

#9

Driving Health

**Direct managers influencing truck
driver health – Driving Health
Allocator Training (DHAT) Program**

Intervention Report

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This report uses data collected as part of an online DHAT program. Receipt, use and disclosure of the data for this study was approved by Monash University Human Research Ethics Committee (MUHREC) on 12 June 2019 (Project ID: 29762).

Glossary

Direct Managers

Defined for the purposes of this study as supervisors, managers and allocators, those who prepare manifests, allocate shifts and loads, manage delivery and schedule interruptions, coordinate timely deliveries at the right location, guide new employees, manage delays and are generally seen as the hub of day-to-day trucking operation.

DHAT

Driving Health Allocator Training Program – a 20-minute online program inclusive of questions pre and post presentation of a training video.

LearnDash

Computer program to house online training programs.

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Key Messages

- A 20-minute online resource can be successfully disseminated to direct managers in the trucking industry.
- Direct managers' awareness and understanding of the health and wellbeing factors that they can influence in the workplace can increase with an online program.
- Direct managers in the driving industry have limited knowledge of the influence they can have over physical activity, family relationships and financial stressors, and driver weight.
- The DHAT program in its current form needs revisions to improve its data collection capability.

Executive Summary

The purpose of this exploratory study was to pilot and record the implementation process and feasibility of a 20-minute online training program for direct managers in the trucking industry. The Driving Health Allocator Training (DHAT) was aimed at increasing managers' understanding and awareness of the health and wellbeing factors they can influence, in order to support driver health and wellbeing.

Research has shown that Australian truck drivers have increased risk of workplace injury and illness compared to other workers (Gray, Sheehan, Lane, Jetha, & Collie, 2019; Haas, 2020; Xia, Iles, Newnam, Lubman, & Collie, 2018 a).

The Driving Health survey of approximately 1400 drivers showed that the physical and mental health profile of the Australian truck driver is poor (van Vreden et al., 2020). Compared to the general population, drivers were more likely to be overweight, report poor general health and have multiple chronic health conditions (van Vreden et al., 2020). Several lifestyle, workplace, personal, regulatory and lifestyle factors beyond the control of the driver have been identified as significant determinants of poor health outcomes in truck drivers, (van Vreden et al., 2020; Xia et al., 2021).

This suggests there is clearly a role for interventions targeted at stakeholders in the transport industry other than drivers. In order to support drivers to be healthy and stay healthy at work, changes need to be addressed at an organisational and regulatory or government level as well.

Most intervention programs in the transport industry in Australia, are targeted towards the driver and actions they can take to support their own health (Olson et al., 2016), however, we know that many of the causes of workplace challenges are outside of the driver's control. For example, waiting times, road works and shift allocations. We also know that the supervisor/manager or employer can play a large role when it comes to work-related illness and injury through modelling good work practices and behaviours that create a safer work environment (Newnam, Warmerdam, Sheppard, Griffin, & Stevenson, 2017; Zohar, 2003). We therefore require a multi-pronged approach across individual companies, the industry as a whole, policy and regulatory bodies, and the public in order to address the health concerns of drivers in Australia (Pritchard, Van Vreden, & Iles, 2020; van Vreden et al., 2020; Xia et al., 2021).

To address one of these intervention gaps in the trucking industry, we created the Driving Health Allocator Training (DHAT) program, which was a 20-minute online program and comprised of an educational video on the health and wellbeing factors impacting driver health, with a pre- and post-program questionnaire. This intervention used the approach of 'nudge theory' (Thaler & Sunstein, 2008) which capitalises on the fact that many of the health decisions we make and the behaviours we enact, are unconscious and have become automatic. When we are confronted with information through each of our learning modalities, we are likely to become more aware of these automatic behaviours, and be able to explore them and learn different ways of acting. Providing accessible online educational programs, information and experiences has the potential of 'nudging' peoples' understanding and responses in a different direction. The provision of the DHAT online program provides an opportunity for direct managers of drivers to explore their unconscious and automatic behaviours around driver health, to bring these to their conscious minds, thereby increase their level of knowledge and potentially influence or change their actions towards drivers in the future.

The specific aims of the DHAT online program were to

1. Examine the feasibility of an online training program aimed at increasing awareness of driver health and wellbeing at the manager level.
2. Identify the degree to which managers feel they have influence on factors impacting driver health.
3. Determine if the awareness training resulted in a change in the perception of managers.
4. Determine if awareness training changed the actions a manager would take to help a struggling driver.

Findings

Of the 63 registrations to the program during the explorative study time frame, 47 people completed the pre- and post- program questions (72% completion rate). Even though less than a third watched the entire video (28%), comparison of pre- and post- program questionnaires showed a shift in the level of awareness managers had on factors impacting driver health.

This suggests that reading and answering questions about which driver factors they feel they have influence over, and identifying what they have done in the past or could do to support driver health in the future, resulted in an increase in their understanding in line with nudge theory.

Following the examination of the proportion of managers reporting a level of influence for each factor, we identified that all but one of the 10 factors showed an increase in reported influence following completion of some part of the DHAT. The proportion of managers reporting influence over seven of the 10 factors (training level, sticking to regulations, workplace bullying, schedules, fatigue and sleep, mental health and physical health) was between 63% and 97% at the beginning of the program, which increased to between 72% and 100% at the end.

Managers initially reported a low ability to influence the remaining three factors (driver weight, family financial stress, driver physical activity) (ranging from 19% to 27%), but showed the biggest improvement at the end of the program, with 46% to 51% reporting they could in fact influence those factors.

Summary

Although there were implementation limitations with this program we know that it is possible to disseminate a short online program to managers in the trucking industry. We also know that there are a variety of levels of understanding of the factors manager's feel they can influence in the workplace, and that through the approach of nudge theory and being confronted with information about a certain topic, managers' levels of awareness can increase. This initial explorative study has created a platform on which the next intervention can be based, and has highlighted a number of areas for improvement to enable this program to be rolled out further.

Purpose

The purpose of this exploratory study was to pilot and record the implementation process and feasibility of a 20-minute online Driving Health Allocator Training program (DHAT). The DHAT aimed to increase understanding and awareness of the health and wellbeing factors that direct managers can influence to support driver health and wellbeing. Direct managers are defined for the purpose of this study as (but not limited to) supervisors, managers or allocators who have direct interactions with truck drivers on a daily basis. While the direct manager role can vary across companies, it was identified that this level of the organisation has the potential to have a large influence over the health and wellbeing of truck drivers.

Following a literature review (Pritchard et al., 2022), consultation with our project partners, and conducting an industry scan of programs currently in place in Australia, we identified several active programs aiming to improve driver health. These include Health in Gear (ozhelp.org.au), Healthy Heads in Trucks and Sheds (healthyheads.org.au), SHIFT Program (Olson et al., 2016), HealthyTruck.org, Linfox Healthy Fox program, and Heads Up (Beyond Blue and Safe Work Australia). Although many of these programs are new or have not yet been evaluated for effectiveness, they focus on issues within the driver's control ranging from healthy eating and exercise through to mental health toolkits and accessing crisis intervention (Olson et al., 2016; Puhkala et al., 2016; Sendall, McCosker, Ahmed, & Crane, 2019; Thiese et al., 2015; Wilson, Wolf, & Olszewski, 2018). While these programs are aiming to address very real needs in the industry, several programs are still in the initial stages of development or testing and therefore the efficacy of these programs is unknown.

It has been identified that a number of factors beyond the driver's control also have an impact on driver health. These factors include work-related injuries, hours worked, pain, high injury risk work tasks, poor work environment and verbal abuse (van Vreden et al., 2020; Xia et al., 2021). Drivers and their family members identified seven important factors to consider for optimal health and wellbeing for drivers; physical health, mental health, relationships, work conditions, regulations, environments and attitudes, all of which need to be balanced to maintain health and wellbeing (Pritchard et al., 2020).

These factors are not the sole responsibility of the driver, and the recommendations from each of these previous Driving Health reports identified the importance of a systems thinking approach targeting multiple actors in the system, if the industry is to successfully improve driver health and wellbeing in the transport industry.

