Psychological Impairment: Light at the End of the Drift

Brad Strahan

Consulting Psychologist

Abstract

Embedded within the *Fitness for Duty* provisions of the new regulations is the requirement for mines to develop protocols for responding to psychological impairment. The present paper describes the **EASE** (Education, Assessment, Support, Evaluation) model for managing *Fitness for Duty* issues and assesses its value for responding to psychological impairment. The exercise of mutual responsibilities of mining companies and employees is seen as the key to effective response. The response to psychological impairment invariably amounts to processes of recognition and referral. However, mining companies might also benefit from an examination of those factors that generate excessive stress for their people and at the careful matching of individuals to positions.

Brad Strahan
Psychologist
PO Box 432
Samford QLD 45520
Ph (07) 3289 4682 or 0438 328 948

Introduction

Current regulations require coal mines to develop health and safety systems for fostering employee's *"Fitness for Duty"*. To the credit of the writers of the new regulations the psychological state of employees has been recognised as having the potential to pose a significant risk to the safety of both the individual and others. The present paper explores the issues involved in developing protocols of response to the psychological impairment of personnel.

Fitness for Duty

"Fitness for Duty" can be understood in a variety of ways, but it essentially means what it says – an individual's fitness for carrying out their work in an efficient and safe manner. Generally, an understanding of *Fitness for Duty* has been constructed in two ways – the first as an individual presenting to work within a set of boundaries as defined by the regulations, ie. unimpaired by alcohol, drugs, fatigue or some other physical or psychological impairment. A second approach sees *Fitness for Duty* in a broader sense in terms of the overall health and fitness of the individual not only for work, but for life (see Cliff, Bofinger, Mahon, & Heiler, 2001).

I have used the diagram in Figure 1 to talk about *Fitness for Duty* issues to mining personnel in presentations on fatigue and drugs/alcohol. The notion of **mutual responsibilities** is central to my understanding of these issues. Mining companies' share a responsibility for the design of the workplace to foster a safe working environment. The important ingredients of *Fitness for Duty* health and safety systems are the provision of information via **education** programs, and **support** via Employee Assistance Programs. A third ingredient of *Fitness for Duty* programs is the **assessment** of the *Fitness for Duty* of employees. The recognition and monitoring of *Fitness for Duty* has involved a variety of methods of testing for impairment. The final component is an ongoing **evaluation** of the effectiveness of one's approach.
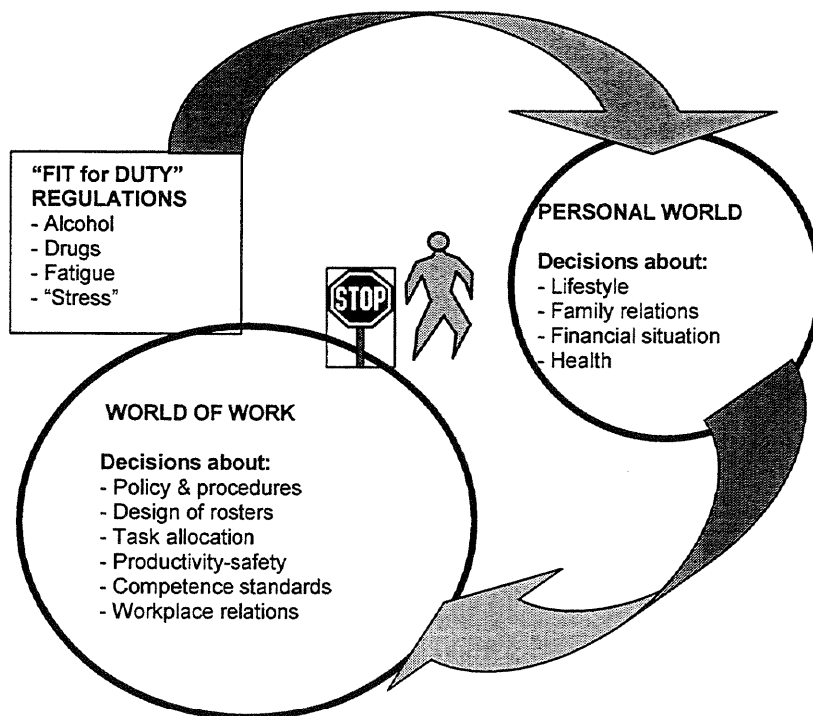

Figure 1. Fitness for Duty requires mutual responsibilities for decision-making.

