computerizing nursing documentation may ultimately save nurses time.

6. Further study should identify the barriers to effective delegation in different sectors.

Table (1): Percentage distribution of demographic variables and general characteristics of the study subjects.

Variables	No = 89	
Age	No.	%
< 24	3	3.4
25-30	20	22.5
31-36	26	29.2
37-42	23	25.8
43-48	10	11.2
> 48	7	7.9
Level of Education	No.	%
Diploma	48	53.9
Bachelor	41	46.1
Experience Years	No.	%
< 10	26	29.2
(11 - 20)	34	38.2
(21 - 30)	28	31.5
> 30	1	1.1
Training Courses	No.	%
Yes	54	60.7
No	35	39.3
Units' Structure	No.	%
Centralized	67	75.3
Decentralized	22	24.7
Span of Control	No.	%
< 10	19	21.3
(11 - 20)	47	52.8
(21 - 30)	14	15.7
> 30	9	10.2
Patients' Number	No.	%
< 10	26	29.2
(11 - 20)	35	39.3
(21 - 30)	19	21.3
> 30	9	10.2

Table (2): Comparison of mean scores of first line managers' practices of delegation process, time management, and productivity among the selected sectors (N= 89)

Variable	University		Private		MOHP		F	P
	M	SD	M	SD	M	SD		
Delegation	39.76	2.54	37.85	4.94	40.85	5.12	38.3	0.000
Time Management	62.36	4.22	65.40	3.29	47.05	4.65	38.7	0.000
Productivity	26.52	3.00	28.20	3.39	24.78	2.29	14.82	0.000

Table (3): The first line managers' demographic variables in relation to their delegation process, time management, and productivity

Demographic variable	Delegation		Time management		Productivity	
	F	P	F	P	F	P
Age	19.19	0.000	26.76	0.000	33.70	0.000
Nursing experience	18.29	0.000	16.85	0.000	37.57	0.000
Educational level	1.969	0.146	0.479	0.621	0.002	0.998
Continuing education evidence	8.033	0.001	8.680	0.000	7.74	0.001

Table (4): Relationship between the first line managers' delegation process and their time management

Delegation process levels	Time management		X ²	P
	M	SD		
Weak	58.5	8.21	38.78	0.000
Adequate	58.9	8.28		
Excellent	60.9	7.87		

P ≤ 0.01

Table (5): Relationship between the first line managers' delegation process and their productivity

Delegation process levels	Productivity		X^2	P
	M	SD		
Weak	24.95	2.54	14.82	0.000
Adequate	27.08	2.69		
Excellent	29.58	3.47		

Table (6): Relationship between the first line managers' productivity and time management

Time management levels	Productivity		X^2	P
	M	SD		
Out of control	23.85	2.13	24.44	0.000
Moderate control	26.97	2.28		
High control	29.73	3.23		

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