One of the stakeholder groups with the potential to influence driver health and wellbeing target is the direct managers of drivers. Previous research into work-related injury and illness has identified that a worker's direct manager can have a large impact on health outcomes through the behaviours that are modelled, the information given and the relationship they have with the drivers (Newnam et al., 2017; Zohar, 2003).

To our knowledge, an intervention supporting driver health that is aimed at direct managers has not been done before in the Australian transport industry. As a result, an intervention was designed as part of the Driving Health study targeted at the direct managers of truck drivers. Little is known about how to implement an intervention targeted to this level of organisation in the transport industry. Therefore, this report aims to describe aspects of the designed intervention, data collected, type of analysis possible and limitations to implementation that determine the feasibility of a wider rollout of this type of program.

Overview

Rationale

Driving Health is a 5-year research project investigating truck driver health and wellbeing in Australia. This report is the final in the series of nine reports, and includes methods and analysis from the explorative intervention, the Driving Health Allocator Training program (DHAT). Several priority areas have emerged from analysis work-related injury and disease claims data (Xia, Iles, Newnam, Lubman, & Collie, 2018), life insurance claims data (Xia et al., 2020), a brief online survey of truck drivers (van Vreden et al., 2020), a more detailed telephone survey of truck drivers (Xia et al., 2021), and in-depth interviews with truck drivers and family members (Pritchard et al., 2020).

The health priorities for drivers have been described as: 1) Mental health; 2) Chronic health conditions; 3) Physical (musculoskeletal) health; 4) Pain; and 5) Crashes and near misses. Mental health stood out as a priority to target due to high rates of psychological distress, where 50% of drivers (n=1390) experienced distress in the last 12 months with 13.3% reporting severe distress (van Vreden et al., 2020), and suicide rates being the 2nd leading cause of death benefit claims in transport workers under 39 years (Xia et al., 2020).

The findings of the early stages of the Driving Health project have identified that a multi-pronged approach, involving all levels of stakeholders and industry, is needed for the drivers to become healthier (Pritchard et al., 2020; van Vreden et al., 2020; Xia et al., 2020). The reports acknowledged that increasing drivers' capacity to cope with stressors and pressures of the job should not be the sole strategy in place to help drivers be healthy and stay healthy at work. The transport industry also needs to address knowledge gaps at all levels. This entails supporting employers and regulators alongside driver-specific programs.

To our knowledge, the direct managers of truck drivers in the transport industry have not yet been targeted in Australia as a point of intervention to address driver health. Direct managers in the transport industry are those who have a direct line of contact with drivers on a daily basis. For the purpose of this explorative study this includes allocators, supervisors and line managers who are defined by the research team as those who prepare manifests, allocate shifts and loads, manage delivery and schedule interruptions, coordinate timely deliveries at the right location, guide new employees, manage delays and are generally seen as the hub of day-to-day trucking operations.

Even though role descriptions vary across companies, we are using these terms synonymously in that they have the potential to influence drivers through the way they interact, the behaviours they model, the opportunities they have to provide training and information to the drivers on a daily or weekly basis. Individuals employed in these roles can also be seen as 'gatekeepers' responsible for translating policy and procedures into daily practices for the drivers.

Past research has reported that supervisors can influence drivers and play a key role in creating a culture of safety (Newnam, Griffin, & Mason, 2008), which in turn, was associated with a reduced number of crashes. It is important to note that the level of influence supervisors have with workers can vary and can also be impacted by their own personal beliefs and perceptions (Huang, Lee, McFadden, Rineer, & Robertson, 2017).

Additionally, supervisors' level of influence can be impacted by the way they enact or enforce company directives and policies. The role of the supervisor or direct manager is not always an easy role to fill, and often direct managers feel disempowered to influence their workers or create any lasting change (Zohar, 2003), particularly when their subordinates are working outside the physical boundaries of the organisation and there is limited opportunity to observe behaviour and provide feedback.

We know that employer support does influence return to work outcomes and is paramount for good work environments (Gray et al., 2019; Newnam et al., 2017). We also know that supervisors play an important role in shaping the occupational health and safety behaviours of employees, especially when drivers perceive that the managers value safety (Newnam et al., 2008; Newnam et al., 2017; Zohar, 2003) and that they can support employees in many different ways (Haas, 2020). These supports can include emotional support, listening and providing feedback on performance; informational support, and providing the worker with advice and guidance to help solve a problem (Haas, 2020).

However, there appears to be very little research exploring the level of knowledge and awareness around the health and wellbeing factors that direct managers believe they have influence over in the workplace. When supervisors or direct managers are better equipped to support employees in all three ways (emotional support, listening and performance feedback, and informational support), and show that they value the driver and prioritise safety, then there is likely to be an improvement across all employee areas of performance (Haas, 2020; Zohar, 2003).

We are still uncertain about the level of understanding direct managers in the trucking industry to be able to recognise the signs of when someone needs help, is struggling with their physical or mental health or if managers indeed perceive they have any influence over these factors in the workplace (Pritchard et al., 2020). We are also unsure what actions direct managers currently take to support or discuss health and wellbeing factors with drivers, or if they are knowledgeable about what services are available to support drivers in seeking help.

Research confirms that managers trained to recognise the warning signs of ill-health and equipped with the tools and resources to support drivers, are more likely to positively influence the safety climate within the workplace, (Zohar, 2003), increase motivation to drive safely (Newnam et al., 2008), decrease sick-days or delays, increase loyalty of drivers to the company and improve driver health and wellbeing (Pritchard et al., 2020). Therefore, we have the potential to address some of the challenges related to driver health and use the approach of nudge theory in the industry (Thaler & Sunstein, 2008), to support healthier behaviours and responses to drivers.

To this end, we designed and piloted a 20-minute online training program (DHAT) to identify which health and wellbeing factors the direct managers felt they could influence pre- and post- completing an online learning resource. This intervention was based on the principles of nudge theory where many of the decisions we make and behaviours we enact, are unconscious. With the repeated and varied approaches of receiving information and different experiences, people's behaviour can, over time, be influenced and changed (Thaler & Sunstein, 2008). Evidence suggests that nudges (including repeated interaction with words, information and experiences) can create the desired behaviour change. However the long-term benefits are still unknown (Ledderer, Kjær, Madsen, Busch, & Fage-Butler, 2020).

By providing an evidence-based program incorporating the culmination of findings from the Driving Health study, quotes from driver interviews and leading the participant to tailored resources, we aimed to create a nudge towards increasing managers' understanding and awareness of the health factors that they could potentially influence with drivers.

Objectives

This ninth report describes the results from the intervention phase of the Driving Health study, implementing the DHAT with direct managers of drivers in the Australian trucking industry. This study aimed to:

1. Examine the feasibility of an online training program aimed at increasing awareness of driver health and wellbeing at the manager level.
2. Identify the degree to which managers feel they have influence on factors impacting driver health.
3. Determine if the awareness training resulted in a change in the perception of managers.
4. Determine if awareness training changed the actions a manager would take to help a struggling driver.

Methods

DHAT Program Design

The DHAT program was designed to be completed online by direct managers within 20 minutes. It consisted of demographic questions and a set of pre-program questions to ascertain their understanding of the health and wellbeing factors of truck drivers that managers could influence. Next a short video was played of a conversation between a driver and a manager discussing the pressures that the driver was currently facing, and identifying how the manager solved a problem of a driver being delayed on the road. The content for the video was taken directly from the in-depth interviews conducted by the Driving Health team (Pritchard et al., 2020). Post-video the previous questions were repeated to ascertain any shift in awareness or understanding [Appendix 1].

There were also a number of evidence-based resources provided by the Driving Health team that managers could download after completing the program, for their information and use. The flow of the study is summarised in Figure 1.



