Kellogg Rural Leadership Programme

Course 39 2019

The importance of developing positive stress management and mindset skills in young dairy workers

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I wish to thank the Kellogg Programme Investing Partners for their continued support:

Be kind. For everyone you meet is fighting a battle you know nothing about. – Plato

This report discusses topics that some readers may find distressing. Please call 1737 to talk to a trained counsellor, if this report brings up anything you help with.

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1. Executive Summary

Stress management is a learned skill. No one is born with it. We develop stress management skills either good or bad reactively out of our upbringings or life events. Positive stress management is seen as an important skill but there is still much room to proactively develop this in younger dairy staff. The way we handle stress can lead to growth or improved performance or, rarely but tragically at the other end of the range people in extreme distress can take their own lives.

There are now more farm suicides than there are accidental farm deaths. Between 2013 and 2018 104 people were killed in accidental farm deaths, compared to 122 by suicide. Rural males under the age of thirty are over-represented in the statistics. Maori and Cantabrians are also over-represented in the statistics as a whole.

There were three parts to this research project 1) a survey of dairy farmers 2) a literature review and 3) interviews with industry leaders, psychologists and counsellors.

The aim of this report is to provide the industry with a discussion document on the importance of developing positive stress management in young dairy workers.

The key findings of the survey for this report were:

- Medium correlation between female workers and loneliness
- Large correlation between loneliness and resilience
- No relationship between loneliness and living situation or relationship status
- Large significant relationship between loneliness and help-seeking
- Large significant relationship between loneliness, meaning and purpose
- Medium significant correlation between loneliness and increased alcohol use
- Over 40% of respondents use alcohol as a coping strategy
- Approximately 50% of respondents said they were sometimes or often lonely.
- Indication that 75% of people are relatively well educated about depression.
- 45% of respondents stated they were extremely unlikely or unlikely to seek help from someone else if they were facing a personal or emotional problem.
- 76% of respondents stated they were extremely unlikely or unlikely to tell their employer if they were facing personal or emotional problems.

The key findings of the literature review and interviews with health professionals were:

- Rural areas need to be acknowledged by government as needing a specific focus
- Employers need to protect employee's mental health. They may be liable under the Health and Safety at Work Act if they do not.
- Relationship problems account for 20% of stressors to suicide, compared to financial issues being 5%
- Adolescents undergo significant brain development, which can make them more emotional and prone to risk taking

- Current suicide demographic statistics follow a similar *"pattern of inequalities in the broader determinants of health, such as socioeconomic status, ethnicity, gender, age and geographical region. (Minister of Health 2000)"*[1]
- Dairy industry culture could do more to encourage positive stress management in younger staff
- There is an opportunity for rural leaders and employers to grow in emotional intelligence skills

The most important recommendation of this report is for individuals and managers to develop positive stress management skills in their own lives, and then role model this to young dairy workers.

Three other key recommendations were made by Dr Annette Beautrais (psychologist and researcher into rural suicide)

- Central farm armoury

Firearms are used as a method of suicide in 40% of rural suicides compared to 8% in the general population. Individual farm health and safety policy should store firearms in a central secure location (e.g. at a manager's house). Holders of firearms licenses can then access firearms for a defined period only after an interview and approval by an appropriately trained manager, that knows the individual.

- Gatekeeper / First responder training

Young people under extreme distress will often not seek help themselves. Gatekeeper training should be seen as a necessary measure by employers. These programmes are available now and being used by other industries.

- Develop a self-care plan with staff

Gatekeeper trained staff can facilitate specific individual "self-care" plans with staff.

Other recommendations include 1) developing a rural mentoring scheme, and 2) emotional intelligence training for managers.

2. Acknowledgements

I would firstly like to acknowledge Scott, Lisa, Anne and Patrick for running a great programme. It's set me on a lifelong path of growing as a rural leader, and given me some great tools to implement change.

There are many professionals I have sought feedback and input from over the course of this project. I am very grateful to all of you for your guidance around this topic, particularly with how busy you all are. I'd like to thank Dr Jackie Blunt (GP Lincoln University), Dr Hillary Bennett (Leading Safety), Gerard Vaughan (Farmstrong), Michelle Thompson (Good Programmes Trust) and Francois Barton (Zero Harm).

Dr Francis Blaikie, Mandy Gibson (Australian Institute for Suicide Research and Prevention), and Ian Johansen (Headspace Swan Hill Manager) thanks for your

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[1] (Ministry of Health, 2006, p. 6)

support and pointing me in the right direction with research articles, and reviewing sections of this report.

Dr Annette Beautrais, thanks for your work into rural suicide prevention in New Zealand. Thanks also for allowing me to interview you for this project, and especially for reading and reviewing the entire 50 page report!

Carol Kirk and Theo Feldbrugge (Total training) thanks again for your input into this project. I'm very fortunate to have been involved in your 9 month leadership programme and seminars. I'll be using what I've learned from you for many years.

Michelle Cathcart (Ngai Tahu Farming General Manager of Health, Safety and Wellbeing), and Hayden George (Farm Manager, Ngai Tahu Farming), thanks for your support and feedback during the last six months on this topic. Thanks also to Ngai Tahu Farming for the donation towards my course fees.

Lastly thank you to my wife Cheryl. You have never questioned this decision to do the Kellogg programme this year, despite it being a difficult one. You've let me spend a lot of money on the Kellogg course and use three weeks of my annual leave to do it. I've used a few Winston Churchill quotes in this report but this one is the best "my most brilliant achievement was my ability to be able to persuade my wife to marry me".

3. Why is this important?

Developing positive stress management skills in young dairy workers is a very important topic. Stressful events happen to everyone, and everyone deals with them in a range of positive and negative ways. Often the way we handle stress can lead to growth or improved performance or, rarely but tragically at the other end of the range people in extreme distress can take their own lives.

On the 8th April 2016 a senior politician addressed a farming industry group meeting and in response to a question about increasing the migrant workers numbers for dairy farms said "*A lot of the Kiwis that are meant to be available [for farm work] are pretty damned hopeless. They won't show up. You can't rely on them and that is one of the reasons why immigration's a bit permissive, to fill that gap.*"[2] The politician later apologised when questioned, but his comments are not uncommon when talking to dairy employers.

Another common phrase when talking to farm owner's about staff is "*the cows are easy, they're predictable. It's the people that are hard*". Managing staff is often described as one of the biggest stressors on a dairy farm. This is not a small comment when you think about the number of things a farm owner has to be stressed about: Government policy, markets, weather, finances, and biosecurity among others. "*Attitude is the hardest thing to change in staff. Practical skills can be taught, but it's very hard to change someone's attitude*".

So are a lot of Kiwi workers hopeless, and unreliable? If so, why is this? What can be done about it?

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[2] (Scoop, 2016)

This report discusses the importance of developing positive stress management and mindset skills in staff. It is likely that negative coping strategies and negative mindset skills may be a contributing factor to staff performance and attitude. By developing positive skills in staff, it is hoped that this will be beneficial for both the employer and employee. Lack of stress management skills may in some cases translate into depression and suicide in the extreme case.

"Depression is the leading cause of disability worldwide, and is a major contributor to the overall global burden of disease" – World Health Organisation (March 2018)[3]

In the last five years there has been an increased push from the New Zealand public and celebrities to raise awareness about suicide rates, and secure more funding for mental health services. Several marches to parliament have taken place. New Zealanders are now very aware of suicide rates; however, this increased awareness doesn't seem to have translated into any decrease in suicide statistics.

Raising awareness for suicide prevention does not feature in any of the suicide prevention strategies. You are also unlikely to find a mental health professional fronting the campaigns. Does raising awareness for suicide prevention actually help reduce the suicide rate? We need to be careful that these awareness campaigns are not normalising suicide.

The Office of the Chief Coroner reported 668 suspected suicides in NZ in the 2017/18 year. This is the highest recorded since records began. The suicide statistics are used as an *"indicator of both the mental health and social wellbeing of the population."*[4] In comparison 378 people have been killed in road accidents.[5] Based on 2013/14 data New Zealand ranked 53 out of 183 countries for the rate of suicides per 100,000 people.[6]

Table 1: Provisional suicide deaths per 100,000 population July 2012 and June 2018

Year	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Total	541	529	564	579	606	668
Rate per 100,000	12.1	11.7	12.3	12.3	12.64	13.7

(Mental Health Foundation of New Zealand, 2019)

In 2012/13 NZ recorded the highest suicide rate in 15-19 year olds in the developed world.[7] Suicide in New Zealand and worldwide is now the *"the second leading cause of death in 15-24 year olds."*[8]

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[3] (World Health Organization, 2018)
[4] (Ministry of Health, 2006)
[5] (Ministry of Transport, 2019)
[6] (Wikipedia, 2019)
[7] (UNICEF, 2017)
[8] (Ministry of Health, 2006)

Table 2 - World youth suicide rate per 100,000 people

Place	Country	Suicide rate / 100,000 people for 2012/2013
1	New Zealand	15.6 *(2017/18 – 16.9)*
2	Lithuania	13.3
3	Finland	11.3
4	Ireland	10.3
5	Chile	10.3
10	U.S.A	7.6
15	Australia	6.8

There are now more farm suicides than there are accidental farm deaths.

