



Proceedings

The effects of the Coronavirus Job Retention Scheme (Furlough) on lifestyle health-related behaviours and mental health symptoms in a sample of UK-based truck drivers

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Abstract: Delivery drivers were classified as a key worker group during the 1st UK COVID-19 lockdown. Whilst those delivering essential goods had their permitted driving hours extended, others employed by the hospitality sector were placed on the Government's job retention scheme (furlough). This study investigated the differences in this situation (furlough vs non-furlough) on lifestyle health-related behaviours and mental health symptoms in a sample of UK-based truck drivers using an online survey complete by 89 participants (40% response rate from those invited, mean age: 51 years, BMI: 29.8 kg/m², 100% male). 43 (48%) reported being furloughed. Furloughed drivers reported a longer sleep duration (mean±SD: 7.5±1.3 vs 6.3±0.8 hours/night, p<.001), an increased frequency of spending time in nature (2.5±1.1 vs 1.6±1.4 times/week, p<.05) and were more likely to engage in a new form of physical activity compared to non-furloughed drivers (18% vs 7%, p<.005). No differences in anxiety and depression symptoms, or alcohol intake, were observed between groups (p>.05). A higher proportion of positive lifestyle behavioural choices were made in furloughed drivers during the lockdown, which if sustained, could lead to health improvements in this traditionally at-risk occupational group.

Keywords: COVID-19; Furloughs; Government lockdown; Health-related behaviour; Physical activity; Truck drivers

1. Introduction

The spread of the SARS – CoV-2 virus led the UK government to employ unprecedented measures such as self-isolation, restrictions on social distancing and limitations on the movement of the population. In March 2020, the national lockdown was announced to slow the spread of the disease and to protect the NHS's ability to cope and save lives.

To support employers whose operations were severely affected by the COVID-19 lockdown, the UK government introduced the Coronavirus Job Retention Scheme (Furlough) to provide financial support to businesses and to protect the economy. The furlough scheme allows employers to place their employees on a temporary leave but retain them on the payroll for the period of leave. It provides funds for the employers (businesses) to cover 80% of the employee's wages for any time spent on the scheme. Employees are not allowed to undertake work for their employers while they are on furlough [1]. 8.7 million workers were furloughed in Britain by the end of May 2020 [2].

Although truck drivers have been identified as an at-risk occupational group who have a higher prevalence of cardiometabolic and mental ill-health risk factors compared to other groups [3], delivery drivers were classified as a key worker group during the pandemic. Furthermore, the UK Department for Transport agreed to a temporary relaxation of the enforcement of EU drivers' hours rules in England, Scotland, and Wales during the 1st UK COVID-19 lockdown. The relaxation in the UK driving rules allowed drivers, who were delivering essential goods, to extend their permitted driving hours, up to a

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maximum of 55 hours/week [4]. However, other drivers employed by the hospitality sector were placed on the Government's job retention scheme (furlough). The primary purpose of this study was to explore the differences in lifestyle health-related behaviours and mental health symptoms between furloughed and non-furloughed truck drivers.

2. Methods

An online 'COVID-19' survey (distributed by the 'Online Surveys' platform) was administered to long-haul truck drivers (between May and July 2020) participating in the ongoing 'Structured Health Intervention For Truckers (SHIFT)' trial which is a randomised controlled trial evaluating the effectiveness and cost-effectiveness of a lifestyle-behavioural health intervention delivered within the workplace setting of a large logistics company [5]. Overall, 386 truck drivers were enrolled in the trial, recruited across 25 depots throughout the Midlands region of the UK, from our partner logistics organisation.

Of the 220 participants who remained in the trial at the start of the pandemic, 89 (40% response rate from those invited, mean age: 51 years, BMI: 29.8 kg/m², 100% male) completed the COVID-19 questionnaire. Participants self-reported their weight (Kg), number of years worked as a heavy goods vehicle driver, furlough status, sleep duration (hours/day) in the past 14 days, alcohol intake frequency, alcohol consumption (units/day), fruit and vegetable consumption (portions/day), frequency of spending time in nature and whether they had engaged in any new forms of physical activity since the COVID-19 lockdown. Symptoms of anxiety and depression were assessed using the Hospital Anxiety and Depression Scale (HADS) [6]. BMI was estimated using participants' height measured at baseline and their self-reported weight in the COVID-19 questionnaire. Further details about all measures taken at baseline are reported elsewhere [5].