Figure 1: Process flow of the online DHAT program

An educational teaching platform (LearnDash) was used to collate the program online and integrate with the Driving Health project website (drivinghealth.net). Questions were created based on the findings from Driving Health Reports 6 (van Vreden et al., 2020), 7 (Pritchard et al., 2020) and 8 (Xia et al., 2021). All questions were discussed, refined and tested by the research team, the communications team (including external agencies in the industry), the project industry advisory committee (including regulators, trade union representatives, insurance company representatives, transport company employers and truck drivers), as well as the Driving Health investigator team. The questions appear in Appendix 2. The priorities that arose from previous study results were balanced with the need to develop an online program that could be completed under 20 minutes. The videos were housed in the Vimeo platform and integrated within the LearnDash platform.

Eligibility Criteria

Those included in the study were self-selected managers whose jobs currently or in the past involved working with truck drivers in Australia in a supervisory or managerial capacity. This was described in the program eligibility requirements as those who prepared manifests, allocated shifts and loads, managed delivery and schedule interruptions, coordinated timely deliveries at the right location, guided new employees, managed delays and generally seen as the hub of day-to-day trucking operations. Those excluded were drivers only (no direct manager role) and direct managers in companies outside of Australia.

Participant Recruitment

Communications inviting direct managers to complete the online program were distributed through the study partners and collaborative organisations. People within the industry were also notified of the program availability at the end of a webinar series providing the results of the previous Driving Health studies to date. Managers had the opportunity complete the program at any time from November 2021. Data for this report was collected over a 9-week time frame (03 November 2021 to 10 January 2022).

Prior to starting the program, managers were provided with a brief explanation of the study, what was entailed to complete the program, as well as a full Explanatory Statement available to download. Implied consent was described on the program explanation page and gathered when the participant clicked start on the DHAT. Ethical approval for the study was provided by the Monash University Human Research Ethics Committee, project number 29762.

Data Sources

Data were collected through the LearnDash platform as answers to the demographic, pre- and post- program questions, and narrative data from the open-ended questions. Data were downloaded and cleaned for analysis. The number of views of the video and length of time viewed were collected from Vimeo, however this data could not be matched or connected to data collected in the LearnDash platform.

Measurements

Demographic data captured in the program included: roles, age, state or territory, operating postcode, number of employees, number of years in the business, number of years in a management role, whether they had been or are currently a truck driver, and the distance driven by employees on a daily basis; short (< 500 kms per day) or long-haul (> 500 kms per day) or both.

The pre- and post- program questions asked managers to select their perceived level of influence over ten health and wellbeing factors important to truck driver health.

Response options were: None, a little, some, a lot, or not applicable. The ten factors were:

1. Training level in work health and safety
2. Physical health
3. Mental health
4. Weight
5. Physical activity
6. Family or financial stress
7. Fatigue and sleep
8. Schedules and work hours
9. Sticking to regulations
10. Workplace bullying and harassment

The pre-program questions also included two open ended questions:

1. What are the things or signs you notice if one of your drivers is struggling with their health or wellbeing? (Please describe).
2. What specific things have you done in the past to help a driver who is struggling? (e.g. had a chat, given them info) (Please describe).

In the post-program questions, managers were asked which of a list of 13 possible actions they would now take if a driver needed help with one of the 10 health and wellbeing factors (e.g. talk to driver, take them off road, provide resources). An additional question stated “If you would do something else to help a driver, please describe what it would be?”, providing a space for a short narrative response [Appendix 1].

Outcomes

The intervention was designed as an explorative intervention study.

Four outcomes were explored: 1) The proportion of managers reporting their understanding of the level of influence they had for each health and wellbeing factor; 2) Whether completing DHAT changed the proportion of managers who felt they could influence drivers’ health and wellbeing factors; 3) Analysis of the short narrative answers to identify how managers identified when someone was struggling; and 4) Analysis of the pre- and post-program actions managers took to support drivers to identify any differences.

This approach aimed to identify workplace factors that could be targeted in future interventions to improve awareness and understanding of truck driver health and wellbeing, and whether the intervention had the potential to change perception of influence using nudge theory. The potential to change perception was determined, where possible, by comparing the proportion reporting influence pre- and post-program using the Wilcoxon signed-rank test of proportions.

The answers from the short narrative questions were analysed to identify common factors and approaches, and to determine whether there was any change after the video. Answers were grouped and themed to identify the general responses and actions managers stated in three areas: 1) How they identified when a driver was struggling; 2) What actions they already took if a driver needed help; and 3) What actions they would take in the future when a driver needed help.

Data Preparation

Data were downloaded in several Excel files for each group of questions. Original data were formatted as they appeared to managers, with sets of questions repeated for each participant (pre- and post- program). A series of filters were executed in R to re-format individual participant responses into single rows of responses (R Core Team, 2021; Wickham et al., 2019).

Analysis Strategy

Data analyses were completed in three parts: 1) Descriptive analysis; 2) Examination of the proportions pre- and post- program using Wilcoxon signed-rank test; and 3) Thematic analysis on the narrative short answer question responses.

1) Descriptive analysis was completed to determine numbers and spread of responses across demographics.

2) Examination of proportions reporting influence was conducted to identify the areas where managers felt they had some influence. Responses over the 10 health and wellbeing factors were dichotomised into having influence (a response of some or a lot of influence) and not having influence (response of little, none or not applicable). The proportion of managers reporting having influence was examined for each factor to identify the factors where managers reported high levels of influence over the factor.

It was expected that for factors where a high level of influence existed before the video training there would be little need to further increase awareness of influence on these factors. Analysis aimed to determine the impact of training for any factors where less than 50% of respondents reported having influence before the video training. For each of these factors a Wilcoxon signed-rank test was performed to assess the significance of any change in the proportion reporting having an influence on that factor pre- and post-program. Identifying these areas and their potential for change provides an indication of the effectiveness of the training, and how it may be modified in future to achieve the largest impact possible.

3) Thematic analysis was performed on the short narrative questions. Each response was assigned to a topic that it was highlighting (e.g. for the question 'what have you done in the past?' the answers varied from Support through Employee Assistance Programs (EAP), check-in and talk with driver, to give time off).

The number of responses under each topic were then counted. Topics were then grouped into themes. For example; Talking with driver (which included check in, phone calls, listening); Recommending services (including EAP, GP, Nurse, Counsellor); Adjusting work hours (including arrange cover, give time off, change duties, flexible rostering); and Give information and training (including information, morale boosting activities, training and health programs). The number of responses pertaining to each theme were again summed to determine those that were reported the most.

Common themes under each topic were counted to identify the most common signs noted by managers and how managers recognised that drivers needed help (e.g. frustration, change in personality of driver, mood swings, out of character responses and attitudes), what they had done in the past to help (e.g. chatting with the driver, offering information), what they would do now after the training program (e.g. listen more, be more empathetic), and any other possibilities of helping drivers from their perspective (e.g. consistent review of tasks, swap duties).

Research Findings

During the study period, 63 initial registrations on the program were made with a total of 47 individual programs completed with no duplicates needing to be removed.

The completion rate was 72% [Figure 2]

