

Change • Challenge • Opportunity

Injury & Disability Schemes Seminar



12 - 14 November 2017 • Sofitel • Brisbane



**Actuarial
Institute**



Exercise and Mental Health

Research and Implementation

Dr Simon Rosenbaum & Steve McCullagh



Pat's Story



A Contributing Life: the 2014 National Report
Card on Mental Health
and Suicide Prevention



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How Exercis

Phys Ed

By GRETCHEN REYNOLDS NOV. 16, 2016



226 COMMENTS

[Click here](#) to read the best Times comments from the past week.

Share your thoughts.

All 226

Readers' Picks 164

Tom Missouri • November 17, 2016

If I start exercising regularly, will Donald Trump go away? Because otherwise I think my depression will last for the next four years.

Reply · 234 Recommend ·

Flag

Leslie Long Island • November 17, 2016

Often a hallmark of depression is to be unable to get up and go in the first place, so while exercise is a wonderful antidote, it is quite difficult to implement for many.

Reply · 144 Recommend

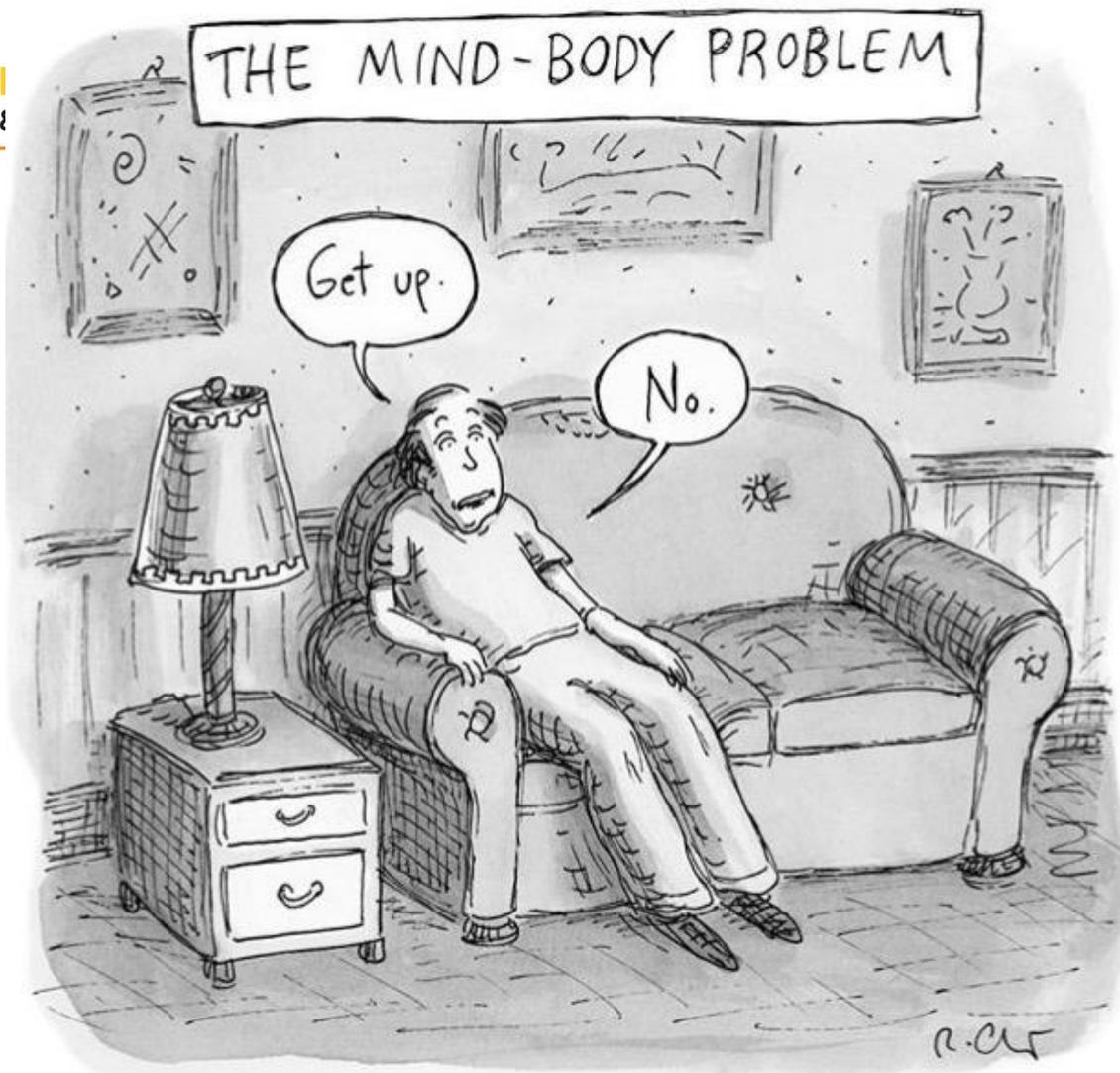


Independent Voter Los Angeles • November 17, 2016

I've struggled with severe depression since my late teens and have been on various medications on and off for decades. I have found that the ONLY thing that consistently alleviates it is going to the gym and working out for an hour or two. It's quite amazing how the depression lifts. It may not go away entirely, but it certainly lessens and makes the day more bearable.

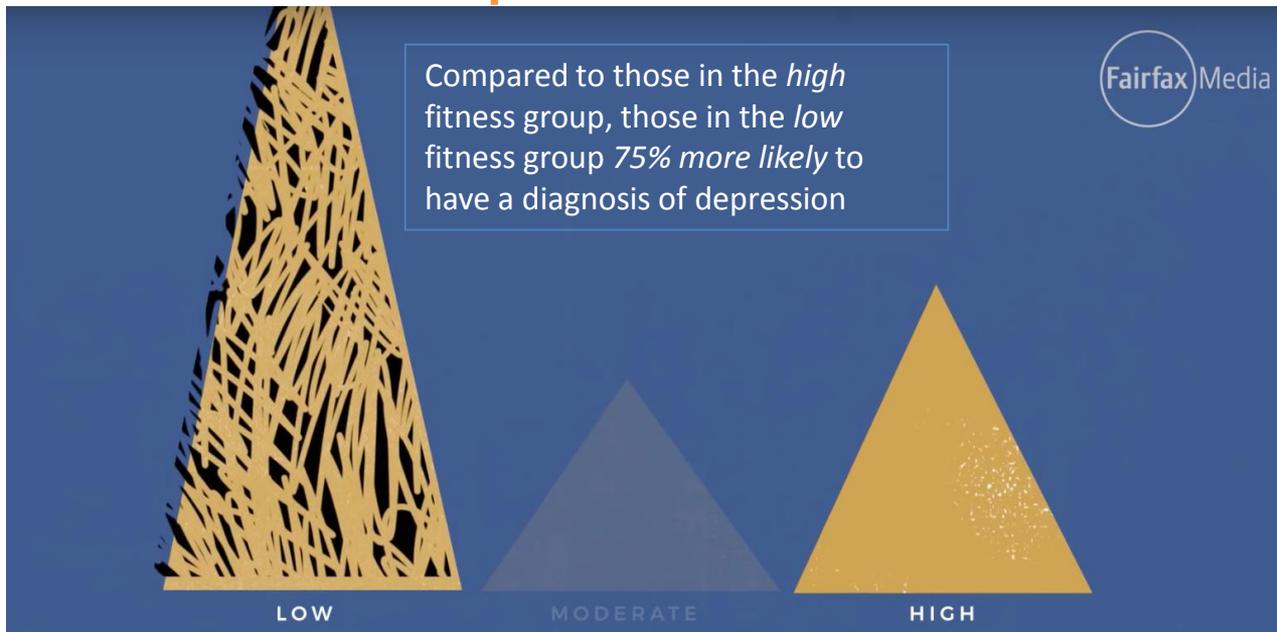
Reply · 114 Recommend

THE MIND-BODY PROBLEM





Can being fit prevent depression?