Brad Strahan
Psychologist
PO Box 432
Samford QLD 45520
Ph (07) 3289 4682 or 0438 328 948

Of equal importance is the responsibility shared by the individual for ensuring their *Fitness for Duty*. Each individual has an obligation to protect his or her health and safety – essentially this involves decision-making. Individuals make conscious and unconscious decisions in their personal world that have an impact on their safety while at work. Again, the essential ingredients apply:

- develop an **understanding** of personal health sufficient to recognise those times when they might be at risk
- **self-assess** if in doubt
- **seek support** when in difficult times
- ongoing **evaluation** of personal health and fitness within the context of personal and organisational values

The above process can be described by the following acronym:

- Educate
- Assess
- Support
- Evaluate

Managing "Fitness for Duty"

The **EASE** model works well with managing the risks posed by inappropriate use of alcohol. We have decades of research on the effects of alcohol, we can measure its concentration in the body accurately, we know at what level of concentration it produces cognitive impairment and it's detrimental effects on human physiology. The model of educate, assess, support and evaluate works well. Our knowledge and understanding of the impact of illicit drugs on human physiology is perhaps less sophisticated than for alcohol, but essentially the formula and the approach remains functional (see Strahan, 2001[b]).

The application of the EASE model to issues of fatigue is less convincing, if we have a desperate need for measurement. The Educate, Support and Evaluate components of the model work well, but the debate about the accuracy of assessing fatigue will continue for some time. Fatigue is clearly a more complex issue.

The fatigue issues bring home the importance of the mutuality of responsibility between employers and employees. The effective management of fatigue has a capacity to affect the design of the business. Rosters and task allocation or rotation need to be examined. The inevitable trade-off between effective business management and effective people management becomes quite clear when issues of fatigue are examined. It is clearly possible that some aspects of the workplace expose people to an unacceptable level of fatigue risk.

Psychological Impairment

The above notions invite an application of the **EASE** model to issues of psychological impairment. Before we test the value of the model, there are a number of fundamental issues involved in appreciating the nature of psychological impairment.

We might define psychological impairment as a **reduction in a person's normal ability to function that has its basis in a disturbance of emotion, thought or behaviour.** An example, of psychological impairment could be an individual who is depressed. Depression is generally seen as a disturbance of emotion with some of the more serious depressions also involving disturbance of thoughts. Depression can reduce an individual's ability for concentration and response time. Depression is often associated with a preoccupation with negative thought processes including self-harm or suicide.

An initial issue is to appreciate the **prevalence of psychological disturbance** in our community. Table 1 is taken from the results of the *National Survey of Mental Health and Wellbeing of Adults* conducted by the Australian Bureau of Statistics in 1997. Over 13,000 adult

Brad Strahan
Psychologist
PO Box 432
Samford QLD 45520
Ph (07) 3289 4682 or 0438 328 948

Australians were interviewed in relation to mental health symptoms or physical health conditions experienced in the last 12 months. The study specifically targeted affective (emotional) disorders, depressive disorders, and substance abuse, and did not target symptoms of psychosis. Psychosis is a serious disturbance of thought involving a clear break with reality and occurs less often than the affective disorders. An example of a psychotic disturbance might be schizophrenia, which has a prevalence rate of about 1 person in 100 who experience a psychotic episode at least once in their lifetime.

Almost one in five (18%) experienced a mental disorder at some time during the 12 months prior to survey. The prevalence of disorder generally decreased with age, with 27% of young adults (18-24 years) experiencing significant symptoms of mental disorder. By age 65 years and over the rate of experience of mental disorder had fallen to 6.1%.

There were also some differences between men and women. Women were more likely than men to have experienced anxiety disorders (12% compared with 7%) and affective disorders (7.4% compared with 4.2%). On the other hand, men were more than twice as likely as women to have substance use disorders (11% compared with 4.5%). Further, for people with mental disorders the patterns of comorbidity differed for men and women. Women were more likely to have anxiety and affective disorders in combination (22%), while men were more likely to have substance use disorders in combination with either anxiety disorders (13%) or affective disorders (8.4%).

Table 1.
Prevalence of disorders over 12 months[a], Australian adults[b] by sex .

Disorders	Males		Females		All Persons	
	'000	%	'000	%	'000	%
Physical conditions	2,380.2	35.9	2,810.4	41.1	5,190.6	38.5
Mental disorders						
Anxiety disorders	470.4	7.1	829.6	12.1	1,299.9	9.7
Affective disorders	275.3	4.2	503.3	7.4	778.6	5.8
Substance use disorders[c]	734.3	11.1	307.5	4.5	1,041.8	7.7
Total mental disorders	1,151.6	17.4	1,231.5	18.0	2,383.1	17.7
No mental disorder or physical condition	3,543.1	53.5	3,361.3	49.2	6,904.4	51.3
Total[d]	**6,627.1**	**100.0**	**6,837.7**	**100.0**	**13,464.8**	**100.0**

Notes. (a) During the twelve months prior to interview.
(b) Aged 18 years and over.
(c) Includes harmful use of alcohol.
(d) A person may have more than one mental disorder with or without a physical condition. The components when added may therefore be larger than the total.

