

Victoria Cheung
Professor Donna Cantor
The Impact of Shiftwork on the Everyday Worker

Abstract

This paper seeks to discuss the night shift and its impact on individual workers as well as a company at large. The growth of shiftwork has given rise to a new 24-hour economy from which we could never return to a normal daytime economy. Numerous industries have adopted shift schedules that can accommodate to their businesses, employees working shifts at abnormal hours to keep the businesses running throughout the night. However, the night shift has detrimental effects on the individual workers, and in turn on the companies at large. There are various risks to working the night shift, including those of physical health, stress, mental health, family and social life, and work and life satisfaction.

What impact does working the night shift have on the worker's individual health, mentality, and well being? How can this affect his safety and productivity, as well as the well being of the company or business as a whole?

Shiftwork has risen from part-time work to a whole new realm of work in terms of schedule and lifestyle. From restaurant workers to doctors, police officers to flight attendants – shiftwork today includes jobs in the food, health, safety, and transportation industries, among many more. Shiftwork extends into so many parts of the economy now, becoming more and more prominent. In this growing global world, need constantly *calls* for work to be done and technology *allows* for work to be done at any or all times. What effects does shiftwork have on the worker? How does shiftwork impact the individual and the company as a whole? While shiftwork has become an integral part of our economy, there have been studies that show detrimental effects of shiftwork. The night shift is considered to be the most detrimental. The night shift has a significant correlation with employees' affect, health, and negative behaviors. A reduction of quality of sleep, heavy drinking, emotional turmoil, family issues, and illness and toll

on health are all correlated with night shiftwork. Does the night shift *cause* these negative cognitive and physical effects, and do variable work schedules need to be adjusted for the health and wellness of shiftworkers?

Many industries have developed in a way that depends on shiftwork, causing the stability of the economy to depend on shiftwork as well. However, shiftwork has various negative cognitive and physical effects on the individual worker. Shiftwork not only moves the worker's social and family life farther and farther away from the healthy norm, but it also can cause detrimental effects in terms of mental and physical health. It causes the worker to become highly prone to certain disorders and diseases, and it has caused immense pressure and stress in the lives and minds of the workers. It has played with the worker's emotions and happiness, and it has taken a toll on the worker's overall wellness.

To analyze the impact of the night shift on the worker, one must first understand some of the vocabulary and concepts that go behind it. One important concept is the circadian rhythm. The circadian rhythm is the internal clock of one's body, the clock that controls all bodily functions, including the secretion of hormones, one's sleep and wake schedule, and ultimately one's physical and mental health. According to Torbjorn Akerstedt in "Psychological and Psychophysiological Effects of Shift Work," "The psychology and psychophysiology of shift work is intimately related to the rhythmic timing system of humans, particularly that having a 24-h period - the circadian (from *circa dies* = approximately 24 h) system" (67). Each individual's bodily functions are controlled by the circadian rhythm, which creates a sort of bodily routine for the maintenance of health. Another important term is "the graveyard shift," which is the night shift. The beginnings of this phrase "the graveyard shift" is unknown, but there are clear implications from the coining of this term. This term not only correlates with darkness in which

night shiftworkers work, but it also embodies the detrimental effects of the night shift on the worker.

The negative effects of the shiftwork system ultimately affect the workplace negatively, causing adverse effects in employee lifestyle, health, and mentality. While shiftwork is integral in a 24-hour economy like the one we have today, changes need to be made to the shiftwork system to improve the health and wellness of shiftworkers.

Shiftwork as a whole stems from a large revolution in world history – the Industrial Revolution. The Industrial Revolution occurred in 18th and 19th centuries, and it was a time in which many economic changes were being made. People were moving from rural areas to cities, and the type of work that people were doing was shifting from agriculture to manufacturing and services. Years later, the world came to be what it is today – a constantly moving, ever running economy in which countless industries do not sleep. As stated by Teich and Porter in *The Industrial Revolution in National Context: Europe and the USA*, “The blooming of a flower, the hatching of an egg, the bursting of the butterfly from its chrysalis – are examples of ‘revolution,’ of moments of apparent, bewildering chaos, from which, or after which, for a time, a stable new order appears” (366). The Industrial Revolution gave rise to a “stable new order” in which shiftwork is not only common, but also necessary. This economy has come to depend heavily on shiftwork to keep businesses running all day and night. Hillstrom and Hillstrom declare in *The Industrial Revolution in America*, “The Industrial Revolution was a transformational era in U.S. history, ushering in a host of major technological and socioeconomic changes that continue to define the nation’s political, social, and environmental landscape today” (7). The Industrial Revolution birthed so many different industries that are now active in the United States and so many other places as well. These 24-hour industries, whether they might be transportation or

medicine, are now a necessity for our economy's needs. This revolution has truly changed our economy forever, and shiftwork has become the foundation upon which our economy today has built itself.

