Challenges for the FIFO/DIDO Workforce: Impacts on Health, Safety and Relationships

Final Report

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Executive Summary

This report identifies the outcomes for the SBEnrc 2.32 FIFO/DIDO research project; Challenges for the FIFO/DIDO Workforce: Impacts on Health, Safety and Relationships. The focus of this report is on four key agreed objectives:

1. Understand more clearly how employee family relationships are affected by the FIFO/DIDO working environment and investigating solutions
2. Investigate the psychosocial health implications for employees in a FIFO/DIDO working environment and seeking recommendations for change
3. Assess the impact of FIFO/DIDO travel on workplace health and safety incidents
4. Examine rosters, shifts, work hours, job design and productivity demands as to how best design a safe, healthy and productive work environment for FIFO/DIDO employees

The report examines and assesses these objectives, using a mixed method approach. In total, data was collected from 306 surveyed employees and 15 focus groups across construction sites in Western Australia (Wheatstone and Roy Hill), New South Wales (Broken Hill and Tiboburra) and Queensland (Cairns).

This project identified several negative impacts FIFO/DIDO engagement had on worker and family life. Common reports included:

- The drain on time and energy of workers
- Isolation
- Lack of available communication with family
- Workplace Stress
- Shifts, rosters and work hours
- An uncertain work future
- Fatigue, particularly in terms of travel and roster cycle

Outcomes from this project have identified four key recommendations to improve the impact of FIFO/DIDO work on employees' health, safety and relationships. These include:

1. Better Communication between Workers and Management

Improvements in top-down communications are a critical step in improving safety performance. Whilst it was reported that employees felt they could raise issues with senior leaders or management, there was also real uncertainty and a lack of trust with information coming from management. This would require stronger attempts within the organisation to make authentic attempts to engage, action, and provide feedback to the concerns of the workforce.

2. Training

A common theme from the focus groups across all sites, regardless of whether the workforce was FIFO or DIDO, was a strong need for more training, specifically around financial planning/financial aid and realistic issues the workforce will face in regards to their health and well-being whilst employed as a FIFO/DIDO worker, such as mental health awareness training for supervisors and family-work adjustment training.

3. Rosters

Whilst there were slight differences between workers employed as FIFO, compared to their DIDO counterparts, there was strong and consistent support for having a 10-day off roster, which included two consecutive weekends as part of their rest and relaxation time.

4. Continued External Support

Consistent with outcomes from the West Australian Education and Health Standing Committee government inquiry into the mental health of FIFO workers, the research project identifies a need for Mates in Construction to continue their current work on-site, and to even increase their exposure. Data from the focus groups further supported this notion, with participants identifying Mates in Construction as one of the major supports they had, and the excellent work they did to engage the workers on-site and provide the necessary support.

Synopsis

Australia is experiencing a rising trend in the use of fly-in, fly-out (FIFO) or drive-in, drive out (DIDO) workers within the resource extraction, construction infrastructure, and road construction industries. Previous research aiming to understand the implications associated with this unique workforce has been limited, and as the workforce continues to expand rapidly, industry is faced with many new challenges for its safe management of this workforce. The complexity of this workforce covers a range of factors including roster design, shift work, working hours, performance, satisfaction, turnover, wellbeing, relationships and community issues. This research seeks to understand better the relationship between workplace requirements and personal and social relationships for the FIFO/DIDO workforce, assess the consequent impacts on workplace factors of health, safety and productivity and personal and family relationships, and recommend more effective next practice

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1.   Introduction

1.1   Overview of the Report

The current SBEnrc project, 2.32 Challenges for the FIFO/DIDO Workforce: Impacts on Health, Safety and Relationships, has drawn on various literature, documents and reports on the FIFO/DIDO work environment. In addition, extensive consultations were held with employees across the partner organisations in Western Australia, New South Wales and Queensland.