To date there is no substantial research into the prevalence of mental disorders in mining populations. We do not know whether mining populations are more or less at risk for mood disorders or substance abuse as a result of the nature of their employment. We might speculate about potential differences, but it is unlikely that the differences would be substantial or that mining populations would be generally better off than the general public. It is also important to recognise that the experience of a mood disorder does not necessarily equate to impairment in the workplace, although that is likely.

The above figures suggest that as many as **one in five people at any given mine throughout the state will experience a form of psychological impairment during the course of this year.**
A second basic issue is that psychological impairment involves **multiple pathways of cause and effect** and expresses itself in many ways.

Brad Strahan
Psychologist
PO Box 432
Samford QLD 45520
Ph (07) 3289 4682 or 0438 328 948

It is rarely possible to say that event A causes state B in the world of mental health. For example, a depressive episode might be triggered by the death of a spouse, long exposure to 12-hour night shifts with poor sleep, ongoing conflict with a hostile supervisor, or alternatively, an individual might be genetically predisposed to depressive episodes.

A third issue of considerable importance is the **role of the social and work environment** in bringing about psychological disturbance in humans. It has been clearly documented by psychologists for over a century that early and later social contexts have a profound impact on human development and psychological health. For example, Australian data has revealed that adults growing up in dysfunctional families have nine times the risk of serious depression than adults who grew up in families where the attachment between parents and children were optimal (Parker, 1983; Strahan, 1995).

It is certainly true that a poor working environment with dysfunctional social relationships, or harsh working conditions can stimulate psychological disturbance and hence impairment in employees. Principles of Duty of Care implies that employers have an obligation to consider the impact of the organisation, with its peculiar workplace arrangements and culture, on the psychological well being of employees.

Responding to Psychological Impairment

It might be now appropriate to return to an examination of the suitability of the **EASE** model for responding to issues of psychological impairment in the mining industry. Generally, I want to suggest that the model works with a few modifications.

E - Education

The sharing of information and **education of people** about psychological health is an important step forwards. To simply engage in a conversation that acknowledges that coping with work-related stress is an issue for employees goes a long way towards validating people's experience and building some credibility in the workplace. A reasoned and strategic response to managing psychological impairment (and other aspects of *Fitness for Duty*) needs to include both preventive and remedial approaches. Educational programs should include material on the recognition of symptoms of psychological distress, an explanation of the varied and complex causal factors involved in psychological disturbance, and a description of treatment processes and self-help approaches. Much of the purpose of this sharing of information should be aimed at dispelling the myths surrounding psychological illness.

It *is vital that educational programs respond to their audience*. Each organisation will have its own set of stressors and issues. For example, if we are going to ask people to be involved in fly-in fly-out operations we might want to give them tools and language to manage personal and family relationships within such an arrangement. My experience in the industry suggests that family related issues generate a good deal of stress and tension for employees in such operations. There is little question among employees at these operations that family difficulties at home adds to the risk at work via stress. Providing employees with some language and tools for managing family issues are likely to result in increased safety, less turnover of staff, and improved morale in these operations.

Secondly, within each organisation *some people will invariably occupy positions and roles that attract stress*. For example, it is my experience that management and staff are vulnerable to increased stress because their job is never finished, these people generally benefit from a discussion of strategies for balancing work-personal boundaries.

Finally, it is important to challenge the myths and social attitudes that promote the denial and embarrassment all too often attached to psychological distress or disturbance.

Brad Strahan
Psychologist
PO Box 432
Samford QLD 45520
Ph (07) 3289 4682 or 0438 328 948

The process of exposing individuals to specific and detailed information about psychological illness and its prevalence in our community, describing its causes, symptoms and treatments tends to dispel much of the stigma attached to psychological disturbance. In addition the myths can also be directly targeted and shown to be without a basis in fact.

A – Assessment

The **assessment of employees for psychological impairment** is likely to attract a good deal of debate. Here we are clearly in a different ball park than assessing blood alcohol concentration. Clinical assessments may be useful at some stages, eg. recruitment and under special circumstances, but are not ever likely to be commonly used for all employees. It is possible with clinical tests to predict vulnerability to stress and to detect latent forms of emotional disturbance. While these tests are not widely used in the mining industry, such tests are used in other industries, eg. aviation and the defence forces.