Above all else, a person should always value his or her own health. One cannot do without health, and employers should keep that in mind. Night shift work, unfortunately, has been shown to have correlations with a number of physical health issues that range from fatigue to cancer. According to Nancy P. Gordon et al, "When workers are forced to alter their sleep/activity schedule abruptly to correspond to a new work shift, there is usually a mismatch between the body's resources and the demands placed upon it until the circadian phase can adjust" (Gordon 1225). This "mismatch" causes excessive fatigue throughout the day and night, causing problems not only physically but all around. This is nothing, however, to the other detrimental consequences that the night shift could have on a worker. Studies show that night work is even correlated with cancer. Paul Winston says that "In the case of night shift work, a report...by the International Agency for Research on Cancer found that workers in the so-called graveyard shift have a higher risk of cancer than the general population and that the work should be classified as 'probably or possibly carcinogenic.' That's right: they said working at night causes cancer" (Winston 6). What Winston means by the "graveyard shift" is the night shift. If only the workers knew that their work could cause them cancer and death. But even then, most would probably continue working because they have no other choice in this competitive world. It is stop working and starve, or work and *possibly* get cancer in the future. Most would choose the latter.

Employees should know, however, that worker productivity and safety decrease significantly during the night shift, which should encourage them to work towards bettering the

shift system if no alternative argument does. According to Simon Folkard and Philip Tucker, “It has long been recognized that people’s efficiency at performing various tasks is not constant, but varies over the course of the normal waking day. Early theorists attributed this to either a build-up of ‘mental fatigue’ over a period of wakefulness or an underlying rhythm in ‘sleepiness’ that was independent of whether people had actually slept” (Folkard and Tucker 99). What they mean is that efficiency and productivity are ultimately affected by various factors that change throughout the day. They suggest in their article that during the night shift, workers are unable to maintain the same productivity and safety because their internal clock controls their attention and alertness. They cannot adjust and make the changes to their body and its functionality that would be necessary to allow for the same productivity and safety levels that are present in the day. This was also found to be true in a study done by Claire C. Caruso, et al, in which researchers found that “Six studies examining 12-hour shifts combined with more than 40 hours of work per week reported increases in health complaints, deterioration in performance, or slower pace of work” (4). Regardless of whether or not people have actually slept, the fact that the workers’ circadian rhythms have been thrown off will automatically cause the worker’s productivity and safety to decrease. Not only will work be less efficient during the night shift, but more mistakes will be made in employees’ work and accidents are more likely to occur, resulting in potential lawsuits. With this in mind, employers should at least be inclined to change their night shift systems for the improvement of their own businesses, if not to help their employees.

With increased safety risks, companies also face increased possibility of unwanted liabilities. As the risks of the safety of their workers increase, so do the possibility of lawsuits and the profits made from night shiftworkers lost to the workers themselves as a result of these lawsuits. As stated by Professor Shantha Rajaratnam in “Health in a 24-hour Society,”

“Sleepiness surpasses alcohol and drugs as the greatest identifiable and preventable cause of accidents in all modes of transport” (999). Simply the sleep deprivation increases the risk of liability, let alone the increased probability of alcohol and drug use in night shiftworkers. Not only do most companies not have extra benefits for night shiftworkers, but many even refuse to acknowledge the risks involved with night shiftwork. The United States Department of Labor, for example, does not require increased pay or benefits for workers on the night shift. It is therefore highly possible for these companies to lose these lawsuits. Employers should also keep these in mind when considering their shiftwork system.

Research shows the inability of the body to adjust to the night shift causes stress and related consequences. According to Steven Slon and Linda Rao, “The disruptive patterns of the night shift put the body in a constant state of stress, which doctors believe causes the release of stress hormones that raise blood pressure and cholesterol levels” (Slon 106). What Slon and Rao mean by “disruptive patterns of the night shift” is the interference of the natural internal clock – the circadian rhythm. When the circadian rhythm is thrown off, the body cannot function the way it normally functions during the day, causing people to feel stress. This ultimately causes even more negative effects, whether they are physical effects like those described by Slon and Rao, or whether they are one of various mental effects stress can cause as well. The various mental health effects that working the night shift can cause include depression, alcoholism, aggression and irritation, emotional turmoil, and many others.

As stress rises to unprecedented, detrimental levels in the graveyard shift, it becomes more and more important that the shiftwork system be changed to accommodate to the needs of the workers. When workers cannot perform as well as they want to, they begin to feel stressed out, and as a result, they wear out physically and mentally. They experience highly negative feelings

related to stress and distress, such as nervousness and tension, and these feelings come into play in the workplace. “Affective processes (more commonly known as emotions) create and sustain work motivation...Strong affective feelings are present at any time we confront work issues that matter to us and our organizational performance” (Barsade and Gibson 36). Emotions have quite a bearing on important things like leadership, teamwork, and decision-making, and when negative emotions due to stress are experienced, they have a negative effect on these essential organizational behaviors. This causes the workers to be even less likely to perform well and to feel even more stressed, ultimately causing a vicious cycle that damages the productivity of the company.

