

PRESS RELEASE

Leibniz Research Centre for Working Environment
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Study identifies key psychosocial stress factors in freight train driving

Long shifts, irregular working hours, high time pressure, and social isolation: the work of freight train drivers is both physically and mentally demanding. A better understanding of the specific work-related stresses faced by freight train drivers can help make the profession more sustainable and attractive in the long term. To this end, a research team at the Leibniz Research Centre for Working Environment and Human Factors in Dortmund (IfADo) studied 532 freight train drivers in Germany, examining how various psychosocial factors and their interactions influence well-being, performance, and safety.

“Our findings show that it is crucial to understand how psychosocial factors interact as a whole, rather than looking at individual stressors in isolation“, explains Dr. Yannick Metzler, head of the Junior Research Group Occupational Stress at IfADo. “Stress can occur particularly under emotionally demanding conditions, combined with limited social interaction and restricted decision-making freedom, which can significantly impair well-being and performance.”

The study shows that the psychosocial work environment of freight train drivers has a significant impact on health and safety. Factors such as personal commitment to work, stable social relationships, autonomy, and opportunities for professional development contribute to varying degrees to the health and performance of employees.

To ensure long-term health and safety, researchers recommend implementing targeted organizational measures. “Social contacts - whether with colleagues, supervisors, or in one’s private life - have a significant positive impact,” explains Nikita Rajendra Sharma from the “Stress and Work Design” group. “Autonomy can refer to shift planning, for example, and if designed appropriately, can also counteract social isolation.” The data shows how strongly psychosocial factors influence work performance and provides important insights for designing workplaces that protect health and improve safety in freight train driving.



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