

Daylight-Saving Time No Longer Has The Same Benefits

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Argumentative Research

Many countries around the world have long been using daylight-saving time (DST) for beneficial reasons such as energy conservation. DST refers to the time as adjusted by setting the clocks an hour ahead of the standard time. The aim is to achieve longer evening daylight, especially in summer times. Now, during its first implementation in March 1918 in the United States, it was expected to bring many benefits, such as energy conservation and other benefits to citizens. It was because of that that other countries, such as Britain and Germany, followed suit and implemented DST in its early years. But during its course over the years, many people still have questions as to whether DST is as beneficial as before or not. Various studies have been carried out across the world regarding the benefits of DST years after it was implemented in the United States and other countries.

A majority of the findings from several studies have indicated that DST no longer has the same benefits as when it was implemented in 1918, such as energy conservation. These findings have even gone further to indicate that DST brings more harm than good, such as affecting the health and safety of citizens and reducing productivity. Evidence from several studies has proven that DST has little to no benefits as it was anticipated during the time of its implementation. These studies have been carried out in various aspects of life, including education, health, and psychology. Renowned scholars have compiled important data and the necessary information that has come to prove right this assumption about the benefits of DST, which are no longer there as it was during its implementation several years ago. The scholars have also compiled critical evidence that shows DST to have more harm than good.

One of the commonly held beliefs about DST is that it reduces the demand for electricity. In fact, the main idea behind the implementation of DST in the United States and several other countries was to conserve energy by reducing the demand for electricity. However, several studies have come to prove this assumption by demonstrating that DST does not in any way reduce the demand for electricity among the citizens. One renowned scholar, Alistair Pellen (2014), carried out a study involving the use of DST. He wanted to determine whether DST affects the demand for electricity. He carried out this study in the western part of Australia. To get the best of what he wanted, Pellen utilized a unique dataset to examine the distributional and overall effect of DST on electricity demand.

The dataset covered the most recent three-year trial of both DST and outside the DST and was important in giving the most recent inference about how the use of DST versus standard time affects the demand for electricity in the selected region. The use of DST only changed the normal behaviours

of electricity consumers, according to the findings of this study. That is the time that consumers use more electricity, only shifting from evenings, when there was an extended period of sunlight, to the morning when there were colder and darker situations. Consumers, therefore, use the same amount of electricity overall as they used to outside DST, with the change being a reduced demand in the evenings and increased electricity demand in the mornings. The results of this study prove that DST does not save electricity, contrary to the historical belief that termed DST as an electricity conserver.

Daylight-Saving Time and Student Performance

Another assumption that was brought out during the implementation of DST is that of improved student performance. There exists a common belief that DST improves the performance of elementary school students in some capacities. That is, elementary school students' performance improves when the time shifts to DST. However, this is just a belief that has little empirical evidence, but a study by Herber, Quis, and Heineck (2017) wanted to prove if, indeed, DST has effects on the student's performance. The aim of the study was to examine whether daylight saving time harms the performance of elementary school students in low-stakes assessments (math, science, and reading) in the week after the time change. This study was important in providing empirical evidence regarding the little or no benefits that DST has for citizens in the education sector.

This study focused on test results of elementary students extensively involving six European countries and with more than 22,000 participants. Most European countries have implemented DST in a move that aims to benefit citizens in one way or another. Now, this study was able to demonstrate that, indeed, DST has no benefits as before, especially in terms of the performance of students in elementary schools. The findings of the study revealed that the transition into daylight saving time was not statistically significant in all three testing areas. This study is, therefore, one of the critical pieces of evidence that shows that DST has no benefits. A hypothesis that is not statistically significant means that DST does not add any value as far as the performance of elementary school students is concerned.