In addition to all of these possible mental effects, night shiftwork has a significant impact on family and social life, as well as overall life happiness and satisfaction. Because most people are on different schedules than shiftworkers, working by day and sleeping by night, shiftworkers often have difficulty when it comes to supporting a family, maintaining healthy relationships, and upholding a normal social life. Anita Ilta Garey conducted several case studies on female nurses and their ability and willingness to work the night shift. In her study, a nurse named Angela stated, “After I get [my kids] and tell them to do their homework and all those things...I try to get some sleep but it doesn’t work...So almost every night I have only four hours of sleep every day” (431). Angela has great difficulty managing both her family life and her job because she experiences sleep deprivation and resulting stress.

Those who do not have families still suffer from negative emotions due to minimal social interaction. Shiftworkers frequently have little interaction with people who work normal work schedules. This decrease in human interaction as well as the difficulties with family and social life often contribute to a feeling of isolation and depression, as mentioned above.

While it is true that the graveyard shift has a multitude of negative effects on the workers, it would be nearly impossible to remove the night shift from our economy today. Various industries have come to depend on the night shift to keep businesses running 24 hours a day. People need to travel and eat at night. Crimes need to be prevented at night. Patients need to be taken care of at night. What would we do if the night shift was just eliminated from our economy? How would we survive? According to Steven Slon and Linda Rao, “One in five Americans lives on the other side of the clock...They sleep by day and toil at night to keep factories humming, to keep hospitals in operation, and to provide 24-hour services – such as all-night supermarkets – to an economy that never sleeps” (106). The global economy has become one that “never sleeps” – everything around us is constantly active, moving, working. Employers depend on night shiftworkers to continue their work throughout the night.

Unexpectedly, it is not only employers argue in favor of the night shift and shiftwork in general, but many workers are in favor as well because they feel that there are greater returns in the long run and in the bigger picture. For example, in Anita Iltta Garey’s study, she found that many mothers were more than willing to work the night shift because they wanted to be able to be more involved with their children. “Night shift workers are constructing a ‘working mother’ who is a ‘full-time mother’ because she does what ‘full-time’ mothers do: she is at home during the day” (452). They found that they could play a more impactful family role if they worked during the night rather than the day. Nevertheless, many of these mothers struggled in juggling these dual-lives, and managing this kind of lifestyle was found to be quite difficult. Another extensive study done by Fitzpatrick, Joanne M. and other researchers found that more effective shift schedules would affect organizations positively, which was described in their article “Shift work and its impact upon nurse performance: current knowledge and research issues.” This study on

nurses concludes that “every attempt should be made to enhance the well-being and effectiveness of the nursing workforce, and it is argued that effective management of nurses’ shift work represents a key strategy for achieving this. The latter also has the potential to generate positive outcomes for consumers and for employing organizations” (25). Therefore, regardless of the benefits of the night shift, improvements can be made on the shift system for the betterment of all.

Today, the “disposable worker” is cheap, available, hard-working, and ready at all times. Employers take advantage of this, having a cut-throat, business mentality, but this mentality must come to an end. Employers need to think about how shiftwork affects their employees. The disposable worker mentality is detrimental to the workers’ well being because it gives rise to a harmful shift system and limited benefits for workers. The shift system causes workers to be less productive and to work in a situation with a high risk of accidents and mistakes. The shift system, however, has become an integral part of our economy, and most workers will not leave their work or fight for a better system or benefits because the economy is so competitive today. Just like Friedman states, today, we live in a “flat world,” where everyone is on the same playing field (1). Shiftworkers, despite the detrimental effects of their work, will not cease to work and will not fight for their rights because they can easily be replaced with other workers that are capable and more than willing to take their jobs with no argument.

Although the night shift is heavily depended on today, it is still possible and necessary to make changes to the system that would ultimately benefit the wellness of night shift workers. According to Paul Winston, “It's unlikely the night shift could ever be eliminated without severe economic and social consequences, but maybe [awareness of the consequences] will result in new attention to address the risk, hazard pay and claims for compensation. It could also provide added impetus to globalization in the information industries, since a big chunk of night time in North

America is day time in Asia and India” (6). So many things could be done to improve the health and lives of night shift workers. More breaks could be offered; shorter shifts could be required; more health insurance benefits could be provided. Some serious changes are going to have to be made if employers do not want to see their workers, and in turn their businesses, collapse. If no changes are made, however, some serious consequences would emerge in the future, not only for workers and employers, but possibly even for the economy. But a positive outlook is always more encouraging, so think about all the positive outcomes to which changes in the shift work system could lead. According to Gordon et al, “Research suggests that restructuring the way work is done, i.e., redesigning shift schedules to be more compatible with the body's circadian rhythms, can lead to improved health, reduced stress, and increased job satisfaction and productivity” (1228). If adjustments are made to the night shift system, immense improvements could be made in the lives of all night workers, to employers and their businesses, and to the productivity and wellness of the economy as a whole.

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