Table 3 - Rural accidental deaths and suicides from 2013 to 2018

Year	Accidental farm deaths[9]	Period[10]	Farm suicides[11]
2013	22	2012/2013	17
2014	20	2013/2014	20
2015	19	2014/2015*	26
2016	18	2015/16*	17
2017	9	2016/17*	22
2018	16	2017/18*	20
Total	104		122

The suicide rate in rural areas was 16 per 100,000 people compared to 11.2 per 100,000 for people living in cities. Young rural males are a group at high risk of suicide in New Zealand. In the general population males are 2.5 to 3 times as likely to take their own lives as females are. While the overwhelming majority of rural suicides are by New Zealand European males, Maori are over-represented in national suicide statistics as a whole. The higher rate of New Zealand Europeans in rural areas may simply be that this is because there are more of them working on farms compared to Maori.

Teaching young dairy workers healthy ways to deal with stress, removing barriers and facilitating help seeking behaviour is a very important issue. There are several ambassadors and professionals warning the rural industry of this issue. But until this issue is "owned" by farm owners, managers and workers on the ground, there will likely be no real change.

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[9] (Worksafe, 2019)

[10] (RHANZ, 2017)

[11] (Piddock, Call for new approach to rural mental health in wake of latest rural suicide statistics, 2018)

i. Aim

The aim of this report is to provide the dairy industry with a discussion document on the importance of developing positive stress management skills in our young dairy workers. It is not within the scope of this report or the writer's expertise to discuss exhaustively solutions to rural suicidality or rural mental health. This report aims to highlight to the industry the need for targeted mental health strategies and for research focussed on young rural workers. It recognises that suicide prevention needs a multi-sectoral approach, and this topic of developing stress management skills in young dairy workers is only one small aspect in a vast and comprehensive problem in society as a whole.

4. Background

The following section describes some of the background to this topic including adolescent development, current mental health strategy, stressors and trends in mental health.

i. NZ's current mental health strategy

New Zealand's mental health strategy is currently under review. In 2018 the Labour Government asked for a wide-ranging review into mental health. The report *"He-Ara-Oranga"* was released in November 2018, and the Government has accepted 38 out of 40 of their recommendations.

NZ suicide prevention strategy 2006-2016

This strategy is currently still in use, but is overdue for review.[12]

> *Vision* The inspiration for this strategy is a vision of a society where all people feel they; are valued and nutured, value their own life, are supported and strengthened if they experience difficulties, do not want to take their lives or harm themselves.

> *Purpose* The overall purposes of this strategy are to; reduce the rate of suicide & suicidal behaviour, reduce the harmful effect and impact associated with suicide and suicidal behaviour on families/whanau, friends and the wider community, reduce inequalities in suicide and suicidal behaviour.

> *Principles* All activities undertaken as part of this strategy should be guided by the following principles; be evidence based, be safe and effective, be responsive to Maori, recognise and respect diversity, reflect a co-ordinated multisectoral approach, demonstrate sustainability and long-term commitment, acknowledge that everyone has a role in suicide prevention, have a commitment to reduce inequalities.

> *Goals*
>
> 1) Promote mental health and well-being, and prevent mental health problems
> 2) Improve the care of people who are experiencing mental disorders associated with suicidal behaviours
> 3) Improve the care of people who make non-fatal suicide attempts
> 4) Reduce access to the means of suicide
> 5) Promote the safe reporting and portrayal of suicidal behaviour by the media
> 6) Support families, whanau, friends and others affected by a suicide or suicide attempt
> 7) Expand the evidence about rates, causes and effective interventions

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[12] (Ministry of Health, 2006)

It states suicide prevention is a *"multi-sectoral approach"*, with multiple contributing factors, of which there is *"no quick fix".* It requires involvement from national, central and local government, non-government agencies, professional organisations, business, Iwi and social services, families/whanau and individuals, community groups, researchers, educational institutions, local health services and volunteers.

He-Ara-Oranga ("Pathways to wellness")[13]

He-Ara-Oranga is the report released by the Mental Health Review panel in 2018. In preparing this report the panel sought feedback from a very wide range of stakeholders including health professionals, people and family members with lived experience. It reviewed *"mental health problems across the full spectrum from mental distress to enduring psychiatric illness"* and looked *"beyond the health sector to other sectors (including education, justice and social policy) that influence mental health outcomes".* It covered *"addictions and harmful use of alcohol and other drugs".*

Several significant statements were made highlighting the state of the system, including the following:

- Every year, an estimated 150,000 people in New Zealand think about taking their own life, 50,000 make a suicide plan and 20,000 attempt to take their own life
- The annual cost of the burden of serious mental illness, including addiction, in New Zealand is an estimated $12 billion or 5% of gross domestic product[14]
- The number of prescriptions for mental health–related medications increased 50% in the last 10 years and continues to grow about 5% each year
- The number of people accessing mental health and addiction services has grown 73% over the past 10 years
- Each year around one in five of us experience mental illness or significant mental distress. Increasing numbers of children and young people are showing signs of mental distress and intentionally self-harming. Any one of us can be affected: over 50–80% of New Zealanders will experience mental distress or addiction challenges in their lifetime.
- A range of social determinants are risk factors for poor mental health: poverty, lack of affordable housing, unemployment and low-paid work, abuse and neglect, family violence and other trauma, loneliness and social isolation (especially in the elderly and rural populations) and, for Maori, deprivation and cultural alienation.

The Government has accepted 38 out of 40 of the report's recommendations. Including the following:

- Urgently implementing a national suicide prevention strategy
- Reforming the Mental Health Act
- Establishing a new Mental Health Commission

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[13] (NZ Government Inquiry into Mental Health and Addiction, 2018)
[14] (NZ Government Inquiry into Mental Health and Addiction, 2018, p. 29)

It was particularly concerning that the Commission's report made no mention at all of rural communities as a specific challenge, even though farmers are over-represented in suicide statistics, and even though farmers have faced, and continue to face, specific challenges including; PSA, the Global Dairy Crisis, mycoplasma bovis and weather events related to climate change.

<u>Business Leader's Health & Safety Forum / Zero Harm Workplaces</u>

Zero Harm is a voluntary organisation that is *"Bringing leaders together with a common vision for Zero Harm Workplaces."*[15] Individual members commit to becoming more effective safety leaders, and gain support on how to do this. Zero Harm recently released a report titled *"CEO guide to mental health and wellbeing at work – meeting obligations to prevent harm, harnessing opportunities to thrive."* This was project led by Dr Hillary Bennett, an organisational psychologist from Leading Safety. Leading Safety is an organisation that helps organisations achieve and sustain healthy and safe workplaces. Input was sought from WorkSafe, the Mental Health Foundation and several other industry groups.

Zero Harm's stance is that mental health of staff is an issue that employers need to think about and protect. They can be held liable under the Health and Safety at Work Act if they do not. Morally it is also the right thing to do, and mentally healthy and well workers also perform better at their jobs.

The following framework is shown for managing mental health and wellbeing at work. Their advice was for CEO's to consider which areas they were operating in, and develop strategies to work across the whole range of areas.

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[15] (Zero Harm Workplaces, 2019)

Figure 1 - Framework for managing mental health and well-being at work
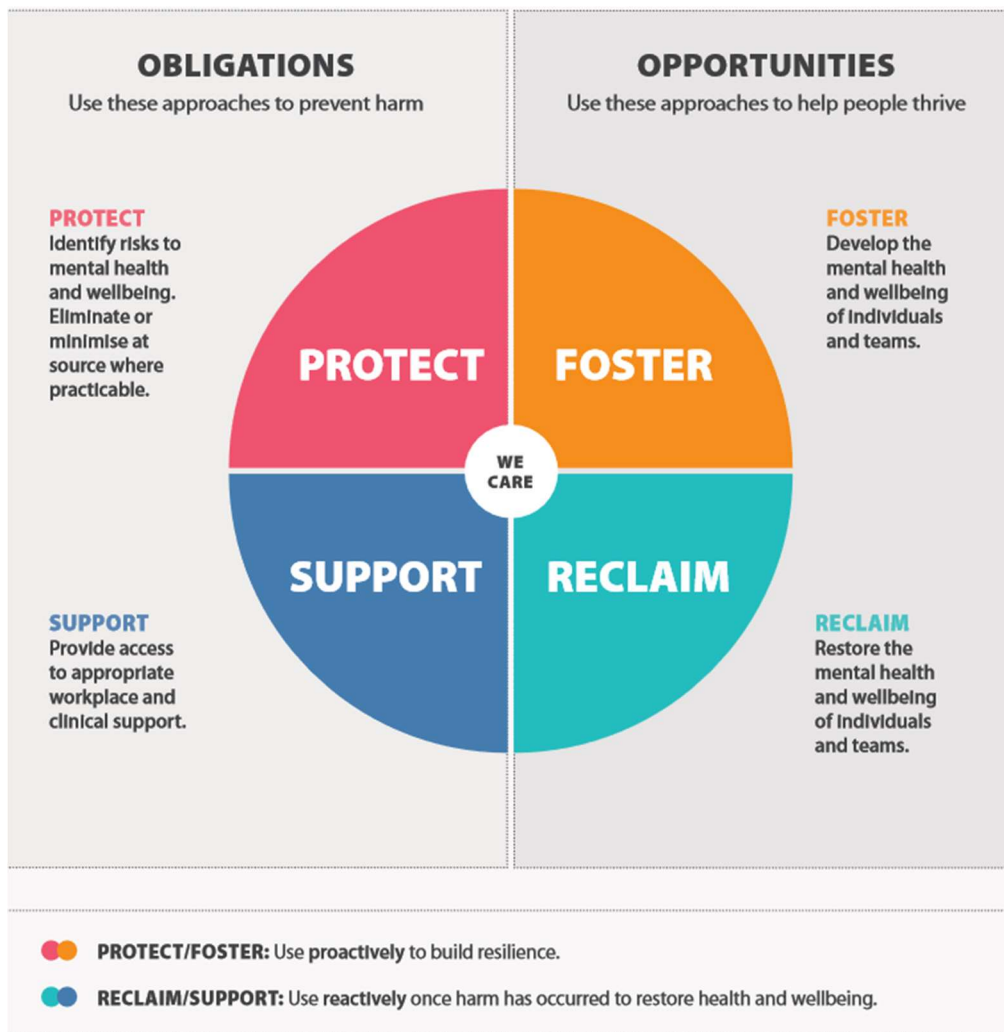
One example given in the report under the heading of "Protect" was to develop stress management policies for workers. Other recommendations included for *"managers to champion awareness of mental health and fighting to remove stigma around it"*, and mental health awareness workshops.