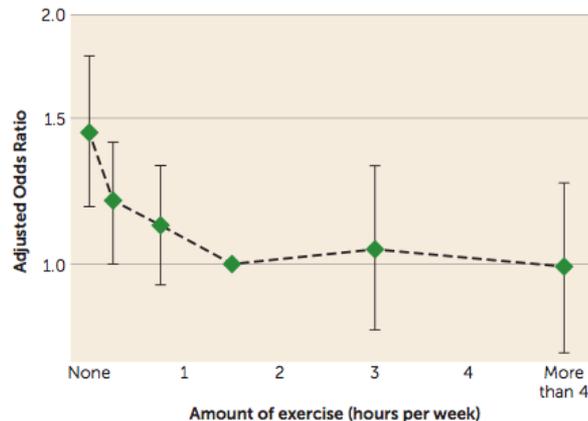




Exercise and the prevention of depression

- 33,000 people with no mental health conditions were followed for ~11 years
- No exercise at baseline = 44% higher odds developing of depression compared 1-2 hrs/week
- 12% of depression cases could be prevented with at least 1 hour exercise per week
- No benefit found beyond 1 hour of exercise each week

FIGURE 2. Adjusted Odds Ratios (With 95% CIs) for Case-Level Depression at Follow-Up According to the Overall Amount of Exercise Reported at Baseline^a



^a All odds ratios are adjusted for age, gender, marital status, education, social class, number of cigarettes consumed, alcohol use, and body mass index.



Physical health consequences of PTSD

Metabolic syndrome = **38.7% (RR=1.82)**

Type 2 diabetes = **10% (RR=1.49)**

- Abdominal obesity **49.3%**
- Blood sugar level **36.1%**
- Triglycerides **45.9%**
- Low HDL cholesterol **46.4%**
- High blood pressure **76.9%**





"Refusing to go to the gym is not the same thing
as resistance training."