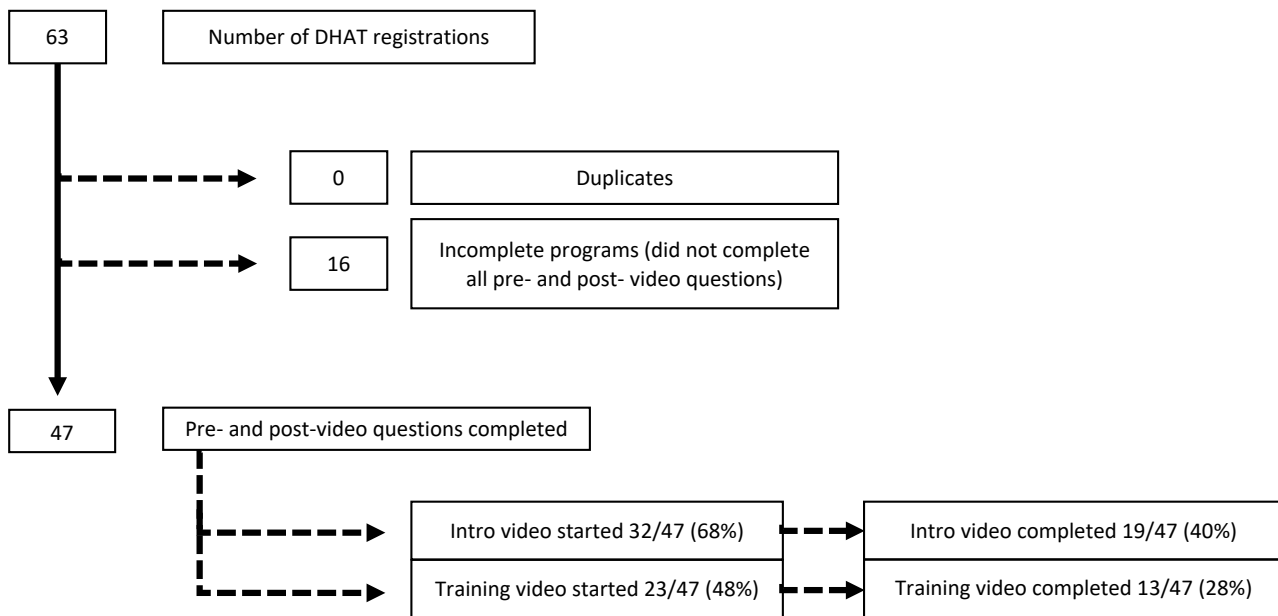


Figure 2: Response and completion rates

Completion times were difficult to calculate due to the data being held within two different platforms. From the LearnDash platform, question answering times (minutes and seconds) ranged from 4 seconds (incomplete) to 23 minutes. Vimeo analytics identified that 32/47 (68%) watched some part of the intro video with 19 (40%) completing all 1.49 minutes with an average time watched of 1.15 seconds.

For the training video, 23/47 (49%) watched some part of the training video of 13:32 minutes with 13 completions (28%), with an average watch time of 9.17 minutes. This indicates that less than a third (28%) watched the full video content. However, 47 completed the pre- and post- questions.

Due to the nature of Vimeo analytics, individual managers were not able to be identified, and therefore cross-matching question answers with the length of video watched was not able to be assessed. This presents a key limitation in the study design. The findings indicated that approximately 30% of the managers did not watch any of the video content, however, 47 managers were still engaged enough to answer all of the pre- and post-program questions.

Descriptive Statistics

The demographics of the managers is summarised in [Table 1](#). Just under half of the managers were currently or had previously been a truck driver (45%), numbers of drivers managed on a typical day was typically less than 100 (87%), and most had been in the role for less than five years (53%). The number of other employees in the company was less than 10 for under one third (27%), most were from NSW (43%), and the majority (62%) managed drivers covering both inter- and intra-state driving. The majority (57%) had been in the transport industry for more than 10 years.

TABLE 1: DEMOGRAPHIC CHARACTERISTIC OF THOSE WHO ENGAGED WITH THE DHAT PROGRAM

Demographic questions	N	%
Participant roles or job titles		
Allocator	7	15%
Line manager	6	13%
Supervisor	5	11%
Other	29	62%*
Whether they have been or are a truck driver		
Currently	1	2%
In the past	20	43%
Never	26	55%
Drivers managed daily		
0–4	10	21%
5–10	6	13%
11–20	5	11%
21–40	11	23%
41–100	12	26%
> 100	3	6%

TABLE 1: DEMOGRAPHIC CHARACTERISTIC OF THOSE WHO ENGAGED WITH THE DHAT PROGRAM

Demographic questions	N	%
Employees in the company excluding drivers		
0–4	10	21%
5–10	3	6%
11–20	5	11%
21–40	5	11%
41–100	6	13%
> 100	18	38%
Where the companies are based		
ACT	1	2%
NSW	20	43%
NT	0	0%
QLD	7	15%
SA	1	2%
TAS	6	13%
VIC	6	13%
WA	6	13%
Work location		
All Intrastate	6	13%
Mostly Intrastate	9	19%
Mostly Interstate	2	4%
All Interstate	1	2%
Both Intrastate and Interstate	29	62%

TABLE 1: DEMOGRAPHIC CHARACTERISTIC OF THOSE WHO ENGAGED WITH THE DHAT PROGRAM

Demographic questions	N	%
Distances driven each day		
Short-haul	14	30%
Long-haul	4	9%
Both	29	62%
Years in current role		
0–1 years	9	19%
2–5 years	16	34%
6–10 years	3	6%
> 10 years	19	40%
Years in a management or non-driving role		
0–1 years	5	11%
2–5 years	14	30%
6–10 years	5	11%
> 10 years	23	49%
Years drivers have been in the industry overall		
0–1 year	4	9%
1–5 years	13	28%
6–10 years	3	6%
11–20 years	9	19%
21–30 years	8	17%
31–50 years	9	19%
> 50 years	1	2%
*Roles unknown or not described		

Pre- and Post- Program Impact

The proportion of direct managers indicating having influence across each of the 10 factors pre- and post- program, is provided in [Figure 3](#). The difference in the proportions (% change) pre- and post- program is also described.

Prior to completing the program, more than 4 out of 5 managers reported being able to influence training levels, sticking to regulations, workplace bullying, schedules, and fatigue and sleep. However, only around 1 in 5 managers reported they had an influence on physical activity levels or family and financial stresses, and 1 in 4 reported influence over driver weight.

All but one of the 10 factors (schedules) showed an increase in the proportion of managers reporting having influence in the post-program questionnaire. The percentage change ranged between 2% (mental health) and 32% (driver physical activity). Pre-program questionnaire responses showed the majority of managers (> 50%) reported having influence on seven of the factors (training level, sticking to regulations, workplace bullying, schedules, fatigue and sleep, mental health and physical health).

Less than one third of the managers reported having influence on three factors (driver weight, family financial stress and driver physical activity). The proportion of managers reporting having influence on these three factors also had the biggest increase in the post-program questionnaire. These three factors were selected for further analysis to determine if the observed percentage change was statistically significant.

A Wilcoxon signed-rank test indicated that post-program scores were significantly higher than pre-program scores for influence on family/financial stress ($Z = -4.201$, $p < 0.001$), driver physical activity ($Z = -3.464$, $p < 0.001$) and driver weight ($Z = -3.582$, $p < 0.001$). A statistically significant change indicates that DHAT was able to improve manager awareness of the factors they had influence over. This suggests the program was effective in some way at increasing the awareness and understanding of the influence managers may have over health-related factors, where low levels of awareness existed prior to the training video.

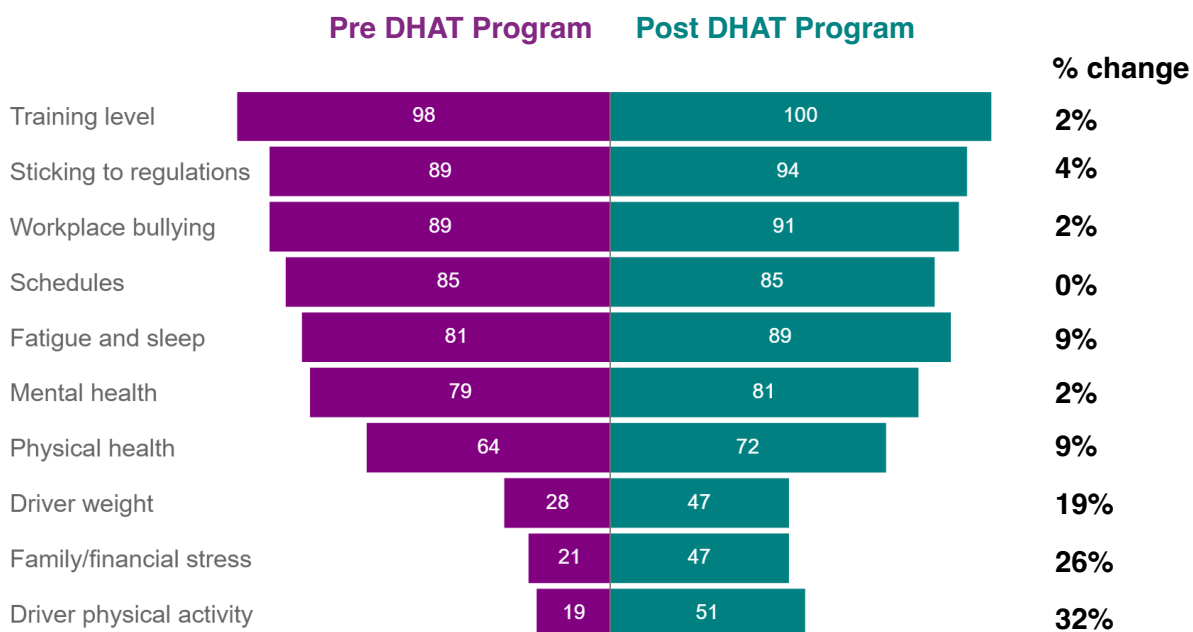


Figure 3: Level of direct manager's perceived influence of each factor, pre- and post- program