Farmstrong and Rural Support Trust are industry led well-being groups. They are discussed briefly below.

Farmstrong strategy

Farmstrong began in 2015 and *"is a nationwide rural well-being programme for farmers and growers to help them live well to farm well".* Their *"aim is to increase the uptake of wellbeing behaviours so that farmers, growers, their teams and families get the most out of life and work."*[16]

Farmstrong operates in the Support and Foster spaces, they provide information and resources to the rural sector to improve well-being. They have little ability to influence the workplace environment on a farm as whole.

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[16] (Farmstrong , 2017)

Until recently Farmstrong had tended to focus their research on farm owners and employers. In February they released a survey they had carried out on farmers under the age of 35. Approximately 45% of male respondents and 25% of female respondents were members of Young Farmers. Respondents were sought from NZ Young Farmers, Farming Mums NZ, Dairy Women's Network, Beef + Lamb New Zealand and Agri Women's Development Trust. It was encouraging that the *"vast majority of younger farmers—84% of women and 74% of men—expressed 'moderate' or 'high' interest in improving their wellbeing and resilience."* The following table highlights their findings.

Table 4 - Key findings of Farmstrong 2018 survey[17]

	Men	Women
Most mentioned things that people thought would improve their wellbeing	More time off the farm (44%)	Getting more /better quality sleep (39%)
	Getting more/better quality sleep (33%)	Getting more exercise (31%)
		Eating healthier (28%)
Moderate to high interest in improving their wellbeing or resilience	74%	84%
Wellbeing topics the greatest proportion of respondents expressed high interest in	Thinking strategies (23%)	Nutrition (32%)
	Happiness (23%)	Happiness (28%)
	People skills / communication skills (22%)	Self-confidence, self-worth, self-compassion (27%)
	Staff management (22%)	Thinking strategies to deal with ups and downs (26%)
		Exercise (26%)
Percentage of people injured in the last 12 months that felt lack of wellbeing had contributed to their "worst injury"	63%	69%

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[17] (Farmstrong, 2018)

Limitations of survey:	• Possibly a biased sample towards those already interested in wellbeing • A large proportion of respondents were part of an industry support network e.g. Young Farmers, Farming Mum's, Dairy Women's Network, Rural Women, Agri Women's Development Trust

Rural Support Trust

Rural Support Trust is a free service providing volunteer support to rural communities. They largely operate in the Support and Reclaim areas, by responding to calls for assistance. Although they state they are a service for workers and employers it is thought they have tended to be utilised by employers and owners much more than employees.

ii. Stressors to rural suicide

In 2017 Dr Annette Beautrais from the University of Canterbury released a research paper reviewing characteristics of farm suicide and investigating the link between financial stresses and suicide[18], particularly in light of the Global Dairy Crisis in 2015/2016. Coroners records were reviewed for 185 people who died by suicide in farm and agriculture related occupations between 2007 and 2015. She found that financial stresses made a negligible contribution to farm suicide, but ready access to firearms did. Firearms were used in 40% of farm suicides (compared to 8% in general population). Young male farm labourers were the leading demographic, with 25% of all farm suicides aged less than 25 years old, and almost 50% under 40 years. Stressors commonly included relationship losses, access to firearms and acute alcohol intoxication. She found that the young male labourers often had no prior contact with health services. The main recommendations of her article were:

- That rural suicide prevention for young workers in particular needs to be positioned in settings other than primary care e.g. the community, farming and sports organisations.
- Programs should be developed in agricultural colleges and polytechs to strengthen personal coping skills.
- Implementing gatekeeper training programs to equip rural residents with the skills and confidence to recognise people that may be stressed / depressed and refer them to professionals.

Dairy farm suicides (56/185) accounted for 30% of all farm suicides. Of dairy farm suicides 96% were male, 23% were teenagers, and 48% were under 30 years old.

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[18] (Beautrais, 2018)

The following table summarises the prevalence of stressors in suicide cases.

Table 5 - Risk factors to rural suicide

Risk Factors	Percentage shown in suicide cases
Existing mental illness	29%
Relationship breakups	20%
Physical health problems	12%
Conflicts/ arguments	8%
Legal charges or issues	5%
Financial problems	5%
Acute alcohol or drug intoxication	3%
Life "struggles"/ accumulation of problems	2%
Work problems	1%
Recent death of a family member	1%

These risk factors for suicide in rural populations showed little difference to the general population. However, suicide rates for farmers are higher than national rates in New Zealand. Firearms were used five times more often in farm suicides than in the general population.

It was commonly thought that a large stressor to rural suicide was financial issues. This report provided evidence that this was not the case, although the study will be extended to see if there was a lagged effect of the Global Dairy Crisis.

iii. Developmental Issues

Understanding aspects of human development, from early childhood to completion of adolescence, can indicate factors that are important for understanding how individuals react to stress. It can inform how the development of coping strategies can be encouraged in a farm/work environment. These are the factors that managers and employees need to be aware of.

Adolescence is defined as the period from the onset of puberty to successful independence from the parent.[19] Most research states it as being between 12-25-year-old. Relative to childhood, this transition is accompanied by an increase in mortality due to preventable forms of death (accidental fatalities, suicide and homicide) despite teens being *"faster, stronger and more resistant to disease"*.[20] The brain in adolescent mammals undergoes significant remodelling during this period to prepare them for leaving their family group and creating their own peer and eventually family group in adulthood.

The adolescent brain becomes much faster at carrying out activities. There is increasing capacity to apply higher order thinking, and they *"develop a greater*

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[19] (B.J Casey, 2013)
[20] (B.J Casey, 2013)

capacity to process the nuances of social relationships".[21] The prefrontal cortex is the last area of the adolescent brain to mature, and this is completed by 24-30 years old.[22,23] It is the *"place of executive control of planning, emotional regulation, decision making, multi-tasking, self-awareness, impulse control and reflective thought".*[24] Young people effectively sculpt their brain by processing their environment. Unused pathways are pruned. Neural pathways that are used are accelerated, and become more efficient. The process is called myelination. Myelin is a fatty sheath which forms around neural connections and it can increase the efficiency up to 3000 times.[25] The brain begins to develop more as a network, allowing greater cognitive control.[26]

Two networks that emerge in adolescents are the Default Mode Network (DMN) and the Central Executive Network (CEN). The DMN is responsible for a person's capacity to organise their thoughts, reflect on thoughts and feelings, and develop their identity and self-concept. This occurs mainly through a 'mirror' of social environments. The CEN is responsible for controlling behaviour, restraining instinctive responses to emotions, thoughts and environmental stimuli. During adolescence there is a growing capacity to conceptualise the thoughts of other people.

Adolescence is defined as a period of *"emotional intensity, desire for social engagement primarily with peers, and novelty seeking."*[27]

The asynchrony in brain development has been argued to produce an increased sensitivity to rewards and a diminished response to negative consequences. This is necessary in motivating young people to pursue greater independence[28], however it can lead to increased risk of adverse health outcomes.[29] In young farm employees, novelty seeking and a failure to appreciate risk, can make them vulnerable to high risk taking activities and a lack of regard for safety issues, such as the need for firearm safety. Again, in young farm employees, a desire for social engagement with peers can lead to risk-taking behaviours such as alcohol and drug use without regard for possible problems substance misuse can lead to.

Adolescents can be criticised by older generations as being "too sensitive", or that younger generations have something wrong with them. Recent studies have shown that *"there is a unique sensitivity to motivational cues during adolescence."*[30] Another study showed that when adolescents were presented with neutral face expressions of older people, they were more inclined to state them as being negative

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[21] (Johansen, 2015)
[22] (S.J Blakemore, 2006, p. 299)
[23] (Clover, 2013, p. 2)
[24] (Clover, 2013, p. 3)
[25] (SB Johnson, 2009)
[26] (Johansen, 2015)
[27] (Siegel, 2014)
[28] (Johansen, 2015)
[29] (C Bell, 2010)
[30] (B.J Casey, 2013)

expressions. This is important for managers to remember when providing "critical" feedback if they want it to be received in a way that develops the employee.

There is a critical and dynamic relationship between brain development, human experience and environment. During childhood and adolescence, we form "attachment models" to caregivers. This explains *"how people learn to experience and respond to separation and distress* in the context of *core, close relationships from very early on in their lives.*"[31] It can be helpful for employers and managers to be aware of how young workers upbringings can influence the way they deal with stress. This also suggests employers and managers should learn at least a little about the employee's family background and be aware of what support systems they have, or lack.