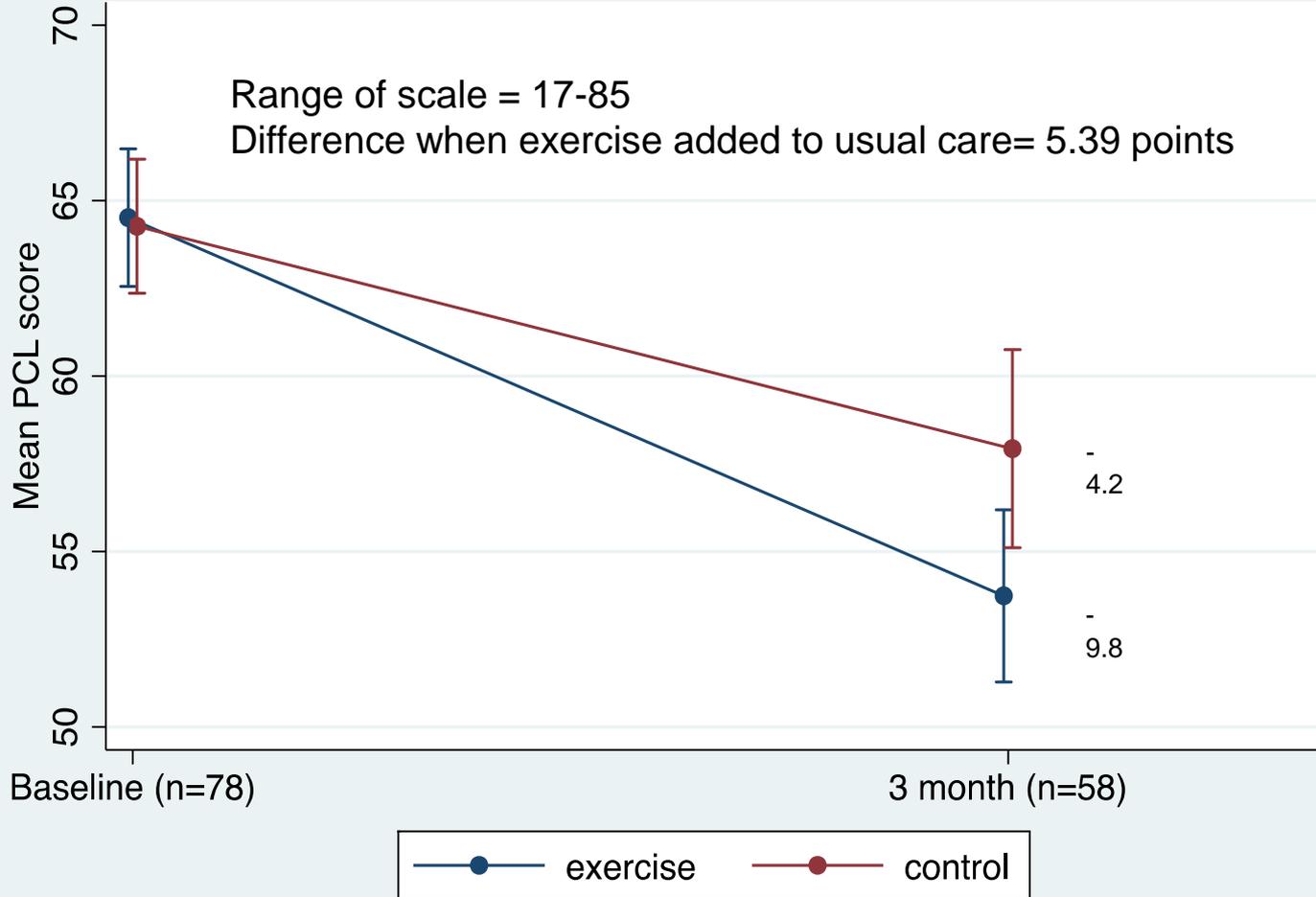


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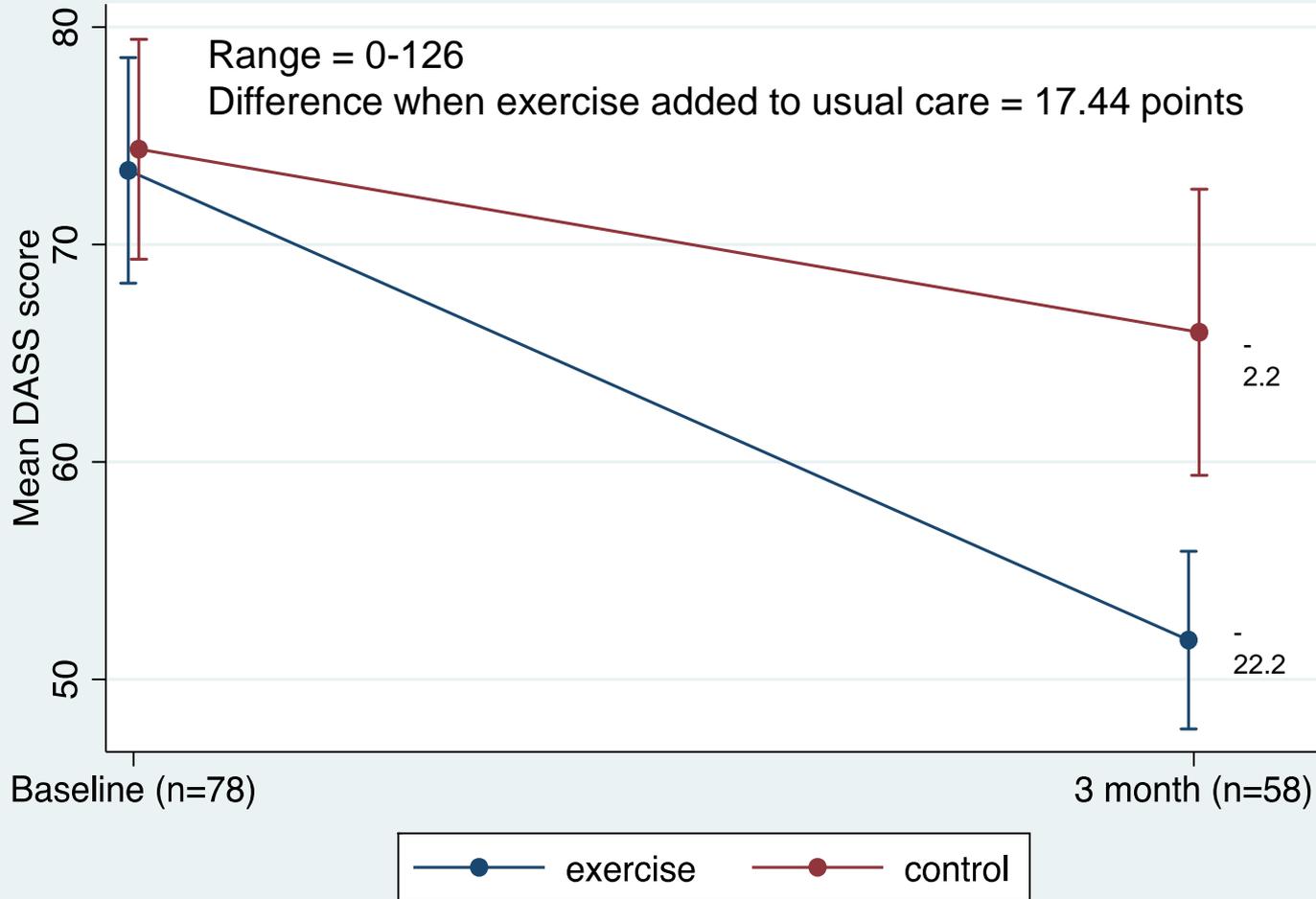


Post Traumatic Stress Disorder- Checklist (PCL)





Depression Anxiety and Stress Scale (DASS)