2.1. Statistical Analysis

The Kolmogorov-Smirnov Test was used to check variables for normal distribution using IMB SPSS Statistics (version 27). Descriptive statistics were produced for demographic and behavioural variables. Between group comparisons (furloughed drivers versus non-furloughed drivers) were undertaken using Chi-squared tests for categorical variables, independent samples t-tests for normally distributed variables and Mann-Whitney U tests for non-parametric data.

3. Results and Discussion

Descriptive statistics summarising the demographic characteristics, lifestyle behaviours and mental health symptoms of participants according to their furlough status are shown in Table 1. 43 participants (48% of respondents) reported being furloughed during the first UK national lockdown. Furloughed and non-furloughed drivers did not differ significantly in terms of their age or duration working as a heavy goods vehicle driver (Table 1). BMI was significantly higher in furloughed drivers. Furloughed drivers also reported a significantly longer sleep duration over the past 14 days, a higher frequency of fruit and vegetable intake, a higher frequency of spending time in nature, and were more likely to report trying a new form of physical activity, in comparison to non-furloughed drivers (Table 1). The most common new forms of physical activity reported included: cycling, walking, gardening, running, weights at home, boxing, exercise at home, and DIY. Reported alcohol intake did not differ between the two groups, nor did reported Scheme

Table 1. Descriptive statistics and demographic characteristics of the participants stratified between furloughed and non-furloughed drivers.

		Furloughed	Non-furloughed	Differences between
		(n=43)	(n=46)	groups (p value)
	N	Mean ± S	D / number (%)	
Age (years)	89	52.1 ± 8.0	50.0 ± 9.7	p>.05*
Weight (kg)	82	96.0 ± 15.4	90.2 ± 11.1	p>.05*
BMI estimate (kg/m²)	89	28.9 ± 8.0	24.6 ± 10.2	<i>p</i> <.05*
HGV duration (years)	89	17.5 ± 10.2	18.8 ± 11.1	p>.05

Sleep duration (hours/day)		88	7.5 ± 1.29	6.3 ± 0.83	<i>p</i> <.001
Nature frequency (times/week)		89	2.5 ± 1.12	1.6 ± 1.4	p<.05
Alcohol consumption		89	2.3 ± 1.4	2.7 ± 1.4	p>.05
Alcohol intake frequency		89	3.2 ± 1.0	3.0 ± 0.9	p>.05
Portion of fruit & vegetables/day		40	4.5 ± 2.3	3.2 ± 1.42	<i>p</i> <.05*
Anxiety		89	3.5 (48%)	4.3 (52%)	p>.05
Depression		89	3.0 (48%)	3.4 (52%)	p>.05
NEW form of PA	Yes	23	16 (18%)	7 (7.0%)	p<.05**

^{*} data were normally distributed; p value denotes the results of the independent samples t-test. P values without a * denote the findings from Mann-Whitney U tests, as these variables were not normally distributed. ** denotes the findings from Chi-squared tests.

This research is the first to investigate the impact of the COVID-19 lockdown on truck drivers who have been furloughed for at least one month during the 1st UK national lockdown. The findings suggest that furloughed truck drivers made positive health-related behavioural choices during the first UK COVID-19 lockdown in May-July 2020. They reported sleeping longer, spending time in nature more frequently, eating more portions of fruits and vegetables on a daily basis and were more likely to engage in a new form of physical activity compare to non-furloughed drivers. This study is the first to observe that the COVID-19 furlough scheme may have had a positive impact on the lifestyle health-related behaviours of furloughed employees. However, further investigation is needed to understand whether these positive behavioural choices are sustained.

Compared to other occupational groups, truck drivers have a significantly lower life expectancy [7, 8] attributed to their working conditions which impact opportunities to engage in healthy lifestyle behaviours [9, 10, 11]. Sleep deprivation and psychological stress due to long working hours with irregular working patterns and pressure to meet delivery schedules have also been reported [12]. These studies indicate that the workplace plays a vital role in truck drivers' health [3]. The present findings are of relevance to employers in that they suggest that in the absence of workplace restrictions, furloughed drivers were more likely to make positive lifestyle choices compared to non-furloughed drivers, suggesting a willingness of employees to improve their lifestyle-related health behaviours. The incorporation of low-cost lifestyle behaviour interventions within the workplace environments of truck drivers should be treated as a priority to enable positive behaviours (e.g., fruit and vegetable intake, increased activity) to be sustained in those increasing these behaviours whilst on furlough, and also to provide drivers (not furloughed) with opportunities to improve such important health enhancing behaviours.

