

Les Mills Lab:

The effects of CXWORX group fitness classes and exercise on stress and the quality of life of medical students



Background

The life of a medical student is stressful and as a result, there can be serious consequences on student health such as high burnout, high rates of depression, stress, low quality of life and fatigue. This distress has negative effects on both a personal level – including substance abuse, broken relationships, suicide, attrition from the profession - as well as negative effects on a professional level including cynicism that may subsequently affect student care of patients, relationships with faculty, and the culture of the medical profession.

For this study, researchers from the University of New England College of Osteopathic Medicine hypothesized that:

- participation in regular exercise yields a decrease in perceived stress while increasing physical, mental and emotional quality of life or QOL
- participation in group fitness classes yields greater stress reduction and QOL improvement than exercising on an individual basis

Method

Researchers recruited 69 medical students – a group known for high levels of stress and self-reported low quality of life – and allowed them to self-select into a 12-week exercise program, either within a group setting or as individuals or they could elect to be in the control group and do no exercise for the 12 week period.

Those participating in group exercise spent 30 minutes at least once a week doing CXWORX™, a core strengthening and functional fitness training program.

By comparison, individual fitness participants were allowed to maintain any exercise regime they preferred, which could include activities like running and weightlifting, but they had to work out alone or with no more than two partners.

Every four weeks participants completed surveys to assess exercise, perceived stress (PSS) and mental, physical and emotional QOL.

Results

Participation in regular CXWORX group fitness classes improved the students' quality of life, evident by their mean monthly survey scores. The specific improvements in quality of life measures included: mental 12.6%, physical 24.8% and emotional 26%.

They also reported a 26.2 per cent reduction in perceived stress levels.

On average, the solitary exercisers worked out twice as long, and saw no significant changes in any measure, except in mental state (11% improvement). The non-active control group also saw no significant changes in quality of life or perceived stress levels.

Conclusion

CXWORX participation leads to an improvement in medical student well-being, which may lead to happier, healthier students and physicians. The communal benefits of coming together with friends and colleagues, and doing something difficult, while encouraging one another, pays dividends beyond exercising alone.

If physicians lead by example and live healthier lifestyles, then they uphold the integrity necessary to inspire change in their patients.

A link to the published abstract in the The Journal of the American Osteopathic Association is available [here](#).