

The relationship of work productivity of nurses and their work schedules research...

[Business](#), [Employee](#)



- Healthcare Management Issue/Problem: Working Hours for Nurses

Among the many issues that are discussed in workplace settings revolving around the topics of efficiency and productivity are hours worked by personnel. There are several aspects of this relationship that has been studied by management experts leading to an obvious conclusion. The management of time of work personnel (i. e. the number of hours worked) affects both their productivity and the organization's viability. The Stanford University (n. d.) said that overwork leads to a decrease in the average productivity (as explained by output). The decrease in productivity is due to employees becoming very less efficient (due to factors such as stress, fatigue, etc.) at any given point within the work day. Thus if an employee is overworked (i. e. due to very long working hours or too much work load), that employee will be less productive at all hours of the work day, leading to errors and subsequent costs that could otherwise be avoided. Additionally, Stanford (n. d.) stated that reduced employee productivity is manifested throughout the day, but increases at a particular time than others. For example, an employee can be productive on the first few hours of work and drastically becomes unproductive thereafter. In some cases, researchers from Stanford found some employees exhibiting negative productivity wherein the actions taken by workers (employees) lead to mistakes, oversights, additional hours of work required, injuries, costs, etc. A good example are heavy equipment operators, who when overworked, tend to injure themselves and cause damage to projects, properties or equipment they are working on.

One solution to maintain worker productivity is to provide fixed and flexible

working arrangements. Fixed working schedules, such as those used by traditional companies, require employees to be at the work area for a total of eight (8) hours per working day. Flexible work arrangements include longer working hours at preferred times of the day by the employee. The idea behind flexible work hours is that an employee will choose the hours to work which would correspond with his or her peak times . That benefits both the employer and the employee through better work coverage, extended working hours, improvement of personal and collective morale, reduction of absenteeism and tardiness, better work-life balance, among others.

According to the internet resource Workplace Flexibility (n. d.), there are studies that show that there is a positive relationship between employee productivity and flexible work schedules while there are studies that show otherwise. In the negative instances when flexible work schedules did not affect productivity positively, employees were found not to use them and instead rely on traditional working hours. It was reported that those employees did not feel that the flexible work schedules were usable. Those employees that use their flexible hours found them usable thus creating a positive effect on their psychology making them more productive.

- Background

In the healthcare industry, the environments are often full of distractions making the provision of health care services very difficult. Nurses, being a central figure in health care provision in the hospital environment, are critical in making the right clinical decisions about their patients. Health care patients are of course, precarious customers because their conditions may change by the minute thus making their needs demanding twenty four hours

every day. Nurses are in charge of their by-the-minute management thus the pressures of accommodating the requirements of these patients are paramount.

There are a lot of studies on workplace productivity in the hospital environment but there is very little information that would lead to an understanding of the performance of nurses with respect to work place policies such as the use of fixed and flexible working hours. A piece of work conducted in 1988 comparing nurses working on eight hour and twelve hour shifts was published by Fields and Loveridge. The researchers found that there was no significant difference between eight hour and twelve hour shifts for nurses which indicated that the problem is not caused by a four hour extension for nurses. It could be that the factor that we are looking for is the continuous extended work hours nurses are burdened with in carrying out their tasks.

Of the updated information available, the premier resource can be found in a study conducted by Rogers, et al (2004) on the relationship between the working hours of staff nurses and the safety of the patients they are taking care of. In this study, the researchers found that the risks of errors from nurses who are on active duty increases significantly as their work shifts grew longer than twelve hours a day (or equivalent to more than 40 hours per week). This is due to the use of extended work shifts and overtime by hospitals to cope with the decreasing number of registered nurses in the United States. Their study examined the log books that were completed by about 393 nurses. The data showed that of these nurses, about 40 percent exceeded the normal 12 hour shifts.

A similar study was conducted in 2006 by Scott et al. online. The study was entitled Effects of Critical Care Nurses' Work Hours on Vigilance and Patients' Safety and discussed the researchers conclusion that the longer the working hours of the nurses, the more errors they commit and the lesser their degree of vigilance is. This was concluded based on a survey of 502 respondents that were found to be working longer than-usual hours in hospitals.

In 2010, research entitled “ Fatigue, performance and the work environment: a survey of registered nurses” was conducted by Barker et. al examined the levels of mental, physical and total fatigue of nurses and the relationship between these levels of fatigue and their effectiveness were investigated. Nurses from different demographics and working environments were identified for this study.

- Question of Inquiry.

Because there is little attention given to work place requirements of nurses with respect to the policy on working hours, there is a need for scholarly research on the topic. In particular, the study will focus on the difference between a fixed eight-hour work schedule versus a flexible twelve (12) hour work schedule for nurses on their critical thinking, productivity, vigilance and efficiency. The study will theorize on the improvements in terms of level of service quality delivered by nurses under the two work schedules.

- Sources of information used to gather Evidence

There are several potential sources of information for this study. A combination of human factor analysis techniques, qualitative observations and quantitative measurements may be used in addressing the study questions.

The work cited above leaned on the use of surveys for gathering evidence. The surveys conducted came from actual registered nurses, in various demographics and working environments. For example, one example of information that could be used for this analysis is presented by a study conducted in 2009 by Williams, Harris & Turner-Stroke whereby the activities of nurses were quantified under a neuro-rehabilitation section of the hospital. Another example is a study conducted by Potter, et al, wherein a new perspective on medical errors based on the cognitive work of nurses is examined. Lastly, a study conducted by Clarke and Donaldson looked into the relationship of nurse staffing and the quality of service provided. These studies look into various aspects of the work delivered and the performance of nurses. However, the correlations between working hours and working hour policies have not been addressed adequately in scholarly research work. The surveys that were conducted in these studies showed that primary information is critical for the understanding of the problem.