This report highlights the key findings from the project, and provides key recommendations for the industry to continue safe productivity and ensuring the health, safety and well-being of their workforce. First, the background of to the study will be discussed, including the methodology undertaken, the objectives of the project and the timeline and participants of the project. Second, the results of the survey and focus groups will be presented. Third, key recommendations for the industry as a whole going forward will be discussed.

1.2   Study Background – The Challenge Facing the Industry

Since 2000, Australia has seen a large growth in the mineral, resource and infrastructure sectors, with operations expanding to rural and remote locations, leading to an increase in demand for personnel to work fly-in, fly-out (FIFO) or drive-in, drive out (DIDO) rosters. Such models of work have become increasingly popular as it takes into account the relatively short lifespan of sites, and is considered more economical than building permanent accommodation or paying for rent (Lifeline WA, 2013), helping organisations remain economically competitive.

While there are many organisational benefits to employing FIFO/DIDO rosters, there are oft cited adverse effects on the workers themselves. The issues in employing these workforces are becoming more apparent, and include a range of physical, mental, psychosocial, safety and community challenges. Research evaluating the impacts of fly-in, fly-out operations in Australia has been limited, and in February 2013 the Australian House of Representatives Standing Committee on Regional Australia made 21 recommendations aimed at improving these operations (Parliament of Australia, 2013). To date, none of the recommendations have been implemented.

A recent inquiry submission to the West Australian Education and Health Standing Committee (2015) highlighted multiple issues including but not limited to mental health concerns, family breakdowns and alcohol and other drug abuse. Recent research into FIFO employees revealed that between 24 and 36 percent of personnel experience severe levels of psychological distress in the forms of anxiety, depression and stress symptomology (Tuck, Temple, & Sipek, 2013). Further, it was also found that 71.5% of these FIFO participants had planned to exit FIFO employment within five years. Based on the limited literature, potential impacts include loneliness, depression, satisfaction levels with onsite facilities and home contact, fatigue leading to safety concerns and strain on marital relationships.

The concerns associated with FIFO/DIDO operations cover a range of variables, some of which are also prevalent in other industries (for example, manufacturing and nursing) and can broadly be described as having workforce and social and community impacts. The workforce areas of concern include roster schedules, shift work and work hours, sleep disruption, fatigue, safety performance,

wellbeing both physical and mental, and workforce turnover. The social and community areas of concern include psychosocial wellbeing in personal and family relationships, and social and resource impacts on home and host communities. There is an early understanding emerging of the symbiosis of the workforce and social and community concerns but, as yet, very little evidence of how to translate the best aspects of this relationship into next practice.

The construction and infrastructure FIFO/DIDO workforce is facing challenges on several fronts with impacts on the individual worker (e.g. work productivity, safety, psychosocial resilience), the families of the workers (e.g. personal relationship challenges, remote parenting, health and wellbeing concerns) and companies themselves (e.g. difficulties attracting the right employees, increasingly unacceptable turnover rates).

Operations in regional communities utilising a FIFO/DIDO workforce are exposed to a myriad of concerns which are not only limited to their economic prosperity and survival, but also include the welfare of their contractors, employees, their families, and the home and host communities in which they operate. At the workplace these challenges include an understanding of the management of optimal roster designs for performance and employee satisfaction, the at-risk days and times to best manage tasks, hours of work including start and finish times to minimise sleep debt and fatigue, and the need for data on fatigue related work incidents and road accidents. There are challenges in relation to health and wellbeing for FIFO employees in ensuring the FIFO lifestyle is properly communicated and understood before engaging in FIFO work. In the home and host communities the challenge is between FIFO workforces in their home and host communities, relationships and educational programs for their inclusion and integration, and for communities, government and industry to support and promote the growing needs and concerns for operations, communities and workers. No research to date has examined the linkages and relationships between workplace and personal relationships challenges in a FIFO/DIDO environment. In this regard, this research seeks to be aptly innovative.

1.3   Project Timeline and Participants

The project was carried out from October 2014 through to September 2015. The project's steering group consisted of representatives from two universities, five organisations utilising a FIFO/DIDO workforce and the Federal Safety Commissioner. Members of the steering group are presented below. In addition, consultations were also held with FIFO Families and FACE (FIFO Australian Community of Excellence).