Thematic Analysis

SIGNS OF DRIVERS STRUGGLING

From the short narrative responses relating to the signs that managers noticed if drivers were struggling, 29 signs were identified. These ranged from fatigue, frustration and stress, to not helping others, complaining and mood swings. The number of times each topic was mentioned was tallied, and the top five themes were: Behavioural or personality changes (e.g. mood swings); Work performance issues (e.g. poor attendance, poor driving, increased mistakes); Fatigue and sleep disturbances; Agitation or frustration; Physical health changes [Table 2].

One quote from the managers stated:

“They struggle to do their days work and are cranky and complain verbally about the company and their colleagues.”

TABLE 2: SIGNS IDENTIFIED BY MANAGERS, INDICATING WHEN A DRIVER IS STRUGGLING

Theme	Examples	Times mentioned
Personality and behavioural changes	Complaining, mood swings, attitude changes, decreased communication	33
Work performance issues	Poor attendance, poor driving, decreased alertness, decreased activity, decreased performance, poor driving, making mistakes, damage to equipment, none compliance, more claims	32
Fatigue and sleep disturbances	More fatigued, sleepier	14
Agitation or frustration	More displays of agitation or frustration	14
Physical health changes	Poor physical health, eating changes/ weight gain	10

ACTIONS MANAGERS TAKE

To the pre-program question “What actions have you done in the past...?” 19 different actions were identified and then grouped into the following themes:

Taking direct action – where the manager had a conversation with the driver directly and including the importance of listening; Offering external support and connecting with health professionals; Adjusting the current workload activities through a variety of options including giving time off, arranging cover, changing duties, and taking off the road; offering programs or information which included information about support programs, giving resources for information around mental health.

The responses to what actions they have taken in the past to help a driver who is struggling were collated into four themes:

1. Check-in and talk with the driver,
2. Adjust work hours,
3. Recommend services, and
4. Give information or training.

Quote from one participant:

“I have spoken to many drivers that seemed to be a bit down and asked if they needed some time off to recuperate, worked through issues that they had with the job itself...”

The post-program version of this question, what the manager would now do to assist struggling drivers, identified 21 options. These were grouped into themes and compared with the pre-program themes which were identified as:

1. Taking direct action e.g. Talk with and listen to the driver,
2. Offer external support e.g. EAP, Counsellor, Nurse, GP,
3. Adjust work schedule e.g. change shifts, give time off, and
4. Offer programs or information e.g. support programs, training.

The responses post-program identified a small change in the ordering of the same 4 themes which suggests the top two priorities were more about what the manager could immediately do themselves, with the latter two requiring participation from the driver in order to create any changes.

1. Taking direct action e.g. Talk with and listen to the driver,
2. Adjust work schedule e.g. change shifts, give time off,
3. Offer programs or information e.g. support programs, training, and
4. Offer external support e.g. EAP, Counsellor, Nurse, GP.

Quote from one participant:

“I would continue to develop the transport community of drivers to work together to support each other Work with them to increase their self-esteem.”

Another participant wrote about the importance of respecting and understanding of their workforce needs:

“Any service provided to the driver needs to be client focused and each individual must be given the respect, understanding and time to deal with their issues.”

OTHER ACTIONS TO HELP DRIVERS

The top three answers to the final question, “If there was something else you could do to help the driver, what would that be?” were identified in the same order on both pre- and post-program questions:

1. Take more direct action e.g. Check in more with the driver and listen more, address bullying, recognise fatigue,
2. Promote programs and give information e.g. fitness programs, mental health support, and
3. Do more around changing external policies e.g. better truck stops, regulation changes.

Some managers identified programs they already have in place to support drivers with one manager stating:

“We have Exercise Physiologists attend work weekly to help with exercise and nutrition, always looking at duties to ensure safe time to complete, fixing hazards in a timely manner, ensure any bullying is addressed instantly, ensure there is no annoyance if drivers flag fatigue.”

Another highlight the external demands and processes that were still getting in the way:

“Fatigue is caused by the fact that all drivers no matter where they are delivering too must make their deliveries between 7 am and 2.30 pm in the day. If receiving depots worked around the clock there would be less traffic on the roads and less fatigued obese drivers.”

While the themes stayed the same pre- and post- program, the comments highlighted that the regularity of the check-ins would increase with more discussion, and some identified that having “more empathy” or “taking more time to connect” with the drivers was important.

OVERALL SUMMARY OF THEMES

These results suggest that many of the managers who participated in the DHAT program were very aware of what they can influence and many are doing something about the factors and acting in a way to support the drivers in their company. The types of actions they would do following the program included the more immediate and direct actions first (e.g. changing the shifts), followed by linking with external and indirect options like offering programs and recommending professional services.

A smaller number of managers were unable to identify how they could influence some of the health factors and left their responses blank. It appears that many enrolling in this DHAT program, may be the managers who already have high levels of awareness and therefore are not the ones that this program needs to target. We need to identify how to target those who do not have this high level of awareness and understanding in the first place.

Implications

The findings of this explorative intervention study show that it is feasible to connect with direct managers of truck drivers and have them interact with a short online program. Due to the challenges in recruiting managers at the time, it is difficult to assess if this method of delivery is achievable across a variety of companies and manager roles or if the additional factors of time of year (period of higher demand on truck drivers) and COVID-19 pandemic implications to the transport industry were underlying factors of a relatively low uptake. The findings showed an increase in perceived level of influence across 9 of 10 health and wellbeing factors through the use of nudge theory, where people's awareness increase through being presented and engaging with information on a specific topic. This occurred even though data collection was compromised and the connection of data across the two chosen platforms could not be conducted.

We discovered that a high majority (> 80%) of direct managers were aware of their influence with drivers across 5 of the 10 factors examined. Around half perceived they had no to a little influence over family/financial stress, driver physical activity or driver weight until after the post-program questions. It is interesting to note that the majority of managers completing the DHAT reported already implementing practices and programs within the workplace to support driver health. However, it is difficult to ascertain if this sample is representative of the broader industry due to the small sample size and the similarity of answers received. Enrollment and completion of the DHAT was entirely optional which may have biased the cohort to managers already engaged with supporting driver health and wellbeing. Future interventions would need to employ a different strategy to ensure recruitment of a larger number of managers representative of the broader industry. Liaising with regulators to assist with the distribution of the program could also be explored. The video could be sliced into shorter sections and integrated on the same platform to allow for connection of the data and more in-depth analysis. Factors to be considered in this future strategy include the timing of delivery and reminders (or possibly incentives) to managers to encourage completion.

Raising awareness and increasing understanding of factors influencing health and wellbeing is the first step to changing a workplace culture and supporting health of any population (Ledderer et al., 2020; Thaler & Sunstein, 2008). Interventions targeted at the level of the direct managers, like DHAT, have the potential to increase the number of supportive managers that are in tune with their drivers and able to notice signs of a struggling driver early.

The level of program completion (72%) could suggest two things; 1) that the content is feasible and applicable to individuals and their workplaces; and 2) that the program needs to be changed in order encourage completion of all aspects of the program, especially the video training. Unfortunately, it was not possible to identify accurate completion times across the question and video components of the training due to the combination of two platforms. LearnDash reported completion times in minutes and seconds per block of questions, and Vimeo identified the number of completions, average and total time watched. The absence of clear identifiers common to both platforms prevented the calculation of completion times per individual, and this limitation should be addressed in any further rollout of DHAT.

