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THE SIX-HOUR WORKDAY: LITERATURE AND CASES ON PRODUCTIVITY, WELL-BEING, AND ECONOMIC IMPLICATIONS

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Abstract

The traditional eight-hour workday has been the cornerstone of industrial and post-industrial economies for over a century. Yet, experiments in recent times, especially in Sweden, have challenged this norm and brought in a six-hour workday. This article conducts a systematic literature review to explore the implications of a six-hour workday on productivity, employee well-being, and economic outcomes. In light of empirical evidence from Sweden and other countries, as well as theoretical frameworks such as Pareto's Principle and Parkinson's Law, this study examines whether shorter workdays can indeed lead to greater productivity, better work-life balance, and lower health care costs. However, these findings suggest that although the six-hour workday has potential, prevailing conditions inside organisations' settings and public attitudes greatly affect its success.

Keywords: Six-Hour Workday, Pareto Principle, Productivity, Work-Life Balance, Employee Well-Being

I. INTRODUCTION

The eight-hour workday was conceptualised during the Industrial Revolution to balance work demands with fundamental human rights. But as economies have progressed, so have the requirements placed on workers. The knowledge-based industries' boom, along with the impact

of technology, has caused increased stress and burnout, as well as a growing demand for work-life balance. This has led some countries, most prominently Sweden, to experiment with shorter workdays, namely six-hour workdays, to address these challenges.

We provide a systematic review of the literature on the six-hour workday, examining its effects on productivity, employee well-being, and economic outcomes. The review will analyse data on six-hour workdays in Sweden, where several organisations have adopted them, and examine how they benefit workplace productivity, along with Pareto's Principle and Parkinson's Law. Finally, the paper will consider the potential challenges and limitations of implementing shorter workdays across different cultural and economic contexts.

II. THEORETICAL FRAMEWORK

II.1 Pareto's Principle and Productivity

The 80/20 rule, also called Pareto's Principle, states that 80% of outcomes come from 20% of the inputs. This concept, when applied to work, tells us that you can achieve a great deal of productivity with just a small amount of effort. Employees can complete 80% of their daily tasks in the first few hours of work, but with diminishing returns as the day progresses. It had been applied to production processes in the past (Juran, 1951), where Joseph Juran made beneficial use of the principle to gain efficiency.

Pareto's Principle, or the 80/20 rule, indicates that, in the context of a six-hour workday, employees must be motivated and dedicated to achieve maximum productivity in a comparably short time (or vicinity). This was similar to the results from Sweden: working six-hour days increased productivity and job satisfaction (The Guardian, 2015). Another study (Brynjolfsson & McAfee, 2014) has shown that technology can increase productivity and allow employees to do more work in less time.

II.2 Parkinson's Law and Time Management

According to Parkinson's Law, "work expands to fill the time available for its completion" (Parkinson, 1955). It means that if you give workers more time to do it, they will take more time, even if they can do it in less time. In contrast, employees work best and get things done when they are pressed for time.

A six-hour workday can be viewed as an implementation of Parkinson's Law. This squeeze of available time forces employees to prioritise work and increase their efficiency. This has already been seen in Swedish companies with shorter workdays, where employees report completing the same amount of work in a new six-hour workday as in an eight-hour one (The New York Times, 2016). Also, several quantitative studies on time management (e.g., Gajendran & Harrison, 2007)

demonstrate that when given the opportunity to have flexible work arrangements through shorter workdays, workers tend to increase their attention span and work efficiency.

III. EMPIRICAL EVIDENCE FROM SWEDEN

III.1 Case Study: Svartedalens Elderly Care Home

One of the most conspicuous experiments with the six-hour workday happened at the Svartedalens elderly care home in Gothenburg, Sweden. With the goal of reducing employee stress and achieving work-life balance, the experiment shortened the workday from 8 to 6 hours. The results were promising, as employees felt less stressed and more invigorated, and the quality of care to residents improved (Bloomberg, 2016).

The experiment also revealed a paradox: employees managed to maintain or even increase their productivity despite working fewer hours. Because of this, one way to go about resolving this problem was to apply the Pareto Principle, because employees were able to be productive in less time. The success of the experiment has also generated political interest in the six-hour workday, with some policymakers pushing for its broader adoption (The Guardian, 2015). The study is consistent with findings about work intensification, which indicate that workdays that are shorter reduce burnout and improve general job performance (Kelliher & Anderson, 2010).

III.2 Case Study: Toyota Service Center

A prominent example from 2003 is a Toyota car service dealership in Sweden, which switched to a six-hour workday to relieve workers' stress and customers' long waiting periods. The new system extended the hours of the garages and led to heightened customer satisfaction and profitability. Workers said the reduced hours helped them stay more energetic and focused, resulting in better performance (The New York Times, 2016).