Table 1. Organisations of Project Steering Group Representatives

Project Steering Group Representatives
Curtin University
Griffith University
John Holland Group
NSW Road and Maritime Services
QLD Transport and Main Roads
Mates in Construction
Construction Skills Queensland
Office of the Federal Safety Commissioner
Swinburne University
Sustainable Built Environment National Research Centre

1.4   Project Objectives

The objectives of the current study were to:

1. Understand more clearly how employee family relationships are affected by the FIFO/DIDO working environment and investigate solutions
2. Investigate the psychosocial health implications for employees in a FIFO/DIDO working environment and seek recommendations for change
3. Assess the impact of FIFO/DIDO travel on workplace health and safety incidents
4. Examine rosters, shifts, work hours, job design and productivity demands as to how best design a safe, healthy and productive work environment for FIFO/DIDO employees

This project sought to address in part some of these concerns and in particular to understand more fully the mutual impacts on workplace health and safety and personal and social relationships, and to explore strategies and actions that better meet the needs of employers, employees and their families.

1.5   Project Methodology

The project's methodology consisted of four major phases. First, a desktop review was undertaken of the key documents including research literature and reports. Second, the information was used to help formulate a brief survey designed to examine psychosocial and organisational safety climate, rosters and shifts and integration of the frequently used Copenhagen Psychosocial Questionnaire. Third, the review of literature also assisted in the development of semi-structured interview questions for the focus groups. The final phase was the analysis of the data and formulation of key recommendations.

1.6   Ethics

This project was approved by the Human Ethics Committees of Curtin University (Approval no. RDHU-01-15) and Griffith University (Approval No. ENG/02/15/HREC)

2. Results

2.1 Survey Results

2.1.1 Demographic Information

A total of 306 participants across John Holland, RMS NSW and QTMR completed the survey. The table below highlights the key demographic information of participants who completed the survey. Typical of the workforce, a majority of respondents were male (94.8%), aged between 25 and 44 years, with an average age of 39 years. Approximately 61.2% of respondents said they were in a long-term relationship.

Table 2. Demographic Characteristics of Survey Participants

Characteristic	Subgroup	% of participants
Age	18-24	8.3
	25-34	32.3
	35-44	29.2
	45-54	17
	55-64	10.4
	65-74	2.1
	75-84	0.3
	85-94	0.3
Gender	Male	94.2
	Female	5.8
Marital Status	Single	27.2
	Married	41.8
	De Facto	19.4
	Separated	4.4
	Divorced	4.1
	Widowed	0.3
	Never Married	1.4
	Prefer not to say	1.4

Table 3. Work Characteristics of Survey Participants

Characteristic	Subgroup	% of Participants
Roster	4/1	67.5
	3/1	15.5
	11 Day Fortnight	4.2
	9 Day Fortnight	5.3
	Day Shift	3.9
	Varies	0.8
	On Call	2.1
Employment Type	Employee	77.5
	Contractor	21.1
	Other	1.3
	Full-Time	92
	Part-Time	4.8
	Other	3.2

2.1.2 Psychosocial and Organisational Safety Climate

The Psychosocial and Organisational Safety Climate questionnaire was measured on a 5-point likert scale, with higher scores indicating how strongly participants agreed.

Table 4. Psychosocial and Organisational Safety Climate

Sub-Scale	Average score (overall)	Top and Bottom Sub-Questions
Management Commitment to Safety	3.71	Management regard safety as an important part of operations (4.22)
		In my organisation, managers act quickly to correct problems or issues that affect employees' stress levels (3.29)
Communication and Safety	3.40	Management consult employees about safety

Information		issues (3.85)
		Employees know what is going on in the organisation (3.01)
Training and Procedures	3.38	Company training provides adequate skills and experiences to carry out normal duties safely (3.68)
		Regular training is provided for a range of emergency situations (3.03)
Priority	3.25	Senior managers clearly consider employees' wellbeing to be of great importance(3.31)
		Senior managers consider employees' wellbeing to be as important as organisational work performance(3.18)

2.1.3 Rosters and Shifts

Similarly, questions relating to rosters and shifts were measured on a 5-point likert scale. Again, higher scores indicated how strongly participants agreed with the statements.