Resistance exercise and anxiety





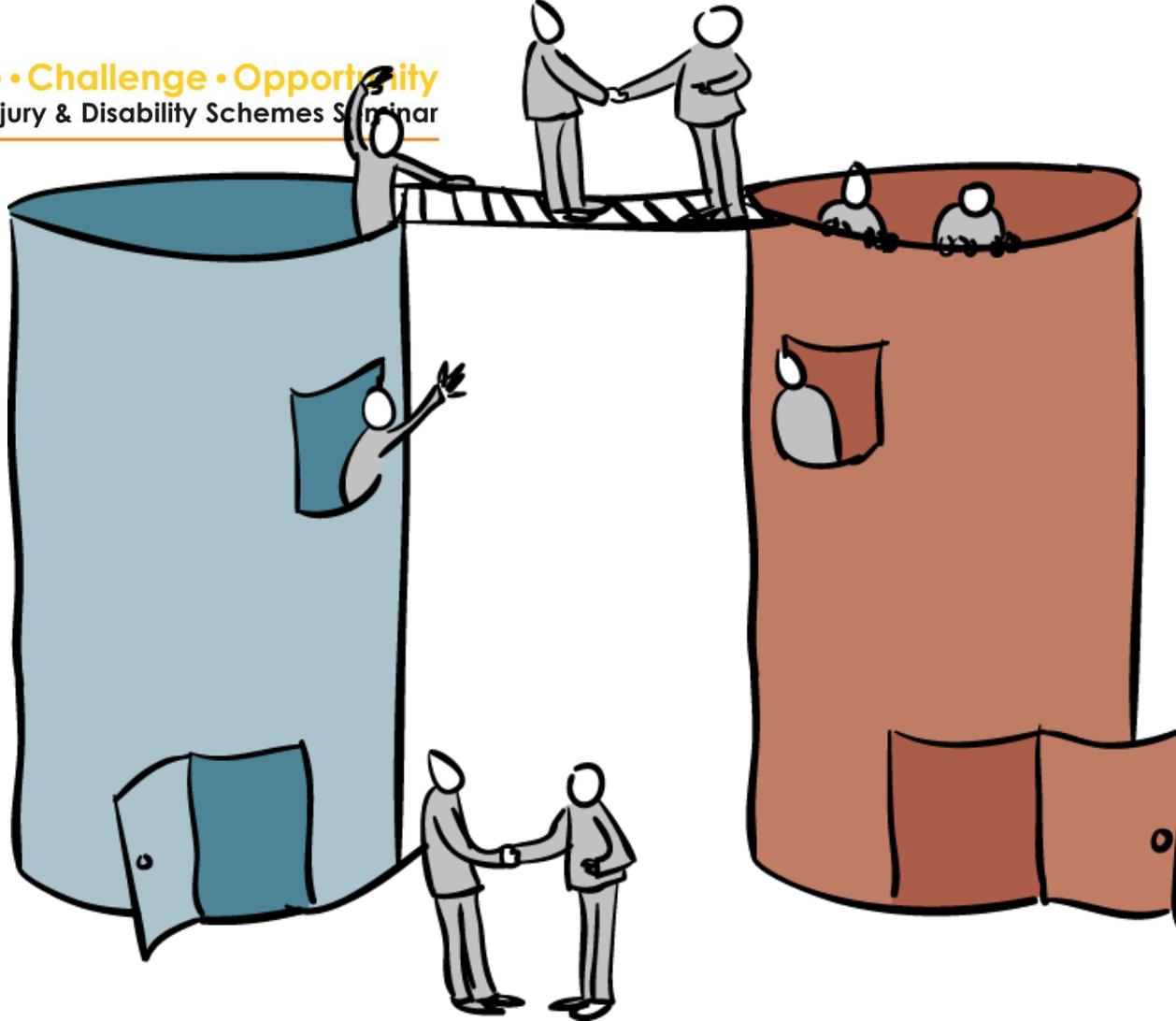
Changing culture and practice





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Future? Exercise and diet therapy as a routine part of treatment





What we know

- Multi-disciplinary
- Integration; clinicians and body systems
- Exercise
- Structure / regularity

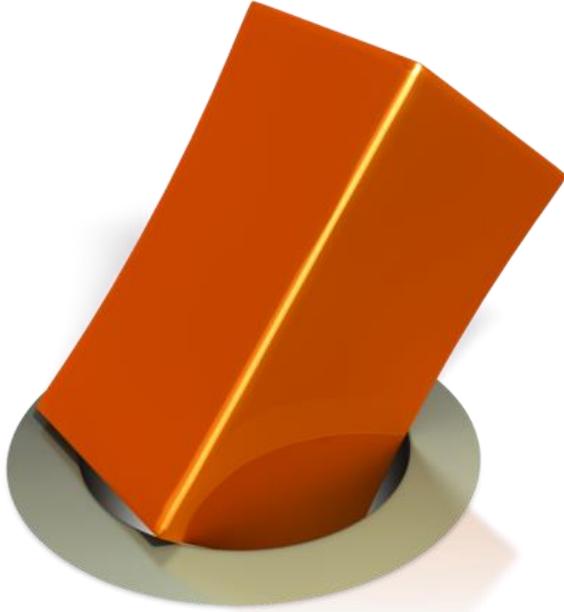


What the market typically provides

- Single discipline
- ‘Silos’
- Passive treatment techniques
- Ad hoc frequency; reactive
- Questionable incentive structure