The preferred attachment model is secure attachment[32]. This occurs when children feel they can rely on their caregivers to attend to their needs of proximity, emotional support and protection. It is considered to be the most advantageous attachment style. *"Secure attachment is as much about offering a safe harbour of support, to turn to when we are distressed or tired, as it is about supporting how we go out and explore the world… Security supports the development of a **resilient** mind.*"[33]

There are three other types of attachment models that generally arise from challenging or abusive upbringings. The individual may then respond to stress in a more negative way.

"While entering adolescence with a secure model of attachment makes it more likely that the adolescent period will be smoother, it does not guarantee it."[34]

Adolescents are sometimes referred to as being *"all gasoline, no brakes and no steering wheel."*[35] However to do so is to greatly oversimplify brain development and also implies there is something inherently wrong with this period. There is not. It is simply an individual living out their experience of life so far, and exploring a way forward using techniques that were established as young children. Since the working environment becomes a significant life factor when the adolescent leaves school, it will therefore become a fertile ground for development of resilience strategies, either positive or negative, and the manager and colleagues will have a huge influence of this growth.

Managers should be aware of how employee's family background and upbringing can impact on the way they deal with stress. It will help the employee and manager to critically assess the working relationship, and to establish how to support the relationship moving forward in a positive manner for those involved.

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[31] (Zahl, 2019)
[32] (Wikipedia, 2019)
[33] (Siegel, 2014)
[34] (Siegel, 2014, pp. 147-148)
[35] (C Bell, 2010)

In this study, individuals were asked questions that aimed to measure the impact of gender, age and living situation on resilience, coping strategies, loneliness and several other factors.

iv. Trends in New Zealand mental health

Current suicide demographic statistics follow a similar *"pattern of inequalities in the broader determinants of health, such as socioeconomic status, ethnicity, gender, age and geographical region. Reducing health inequalities between these different population groups is a key principle of the New Zealand Health Strategy (Minister of Health 2000)"*[36]

Many factors impact on mental health and also are symptoms of declining mental health, but some key risk factors are domestic abuse, sexual abuse, alcohol abuse, poverty, drug abuse and youth well-being. Understanding the prevalence of these factors within NZ society and how they might impact farm employees could indicate factors to address.

NZ domestic abuse

Obtaining an accurate picture of domestic abuse in NZ is difficult. The majority of data are dependent on reporting and recording practices, which have changed over time. Often abuse is not reported. New Zealand Violence Clearing House states that 35% of ever-partnered women report having experienced physical or sexual intimate partner violence in their lifetime.[37]

Table 6 - Family Violence Investigations[38]

Year	Investigated	Investigations with at least one offence recorded
2007	69,729	31,107
2008	73,280	34,785
2009	79,257	42,516
2010	86,764	45,497
2011	89,884	44,489
2012	87,639	40,683
2013	95,061	37,903
2014	101,955	37,452
2015	110,126	38,332
2016	118,910	41,079
2017	121,739	-

These statistics cannot be used to predict trends in mental health or trends in abuse. But there is a strong link that abuse can lead to mental illness.[39] Police are now not

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[36] (Ministry of Health, 2006, p. 6)
[37] (NZ Family Violence Clearing House, 2019)
[38] (New Zealand Family Violence Clearinghouse, 2017)
[39] (Hager, 2001)

prosecuting in many cases preferring to adopt alternatives to arresting and have put extra resources into family violence, that take a whole of family-whanau approach.[40] The government has prioritised the need to address family violence with a May 2019 $320 million funding package to support initiatives to address family and sexual violence. The extent of abuse in the general population suggests that a significant fraction of young people who work on farms may have backgrounds of exposure to abuse, which may or may not have been reported or addressed.

NZ alcohol use

The Health Promotion Agency's alcohol website (alcohol.org.nz) reports that 25% of people over the age of 15 have a potentially hazardous drinking pattern.[41] The Ministry of Health has only just started reporting this statistic, so it is unknown how this compares to previous years. 80% of the adult population drank alcohol in the past year, and this level of consumption has been consistent since 2006/07. New Zealand has a low minimal drinking age of 18, and a youth binge drinking culture. It is likely that a significant fraction of young people working on farms will be part of the youth drinking culture, and alcohol is an accepted part of on-farm and off-farm leisure activities. People who are intoxicated have impaired judgements and may behave impulsively and aggressively, and may be at-risk of suicide (especially if they have ready access to firearms), and traffic accidents. Minimising harmful alcohol consumption and drinking patterns is an issue that could be addressed by farm managers and employers as part of a mental health approach under health and safety.

Sexual abuse

Between 1 in 3 and 1 in 5 New Zealand women and 1 in 10 men report having experienced child sexual abuse. 20% of female and 9% of male secondary school students report having experienced unwanted sexual contact in the last 12 months.[42] Similar to exposure to family violence, some fraction of employees may have been exposed to sexual abuse and employers need to be aware of this possible vulnerability.

Poverty

The NZ Government has become increasingly concerned about domestic child poverty in NZ. In an attempt to target this issue, they recently released the Child Poverty Reduction Act in 2018 to achieve a significant reduction in child poverty. The Act requires government to set targets and report annually on child poverty. Currently 254,000 (23%) children in NZ live in households with less than 50% of median equivalised disposable household income, after housing costs are deducted.[43] 27% of children live below the poverty line.[44] Poverty is a risk factor for

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[40] (New Zealand Herald, 2018)
[41] (Alcohol.org.nz, 2019)
[42] (NZ Family Violence Clearing House, 2019)
[43] (Statistics New Zealand, 2019)
[44] (Child Poverty Action Group, 2019)

mental illness.[45] Young people from poor backgrounds may be those most likely to leave school with poor educational qualifications and to work in "low-skilled" jobs such as farm labouring.

Drug use

A 2013 survey stated that 11% of adults used cannabis over the last year (one third of them using it weekly). 8% of users experienced a harmful effect. Younger people were most affected.[46] They stated that methamphetamine use in 2015 was between 0.7 to 0.9% of the total population. This has remained stable since 2010, although some communities may be more affected than others. Limitations to this survey may be respondent's reluctance to answer questions truthfully. There may also be sampling bias, where an accurate representation of the whole population was not obtained. Bulk testing of sewerage in some cities provides evidence of the use of cannabis, synthetic drugs, and methamphetamine is common in young people and can be expected to be common in young farm workers. Research has linked the use of cannabis to contribute to poorer mental health and specifically in adolescents.

Youth well-being

According to a survey of 8,500 secondary school students in 2012 approximately 16% had serious thoughts of suicide, 10% had made a plan, and 4.5% had attempted suicide. Rural areas followed a similar trend to the overall sample. The findings are similar to 2007 with 4.7% of students reporting that they had attempted suicide. The proportion of students recording similar levels of emotional well-being and having significant depressive symptoms was also similar across 2001, 2007, and 2012. However, it should be remembered NZ's youth suicide rate has increased to 16.9 / 100,000 people in 2017/18 compared to 15.6 / 100,000 people in 2012/13. In addition, there are concerns that there is now more mental distress in young people than previously, with many people attributing this increase to changes in parenting, family break-ups, social values, and the use of cybermedia. Young people working on farms will reflect this new cohort of young people with more mental distress and fewer resiliency skills.

Changes in immigration policy has made it more difficult for the dairy industry to recruit and employ migrant workers. It is likely that more Kiwi workers from non-farming backgrounds will be recruited, some of whom will have had challenging upbringings. The development of positive coping skills will be necessary to ensure longer-term retention in a challenging industry.

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[45] (Brainwave Trust, 2019)
[46] (Drug Foundation NZ, 2019)

5. Methodology

Against this background, above, of changing mental health issues, and increased psychosocial problems, a literature review, and a survey were conducted. Interviews and feedback were sought from psychologists, health professionals and industry leaders.

6. Kellogg Survey

i. Methodology

For this project an online survey of dairy farm employers and workers was completed. Respondents were asked 31 questions aimed at measuring resilience[47], hope[48], loneliness, coping strategies[49], meaning and purpose[50], and attitudes to help seeking[51]. A gauge on staff intending to leave their current roles was sought. Respondents were questioned on a "fixed and growth" mindset[52], and on alcohol consumption. Where possible questions from research validated trials were used. The survey was designed to test the null hypothesis – H_0 = No impact of age on any other factor.