Table 5. Roster and Shifts Results

Sub-Question	Average
My work shifts interfere with my family or social life	3.77
I get tired at work because of the pattern of my shifts	3.05
Rosters don't allow enough rest time between shifts	2.81
I get tired at work because my shifts are too long	2.66
I find it difficult to get enough sleep because of my work roster	2.62
I am tired at work because of the time of day I am rostered	2.54

2.1.4 COPSOQ

The shortened version of the Copenhagen Psychosocial Questionnaire is a tool for workplace assessment of psychosocial work environment. Lower scores (min 1 – max 5) identify areas where improvements can be made to the work environment.

Category	Score
Emotional Demands	2.66
Work-Family Conflict	2.69
Influence at Work	2.85
Stress	2.86
Predictability	2.9
Burnout	2.94
Job Satisfaction	2.97
Justice and Respect	3.12
Rewards (Recognition)	3.19
Tempo, Work Pace	3.24
Trust Between Management and Employees	3.34
Social Support from Supervisors	3.34
Possibilites for Development	3.36
Quality of Leadership	3.41
Self-Rated Health	3.42
Commitment to the Workplace	3.45
Meaning of Work	3.63
Role Clarity	3.69
Quantitative Demands	4.01

Note: Quantitative Demands are demands related to the amount of work to be done by the worker

2.2 Focus Group Thematic Analysis

The 15 focus groups were conducted across four main sites around Australia:

Roy Hill is, at the time of this research, a rail construction site in the remote Pilbara, Western Australia. The site is located 115 kilometres north of Newman. It currently employs 7200 workers and consists of the number of temporary camps (FIFO).

Wheatstone is a Liquefied Natural Gas plant under construction in the Pilbara region of Western Australia. The plant is 13 kilometres from the town of Onslow which itself is 1400 kilometres north of Perth WA. Accommodation and facilities are located on site for the 4000 workforce personnel who commute nationally and internationally to the worksite (FIFO).

Cairns projects have camp sites which are temporary, as their focus is more short term projects. While the main depot is located in Cairns, Queensland, employees often travel a few hundred KM north to where they work. Their focus is mainly road construction (DIDO).

RMS are the NSW data. They have temporary camp accommodation, but they do have one permanent camp site. The facilities there though are basic, consisting of standard twin share dongers and camper vans. Otherwise, these employees will travel to Broken Hill or Tiboburra, which, from the sites we visited, are on average, a 2 hours trip. Again, their focus is more on road construction (DIDO).

Consent was obtained from all focus group participants and each focus group was digitally recorded with the participant's permission. Each focus group (consisting of six to nine participants) lasted between 1-1.5 hours and followed the research objectives with the occasional prompts to encourage discussion. The resulting data presented here, was analysed using thematic analysis which draws out the key themes with accompanying quotes to highlight each theme. Please refer to Appendix A (linked on the SBEnrc website) for a full list of sample quotes related to the key themes.

2.2.1 Project Objective 1: Understanding more clearly how employee family relationships are affected by the FIFO/DIDO working environment and investigate solutions

On site communication to family and friends is problematic particularly for 4 and 1 rosters (4 weeks on, one week off). Many of the camps don't have adequate reception and you get problems at peak times. This can have a real impact on the relationship with families back home. As two participants reported:

> *I think with the younger kids as well, they umm, there becomes a stranger factor as well. When I go back, my niece is two and when I go back my niece has to find out who I am again. Everytime I go back- she says who is this person? So with young kids you can't talk on the phone to them so they don't really understand there is someone on the other end.*

> *I think one of the biggest issues where we are based is communication. We are obviously based at a number of real camps and we know when you go back to real camp to you won't have reception. So you can stand outside on the phone and maybe if you are lucky you might get internet in your room and your landline might work if you're lucky so I guess that's the biggest thing. If you trying to communicate to your kids or anything like that you can really struggle. You might go nights and nights without contact with them because you don't get any reception.*

Having privacy is made more difficult for workers as mobile phone reception is not available in rooms. For East Coasters, the time differences and the long shifts means timing of calls is difficult.