The use of assessment in any form plays the vital function of recognition. *The function of recognising psychological impairment in its early stages is probably the most important aspect of the protocols that need to be developed.* Inevitably this recognition has to be a two-step process. The first step is an on-site recognition by supervisors or peers that an individual is in trouble. A second stage is the referral of the individual for professional assessment and/or treatment.

I have helped developed protocols for responding to psychological impairment at several mines where we have developed a checklist for supervisors and trained supervisors in the recognition of the symptoms of psychological disturbance and the steps of referral. These issues often involve a delicate balance between respect for a person's privacy, acting in the person's best interests and the maintenance of a safe working environment for all employees. It is important that senior management and frontline supervisors develop a more attuned sensitivity to the issues of psychological impairment and its expression, and the courage to act confidently when the signs of distress become evident. It is important that protocols be outlined so the course of action required is clear and straightforward. Inevitably the action is one of referral to an outside health professional. Referral in itself is a straightforward process; it is when an individual who is obviously at risk refuses to seek help that situations become complex.

S - Support

The third step of response in the EASE model is **support.** It is important that individuals identified as psychologically impaired be supported through professional assessment and treatment and by peers and leaders in the work place. Very few psychological disturbances are permanent states if the individual is on the receiving end of prompt and appropriate support and treatment. The truth is that most of us experience some form of psychological disturbance at some time in our lives and most of us recover. For example, most episodes of depression last no longer than 8 weeks.

For many organisations referral will constitute referral through an Employee Assistance Program. It is my view that some thought should go into the referral process. Clearly, EAP programs are not equipped to cater for some issues. Referrals should be made to the appropriate health practitioner given the immediate nature of the situation. For example, the individual who is expressing serious suicidal intentions, or who is psychotic should be immediately taken to a medical practitioner.

Within workplaces the notion of support might also need to sit alongside issues of accountability. Let me provide an example of combinations of support and accountability.

> *Some time ago I was asked to assess a tradesman at a mine. His employment had been placed on probation for a series of conduct difficulties. There was a concern about his potential armed violence.*

Brad Strahan
Psychologist
PO Box 432
Samford QLD 45520
Ph (07) 3289 4682 or 0438 328 948

> *The assessment indicated he was extremely introverted, very depressed, very anxious, overly suspicious, alcohol dependent, but unlikely to be sociopathic or dangerous. He was in serious trouble psychologically and physically and now his employment was under threat.*
>
> *His employment was placed on probation for six months, and he was given a very specific set of accountabilities at work. We referred him to his local medical practitioner (where he received medication for his anxiety and depression), sent him to AA to deal with his alcohol dependency, and I spent time with him on a regular basis. In the workplace we had him reporting to his supervisor every day and discussed with him the value of having someone he felt comfortable with act as his personal mentor over the six-month period. The role of the mentor was a supportive role and I spent several hours coaching the mentor in relation to how he could be most supportive.*

The program was very structured and combined both genuine support and workplace accountability. We explained as clearly as we could the reasons for the program and that it was the best chance I could see of his maintaining his employment. His participation was voluntary.

The outcome of the above process was a dramatic turn-around in his functioning, both personally and in the workplace. He stopped drinking, the medication provided some relief from his depression and anxiety, and his work and relationships with peers improved. Today he is still employed and doing well, and last time I spoke to him, still determined to continue his progress. His present position of employment and relative health is a direct result of his manager taking the decision to manage the process rather than simply terminate his employment. In addition to the direct benefit for the individual there was a range of benefits for the morale of the organisation as a result of the above program.

Such cases suggest that it is possible to work through some of these cases towards positive outcomes, and that well thought through programs that combine both accountability and support can be very effective.

E – Evaluation

The ongoing **evaluation** of the effectiveness of strategies similar to the above is a complex issue. Inevitably the question of the most appropriate indicators to determine an effective program becomes important. Essentially indicators of progress need to be taken from the initial objectives of the program. The question becomes one of "Did you get what you wanted, or to what extent have you achieved what you set out to achieve?"

The ongoing evaluation of a program implies a continuity of effort and follow-through on early plans and ideas. Evaluation facilitates the modification of earlier plans with the benefit of hindsight and provides helpful information with which to plan the future.

One of the major challenges facing mining companies is the ongoing demand for investment in a *Fitness for Duty* program that is broad in its scope, strategically aligned with other organisational development programs and directions, and has short- and long-term goals. I have argued elsewhere about the importance of integrating *Fitness for Duty* issues with broad organisational growth strategies (see Strahan, 2001a).