Toyota service centre's success indicates shorter workdays' benefits in physically demanding jobs. Working shorter hours ensured employees stayed fresh and worked at peak efficiency — beneficial to both the company and its clients. This is consistent with research by Sparks et al. (1997), which shows that working less can improve both physical and mental health, thereby increasing productivity.

III.3 Case Study: Internet Search Optimisation Start-Up

Maria Brath, who founded an online search optimisation start-up in Stockholm, instituted a six-hour workday from the start. While they worried at first that they would have to bring on more people for any given project, they discovered that the shorter timeframe made people more

productive. Consequently, revenue and profit doubled year on year, proving short working hours can be associated with high productivity and a successful business (The New York Times, 2016).

This case study demonstrates that the six-hour workday is particularly useful in knowledge-based industries, where productivity is often determined by focus and creativity rather than a mere number of hours worked. This also resulted in an efficient workforce who had a better work-life balance, thanks to the compressed working schedules. Warr (1990) highlighted mental well-being as necessary for optimal job performance, which supports the case findings.

IV. THE PARADOX OF WORKING LESS AND PRODUCING MORE

Empirically, Sweden has proven that shorter workdays can increase productivity, commonly dubbed as the "paradox effect". Various factors contribute to this impact, including increased employee motivation, effective time management, and lower stress levels.

The paradox effect has many contributing factors, but one of the most important is increased employee motivation. Extended time off allows employees to return to work more energised and motivated. In contrast, Gabrielle Tikman, a surgical nurse, found that her energy increased, and her productivity soared when she transitioned to a six-hour workday (The New York Times, 2016). According to Pfeffer's (2018) research, worker well-being is closely associated with motivation and productivity.

A six-hour workday is also conducive to better time management. Moreover, with reduced time, the employees are required to be selective and dedicate themselves to what matters most. This principle aligns with Parkinson's Law, which holds that work expands to fit the time available for its completion. This increases the likelihood that, given fewer hours, employees will work effectively and will not waste time on non-work-related activities (Parkinson, 1955). The evidence from Gajendran and Harrison (2007) suggests that flexible work arrangements, or control over their working conditions, allow employees to manage their time and lead to employees being more productive.

In terms of pressure and anxiety, less stress (or eustress – positive stress) can, in fact, mean greater productivity. Excessive stress (or distress) can cause burnout, job dissatisfaction, and reduce productivity. Since reduced worker hours go a long way toward ensuring proper work-life balance, they make workers healthier (The Guardian, 2015). Research by Sparks et al. (1997) demonstrated that stress levels are significantly diminished when work hours are shortened, resulting in increased job performance.

V. CHALLENGES AND IMPLICATIONS

The six-hour workday looks promising, but it also has certain difficulties and limitations. One of the highlighted concerns is the potential burden on employees required to deliver tasks in a shorter time. This may cause increased stress levels, especially when the employees' sense that they are being asked to do more in less time (Times of India, 2016). Schor's (1991) research has suggested that work intensification could be experienced with shorter workdays, which could counter a portion of the benefits.

There is also the issue of how this will affect businesses, especially those which depend on long hours to fulfil customer needs. By contrast, sectors like healthcare and retail could see elevated costs associated with staffing with fewer hours worked over the same timeframe (CNBC, 2016). This is in line with the findings by Kelliher and Anderson (2010), highlighting that matters such as increased operational expenses for employers prevent flexible work arrangements from optimal sustainability.

Additionally, the six-hour workday may succeed or fail based on cultural and societal norms. In countries with a strong work culture, like the United States, shorter workdays (or even the idea of shorter workdays) would likely meet resistance because they are often framed as lazy or a lack of initiative (Fast Company, 2016). As Brynjolfsson and McAfee (2014) point out, technology and organisation need to mirror and be aligned with shared values before they can succeed and thrive.

The six-hour workday has all sorts of economic ramifications. Reduced workdays (and, consequently, reduced work hours) may lead to more output in the long run, as well as less overhead and happier employees, leading to a lower churn rate and more hours produced per person employed. Conversely, they may bring additional staff costs and possible business interruptions.

As previously mentioned, a six-hour workday will provide an opportunity to enhance efficiency through time management and the prevention of stress. Because productivity is often a direct correlation to profitability for businesses, that means higher levels of output and profitability and improved job satisfaction for employees (The New York Times, 2016). Brynjolfsson and McAfee (2014) make this exact research argument: it is not productivity or labour, rather you can achieve productivity gains through improved organisation of work and well-being of employees.

In countries with socialised healthcare systems, shorter workdays may also reduce the amount spent on healthcare costs. Less stress and improved work-life balance may reduce health-related issues among employees, leading to less individual and public healthcare costs (Science Alert, 2016). Sparks et al. found that this statement is true (1997) that reducing work hours can bring about substantial improvements in employees' health, with consequent reductions in healthcare costs.