There is considerable stress associated for workers and their families in being unable to help in an emergency. This intensified by the inability to be contacted in work time and the poor mobile reception. One participant mentioned:

> *Also they can't get to you, so it's like. Just this morning, I get normally speak to them at 7am but something at the other end meant that I can't speak to them. My little fella was sick last night so he had to go to hospital last night. I just had a call from the Mrs like at 10:30 or 10:00 and she has been trying to get me because the morning was too early. So you don't make that 7 o'clock call, I know it's only a few hours I guess but if she needed to talk to me, she needs to talk to me…*

Added to this because of the rosters, workers are missing important family events. For those with children, the child is often disappointed.

Workers essentially lead a single person's life on site and generally enjoy that aspect. This is made more obvious when they return home and have to be the family man again (Generally - 94.2% of our sample were male).

The long rosters make communication with your partner more difficult both on-site and off-site. This is intensified because of reception difficulties on site. This can and has led to the breakdown of a number of marriages. Where it works is when there is understanding from the partner of the reason for the work and efforts of both sides to work at communication. One participant said:

Being away from your family does cause strain and you have to work harder on communication to keep relationships alive. I didn't.

2.2.2 Project Objective 2: Investigating the psychosocial health implications for employees in a FIFO/DIDO working environment and seek recommendations for change

2.2.2.1 Psychosocial Health Implications for Employees

The feeling of isolation is a real problem because of the long shifts, poor reception, roster cycle and location. The window of opportunity to communicate with others (family or co-workers) is difficult and at times workers can feel very alone and this can extend over long periods particularly for remote FIFO workers. As two participants reported:

*I think a lot of it comes from the f***ing isolation you know… you can't get on Skype. One of the blokes I spoke too, he was having major problems at home and he could not get hold of anyone because his phone..(his phone what?) you can only make so many calls in your room and when you are having trouble at home you are making more 10 or 15 calls, you know what I mean.*

I think you can very high prevalence of depression and undiagnosed depression as well. Because of the lifestyle people are working, it starts to take a toll on them. I think the isolation can really creep up on people without them really noticing. I'm a bit dead inside but actually don't really think about anyone at home while I'm away and that doesn't bother me. I could be a "psychopath" but I think it's different for most people up here because…I go to be bed and get up for work the next day but when I look at that objectively that's not really healthy.

Management support in terms of training and limited financial support has led to family stress and financial stress. Family problems arise through a lack of adequate training in work-family adjustment. There can also be financial problems due to a lack of organisational financial support or training in how to manage money properly, particularly for the younger workers.

Workers complain about a lack of support from their supervisors in times of need. Being casual makes them feel vulnerable and creates stress. For FIFO/DIDO workers the drawcard is the money. They are on very good wages and are happy with that.

Workers highlighted the social support difficulties through a lack of physical space to communicate on site. They also seemed to be struggling with "motelling" (different rooms each time during roster cycle). They are unable to create a home environment e.g., family pictures, bland room colour, no visual stimulation outside rooms. One participant said:

And, the "motelling" is a massive thing…Every time you leave camp you have to check out of your room. On all other projects I've worked on you have your own room for the entire project. We basically live up here. We are up here for three weeks so the space you have got is the 3 by 4 room. It makes such a difference when you can have a photo of your family there, a proper glass to drink out of and a kettle set up so you can have coffee in the morning in your room or a cup of tea if you are not sleeping in the middle of the night. That makes such a massive difference.