After consultation with health professionals around the safety of respondents replying to the survey it was decided to approach employers through personal contacts, industry groups and social media channels. The survey link was only then supplied to employers that had a support process for staff filling in the survey if needed. Respondents then replied online completely anonymously.

ii. Results

There were 67 responses to the survey. Ten (15%) were aged 24 or younger, although this age bracket was the main target group for this study. This is a major limitation, and more research could be carried out in the future.
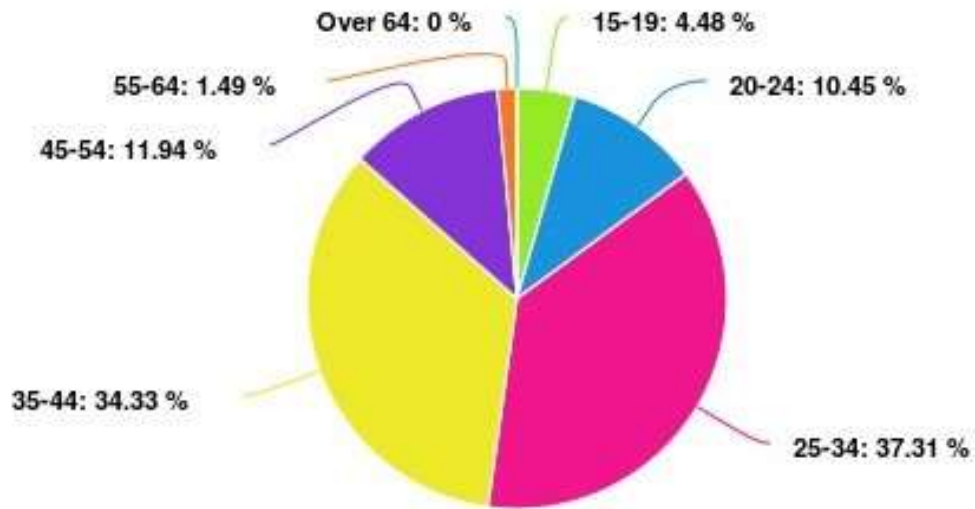
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[47] (Smith B. , 2008)

[48] (Snyder, 1996)

[49] (Department of Psychology, University of Miami, 2019)

[50] (Blunt, 2019)

[51] (University of Wollongong Australia, 2019)

[52] (Dweck, 2019)

Figure 2 - Ages of respondents

Key findings from the survey are shown below in the table.

Table 7 - Key results from survey

Results	Correlation (Pearson's r)	Statistical significance (P-value)
No relationship between age and help seeking	0.056	0.65
No correlation between loneliness and who people live with	0.072	0.56
No relationship between loneliness and personal relationship	0.0055	0.96
No correlation between gender and help seeking	-0.0499	-
Medium correlation between female workers and loneliness	-0.28	0.027
Large correlation between loneliness and resilience	0.47	0.0001
Large significant correlation between loneliness and hope	0.55	< 0.01
Large significant relationship between loneliness and help-seeking	0.48	< 0.01
Large significant relationship between loneliness and coping	0.46	< 0.01

Large significant relationship between loneliness, meaning and purpose	0.46	< 0.01
No correlation between loneliness and growth mindset	0.07	0.58
Medium significant correlation between increase in loneliness and increase in alcohol use	0.38	< 0.01

iii. Brief discussion of results / key findings

This survey found that loneliness correlated significantly with resilience, hope, help-seeking, coping skills, alcohol use and meaning and purpose. Female dairy workers were also more likely to feel lonely than male workers. It is outside the scope of this report to discuss loneliness and factors of the dairy lifestyle that contribute to this, however there has been some work carried out in this area already. This report suggests that further research should be carried out.

7. Literature Review

A literature review of previous Kellogg reports, peer reviewed articles and other reports was carried out in completing this project. These are referenced in the relevant sections.

i. Previous Kellogg Reports

There have been several other Kellogg projects that have looked at topics around staffing, stress, and mental health. However, no other topics have specifically looked at the importance of developing positive stress management skills in adolescent dairy workers. Projects on similar topics are summarised below.

Stuart Taylor prepared a report in 2016 titled "The dream that made us"[53]. He looked at how the dairy industry has changed over the last 100 years, particularly around generational attitudes to farming and challenges to farm ownership. He explained that past success in farm ownership led to strong cultural beliefs being established of what people needed to do to buy their own farm. Long hours, frugality, stoicism, physical toughness and independence were key traits. He found that this belief created cultural expectations around how the industry expected staff to behave, act, and the conditions they would endure, to achieve success.[54]

Leyton King looked at the effects of boredom and repetition on farm owner's motivation and health.[55] He discussed the "five ways of well-being" and provided some tools for farm owners to improve their well-being. He recommended further research into boredom on farm performance.

Sarah Tait submitted a report titled *"Young people today… beating the statistics and holding on to the young talent in your agribusiness".*[56] She referenced reports that stated "*the critical challenge with millennials is their mental health*" and "*millennials have higher depression and anxiety issues than previous generations*". However, the aim of her report was to look at ways to retain millennials in businesses, so mental health was not discussed fully.

Matte Kirk titled a report on "Building mental wellness in the rural sector"[57]. His report aimed to raise awareness of depression and anxiety in rural areas. He discussed signs and symptoms of mental illness and suggested tips and strategies to adopt for improving mental wellness.

Matthew Bell completed a report on *"attracting and retaining young New Zealanders to dairying".* He referenced a 2018 MPI report saying that "*within three years of entering the dairy industry, 33% of the staff remain in the industry*" [58]. This is a staggering claim. It would be helpful to know how much of this was for immigration issues for migrant workers and how much is from staff choosing to exit. Later in his

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[53] (Taylor, 2016)
[54] (Taylor, 2016)
[55] (King, 2018)
[56] (Tait, Course 38, 2018)
[57] (Kirk, 2018)
[58] (Bell, Course 38, 2018, p. 6)

report he stated that long hours, poor time off and early mornings are often attributed to the high levels of turnover.

The following sections discuss several factors essential to promoting positive stress management in young dairy workers.

ii. Positive stress management

Positive stress management is an essential life skill for everyone and is a learned ability. It has gained more attention in wider society recently due to the positive psychology movement. Historically most of psychology research had centred on fixing what was wrong with patients, after being established as a separate field of science in 1840.[59] In 1998 Martin Seligman became the president of the American Psychological Association, and made research into positive psychology his focus for his presidency. His motivation was that in raising his children he wanted to know *"how to nurture strength, resilience and emotional health."*[60] His presidency and theories led to well-being science being researched more commonly. The positive psychology field is different to the "positive thinking" and self-help area, in that there is scientific research behind it, and it promotes more realistic thought patterns than the "positive thinking" area has.

This section will list ways to well-being and adaptive and maladaptive coping strategies. Some of the survey results will be explored.

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[59] (Cherry, 2018)
[60] (Scott, 2018)

<u>Five ways to wellbeing</u>

The Mental Health Foundation states *"mental wellbeing is one of the most valuable business assets. Workplaces that prioritise mental health have better engagement, reduced absenteeism and higher productivity, while people have improved wellbeing, greater morale and higher job satisfaction."*[61]

They list the 5 ways to wellbeing below:

Figure 3 - Five ways to well-being. Mental Health Foundation of New Zealand

Everyone should incorporate habits from each of these five areas to grow their well-being.

The way people deal with stress is defined as "coping strategies" by psychologists. These can either be adaptive or maladaptive. Adaptive coping can be thought of as positive strategies that involve recognising and changing unhealthy emotional reactions, making realistic appraisals of the situation, confronting the problem directly and trying to prevent negative reactions in the body.[62] Maladaptive strategies generally increase stress.

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[61] (Mental Health Foundation of New Zealand, 2019)
[62] (Spark notes, 2019)

Table 8 - Positive and negative ways to deal with stress

Adaptive or coping strategies	Maladaptive or non-coping strategies
Social connection / talking to a health professional	"Burying it" or "Bottling things up"
Mindfulness - "Controlling the sound track in your head" / "Thinking about what you're thinking about"	Mindlessness - Destructive / negative thought patterns, blame, denial, aggression, suppression
Emotional intelligence	Emotional ignorance - emotions are "weak"
Giving to others	Isolation
Learning / Growth mindset	Fixed mindset
Exercising	Inactive
Sleeping well	Losing sleep
Eating healthy	Unhealthy eating
Taking medication on the advice of a health professional	Self-medication with alcohol or drugs

The survey carried out for this project asked several questions on how people deal with stress.

How do we currently deal with stress?

Considering rural suicide and youth suicide rates, rates of depression and the number of dairy entrants that subsequently exit the industry within a few years it is worth asking how the industry currently deals with stress. In our industry or workplaces are we dealing with stress in a positive or negative way? In what way does the dairy culture encourage staff to deal with stress? Several factors or indicators are discussed below.

Alcohol Use

The survey asked four questions on coping strategies from the Brief COPE questionnaire. This questionnaire asks 32 questions on coping strategies, using a four-point Likert scale. The four questions selected for the survey were on alcohol, work or other activities, emotional support, and optimism. 30% (three) of under 25's recorded using alcohol a medium amount or a lot as a coping strategy. A later question on alcohol use showed that 40% of respondents under 24 years old (four) used alcohol more when they were feeling "down" about something.

Table 9 - Alcohol as a coping strategy

	Under 25 years	Over 25 years
Number of respondents	10	57
I have used alcohol or drugs to help me get through it (either a lot or a medium amount)	3 (30%)	10 (18%)
Do you drink more when you are feeling down about something? (either definitely true or mostly true)	4 (40%)	25 (44%)

The majority of respondents used other coping strategies to get through stressful periods, however there was a large significant correlation between loneliness and coping strategies (Pearson r = 0.46, P value < 0.01). The survey results indicate that there is room for further research on coping strategies in dairy staff which could lead to further openings for industry bodies to educate and help farmers develop better strategies in the future.

Farmers physical activity

A common assumption is that dairy farming is a very physical job, with long hours and physical work. This may have been true in the past, and probably is true during the calving period, but dairy farming has become increasingly automated. Tasks now involve more sitting down e.g. on tractors and quad bikes/ LUVs. There has been a proliferation of rotary cowsheds that decrease milking times but this may reduce the amount of walking dairy farmers are doing as well. A Kellogg report in 2014 found that there was no great difference in heart rate between fit and unfit farmers and concluding that manual labour outside of calving is not very physical.[63] Dairy rosters now generally make it difficult for staff to commit to regular weekly sports events. Managers and employers should provide a culture and working conditions that encourages physical activity outside of work.