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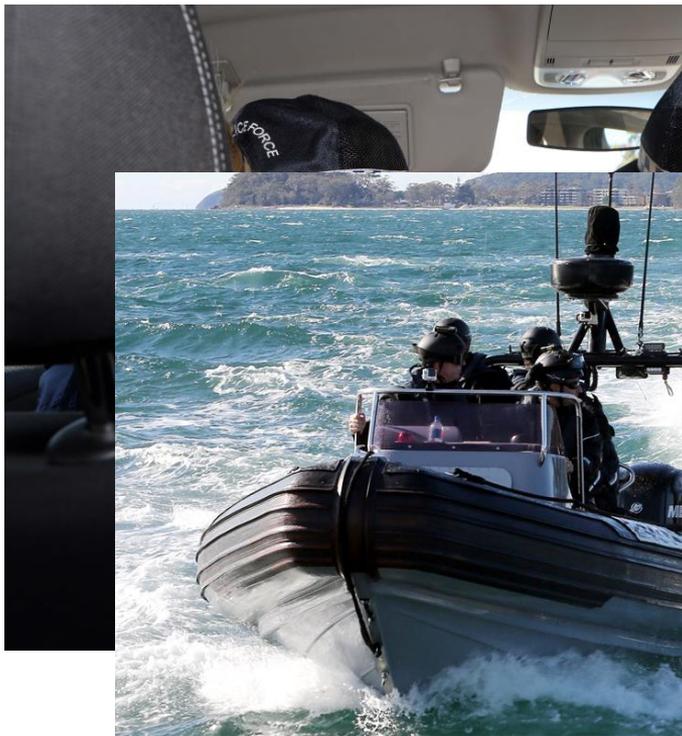


NSW Police Force



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TEAM:

- Psychology
 - Dietetics
- Physiotherapy
 - Strength & Conditioning

What we created...



Planned and
outcome focused

- *Return to play
philosophy*

Integrated clinical
streams

Full time staff,
assimilated to
organisation

Exercise as core
intervention



RE / CONDITIONING

- Rehabilitation
- Hurt on duty / compensable injuries
- Aim; return Officers to pre-injury duties.

RE / START

- Preventative
- Proactive injury reduction and general health program
- Aim; increase operational availability.

RE / CONNECT

- Psychological health
- Built around evidence of structured, goal orientated exercise programs to improve mental health
- Aim; improve habits, psychological symptoms, sleep quality and general health.



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RE / CONNECT

- Recognised mental health illness or not
- Aims to empower Officers with confidence and knowledge of 'exercise as medicine.'
- Scope is not to provide Psychological treatment, but psychological resources.





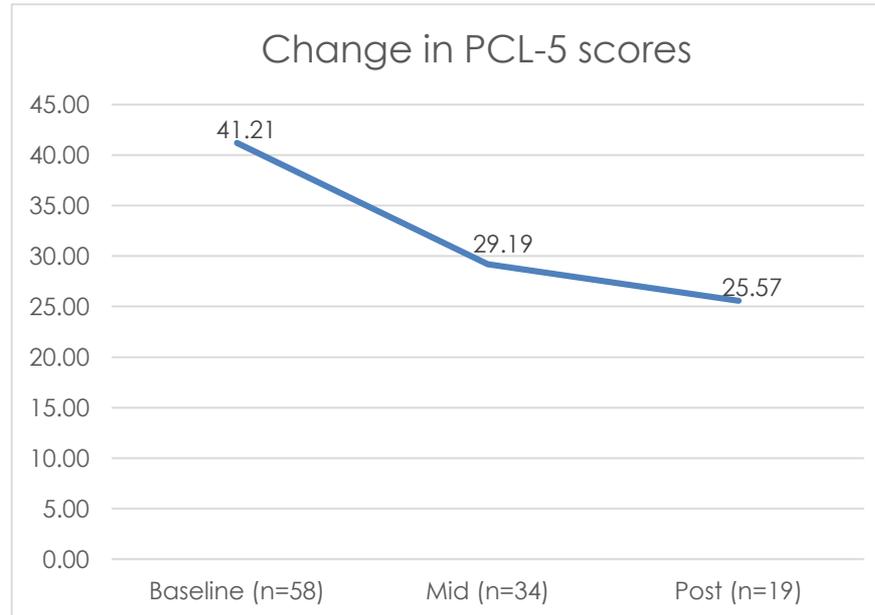
RE / CONNECT



- Physical screening and treatment
- Diet
- Psychological resources
- Communication with team
- Group interactions
- Mentors
- 2 x 1 hour per week for 12 weeks
- Pre, mid and post assessments