It is important to note that DIDO and permanent site FIFO workers are generally happier. However, socialisation and its link to alcohol is common for the DIDO sites in particular.

There does appear to be some irritability and stress associated with the long shifts. Basically workers eat, sleep, and work a majority of the time. Physical health is an issue due to poor quality food at sites in some circumstances.

There does appear to be some stress due to roster cycles however, this differs depending on employee circumstances. One participant reported:

It's funny, you think 2 days wouldn't make a difference, but you actually have 5 full days off where you don't think about work. The first day you fly home, you still think about work, whether you like it or not. The day you fly back to work, you tend to get back into work mode. That's what I find on the Wednesday morning before I fly out, I shut off and shut everything down. Segregate family, otherwise it makes it hard. You drop your kids off, but everyone knows you're flying out the next day. So they put on a brave face, you put on a brave face, so you tend to go into work mode. That last day, while it's meant to be RNR, it's not. It's stressful for everyone.

The work shift is fine for most employees however suitability of length of shift may vary across employee. Generally, there is even desire for longer shifts for DIDO workers particularly because they are away anyway. There is clearly stress associated with changes in the construction industry (less financially buoyant). Contract continuation is a real issue for employees.

2.2.2.2 *Recommendations for change*

Workers highlighted a number of recommendations for change. These included:

- Training in ZIP, work to family adjustment and financial planning.
- Suitable counselling services which encourage particularly men to seek help when needed.
- Continued access to external agencies such as Mates in Construction
- Better communication facilities including mobile and broadband access. Even in peak times.
- Alternate rosters depending on circumstances.
- Private rooms and better communal facilities.
- Consistent quality food options.
- Organizational support during employee crises or sickness (both mental and physical).
- Two consecutive weekends at home would be desirable for workers to allow greater socialisation at home.
- More time off for career development training for some workers (particularly older workers) would be beneficial.

Here are a few quotes from participants which highlight some of these recommendations:

It's a brilliant idea. It's a wee bit of what you were saying, something that my wife and I discussed. When we do get out of this, we will require marriage counselling, purely because, I've never had a job where I've been home for extended periods of time. My old job was 70 hr weeks with one day off, here it's a week off but I'm away 4 weeks. We have never consistently been in each others' pockets, and it's something we will struggle with, without doubt. So that's something that needs to be addressed. Rehabilitating people to get out of the FIFO work, that's a real need. It is like jail, when you're in the loop, then you get parole, and it's like 'welcome to the real world'. People can't cope with that change[1].

It's an awesome program. It helped me out heaps up here but trying to put it between workforce and senior management stuff is stupid. I'm trying to get bloke in home because they're not well but management want to know what's wrong with them, who it is and it's got to remain anonymous, you know[2].

It keeps the job fresh too. You can be on the job for 2-3 years. And nothing bores you more than doing

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[1] Referring to work-family adjustment training.
[2] Referring to the Mates-in-Construction program.

the same job over and over again in that time period[3].

The most important issue, consistent across all sites and work conditions, was an increased need for workers to be able to communicate and stay in touch with their families and friends back home. This was raised as a serious issue, as previously mentioned, with isolation being a major contributing factor and workers often feeling like strangers in their own home due to not being able to communicate adequately and consistently via any medium (landline, mobile, internet, skype etc) whilst on site. To be able to maintain regular contact with family was a key issue and was reported to increase perceived satisfaction of workers.

2.2.3 Project Objective 3: An assessment of the impact of FIFO/DIDO travel on workplace health and safety incidents

The purpose of objective 3 was to assess the impact of FIFO/DIDO travel on workplace health and safety incidents, in particular, examining the '*inverted bell curve',* where incidents were more likely to occur at the start and end of shift. However, the data obtained from the current research more specifically identified key issues from the workforce in relation to work/home travel. The focus here was on workers who had come from shift, and were on a flight back home. The safety issues identified were based on potential fatigue factors which had the potential to increase the risk of more safety incidents occurring while behind the wheel.