Connection / Loneliness

In this Kellogg survey two questions were asked about loneliness, and another three on help-seeking. Loneliness was correlated with several other factors such as gender, resilience, hope, help-seeking, coping, meaning and purpose and alcohol use. Approximately 50% of respondents said they were sometimes or often lonely.

It is outside the scope of this report to discuss loneliness in rural areas. However, this would be an important area for future study.

The dairy farming lifestyle has several specific challenges such as:

- Isolation
- Disrupted sleeping patterns, with effectively shift work
- Living alone or with work mates
- Rotating rosters meaning it is difficult to form regular connections to the community
- Transient lifestyles - workers will move onto another farm in a new location fairly regularly, often this is for career progression.
- Staff retention putting pressure on existing farm staff due to shortages.

The current dairy farming lifestyle has several specific challenges to personal well-being of staff. There is a need to encourage staff to develop a specific stress management plan and identify areas in their lives where they could be more proactive and increase their well-being.

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[63] (Handcock, 2014)

iii. Emotional Intelligence

Managing emotions is an essential part of stress management and a necessary life skill for all managers and employees alike. Those *"who don't learn to regulate their own emotions may become slaves to them."[64]* As described in the previous section on developmental issues adolescence is a time where there is greater emotional intensity due to different networks being formed in the brain.

This area of managing emotions is termed Emotional Intelligence, and it *"involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions."[65]* Dr Daniel Goleman states that it involves self-awareness, self-regulation, motivation, empathy and social skill. A study in 1996 showed that performance of organisations with greater emotional intelligence capabilities was shown to be 20% greater. Emotional intelligence has also been shown to be twice as important as technical skills and IQ on performance.[66]

<u>Self-awareness / Emotional awareness</u>

The first step in developing emotional intelligence is self-awareness. This is described by psychologists as a meta-skill. It is a skill that once obtained, unlocks access to other skills. Self-awareness refers to the ability to *"perceive your emotions at the moment and understand your tendencies across situations."[67]*

Mindfulness is an often-popularised technique that helps participants develop self-awareness. It has roots in Eastern cultures, but has been popularised more recently in the west as a unique behavioural technique. It *"involves the effort to attend, nonjudgmentally, to the present-moment experience, and to sustain this attention over time, with the aim of cultivating stable, nonreactive, metacognitive awareness."[68]* There has been some criticism of the sensational way it is reported on, the claims made about its success for everyone, and the utilisation of it by teachers who have no formal training in mental health.[69] However the essential element of mindfulness is being aware of the present moment. Most stress is driven by worrying about what happened in the past, to becoming anxious about what might or might not happen in the future. Stress is trying to control what we can't control.

Whether or not all the claims of mindfulness proponents are accurate concentrating on the present moment, and naming emotions as they come to mind without responding immediately does develop self-awareness, and a capacity to self-regulate. There is some good scientific evidence around this and is generally encouraged by mental health professionals although should not be used as a solution for everyone.

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[64] (Salovey, 1990, p. 17)
[65] (Salovey, 1990)
[66] (Goleman, 2015)
[67] (Smith N. , 2016)
[68] (Garland, 2009, p. 3)
[69] (Farias, 2016, p. 329)

<u>Self-regulation</u>

The next step in Emotional Intelligence is self-regulation. This is *"controlling or redirecting disruptive impulses and moods"[70].* Put simply it is *"the ability to calm yourself down when you're upset and cheer yourself up when you're down."[71]*

Viktor Frankl was a holocaust survivor and psychiatrist. His work emphasised that between every stimulus (or stressor) there is a space before we need to respond. Learning how to self-regulate in this "space" is an essential element of positive stress management.

Dr Tom Mulholland describes "emotional algebra" as a way to self-regulate in his book Healthy Thinking.[72] He makes the following key points.

- Thoughts create emotion
- First name the emotion. Disengage to an analytical level. Slow the breathing, slow the pulse. Then focus on solving the problem. Identify the emotion, subtract the trigger, then you can identify the thought.
- Trigger + Thought = Emotion
- Unhealthy Emotion - Trigger = Unhealthy Thought **SO** change the thought. Often this unhealthy thought is not true, or may be catastrophised. So, don't allow yourself to think that way.
- Reducing stress is about changing your thinking and changing your attitude.

Sports psychologist and owner of Total Training Theo Feldbrugge summarises Martin Seligman's work on optimism as the way we self-regulate in response to stressful events coming down to two points. 1) "adversity-handling", and 2) language and framing of the event.[73]

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[70] (Goleman, 2015)
[71] (Steven Stosny, 2011)
[72] (Mulholland, 2011)
[73] (Feldbrugge, 2019)

Table 10 - Learned Optimism framework

"Adversity Handling"	Language / Framing
Thought catching 24/7	Permanence (How long will this last?)
Distraction	Pervasiveness (How much of my life does this affect?)
A.B.C.D.E	
A – adversity (stressful event)	
B – beliefs (what do you believe about the event?)	
C – consequences (what would be the consequences of thinking this way?)	
D – disputation ("Don't believe everything you think")	
E - execution	

Self-awareness and self-regulation were not measured in this survey, but would be worthwhile to measure in the future.

Mindset was measured by using Dr Carol Dweck's 3 questions on fixed and growth mindset. This was measured on a scale of 1-6. While no correlations were found in the data, under 25's recorded a median score of 3.7 compared to 4 for over 25's. A score of 1 represented a fixed mindset and a core of 6 represented a growth mindset. *"Those who believe intelligence is fixed and cannot be changed exert less effort to succeed."[74]* The median scores indicate there is room to develop dairy staff's attitude to growth.

It may be necessary to think of ways to incorporate this practice into young rural males' practice. Mindfulness meditation, self-awareness and self-regulation are terms that rural males often wouldn't use or be enthused to practice. Although these are really powerful concepts and lead to personal growth. Approximately 25% of respondents in the recent Farmstrong survey indicated they would like to learn thinking strategies to improve their wellbeing. Breaking these terms into more agricultural concepts may be necessary, as well as role-modelling by respected older males.

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[74] (Hochanadel, 2015)

iv. Challenges for employers and managers

Employers and managers face many challenges in staffing dairy farms. It can be difficult to recruit and retain staff, and when there is a staffing shortage the work often still needs to get done. Managers will end up working more themselves to cover.

The Health and Safety at Work Act[75] defines health as *"physical and <u>mental</u> health."* It states that a **hazard** and *"includes a person's behaviour where that behaviour has the potential to cause death, injury, or illness to a person (whether or not that behaviour results from physical or <u>mental</u> fatigue, drugs, alcohol, traumatic shock, or another temporary condition that affects a person's behaviour)".*

There have been cases of employment bullying or abuse that have gone to court, however to date there have been no prosecutions of farm employers over suicides. However, this is an area managers and owners need to be wary of, and be proactive in making sure well-being of their staff is a consideration. Managers and employers may need to seek further training from industry groups and professionals in order to develop safe workplace practices and procedures in the event of a mental health crisis.

Discrimination against people that disclose they have had a mental health issue is still thought to be prevalent in the industry. Further work should be done to educate farm employers and managers on how to manage these situations. 50-80% of people will experience mental health distress or addiction in their lifetime. There is a very limited pool of staff available to farmers that will not face wellbeing challenges.

v. Barriers to positive stress management / help-seeking

There are two critical steps in dealing with mental health issues as they arise. 1. being able to identify potential problems and then 2. taking action to seek help to address the issues. While the link between these two steps seems obvious, barriers potentially exist. We were interested to know how rural New Zealanders connected these two steps.

The survey asked an open question "what are some signs of depression in people?" Approximately 75% of people responded with some specific signs that indicate they are relatively well educated about depression. The survey also asked two questions on help-seeking. 45% of respondents stated they were extremely unlikely or unlikely to seek help from someone else if they were facing a personal or emotional problem. 76% of respondents stated they were extremely unlikely or unlikely to tell their employer if they were facing personal or emotional problems. The question that remains is why are so many people unlikely to ask others for help when facing a personal or emotional problem?

The sample shows there was no correlation between gender and help-seeking, although other research articles report that men are often more unlikely to seek help. In NZ men are 2.5 times more likely to take their lives than women. The recent

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[75] (New Zealand Legislation, 2019)

Farmstrong survey of younger farmers stated that *"44% of women and 30% of men felt they didn't have 'enough people to talk things through with' when they needed to."*[76]

Rural adolescent males are often described as being one of the least likely groups to seek help for mental health issues, although these survey results did not indicate this. A 2001 National Australian study found that *"only 25% of children aged 4 to 17 years with a diagnosable mental disorder had used any health services in the six months prior to the survey".*[77] A national survey of Australian adults found that *"only 35% of those with a common mental disorder sought help during the previous year".* Rates of mental illness in rural areas were not found to be any higher than urban areas, while the suicide rate was higher.[78] Further research into help-seeking in NZ rural areas would be desirable in order to develop methods to overcome barriers and facilitate greater help-seeking behaviour.