- Analysis of quality of information - Examples from each

The quality of information utilized for background and reference material for this study is of high quality and is acceptable for peer reviews. Data will be acquired from recent studies (not more than 10 years since the date of publication), from published scholarly work conducted by credible research institutions, from similar working environments (i. e. hospital settings). The actual study shall be based on a combination of qualitative and quantitative data which shall be acquired through a carefully constructed survey and then analysed for statistical and operating significance.

- Possible Solutions Considered

The studies used as background information indicate that there is a relationship between the hours worked by nurses and their efficiency by way of their delivery of healthcare services. The efficiency of their service is based on the qualitative assessment of patients as presented in the study by Clarke and Donalson and that the study indicates that the increase in the number of hours worked decreases overall service quality for a fixed number of nurses. The study conducted by Williams et al indicated that the consistency in the work load (including work hours) has a profound effect on overall output and efficiency. Lastly, it was shown in the study conducted by Potter et al that the nurses' behaviour towards productivity is correlated with their work load.

The studies that are used in analysing the problem did not provide strategic solutions other than reducing the number of hours worked by nurses or through the expansion of the nursing personnel. There may be other possible solutions that would require a more operations-research approach such as doing a time-and-motion study or through job/task re-definition. This could improve a nurse's efficiency such that it would take shorter hours to complete her work thereby negating the need to extend working hours.

In all these studies however, there is a gap between the actual determinations of the productivity of the nurses (as measured by their service quality) with the work schedule policy being implemented. This leaves a window for further study and analyses.

- Best Solution & Rationale

The approach to addressing the study question that is, determining the correlation of productivity for nurses working under a fixed eight-hour work

schedule or a flexible twelve (12) hour work schedule is to do an empirical study of nurses within a hospital environment and do a qualitative survey on their service quality similar to the techniques employed in the reference studies. The results could then be analysed for statistical significance and the proper solutions could be drawn up. In this way, the study would provide the necessary academic insights on whether having a fixed working schedule or a flexible working schedule is statistically different in terms of productivity results or not and could lead the way to the formulation of future human resource management strategies for healthcare providers and other agencies.

- Method of Presentation of your Solution

Aside from providing quick references, graphics and explanatory diagrams, a concise discussion of the findings will be presented. This will be presented in a scholarly report, formatted using acceptable formatting standards and using academic references found in the public domain.

- Methods of Evaluating the Success/Failure of your Solution supported by research

The success of the study shall be based on the intuitive results that will be generated and its ultimate use as a factor in addressing human resource management strategies for hospitals and other health care providers.

- Conclusion

The study on the relationship between the productivity and service quality of nurses with respect to a fixed eight hour work schedule and a flexible twelve hour work schedule is a study that revolves within the present sphere of management studies on employee productivity, human resource

management strategies, service quality levels, customer satisfaction and other key management principles. The study will lead to a better understanding of the factors in question, hopefully resulting in a reassessment of current human resource work policies for nurses and other health care professionals.

Bibliography

Barker, L., & Nussbaum, M. (2010). Fatigue, performance and the work environment: a survey of registered nurses. *Journal of Advanced Nursing* 67(6), 1370 - 1382.

Clarke, S., & Donaldson, N. (n. d.). Chapter 25. Nurse Staffing and Patient Care Quality and Safety. In *Patient Safety and Quality: An Evidence-Based Handbook for Nurses* (pp. 1 - 25).

Cornell University. (n. d.). Flex/Alternate Work Schedule. Retrieved July 30, 2013, from Cornell University: https://www.hr.cornell.edu/life/support/alternative_work_schedule.html

Fields, W., & Loveridge, C. (1988). Critical Thiking and Fatigue: How Do Nurses on 8 and 12 Hour Shifts Compare? *Nursing Economics* 6 (4), 189 - 191.

Potter, P., Wolf, L., Boxerman, S., Grayson, D., Sledge, J., Dunagan, C., et al. (n. d.). An Analysis of Nurses' Cognitive Work: A New Perspective for Understanding Medical Errors. *Advances in Patient Safety*, 1 - 14.

Rogers, A., Hwang, W.-T., Scott, L., Aiken, L., & Dinges, D. (2004). The Working Hours Of Hospital Staff Nurses And Patient Safety. *Health Affairs* 23 (Number 4), 202 - 212.

Scott, L., Rogers, A., Hwang, W.-T., & Zhang, Y. (2006). Effects of Critical

<https://assignbuster.com/the-relationship-of-work-productivity-of-nurses-and-their-work-schedules-research-paper-sample/>

Care Nurses' Work Hours on Vigilance and Patients' Safety. Retrieved July 30, 2013, from American Association of Critical Care Nurses: <http://www.ajconline.org>

Sloan Center for Aging and Work. (n. d.). Employer's Need: Improved Performance and Productivity. Retrieved July 30, 2013, from Workplace Flexibility: http://workplaceflexibility.bc.edu/need/need_employers_performance

Stanford University. (n. d.). The Relationship Between Hours Worked and Productivity. Retrieved July 30, 2013, from Stanford University: <http://www-cs-faculty.stanford.edu/~eroberts/cs181/projects/2004-05/crunchmode/econ-hours-productivity.html>

Williams, H., Harris, R., & Turner-Stoke, L. (2009). Work sampling: a quantitative analysis of nursing activity. *Journal of Advanced Nursing*, 1 - 11.

Workplace Flexibility. (n. d.). Employer's Need: Improved Performance and Productivity. Retrieved July 30, 2013, from Workplace Flexibility:

http://workplaceflexibility.bc.edu/need/need_employers_performance