There is employee satisfaction of suitable morning flights which help meet family obligations for FIFO workers. Driving safety is an issue due to FIFO workers driving from airport to home because of lost financial support from organisations for taxis. As two participants reported:

> *The EBA was already signed up by the time we got here and I think they overlooked major part of it. We've got guys flying all over Australia and they're working up to, what a nine hour day here before they go to the airport before they fly home and they need to try and get home at the other end. If its 12:00 at night and you have got young children at home and your wife is going to get out of your bed and come and pick you up. Most of them will drive after that and that really is not good.*

> *Even when I lived south I would do a full work day and fly home. Land at the airport at 7:30-8:00, depending on what flight you're on and then have to drive an hour and half home because there was no other way to get home-there's no trains or buses that go past my house and a taxi would cost me an absolute fortune. That's if I could get a taxi to go there. So the only other option is to pay for your car parking for three weeks and drive yourself home at the end of a three week swing after a full work day driving through the bush with roos.*

However, DIDO workers tend to share driving needs. Employees now travel back to site in their own time affecting time at home and affecting the amount of rest and relaxation they have. Fatigue is an issue at the beginning and end of a roster cycle particularly for workers who travel across the country for work.

The important outcome, in relation to workplace travel, that arose from the focus groups, is that organisations need to give greater thought to their workforce travelling to and from site. Greater consideration, and duty of care is required for those workers, who, for example, come off a 10 hour shift on their last rostered day, but still need to drive over 3 hours to get home. For example, there could be significant benefits if it were feasible to allow workers to work a shortened day on the last rostered day, finishing early so they can still travel home, or provide alternate compensated options such as buses or taxis.

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[3] Referring to career development training.

2.2.4 Project Objective 4: An examination of rosters, shifts, work hours, job design and productivity demands and how to best design a safe, healthy, and productive work environment for FIFO/DIDO employees

10-12 hour day or night shifts for construction workers is suitable because there is the desire to earn as much money as they can while on site (casual contracts). However administration staff preferred shorter work hours (permanent contracts). Rosters need vary depending on circumstances:

- East Coast workers prefer 4 and 1 (because of travel time).
- Family workers prefer 2 and 2 or 2 and 1.
- Others prefer 3 and 1.

Here is what two participants said:

That's a difficult one. I think probably shift duration. Certainly for nightshift the guys working a nine or ten hour shift as opposed to a twelve hour shift. On the flip side of that you get people who are a little unhappy with that because they are dealing with all the negatives of nightshift still but not getting the dollars. So I think a lot of the guys' night and days if they are going to be up here and working in this environment they want to make the most out of it as well. So for a lot of them if we tried to cut the hours to 10 hours a day they would be very unhappy and they would walk out the door I think. So it's very difficult to find a balance that everyone is happy with.

If it was 2 on 1 off it would just be a real good family friendly roster but obviously for Eastern Staters it would cost too much in flights going backwards and forwards.

Construction workers are generally happy with current job designs however prefer more organisational support during personal crises or sickness. More permanent facilities (such as broadband and mobile access, communal space) are required. Employees see productivity as an organizational concern.

3. Key Recommendations

The outcomes of this research have led to a number of recommendations to improve the health and safety of FIFO/DIDO workers.

Better Communication between Workers and Management

Improvements in top-down communication have led to improved workforce engagement, which has led to further improvements in safety performance. For leaders to improve their communication with their workers, it would be beneficial to operate within the prescribed transformational leadership framework.

Transformational leadership occurs when leaders share a vision with their followers, and provide the required resources necessary for developing the potential of their workforce. (Den Hartog, Van Muijen, & Koopman, 1997; Smith, Montagno, & Kuzmenko, 2004). As a consequence, followers identify with the mission and values of their leader, have increased job satisfaction and work to perform beyond simple transactions and base expectations (Avolio, et al., 2009). Operating under this framework has been positively associated with leadership effectiveness and other important organisational outcomes such as productivity and turnover (Avolio, et al., 2009). Most descriptions of transformational leadership include four core components which can be adapted to operational requirements.