Common barriers to accessing professional help in rural areas are similar to the general population. These include self-reliance, cost, inconvenience, confidentiality, fear of stigma, belief that treatment won't help, mental health literacy, feelings of failure, and view of "masculinity".[79] It is outside the scope of this report to address every barrier however stigma, and mental health literacy are touched on below. View of "masculinity" is discussed later in the report.

vi. Stigma

Stigma is the top-rated barrier to help-seeking[80] and *"there is an increasing body of evidence that identifies stigma as a risk factor for suicide."*[81]It is defined as *"a mark of disgrace; a stain, as on one's reputation… or a set of negative and often unfair beliefs that a society or group of people have about something… Self-stigma is the experience of negative beliefs towards oneself."*[82] The problem with mental health stigma from communities, workplaces or even individuals themselves is that the person in need of help won't reach out for help as readily and may "deny" the existence of the illness. This "*complicates access to available care and resources"* and *"reduces the prospect of recovery from poor mental health."*[83] A recent study in 2018 on Australian rural suicide showed that there were *"negative community attitudes and stigma towards mental health issues and suicide were cited by participants as an issue for farmers… The fear of having others in the community view or talk about them negatively and subsequently feeling like a failure was described as a compelling barrier to help seeking."*[84] There was a fear of being physically "seen" by others when using counselling or mental health services.[85]

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[76] (Farmstrong, 2018, p. 8)

[77] (Gulliver, 2012)

[78] (Perceval, 2018)

[79] (Gulliver, 2012)

[80] (Gulliver, 2012)

[81] (Kennedy, 2018, p. 1)

[82] (Kennedy, 2018, p. 2)

[83] (Gulliver, 2012)

[84] (Perceval, 2018, p. 3)

[85] (Perceval, 2018)

There is still much work to be done in reducing stigma in the workplace. As shown in the survey sample 76% of respondents would be extremely unlikely or unlikely to tell their employer if they were having a personal or emotional issue. While there may be other reasons for this it is proposed that fear of stigma or being labelled with an "inability to handle stress" may reduce help-seeking behaviour. Care needs to be taken however that efforts to reduce stigma don't normalise suicide.

vii. Mental health literacy

Increasing mental health literacy has often been thought of as being a facilitator to improved help-seeking.[86] Traditional evidence has suggested that "*increasing mental health literacy is associated with a reduction in stigma,*"[87] although a recent review has questioned the strength of this relationship. In 2018 a rural Australian study found that *"high participant suicide literacy levels were not reflected by reduced levels of stigma."*[88] The author concluded that there needs to be more research and a greater understanding of mental health literacy on stigma in rural areas, and that more work needed to done to research "best practice" for reducing stigma, increasing help seeking and assisting suicide prevention efforts. This research article surveyed participants who had had a close personal experience of suicide, so may not have been an accurate survey sample of how mental health literacy improves help seeking in the wider rural community. Poor mental health literacy has been associated with not knowing where to find help when it is needed, and not knowing how to distinguish between normal and abnormal levels of distress (i.e. lack of self-awareness).[89,90] The body of evidence would still suggest that increasing mental health literacy is a necessary facilitator and pre-requisite for help-seeking.

Encouraging help-seeking is important. However, there is research that when someone is going through severe emotional distress, they cannot process thoughts rationally and realise they need help. All of their resources go into dealing with the emotional problem in front of them. This is why other steps such as self-care plans and training first-responders is still necessary.

viii. Stoic masculinity vs masculinity

View of "masculinity" in rural areas is a common barrier to help-seeking. Older rural males generally portray themselves as being self-sufficient, independent and stoic to younger workers. It is thought that adolescent workers can think it is "weak" to have emotions or ask for help to regulate their emotions when needed.

New Zealand rural males are well known for their stoicism. However, it is not the best way to lead others, and is not authentic masculinity. If we are wanting to see a

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[86] (Gulliver, 2012, p. 2)
[87] (Kennedy, 2018)
[88] (Kennedy, 2018, p. 9)
[89] (Gulliver, 2012, p. 2)
[90] (Gulliver, 2012, pp. 6,7)

change in rural suicide and farm accidents caused by well-being issues, there will need a culture change.

*"Being **stoic** is being calm and almost without any emotion. When you're **stoic**, you don't show what you're feeling and you also accept whatever is happening. The noun **stoic** is a person who's not very emotional. The adjective **stoic** describes any person, action, or thing that seems emotionless and almost blank.[91]"*

There are strengths of being stoic, such as being calm in the midst of a crisis, and thinking logically, without emotion. There are also weaknesses. Stoic leaders often have difficulty connecting with their people and really inspiring change. An Afghan proverb states *"If you think you're leading and no one is following you, then you're only taking a walk".*

Two men with strong leadership and emotional skills were Winston Churchill and Theodore Roosevelt.

Winston Churchill was a man who inspired many during the second world war. He used emotion to direct and inspire his country. He was well known for his speaking ability. *"I have nothing to offer but blood, toil, tears and sweat." "Courage is what it takes to stand up and speak. Courage is also what it takes to sit down and listen."*

Theodore Roosevelt, U.S president once said *"nobody cares how much you know until they know how much you care".* He had a *"cowboy persona defined by robust masculinity"[92].* He once was shot while giving a public speech, and carried on speaking for another hour.

Successful leaders and managers know how to manage their own emotions, and use emotions to inspire and lead change in others in a common direction. Men need to use all their resources – strength, intelligence and emotions to look out for others and encourage positive stress management habits in others and help prevent farm suicides.

The opportunity value for the dairy industry lies in developing leaders that are emotionally intelligent. "You can buy compliance, but you can't buy commitment".[93]

ix. Gatekeeper training

Gatekeeper training programs are necessary to provide people with the skills they need to identify distress in a workmate and connect them with a professional. As described in a previous section people under extreme distress will not often be able to think logically enough to seek help from professionals themselves.

<u>DairyNZ Good Yarn</u>

These are two and a half hour voluntary workshops designed to help participants recognise when they need help themselves, and respond to others suffering from

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[91] (stoic, 2019)
[92] (Theodore Roosevelt, 2019)
[93] (Feldbrugge, 2019)

stress or mental illness. Unfortunately like most training days that staff are sent on, unless it used and reviewed after the workshop it doesn't continually get put into practice. The goal of Good Yarn is also to train facilitators that are able to lead a presentation to participants, but also have greater skills in identifying people in distress and linking them to professionals. This is a good model but workplaces need to use this model more.

Other Industries - Mates in Construction

Mates in Construction exist to tackle the mental health and suicide challenges faced by the construction industry. The construction industry in Australia is currently losing the equivalent of one worker every second day to suicide.[94] Their vision is suicide prevention through raising awareness and building capacity, providing help and research. They do this through an integrated process of support and training. Their training falls into three categories; general awareness, crisis response, and mental health first aid training. They provide field visits, critical incident and postvention support. Workplaces can receive an "accreditation" for training more than 80% of workers in general awareness, having one crisis trained responder per 20 workers and other requirements.

Lifekeepers

This is a national suicide prevention training program funded by the Ministry of Health. It was developed in conjunction with clinicians and academics in the field of suicide prevention. They run seminars and an on-line E-learning programme in suicide prevention.

St Johns Mental Health First Aid

This is a one-day course aimed at equipping people to recognise mental distress and respond to a crisis safely.

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[94] (Mates in Construction, 2019)

8. Conclusion and Recommendations

i. Summary of rationale for this report

Dealing with stress well is a learned skill, and one that young people may not have had the necessary life experience to develop. Stressful events happen to everyone, and everyone deals with them in a range of positive and negative ways. Often the way we handle stress can lead to growth or improved performance or, rarely but tragically at the other end of the range people in extreme distress can take their own lives. It is likely that negative coping strategies and negative mindset skills is a contributing factor to staff performance and attitude. By developing positive skills in staff, it is hoped that this will be beneficial for both the employer and employee.

This report aimed to highlight to the industry the need for targeted mental health strategies and for research focussed on young rural workers. It recognises that suicide prevention needs a multi-sectoral approach, and this topic of developing stress management skills in young dairy workers is only one small aspect in a vast and comprehensive problem in society as a whole.

ii. Brief summary of findings

The key findings of the survey for this report were:

- Medium correlation between female workers and loneliness
- Large correlation between loneliness and resilience
- No relationship between loneliness and living situation or relationship status
- Large significant relationship between loneliness and help-seeking
- Large significant relationship between loneliness, meaning and purpose
- Medium significant correlation between increased loneliness and increased alcohol use

The key findings of the literature review and interviews with health professionals were:

- Rural areas need to be acknowledged by government as needing as specific focus
- Employers need to protect employee's mental health. They may be liable under Health and Safety at Work Act if they do not.
- Relationship breakups account for 20% of stressors to suicide, compared to financial issues being 5%
- Adolescents undergo significant brain development, which can make them more emotional and prone to risk taking
- Current suicide demographic statistics follow a similar *"pattern of inequalities in the broader determinants of health, such as socioeconomic status, ethnicity, gender, age and geographical region. (Minister of Health 2000)"*[95]
- Dairy industry culture could do more to encourage positive stress management in younger staff

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[95] (Ministry of Health, 2006, p. 6)

- There is an opportunity for rural leaders and employers to grow in emotional intelligence skills

iii. How this supports argument for positive stress management in young farmers

Stress management is a learned skill. This survey indicates that there is more that can be done to encourage and develop positive stress management skills in dairy farm workers. 40% of participants used alcohol as a coping strategy and 45% of respondents were unlikely to seek help from anyone when facing an emotional problem. Teaching employees' healthy strategies to deal with stress and how to seek help when stressed is necessary not only to staff performance but also as a preventative strategy to rural suicide.

iv. Recommendations

Eleven recommendations are listed briefly below.

1. Emphasis for leaders to develop positive stress management skills in themselves first, and then role model this to younger workers

This is the most important recommendation. If managers and leaders are not dealing with stress positively themselves, they will not be able to role model this to others. Then these other recommendations will have limited effect.

