NUDGES TO ENCOURAGE STAFF TO BE MORE ENERGY EFFICIENT: Evidence from a field experiment in Germany

Informing truck drivers about their driving performance via an app on their work mobile phones can increase their fuel-efficient driving significantly. This type of informative, digital nudge may thus be an inexpensive tool to motivate employees to be energy efficient at work.

These are among the conclusions of research by **Kirsten Thommes** and **Christin Hoffmann**, to be presented at the annual congress of the European Economic Association in Manchester in August 2019.

The authors ran a field experiment with 104 truck drivers at a German logistics company. They randomly assigned half of them to a 'control' group or a 'treatment' group respectively. The treatment group could receive information about the fuel-efficiency of their driving style. The control group could not monitor their driving.

Both groups were observed for seven months. The authors conclude that informational nudges helped to improve fuel efficiency. Giving drivers the chance to inform themselves about their driving style significantly improves their performance. Additionally, the authors can show, that the impact of this app is sustainable.

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Nudging citizens or customers toward better decisions has been frequently used and analysed. But whether or not nudges alone (without any peer comparison element), improve workplace performance and increase their energy-efficient behaviour is not well researched, even though nudges are a very inexpensive way to influence behaviour. Nudges may offer an alternative to monetary incentives or sanctions in firms. Additionally, nudges may work differently in firms than in other settings.

These results provide evidence for the effectiveness of informational nudges. Giving a treatment group of drivers the chance to see via app an evaluation their driving style and its underlying reasoning significantly improves their performance compared with their performance during a control phase and compared with a control group. This result remains if the authors control for other impact factors, such as work experience.

Studying the underlying mechanism in more detail, they find evidence first, that previous performance has a convex impact on performance during the treatment phase in the treatment group; and second, that an app that informs about performance and underlying reasons improves the performance of initially bad drivers more than those of initially good drivers.

The authors assume the latter is because initially good drivers have fewer possibilities to increase their performance. Additionally, informing initially bad drivers about their performance and its reasons offers the possibility for comparably large marginal increases in performance.

Moreover, good drivers may have already been intrinsically motivated to drive well. Their motivation is not crowded out by nudging as their performance remains high. On

the contrary, individuals who were not intrinsically motivated to drive well improved their performance after informational nudging.

Thus, these results reveal that not all employees reacted equally to nudges, but nudges do not harm individuals' performance and do help some individuals. Treated drivers saved on average €2.09 per week in fuel costs compared with their control phase. Additionally, average CO2 emissions were significantly reduced from 837.54g/km to 792.83g/km. The mitigated CO2 emissions correspond to about 1.3 passenger vehicles driven for one year.

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