VI. CONCLUSION

The six-hour workday represents a significant departure from the traditional eight-hour workday that has dominated industrial and post-industrial economies for over a century. While the empirical evidence from Sweden suggests that shorter workdays can lead to higher productivity, improved employee well-being, and reduced healthcare costs, the success of this approach depends on various factors, including employee motivation, organisational culture, and societal norms.

Relying on Pareto's Principle of 20-80 and its implementation in production processes by Juran, it can be argued that it is physiologically optimal for employees to expend 20% of their energy to achieve 80% of the results. In other words, the day-night cycle lasts 24 hours, meaning that working 6 hours per day equates to 6/24, or 25%, of the day. According to Pareto, Juran, and others (e.g., Parkinson), 20% commitment leads to 80% productivity. Thus, 25% commitment could theoretically lead to 100% productivity. While this is the general logic behind the phenomenon, it is important to consider other variables, such as employee qualifications, motivation, and organisational support, to ensure that this linear causation holds true in practice.

As the global economy continues to evolve, the debate over the optimal length of the workday is likely to persist. While the six-hour workday may not be suitable for all industries or countries, it offers a promising alternative to the traditional eight-hour workday, particularly in knowledge-based industries where productivity is more dependent on focus and creativity than on the number of hours worked.

Future research should focus on the long-term implications of the six-hour workday across different cultural and economic contexts. Additionally, further studies are needed to examine the potential challenges and limitations of shorter workdays, particularly in industries that require continuous coverage or experience high customer demand.

REFERENCES

Bloomberg. (2016). The six-hour workday works in Europe. What about America? Retrieved from http://www.bloomberg.com/news/articles/2016-05-10/the-six-hour-workday-works-in-europe-what-about-america

Brynjolfsson, E., & McAfee, A. (2014). *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*. W.W. Norton & Company.

CNBC. (2016). Six-hour workday good for Sweden, not necessarily the US, expert says. Retrieved from http://www.cnbc.com/2016/05/27/six-hour-workday-good-for-sweden-not-necessarily-the-us-expert.html

Fast Company. (2016). Could the US ever adopt a six-hour workday? Retrieved from http://www.fastcompany.com/3051366/the-future-of-work/could-the-us-ever-adopt-a-six-hour-workday

Gajendran, R. S., & Harrison, D. A. (2007). The good, the bad, and the unknown about telecommuting: Meta-analysis of psychological mediators and individual consequences. *Journal of Applied Psychology*, 92(6), 1524-1541. https://doi.org/10.1037/0021-9010.92.6.1524

Juran, J. M. (1951). *Quality Control Handbook*. New York: McGraw-Hill.

Kelliher, C., & Anderson, D. (2010). Doing more with less? Flexible working practices and the intensification of work. *Human Relations*, 63(1), 83-106. https://doi.org/10.1177/0018726709349199

Parkinson, C. N. (1955). Parkinson's Law. *The Economist*.

Pfeffer, J. (2018). *Dying for a Paycheck: How Modern Management Harms Employee Health and Company Performance—and What We Can Do About It*. Harper Business.

Schor, J. B. (1991). *The Overworked American: The Unexpected Decline of Leisure*. Basic Books.

Science Alert. (2016). Sweden is shifting to a 6-hour workday. Retrieved from http://www.sciencealert.com/sweden-is-shifting-to-a-6-hour-workday

Sparks, K., Cooper, C., Fried, Y., & Shirom, A. (1997). The effects of hours of work on health: A meta-analytic review. *Journal of Occupational and Organizational Psychology*, 70(4), 391-408. https://doi.org/10.1111/j.2044-8325.1997.tb00656.x

The Guardian. (2015). Efficiency up, turnover down: Sweden experiments with six-hour working day. Retrieved from https://www.theguardian.com/world/2015/sep/17/efficiency-up-turnover-down-sweden-experiments-with-six-hour-working-day

The New York Times. (2016). In Sweden, an experiment turns shorter workdays into bigger gains. Retrieved from http://www.nytimes.com/2016/05/21/business/international/in-sweden-an-experiment-turns-shorter-workdays-into-bigger-gains.html?_r=0

Times of India. (2016). The truth about Sweden's six-hour work day. Retrieved from http://timesofindia.indiatimes.com/business/international-business/The-truth-about-Swedens-six-hour-work-day/articleshow/50492820.cms

Warr, P. (1990). The measurement of well-being and other aspects of mental health. *Journal of Occupational Psychology*, 63(3), 193-210. https://doi.org/10.1111/j.2044-8325.1990.tb00521.x