This explorative study revealed several limitations to the DHAT program design which need to be addressed prior to future online interventions seeking to combine video trainings and survey content in a similar manner. In order to accurately assess program completion, the program design needs to limit the managers' ability to skip or fast forward through content such as the video. The program needs to be delivered in a "step wise" with progression relying on completion of previous sections in order to accurately measure attrition at each step. Furthermore, low engagement with the video content of this explorative study indicate that there is room for improvement. However, the flexibility in the resource and the ability to fast forward may have meant more managers progressed to the post program questions than would have otherwise. Regardless, shorter video slices with modifiable playback speeds could be considered in future iterations.

It is likely that the timing and release of this study, during the Covid-19 pandemic and over the period of high demand, negatively impacted recruitment. Restrictions in resource development due to Covid-19 requirements prevented an earlier launch, and project time frames meant an extended data collection time was not possible. Coordinating loads and driving trucks throughout the pandemic, has impacted many drivers in varied ways, and anecdotally drivers and managers are reporting even higher levels of stress and ill-health in the industry than ever before. We were aware that the opportunity for many managers to take even 20 minutes out of their schedule to complete the online program was indeed, a challenge, even despite the increasing importance of supporting driver health and wellbeing during unprecedented workloads.

Nevertheless, despite the low number of full training video completions, this explorative intervention has shown that: 1) It is possible to create and disseminate an online training program to managers across Australia in the driving industry; 2) This short online training approach based on nudge theory, has shown some success in shifting managers' awareness and understanding of the factors they can influence for their drivers; and 3) The resource in its current form is limited and would benefit from revisions to increase recruitment, completion rate and ability to reliably assess program impact.

This revision would need to include refining the recruitment methods to have a wider and broader reach, and reviewing the data collection method and platforms used to provide the opportunity of connecting the two lots of data for greater depth of analysis. Once these aspects have been refined, the next step would be to retest relevance of the content and refine the program further.

The next steps, alongside continuing to raise awareness of direct managers not yet reached, would be to provide training on enabling managers to take action and how to make positive changes in the areas where awareness is already high. While being aware of the factors a manager can influence does not mean that all managers are necessarily acting on this knowledge, and drivers have indicated there are still many health and wellbeing areas left unaddressed. There is also potential for regulators (for example inspectors) to use this intervention as an education tool for employers and operators of heavy vehicles. Future research needs to focus on continuing to increase awareness and understanding in those who lack this, and to ascertain additional methods in which direct managers can help and support drivers more.

Strengths and Limitations

The strengths of this study are in the development of the intervention resources and program based on 5 years of research, integrating administrative data, large surveys, in-depth interviews and current literature. This was a program created for the industry by the industry in an evidence-based manner. The narrative content in the training video was drawn directly from interviews with drivers and/or family members (Pritchard et al., 2020), and represented realistic perspectives and concerns of drivers. The topics, questions and specific factors were all selected from research in this field with a particular focus on Australian drivers.

A limitation of this study is the relatively small number of managers that completed the online program, and as a result the findings are not generalisable to the wider transport industry at this stage. Several factors contributed to this; the study was conducted in 2021, which was the second year of the Covid-19 global pandemic, affecting the trucking industry through illness, additional stress and an increase in the volume of delivery demands. The timeframe of the program was November through to January, and this is a known time of high demand in the transport industry.

The two different platforms selected for this program (LearnDash and Vimeo) did not allow for connection of data between platforms, and therefore matching question responses and completeness of the resource was not possible. These factors contributed to the inability to track individual managers through the program to determine whether they completed the program in its entirety. We were also unable to determine if anyone made an attempt, failed, and then returned later to complete, as time stamps were not captured in either platform.

Despite the challenges in the production and timing of the study period, 47 completions of the resource questions have provided important feasibility data for this stage of the intervention.

Next Steps and Recommended Changes

To improve the deliverability and impact of this type of resource, several things need to occur: 1) Recruitment strategies need to be explored in more detail, to disseminate to a wider audience with the aim of reaching more of the managers who have a lower understanding of the areas they can influence and also smaller companies (i.e. < 100 employees); and 2) Review data collection tools to incorporate the following; a) A platform that enables a 'forced' flow of managers to complete all parts of the program from start to end to increase completeness of data; b) Ensure matching individuals to each component of data collection throughout the resource (e.g. quantitative, short answer and viewing data) for more detailed analysis; and c) Reassess the length and content of the training video with the possibility that it could be divided into shorter videos spread throughout the resource to increase likelihood of watching all video content.

Once these steps have been addressed the program requires retesting with direct managers with a view to a wide rollout across Australia. The program could also be distributed through regulators and policy makers to increase the breadth of the impact. An evaluation of the impact of increased manager awareness and understanding of the health and wellbeing factors they can influence would be a key component of a wider rollout. Such an evaluation would aim to determine whether the DHAT program translates into manager behaviour change in the long-term.

The DHAT program and resource materials continue to be provided on the Driving Health website to further support direct managers. Although the recommended changes are unable to be advanced during the current Driving Health project time frame, the DHAT will remain open to support managers and data will continue to be collected into the near future.

Summary and Conclusion

This exploratory study presented a 20-minute online question and video training program (DHAT) for direct managers of truck drivers to ascertain what health and wellbeing factors they believed they had influence over, and how this changed following viewing a video.

To our knowledge, this approach of targeting the direct managers of truck drivers in Australia has not been applied before. In targeting this program to direct managers in the transport industry, we were extending the current emphasis of truck driver only programs and addressing in some way, the multipronged or systems approach required to create lasting health change across different levels in the industry. This study is one of the few evaluations of an intervention aimed to improve the health and wellbeing of truck drivers, and adds to the body of evidence to inform specific interventions to improve driver health and wellbeing.

This explorative study identified that presenting an online program to direct managers is possible, and that their level of awareness of the influence they have over the identified health and wellbeing factors, did increase over the program. Even though many of the managers did not watch the full training video, being asked questions about the factors they could influence and how they take action to help struggling drivers led to an increase in their awareness of driver health and wellbeing.

However, it is important to note this is not generalisable due to the small sample size and a likely bias towards managers who already have a high level of awareness of issues impacting driver health and wellbeing. This exploratory study also highlighted a number of technical, design and data collection limitations that need to be addressed before a wider rollout can be considered. The results from this study form a useful resource for the industry (including regulators and policy makers) to guide the development of future interventions and programs.

Appendix 1

Script for the video training / conversation

Video 1: Script in red is subtitled research findings on the video

Justin (Allocator / supervisor) and Jack (Truck driver)

Staged in a tea room reflecting the base/depot – driver having a cuppa, on his phone, allocator walks in and asks a question.

Two people involved – one allocator, one driver. Two different perspectives – the allocator talking about what they see as problem behaviours of non-compliance from the driver, and the driver talking about their experience and the factors that influence their day-to-day wellbeing.

Allocator: Oh Jack – How are things? How's Ann, Benson and Jessica?

Driver: Yeah they're good mate thanks.

Allocator: Good. Look mate, I'm glad I caught you. I just wanted to have a chat about that incident last month and you being first on the scene at that accident. You know we got a complaint from a member of the public about you. So, what actually happened?

Driver: Well, that member of the public – was in the third car that turned up. I had stopped, checked out the people in the car that went in the ditch, called the ambos and cops – and then the driver who just arrived came up to me, shaking their fists and yelling at me for causing the accident. I totally lost it with them.

Allocator: Well you know that can reflect badly on us because our name is branded all over the truck. But I get that it totally sucks that the public blames truckies like this, it's just not on.

Driver: Yeah and people in general treat us like dirt. Even at the distribution centres and drop-off points. You go into someone else's workplace and you're treated like an intruder. If you've got anything to say about that workplace and their procedure or their policy, you're just a whinging truck driver. Sometimes, you just want to grab these people and just punch them in the head because they're just so arrogant.