2. Rural suicide prevention strategy

The government has supported the urgent completion of a national suicide prevention strategy. It has been disappointing rural areas were not identified in the He-Ara-Oranga report as being a specific area of concern. Rural industry bodies should ensure they develop a rural suicide prevention strategy preferably in conjunction with the national suicide prevention strategy.

3. Gun safety – farm armoury

Firearms are used as a method of suicide in 40% of rural suicides compared to 8% in the general population. Efforts should be made to promote and audit gun safety. Dr Annette Beautrais recommends the use of a farm armoury, where employees firearms are stored in a central farm armoury and can be accessed for a defined period by staff only after an interview and approval by an appropriately trained manager.

4. Alcohol – social permission for people to drink at low levels

New Zealand has a binge drinking culture. Efforts by dairy farms should be made to encourage drinking at lower levels and not celebrate binge drinking. Alcohol is a depressant and binge drinking habits may cover or contribute to underlying mental health issues.

5. Gatekeeper training

Young people under extreme distress will often not seek help themselves, therefore Gatekeeper training should be seen as a necessary measure by employers. This is

not only to reduce their liability but to protect and improve employee's mental health. There are several good programmes. The one most relevant to the dairy industry is DairyNZ's Good Yarn programme. St John's have also recently developed a mental health first aid course. Unfortunately just sending staff on a 2-3 hour course does not necessarily translate into long term change in habits. It will likely be more effective for workplaces to send selected key people on facilitator training and for these people to run regular seminars as well as individual check-ins with staff. Particularly when they know they are undergoing a stressful event.

6. Address loneliness by looking at employment structures and rosters

Loneliness as shown in the survey results for this report is a common contributor to poor mental health. A lot of dairy farm rosters have a rotating pattern, meaning days off are not regular on certain days. This can make forming regular connections to community events more challenging. Employers should recognise their employee's need for positive social connection and facilitate and develop their rosters accordingly. This may not mean working a shorter roster, but scheduling regular later starts in discussion with all employees.

7. Promote self-care and positive stress management skills

Workplaces should look at the culture they have developed and aim to promote self-care and positive stress management skills. In unhealthy workplaces often drinking to excess and anger or being extremely critical is seen as "manly". Efforts should be made to develop awareness of the importance of self-care and open discussions should be had around practically how to develop positive stress management skills for the individual.

8. Emotional intelligence training

There has been a shortage of staff on dairy farms. Sometimes people are promoted to management positions once they have the necessary practical skills but not necessarily the appropriate life skills or staff management experience. Managers can easily get stressed themselves and then treat staff negatively. Emotional intelligence training should be seen as an important area to develop in conjunction with other leadership skills.

9. Rural mentoring scheme

Adolescents benefit from supportive relationships with older, mature non-related adults. Discussing life experiences and stressors with a mature non-judgemental adult can be one helpful protective factor. Particularly when pathways in the adolescent brain are developing around thinking about consequences of actions and risk / reward payoff. Rural Support Trust often has many more volunteers than they can use, so support for a rural mentoring scheme may be positive. Care would need to be taken that the right mentors are selected and people are paired well in order to protect against negative outcomes.

10. Develop a self-care plan with staff

Gatekeeper trained staff can facilitate specific individual "self-care" plans with staff. This would step through a plan to identify signs of a crisis developing, practical steps for internal coping strategies, friends/ support people to contact and professionals to contact. Staff should then be encouraged to place this somewhere they can see regularly. If managers notice a staff member is stressed, they could point them to this plan and put them in contact with a "Gate-keeper" trained person. It should be remembered though that often people in extreme stress will not reach out for help particularly the first time they undergo such an experience. Other individuals will be necessary to facilitate getting them to professional services.

11. Advocacy of rural mental health to government and making rural counsellors more accessible

The government recently accepted 38 out of 40 recommendations in the He-Ara-Oranga report, and increased funding to $1.9 billion over four years. Mental health Rural industry bodies should ensure there is government funding for rural mental health support services, and to train rural based front-line and rural mental health professionals.

v. Limitations to this study and areas for further research

The major limitation to this survey was that there were only 10 respondents under the age of 24, and respondents to this survey were more likely to be from work places that already prioritised wellbeing. Further research could focus more on how to develop positive stress management skills in dairy staff and emotional intelligence skills in employers and managers. Research into rural loneliness could be investigated in more detail. It was interesting in this survey sample that loneliness did not correlate with relationship status or living situation. There would be room to investigate the cause of loneliness in rural areas in more detail.

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10.   Appendices

Survey questions

Gender*
⚪ Male⚪ Female

Relationship*
⚪ Single⚪ Married⚪ In a relationship

Age*
⚪ 15-19⚪ 20-24⚪ 25-34⚪ 35-44⚪ 45-54⚪ 55-64⚪ Over 64

Ethnicity*
⚪ Maori⚪ NZ European⚪ Pacific⚪ Asian
⚪ Other:[＿＿＿＿＿]

Who do you live with?
⚪ I live alone⚪ With my partner/husband/wife⚪ With workmates⚪ With my child/children⚪ With a friend/ friends⚪ With my wife/ husband/ partner and child/children

○ Other: [   ]

What type of dairy farm do you work on?
○ Family farm less than 700 cows ○ Family farm more than 700 cows ○ Corporate farm less than 700 cows ○ Corporate farm more than 700 cows
○ Other: [   ]

I tend to bounce back quickly after hard times
○ Strongly Disagree ○ Disagree ○ Neutral ○ Agree ○ Strongly Agree

I have a hard time making it through stressful events
○ Strongly Disagree ○ Disagree ○ Neutral ○ Agree ○ Strongly Agree

It does not take me long to recover from a stressful event
○ Strongly Disagree ○ Disagree ○ Neutral ○ Agree ○ Strongly Agree

It is hard for me to snap back when something bad happens
○ Strongly Disagree ○ Disagree ○ Neutral ○ Agree ○ Strongly Agree

I usually come through difficult times with little trouble
○ Strongly Disagree ○ Disagree ○ Neutral ○ Agree ○ Strongly Agree

I tend to take a long time to get over set-backs in my life
○ Strongly Disagree ○ Disagree ○ Neutral ○ Agree ○ Strongly Agree

At the present time I am energetically pursuing my goals
○ Definitely False ○ Mostly False ○ Slightly False ○ Slightly True ○ Mostly True
○ Definitely True

There are lots of ways around any problem I am facing now
○ Definitely False ○ Mostly False ○ Slightly False ○ Slightly True ○ Mostly True
○ Definitely True

Right now, I see myself as being pretty successful
○ Definitely False ○ Mostly False ○ Slightly False ○ Slightly True ○ Mostly True
○ Definitely True

I can think of many ways to reach my current goals
○ Definitely False ○ Mostly False ○ Slightly False ○ Slightly True ○ Mostly True
○ Definitely True

I feel I am unable to reach out and communicate with those around me
○ Often ○ Sometimes ○ Rarely ○ Never

The nature of the job isolates me from others and I feel lonely most of the time
○ Often ○ Sometimes ○ Rarely ○ Never

Think of a stressful event you have been through and answer the following four questions:

I have used alcohol or drugs to help me get through it
○ Not at all ○ A little bit ○ A medium amount ○ A lot

I have turned to work or other activities to take my mind off it
○ Not at all ○ A little bit ○ A medium amount ○ A lot

I have got emotional support from others
○ Not at all ○ A little bit ○ A medium amount ○ A lot

I have looked for something good in what was happening
○ Not at all ○ A little bit ○ A medium amount ○ A lot

I generally feel that what I do in my life is valuable and worthwhile
○ Definitely False ○ Mostly False ○ Slightly False ○ Slightly True ○ Mostly True
○ Definitely True

I feel that my life benefits the world as a whole
○ Definitely False ○ Mostly False ○ Slightly False ○ Slightly True ○ Mostly True
○ Definitely True

If you were having a personal or emotional problem, how likely is it that you would seek help from someone else?
○ Extremely unlikely ○ Unlikely ○ Likely ○ Extremely Likely

If you were having a personal or emotional problem, how likely is it that you would seek help from your employer?
○ Extremely unlikely ○ Unlikely ○ Likely ○ Extremely Likely

If you were having a personal or emotional problem, who would you seek help from?
[   ]

What are some signs of depression in people? [   ]

How likely are you to leave your current position in the next year?
○ Extremely Unlikely ○ Unlikely ○ Likely ○ Extremely Likely ○ No comment

I have a certain amount of intelligence, and I can't do much to change it
○ Strongly Disagree ○ Disagree ○ Mostly Disagree ○ Mostly Agree ○ Agree ○ Strongly Agree

My intelligence is something about me that I can't change very much

○ Strongly Disagree ○ Disagree ○ Mostly Disagree ○ Mostly Agree ○ Agree ○ Strongly Agree

I can learn new things, but I can't really change my basic intelligence

○ Strongly Disagree ○ Disagree ○ Mostly Disagree ○ Mostly Agree ○ Agree ○ Strongly Agree

Do you drink alcohol?

○ Yes, every week ○ Occasionally (once a month) ○ Rarely ○ No, not at all

How many standard drinks would you have in an average week?

○ 0 ○ 1-4 ○ 4-8 ○ 8-12 ○ 12+

Do you drink more when you are feeling down about something?

○ Definitely False ○ Mostly False ○ Slightly False ○ Slightly True ○ Mostly True ○ Definitely True