Mutual Responsibilities

Earlier the notion of *mutual responsibilities* was described as a basic tenet of *Fitness for Duty*. The above material tends to focus on the individual employee and to have the broader systemic issues as background only. However, if our understanding of the potential of one's social context for stimulating psychological disturbance is valid, there are a number of systemic issues that warrant our attention. From a psychological point of view organisations or groups of people can be just as psychologically disturbed or dysfunctional as an individual.

Brad Strahan
Psychologist
PO Box 432
Samford QLD 45520
Ph (07) 3289 4682 or 0438 328 948

The last half-century of family research has clearly shown us that the *healthiest individual will become symptomatic in a dysfunctional family or social context.*
An initial issue might be the *identification of those aspects of the work place that generate excessive stress for individuals.* For example, excessive workloads or monotonous tasks or constant exposure to high-risk tasks may induce symptoms of anxiety and/or depression.

In addition to the above task-related aspects of the workplace, there are a number of qualitative characteristics of workplaces that can be involved in the onset of individual psychological dysfunction. For example, the quality of communication and clarity of instructions, the degree of unresolved conflict between people, the overall morale of the organisation, the degree to which the individual feels valued and the exercise of power and authority. Discrimination and workplace bullying are known to cause psychological damage to individuals. These issues add up to the quality of relationships within the organisation and are probably the most important aspect of organisational culture.

A second issue is careful *matching of individuals to positions.* Recruitment processes should be informed by a clear understanding of the psychological demands of a specific position, and the capacity of the individual to meet those demands. For example, individuals clearly differ in their ability to cope with stressful events and these differences can be assessed quite easily. It would not make a lot of sense to place a vulnerable person in a position that was known to be stressful. It is important that the specific psychological requirements of any position be demonstrable if such selection procedures are adopted. These psychological nuances need to take a more prominent role in our selection processes.

A third issue might be the *consideration of existing systems of management in terms of the degree to which they are psychologically informed.* For example, to what extent are current procedures for reporting sensitive to psychological factors involved in incidents, near misses or failure to follow standard procedures? A more critical question might be the extent of follow-up if there is a hint of psychological factors being involved in an incident.

The Benefits

What might be *the benefits of this psychologically attuned approach*, other than feeling warm and fuzzy? The answer is reasonably simple – warm and fuzzy people are more focused on their job and expend less energy on avoidance strategies at work and at home. They are less likely to develop symptoms of stress, take stress leave, take you to court, or simply leave you in the lurch looking for someone to replace their 10 years of experience. Warm and fuzzy people are more productive, more able to direct energy to their work, less likely to damage machinery just for kicks, and more likely to share important information with the next crew. And when things do get a little tight or there is a crisis, warm and fuzzy people don't fold under pressure or panic, they just hang in there and get the job done. And, when the crisis is over or the work is done, warm and fuzzy people are more able to relax and enjoy themselves. It is not difficult to figure out that the above benefits do translate in to bottom line benefits.

Conclusion

I have argued that the *Fitness for Duty* provisions of the new regulations essentially require an approach that can be described with the acronym **EASE** – Education, Assessment, Support and Evaluation. This model fits best with implementing health and safety systems to control risks posed by alcohol and drugs. The design of systems to manage the risks of fatigue and psychological impairment require some modifications to the essential formula (particularly within the area of assessment), but can be approached within the framework of the EASE model.

Psychological impairment is likely to effect most people at some stage in their career and perhaps as many as one in five people in any one year, according to ABS figures.

Brad Strahan
Psychologist
PO Box 432
Samford QLD 45520
Ph (07) 3289 4682 or 0438 328 948

However, most forms of psychological impairment are responsive to timely and appropriate treatment and individuals can generally enjoy a return to normal working capacity. The new regulations challenge the mining industry to become more psychological attuned to its people and to implement safety and health systems that will support both the safety of the operation and the health of the individual.

References

Australian Bureau of Statistics (1999). *Mental health of Australian adults.* Canberra: ABS.

Cliff, D., Bofinger, C., Mahon, E., & Heiler, K. (2001). Fitness for Duty - a scoping study. ACARP.

Parker, G. (1983). *Parental overprotection: A risk factor in psychosocial development.* Sydney: Grune & Stratton.

Strahan, B.J. (1995). Predictors of depression: An attachment theoretical perspective. *Journal of Family Studies, 1,* 33-47.

Strahan, Brad (2001a). New Regulations provide opportunity to change. *Australia's Mining Monthly, February,* 51-52.

Strahan, Brad (2001). Dealing with Drugs: A case study. *Australia's Mining Monthly, February,* 54-55.

Brad Strahan
Psychologist
PO Box 432
Samford QLD 45520
Ph (07) 3289 4682 or 0438 328 948