Allocator: Sounds like you were having a... (interrupted by the driver continuing)

Driver: I'm fed up with this. We're attacked by the public, the Police, the road or traffic authorities; we're attacked by local council for parking under a gum tree just to get two hours sleep

I know going off reflects badly on the company, but you don't know what it's like for me at the moment.

Allocator: (Sits down at the table) Yeah I do mate, I used to driver too remember.

Driver: I came back to driving last year and found that there were the new fatigue regulations. And I know the logic behind all these cameras and stuff in the truck are supposed to be helping us, but they're not working. You are still expecting drivers to drive all night and half the day and all this. How in God's name do you not expect us to get fatigued when you are doing that? This stuff is for 'them' to say well look we put these fatigue cameras in there, they shouldn't get fatigued now. But it's not working.

It's put even more pressure on us – we are under the microscope every minute of the day. I can't scratch my nose or blink too long, and the alarm goes off and it's like you're getting a shot of adrenalin every time.

The timelines are ludicrous. It's as if management are agreeing to impossible deadlines just to win the contract.

Two-fifths of drivers experience unrealistic delivery schedules

Allocator: Is there other stuff going on with you Jack – this isn't like you. At home maybe?

Driver: I've got my in-laws on my back, the Mrs ringing me up demanding things when I'm on the road – She used to like me being away because she liked time on her own and used to miss me and love it when I came home. Now she doesn't really care when I come back and my kids don't even want to talk to me on the phone. It's all a pile of crap. And it plays on ya, plays on your mind.

Allocator: That's a lot mate, anything else going on for ya at the moment?

Driver: My doctors on my case. Says I'm pre-diabetic. And I can't get to appointments cause I'm on the road, or I can't get time off when I need it to go to one, and when I have a script, I can't get to the chemist during the day to get it filled.

1 in 2 drivers have 2+ medical conditions

But you don't want to know that right, cause you are likely to take me off the roster. I've obviously got to cut out sugar. I don't have fizzy drinks, I have a lot of diet stuff. But the problem is, with being on the road all week, it's all overnight so I sleep during the day and then eat during the night.

1 in 2 drivers are obese

So it's very, very hard. The truck stops don't have healthy options, they are basically converted to McDonald's and Hungry Jacks and such and the food I bring from home to eat healthy, doesn't last the whole time I'm away. Then you've got fruit quarantines, so you can't take your own fruit and veg across.

Over 2/3 don't meet dietary guidelines

All this sitting in the truck, it's not good for you. I guess like an office, if you sit down all the time you're not exercising, you have the weight gain, pain and stiffness. And you know what it's like, when you're driving for long days, like six days on the trot, by the end of the week, you've had enough. It's hard bloody work.

2/3 drivers report back pain

You get to the end of that six days and you're buggered. The seats in the trucks contribute to this, the vibration is terrible – even though they put things in place that are meant to stop this. My body has so many aches and pains and I have a constant back pain that gets in the way of doing things.

Nearly 1 in 2 drivers have chronic pain > 3 months

And geez, when I work 12 days in a row - my body is wrecked! It's a lot.

Work claims are 5x higher in transport workers

Allocator: Jeeze mate – that's a lot going on. So why didn't you come and talk with me about this? We go back a long way you and me. I could have changed the roster or something.

Driver: Well, you know I love my job, but you find yourself consistently having to shut up and not say anything in order to keep your job. (Thoughtful pause)

It's not just about keeping your job, if you rock the boat you won't get a job with anyone. So even if I wanted to speak up about that incident and how it affected me, there's no real avenues to voice that.

Allocator: I get ya – I've worked in companies where if you admit a mistake or that you having trouble with something, you suddenly find you are not on the next shift schedule. It's not like that here though! The big boss is very keen to make sure that all of you drivers feel that it is a safe place to let us know what isn't working, ask for help or suggest changes.

Driver: Yeah well. I did have a hard time the last few weeks because of this, haven't been sleeping too well. And then I get tired on the job.

1 in 4 report problems falling asleep

I know some of the drivers suffer from depression. I know many have found it hard to just keep going and some have talked about being super stressed, or anxious. I don't wanna be that person! I wanna get back to being happy-go-lucky, always got a smile on my face, all that sort of stuff.

1 in 2 drivers have psychological distress

Allocator: I have some numbers of people in my office that you can check out. I know there's others in this company who have used them and found them really good. Some other drivers are in the middle of divorce, some are just not able to sleep, and others are talking about throwing the towel in. Some of the numbers are about getting health checks on a regular basis as well – have you heard of the "Tune up" program?

1 in 3 drivers have NOT had health checks in the last year

I'm gonna go get the contact list, and how about we make a plan for what happens next – would that be good for you?

Driver: (Nods)

Allocator: (Stands up to go get the list – turns back and says).

Usually, I would have just sent you a conduct warning letter, but I thought it might be better if I had a chat with you – I'm sure glad I did!

Video 2: Just Justin (Allocator / supervisor)

Three months later

Narrative from the Allocator making a phone call:

Allocator: Hello Bill, whereabouts are you? You're one hour late for delivery. I've got my boss riding my arse on this one. Why aren't you there already, you've had plenty of time.

What, You're kidding me? Additional road works, eating into your logbook time

What do you mean you're nearly over your allocated hours? How did you let this happen?

What am I supposed to do? You have another load to collect for delivery tomorrow morning.

And its my job is to make sure the loads get to where they need to and now we're pretty much... (Mouthing expletives)

Actually – you know what Bill – it's not your fault – you can't control the traffic or the road works. I get that.

Sorry for getting frustrated, I'll work it out. You keep doing your best down there mate, keep me posted, and I'll work something out at this end for the next load.

Fuming in the office/ pacing. Picks up the phone again and calls Jack

Jack mate, how are you doing? I'm in a pickle and wondered if you could help me out. I know that we agreed to 4 days on and 2 days off for you at the moment while you're getting back on track, but wondered how you would be placed for an additional one-off shift tomorrow?

10 hours turn around trip...

It would be great if you could help us out – someone has been held up and can't make the next shift and I need to cover their delivery pronto.

You will? Oh awesome mate – thanks for that. I'll make sure we stick to the shift agreement after that for next week. Or would you prefer to swap a day and do 3 days on and 2 days off just for next week?

Thanks so much for being flexible and helping me out – really appreciate it.

Hangs up. Recalls Bill

Hi Bill – I've managed to cover your next delivery – I know that the road works are totally outside of your control, and you did get a bum deal at the distribution centre with the loading. I've covered your next load – do what you need to do today and call me when you've dropped the load off and we'll chat more then. Okay mate?

To self

Far out, that was close. I've got my boss riding my arse, and the company waiting for the delivery tomorrow. Yea, I felt a bit annoyed at Bill initially, but I reigned it in and kept my cool. I'm pleased about that – I remember what it was like on the road. They do have a tough job out there managing all the pressures.

I'm glad I had that chat with Jack a few months back, and we were able to sort a plan together so he could get some support and have a health check-up as well – he seems happier these days, and it's so great that he was able to help me out this time round. Maybe talking with the drivers more is a good idea.

Large Pause – then talking to the camera

Allocator: I've realised there are a few things I can do to support my driver's health and make their work a little easier, and in return, this makes my life easier. If I let them tell me when they want leave, or can't work because of events and I roster them off, they're much more likely to show up and not pull out or pull a sickie at the last minute.

I get ridden by the guys upstairs to get things done – I could ride the drivers harder, but I reckon five minutes chatting to them gets better results. I'll have more drivers on the road and more wheels turning.

Even though there seems to be so many things that I can't influence for the driver, if I touch base with them at least once every couple of weeks over the phone/ radio or when they're next in, I can pick up on things before they get too big.

I can also make sure they know about the health screening programs we have, and encourage them to do it at least once a year. I always make sure that I get my health checks, so I'm leading by example as well, and I've also got information in my office about services that support my drivers if they need some help.

These are some of the services I know about and that my drivers have found useful...

Talking through these with the names and numbers coming up on slides.