First, is creating a strategic vision, realistic and attractive, gaining buy-in from employees and focuses their energy, as a group, towards these organisational goals. Creating such a strategic vision unifies and energises employees. Based on the results of the survey, a large majority of workers already bought into their organisations' goals, especially as they had found their work to be meaningful. Second, is communicating the vision. These leaders need to be able to communicate the meaning and importance of the visionary goals to their employees. Following on, transformational leaders need to not only communicate the shared vision, they also need to be seen proactively working towards it. This is not only through significant events, but also through everyday activities such as meeting agendas and executive scheduling. Finally, engaging employee commitment towards the vision is the final component. Importantly, commitment is built through the involvement of employees, with this commitment requiring not only engagement and involvement of the workforce, but also, as leaders, providing appropriate follow-up actions or feedback when issues have been raised.

Training

A common theme from the focus groups across all sites, regardless of whether the workforce was FIFO or DIDO, was a strong need for more training. In particular, this training was identified specifically around issues of financial planning/financial aid and realistic issues the workforce will face in regards to their health and well-being. As many of the current training and education methods were ad hoc, or learnt through experience whilst on the job, or discussions with their colleagues, there was a strong suggestion that the workforce needed more education and training on these key issues whilst employed as a FIFO/DIDO worker. Further, there was a growing need for more re-integration training for workers to return to the 'real world' such as mental health awareness training and family-work adjustment training.

Rosters

The focus group data has suggested there may be slight differences between workers employed as FIFO, compared to their DIDO counterparts. Specifically, many of the FIFO workers who were employed in the West, were unanimous in their support for having a 10 day off roster. This included having two consecutive weekends, as part of the 10 days. This was to allow for greater opportunity to have downtime and spend with their families away from work. While this was a common suggestion, many of the workers also said if this were possible, they had no qualms working the 3 or 4 weeks, as they understood they were paid to do a job. Of greater importance to them, was having the sense they had the opportunity to have genuine time off away from their work.

For DIDO workers, the majority of interviewed workers were employed on the 9 or 11 day fortnight. Again, while there were a few suggestions for improvements to the roster, many participants tended to be satisfied with their current roster.

Continued External Support

This recommendation is consistent with outcomes from the WA inquiry. In particular, the suggestion was that Mates in Construction needed to continue their current work on-site, and to even increase their exposure. Data from the focus groups further supported this notion, with participants identifying Mates in Construction as one of the major supports they had, and the excellent work they did to engage the workers on-site and provide the necessary support.

4.   Summary

Overall, participants have reported that there are consistent issues which arise from the FIFO/DIDO working environment. Positively, workers have generally found that the work they were doing was meaningful and important to them. They also reported that they felt safety was a priority from management.

However, more could be done to improve communication from the top. Whilst it was reported that employees felt they could raise issues with senior leaders or management, they also said there was real uncertainty, and a lack of trust with information coming from management. This would suggest that more needs to be done in terms of top-down communication, and making authentic attempts to engage, action, and provide feedback to employee concerns.

Most importantly, the negative impacts this highly specialised work had on family life were commonly reported across all sites, regardless of whether participants were FIFO or DIDO. Key issues included:

- The drain on time and energy of workers
- Isolation
- Lack of available communication with family
- Workplace Stress

- Shifts, rosters and work hours
- An uncertain work future
- Fatigue, particularly in terms of travel and roster cycle

The qualitative data appears to indicate marked differences between temporary versus permanent sites and fly-in fly-out versus drive- in drive out-out. The differences highlighted by the availability of different facilities (both physical and communication) and opportunities for social interaction. However what appears to be consistent across all sites that the research team visited are clear issues about the psychological and physical health of the workers.

This current research has been carried out across sites in Western Australia, Queensland and New South Wales. The outcomes, and key recommendations provide a starting point for improving the health, safety and well-being of workers employed in this FIFO/DIDO environment, as well as providing further improvements to their familial relationships.

5.   References

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