4. Conclusions

This study shows that a higher proportion of positive lifestyle behavioural choices were made in furloughed drivers, which if sustained, could lead to health improvements in this traditionally at-risk occupational group during the first UK COVID-19 lockdown in May-July 2020.

Author Contributions: All authors contributed to the conceptualization of this survey, and to the design and content of the questionnaire administered. MS, VVM, SC, AS, AN contributed to the methodology and data collection. MS undertook the data analyses, supported by SC and NP. MS wrote the first draft of the abstract and manuscript with support from SC and NP. All authors reviewed a draft of the manuscript. SC and JK were responsible for the acquisition of funding. All authors have read and agreed to the published version of the manuscript.

Funding: Participants were recruited from the ongoing 'Structured Health Intervention For Truckers (SHIFT)' randomised controlled trial, which is funded by the NIHR Public Health Research Programme (reference: NIHR PHR 15/190/42). SAC, JAK, AS and NJP are also supported by the NIHR Leicester Biomedical Research Centre – Lifestyle theme. The views expressed are those of the authors and not necessarily those of the NHS, the NIHR or the Department of Health and Social Care.

Conflicts of Interest: The authors declare no conflict of interest. The funder had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results.

References

- UK government national archive. Available online: https://webarchive.nation-alarchives.gov.uk/20200730170541/https://www.gov.uk/guidance/check-if-you-could-be-covered-by-the-coronavirus-job-retention-scheme (accessed on 26th March 2020).
- 2. UK government. Available online: https://www.gov.uk/government/collections/hmrc-coronavirus-covid-19-statistics#corona-virus-job-retention-scheme (accessed on 12 May 2020)
- 3. Guest AJ, Chen Y-L, Pearson N, et al. Cardiometabolic risk factors and mental health status among truck drivers: a systematic review. *BMJ Open* **2020**;10:e038993. doi:10.1136/bmjopen-2020 038993.
- 4. Department for Transport and Driver and Vehicle Standards Agency. Temporary relaxation of the enforcement of the drivers' hours rules: all sectors carriage of goods by road, 2020.
- Clemes SA, Varela Mato V, Munir F, et al. Cluster randomised controlled trial to investigate the effectiveness and cost-effectiveness of a Structured Health Intervention For Truckers (the SHIFT study): a study protocol. BMJ Open 2019, 9:e030175. doi:10.1136/bmjopen-2019-030175.
- 6. Zigmond, A. S., & Snaith, R. P. The Hospital Anxiety and Depression Scale. Acta Psychiatrica Scandinavica, 1983, 67(6), 361–370. https://doi.org/10.1111/j.1600-0447.1983.tb09716.x
- 7. Thiese MS, Moffitt G, Hanowski RJ, et al. Commercial driver medical examinations: prevalence of obesity, comorbidities, and certification outcomes. *J Occup Environ Med* **2015**, 57:659–65.
- 8. Office for National Statistics, **2015**. Trend in life expectancy at birth and at age 65 by socio-economic position based on the National Statistics Socio-economic classification, England and Wales: 1982 1986 to 2007—2011.
- 9. Apostolopoulos, Y., Sonmez, S., Shattell, M., Gonzales, C., Fehrenbacher, C. Health survey of U.S. long-haul truck drivers: work environment, physical health, and healthcare access. **2013**, 46 (1), 113–123.
- 10. Apostolopoulos, Y., Lemke, M.K., Sevil Sönmez, S., Hege, A. The obesogenic environment of commercial trucking: a worksite environmental audit and implications for systems-based interventions. Am. J. Health Educ **2016**, 47 (2), 85–93.
- 11. Williams Jr., D.F., Thomas, S.P., Liao-Troth, S. The truck driver experience: identifying psychological stressors from the voice of the driver. Transport. J. 2017, 56 (1), 54–76.
- 12. Caddick N, Varela-Mato V, Nimmo MA, et al. Understanding the health of lorry drivers in context: a critical discourse analysis. **2017**, 21:38–56.