Health and Safety Effects

Apart from energy and education, this paper also notes that DST brings more harm than good, such as affecting the health and safety of citizens and reducing productivity. One of the health concerns surrounding DST is sleep and vigilance. DST has for some time been regarded as resulting in adverse effects on individuals' sleep and vigilance. A study carried out by Medina et al. (2015) wanted to test the hypothesis on the adverse effects that DST has on sleep and vigilance of high school students during school days. A shift in daylight time in some capacities affects sleep time, thereby affecting the overall student concentration during the day. The study was able to prove that, indeed, Daylight-Saving Time caused an increase in daytime sleepiness among the selected high school students. This is a clear indication that DST causes more harm than good, especially in terms of students'

concentration during the daytime.

Adverse effects on sleep caused by DST are also supported by another study by Harrison (2013). Harrison, in his study, examined the significance of daylight saving time in estimating adaptation to the new schedule. This study used a sample of 100 people who completed the Pittsburgh Sleep Diary six days before October and also six days after October. Time adjustment can cause individuals to have difficulties in waking up. Although some people can easily adapt to changing schedules like bed sleep time without many difficulties, a majority of people face sleep disturbance and deterioration during DST. According to findings from Harrison (2013), a majority of the participants in the study experienced sleep disturbances when it came to shifting sleeping schedules, which harms people more than it benefits them. Sleep disturbances are one of the health concerns that affect individuals during DST.

Individual Well-Being

There is also the issue of individual well-being when time shifts. Do individuals feel more satisfied when they have extended daylight and darker mornings, or is it the other way around? To answer this puzzle, we incorporate studies that have been done on matters related to individual well-being during DST. Kountouris and Remoundou (2014) examined the impact that DST has on individual well-being. In their study, Kountouris and Remoundou analyzed data from the German Socioeconomic Panel Survey in a fixed effect model, where they obtained the self-satisfaction data of individuals after shifting to DST. The findings from Kountouris and Remoundou's study also proved that transitioning to DST has more harm than good for people, as it revealed that satisfaction deteriorates after the transition to DST. Here, individual well-being suffers a blow when time shifts to DST, implying that DST has no benefits.

In terms of health, DST has also been analyzed in various capacities, particularly regarding the impact it has on some health-related conditions. One of the widely studied health concerns that is impacted by shifting to DST is the incidence of acute myocardial infarction (AMI). AMI refers to the probability of occurrence of heart attack among individuals. DST has also been linked with AMI, and scholars around the world have investigated this assumption. Does shifting to DST have an impact on AMI? Does it increase the incidence of AMI, or does it reduce? Toro, Tigre, and Sampaio (2015) carried out a study in Brazil to investigate the impact of shifting to DST on the incidence of AMI. The result indicated that shifting to DST increases the incidence of AMI by 7.4 to 8.5 per cent, which means that DST causes more harm to AMI.

Circadian Rhythms and Stroke Risk

Another health-related condition that is impacted by DST is circadian rhythms and the pattern of diurnal variation in stroke onset. Sipilä, Ruuskanen, Rautava, and Kytö (2016) conducted research in

Finland-based hospitals with the purpose of examining the impact of DST shifts on circadian rhythms and the pattern of diurnal variation in ischemic stroke (IS). This study provides another significant proof of the harm that the DST shift has on the health of individuals. The finding of this study proved the hypothesis right as it revealed that DST increased IS hospitalizations in the target hospitals, which indeed harms individual patients.

From the various evidence from several studies, it is indeed factual that shifting to DST does not have the same benefits that it had at the time of its implementation. Evidence also reveals that DST has, in some instances, more harm than good, while other studies indicate that DST has no significant effect on individuals. Schaffner, Sarkar, Torgler, and Dulleck (2015), in their study that aimed at examining the effects of DST shift on cognitive performance and risk-taking behaviour, showed no significant changes in both cognitive and risk-taking behaviour. The studies have also objected to the main common belief about DST, which is about energy conservation. The study by Pellen (2014) proved that, indeed, shifting to DST does not change the demand for electricity but instead changes the usage behaviour where individuals use more electricity during the mornings than they do in the evenings. The paper has also discussed several pieces of evidence that show the harms that DST has over its little benefits.

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