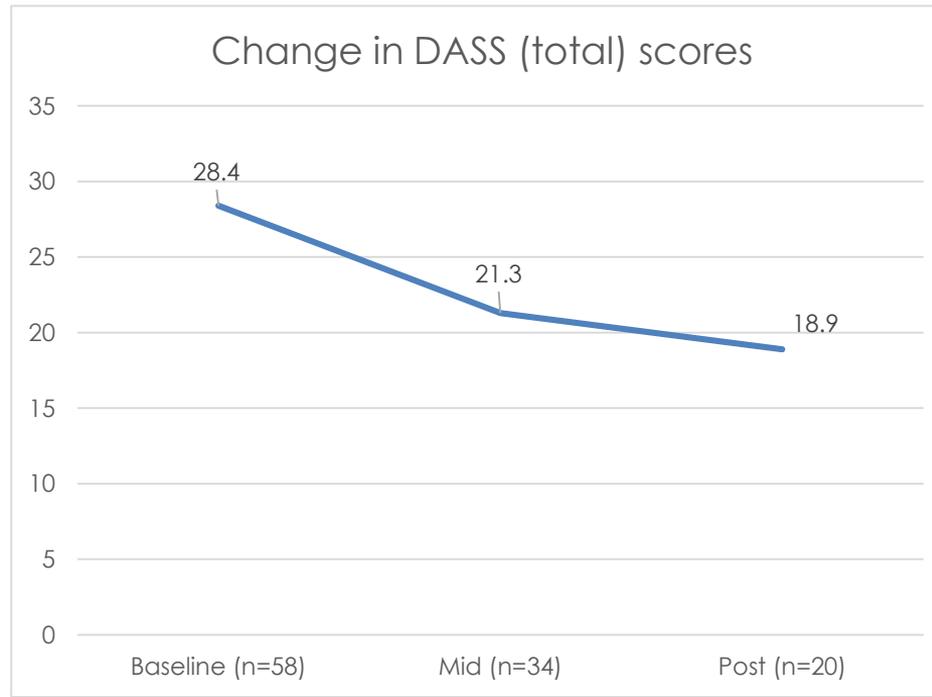
Post-Traumatic Stress

- There was a significant reduction in PTSD symptoms (mean -15.6, $p < 0.001$) as assessed with the PCL from baseline to post-treatment.
- This is a **clinically and statistically** significant change.



Depression, anxiety and stress

- Significant changes were found in the overall DASS score (mean -9.5, $p < 0.01$), as well as across each of the three sub-scales including depression (-3.7, $p < 0.05$), anxiety (-2.5, $p < 0.01$) and stress (-3.5, $p < 0.01$).





How likely are you to recommend Recon (Reconnect participants) to your colleagues? **Av 9.6/10**

“This program is essential for all police. For mental health, injuries and the like, there is somewhere for police to go and **feel like someone does care** about them...”

“A fabulously **professional and empathetic** program efficiently designed to facilitate the return of NSWPF officers to full operational duties in a timely fashion. The **staff are clearly passionate** about their work and portray a **genuine** interest in the overall well being of their clients.”

“**When you are in need**, it is like being thrown a lifejacket when you are sinking.”

“...given me self confidence I need to return to my work place. Attending on a regular basis allowed me to **overcome the fear** of the work place, and colleagues by seeing others in a similar environment. Its **an accepting, endorsed environment** to promote my wellness, without being judged.”