Talking with the drivers and noticing any changes in their behaviours is one of the most vital things that I can do as an allocator. I think by talking and also listening to what's going on, and being interested in them as a person and not just their delivery schedule, I can then encourage them to get check-ups or help.

The win for me is, they're more likely to help me out when I need cover, and they're more likely to be happy and healthy in their work and home life. This is great because it then means my boss stays off my back and we all keep making good money with the work and deliveries we have. This is a major win and well worth the small investment of time into the drivers from my part!

Video 3: Introduction to the training resource – Elizabeth

Video intro to the program:

Hi and thanks for taking the time to think about how you could potentially support the drivers that you work with, in different ways. We all know the incredible demands of driving trucks. The isolation on the long-haul trips (FOOTAGE), the stress of city driving with motorists all around (FOOTAGE), not knowing what reception you might get at the distribution centres or delivery docks (FOOTAGE), the huge unrealistic time pressures placed on us, the cramped conditions in the truck and the ongoing aches and pains that many drivers feel.

The trucking industry is vital to keep Australia moving. When drivers are healthy and well, they keep the wheels turning, and we keep the money flowing in.

Australia relies on the transport sector for just about everything. To get the job done we need deliveries to be reliable, timely and safe. That can't happen without the people who set things up for drivers to do their job. People like YOU, allocators, line managers supervisors – the ones who link the deliveries with the drivers and keep everything to time.

This training program is based on over 2 years of research by the Driving Health team at Monash University, covering hundreds of thousands of workers' compensations claims, thousands of online and telephone surveys of drivers and in-depth interviews with drivers and their family members.

We hope this program will help you in your role, so that we can all play our part in helping drivers be healthy and stay healthy at work.

Appendix 2

Questions of the resource.

Intro Page

Driving Health Allocator Training - DHAT Program

Healthier drivers = more productivity = more dollars earned

The Driving Health Allocator Training Program (DHAT) is a FREE resource developed by the Driving Health team at Monash University targeted towards allocators, supervisors and line managers of truck drivers.

The goal of the DHAT program is to increase awareness and understanding among allocators, line managers and supervisors about the factors they can impact or control, to support or improve the health and wellbeing of drivers in their company.

Allocators, supervisors and line managers are defined as those who get manifests ready, allocate shifts and loads, manage delivery and schedule interruptions, coordinate timely deliveries at the right location, guide new employees, manage delays and roadworks and are generally seen as the hub of day-to-day trucking operation.

Individuals employed in these roles are often the 'meat in the sandwich' between senior management requirements to deliver loads on time and manage delays and setbacks urgently, and they also experience pushback from drivers. This is not an easy role and this training will increase their awareness of some of the ways they can influence health and wellbeing for drivers which will in turn make their job easier.

This training program is designed to take a maximum of 20 minutes to complete and can be done online (either on computer or phone) and consists of some questions, three short video scenarios, and some follow-up questions.

The Driving Health project has been approved by Monash University Human Ethics Committee.

By clicking next you are agreeing to take part in the study.

Page 2

Let's get started. Please watch the intro video that explains the package

To get things started in this training so that we can get the best information to you and support you in your role, we need to know a little more about you and the work that you do. We have a few questions for you to answer first about yourself, remember the answers are not linked to your name and are completely anonymous throughout.

Section 1: Questions about you and your work

1. What is your role/title? (4 options)
 - Allocator; Supervisor; Line manager; Other (with a text box for words)Previously OR Are you a truck driver currently OR Neither?
2. Have you been a truck driver? (3 options)
 - I am currently a truck driver; I have been a truck driver in the past; I have never been a truck driver
3. How many truck drivers do you manage on a typical day?
 - 0–4; 5–10; 11–20; 21–40; 41–100; 101+
4. How many employees (other than drivers) are there in the company?
 - 0–4; 5–10; 11–20; 21–40; 41–100; 101+
5. What state or territory are you based in? (8 options)
 - Choose one only: VIC, NSW, WA, SA, ACT, QLD, NT, TAS
6. What area does your company operate in?
 - All **Intrastate**; Mostly **Intrastate**; Mostly **Interstate**; All **Interstate**; Both **Intra** and **Interstate**
7. What postcode is your company based in? Reminder that this information is confidential and for research purposes only.
8. What is the distance of driving supplied by your drivers?
 - Short haul < 500kms per day; Long haul > 500kms per day; Both
9. How long have you been in your current role?
 - 0–1 year; 2–5 years; 6–10 years; > 10 years (select one option only)
10. How long have you been in any management or a non-driving role in the trucking industry?
 - 0–1 year; 2–5 years; 6–10 years; > 10 years (select one option only)
11. How long have you been in the transport industry overall?
 - < 1year; 1–5 years; 6–10 years; 11–20 years; 21–30 years; 31–50 years; > 51years (select one option only)
12. What are the things or signs you notice if one of your drivers is struggling with their health or wellbeing? (please describe)
13. What specific things have you done in the past to help a driver who is struggling? (e.g. had a chat, given them info) (please describe)

Questions about your influence (pre video)

We now want to find out about your thoughts of the areas you can influence, for increasing the health of your drivers.

As an allocator/supervisor/line manager, how much influence do you think YOU have over the following factors with a driver?

1= None, 2= A little, 3= Some, 4= A lot

- Training level – Work Health and Safety
- Physical Health
- Mental Health
- Driver Weight
- Physical activity
- Family or financial stressors
- Driver fatigue and sleep
- Schedules and work hours
- Sticking to regulations
- Workplace bullying or harassment

Questions about what you would do

1. If a driver needs help with one of these factors in the future, which of these options would you choose to do? (please select all that apply)
 - I wouldn't do anything, it's not part of my role
 - I would have a chat to them when they are next in at base
 - I would call them up on the phone or radio and have a chat
 - I would tell them to talk to HR
 - I would recommend they talk to a counsellor/chaplain
 - I would suggest they contact EAP (Employee Assistance Program)
 - I would recommend they contact their GP
 - I would give them a pamphlet and tell them to get help
 - I would ask if there are any problems with the truck/equipment that needs attention
 - I would issue them with a warning for poor performance
 - I would take them off the road
 - I would talk to all the drivers in the company together
 - I would put a general statement in the next newsletter
 - Something else
2. If you would do something else to help a driver, please describe what it would be.
3. If you could change some of the things mentioned in the last question, what would you do?

Video Presentation

Please watch this video that shows some ways you may be able to assist drivers in the future. After the video there are 3 short questions to answer.

When you are finished you can download the Driving Health Resource Kit. This Kit provides information on how to support a driver who may be struggling with mental health or wellbeing.

You can also download a resource to give straight to your drivers.

Press play on the video to start.

Questions about your influence (post video)

You're almost there! The following questions will allow us to gauge if the Driving Health Allocator Program has assisted you in being able to identify areas that impact the health of your employees.

As an allocator/supervisor/line manager, how much influence do you think you have over the following factors with a driver?

1= None, 2= A little, 3= Some, 4= A lot

- Training level – Work Health and Safety
- Physical Health
- Mental Health
- Driver Weight
- Physical activity
- Family or financial stressors
- Driver fatigue and sleep
- Schedules and work hours
- Sticking to regulations
- Workplace bullying or harassment

Final Questions

1. If a driver needs help with one of these factors in the future, which of these options would you choose to do? (please select all that apply)
 - I wouldn't do anything, it's not part of my role
 - I would have a chat to them when they are next in at base
 - I would call them up on the phone or radio and have a chat
 - I would tell them to talk to HR
 - I would recommend they talk to a counsellor/chaplain
 - I would suggest they contact EAP (Employee Assistance Program)
 - I would recommend they contact their GP
 - I would give them a pamphlet and tell them to get help
 - I would ask if there are any problems with the truck/equipment that needs attention
 - I would issue them with a warning for poor performance
 - I would take them off the road
 - I would talk to all the drivers in the company together
 - I would put a general statement in the next newsletter
 - Something else
2. If you would do something else to help a driver, please describe what it would be.
3. If you could change some of the things mentioned in the last question, what would you do?

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