

Powerlifting is just as effective as bodyweight exercise for chronic low back pain, new study reveals

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Credit: AI-generated image ([disclaimer](#))

Chronic back problems are common among Australians, affecting 16% of the total population. It's also the most common cause of disability in Australia, affecting 28% of the total population, costing the economy \$4.8 billion every year.

It can affect a person's quality of life and in addition to [pain](#), patients typically suffer from physical and psychological distress. By definition, chronic low back pain is pain that has lasted longer than three months.

Contemporary management of chronic back pain typically involves pain education and combined exercise such as traditional bodyweight and "core" exercises. However, a new study published in *Clinical Rehabilitation* by UNSW Sydney researchers suggests powerlifting style training is a safe, effective alternative to these bodyweight movements.

"The key findings of this paper were that powerlifting is safe and effective for people with chronic low back pain when combined with education around how pain works. This was compared to more traditional bodyweight and 'core' exercises, and we found no difference between groups," explained Dr. Mitchell Gibbs from the School of Health Sciences at UNSW Medicine & Health.

Gaps in current literature

The paper highlighted a gap in the literature in terms of whether any exercise mode was better accompanied with pain education. The purpose of the study was to compare general callisthenic exercise with a powerlifting style program, both paired with consistent pain education, for chronic low back pain.

"Within the context of the body of literature, this study furthers that exercise and pain education can help people with chronic low back pain. The novelty of this study is that it is one of the first to explore different exercise types when paired with the same education. What this tells us is that exercise of all forms can be beneficial, meaning we can prescribe the best program for the person rather than the condition," said Dr. Gibbs.

Dr. Gibbs said the main implication of the finding was that exercise for chronic low back pain did not need to subscribe to traditional systemized approaches and heavy lifting is both safe and just as effective. "This is important as it means we are able to dose exercise appropriately for people with chronic low back pain to achieve positive health-related outcomes, rather than focus our prescription only on the individuals low back pain."

During the study, the powerlifting group performed a one-repetition maximum (1RM) for the squat, bench press, and deadlift, which means they lifted the most amount of weight they could for one-repetition. "This shows us that loading shouldn't be avoided for people with chronic low back pain," explained Dr. Gibbs.

More tools for practitioners to treat back pain

The researchers said they were optimistic about how the findings may be able to assist exercise-based practitioners to treat people with chronic low back pain.

"It has been reported that 50–70% of people with chronic low back pain do not adhere to an exercise program, which may be owing to the rigid and systemized nature of exercise prescribed. This introduces the ability to prescribe meaningful exercise, allowing practitioners to focus on these key elements of exercise, such as enjoyment and adherence by giving the individual agency in the consultation process."

Dr. Gibbs said these findings provide practitioners with more tools in the metaphorical toolbox to be able to reach and help many Australians with chronic low back pain. Further, the ability to appropriately dose exercise for people with chronic [low back pain](#) to achieve health-related outcomes allows practitioners to prioritize and inform individuals of the broader benefits of engaging in physical activity.

The authors of the study acknowledge a key limitation of this study is the advertisement as an exercise-based trial, which was previously suggested as a potential bias to only recruit patients with positive beliefs about physical activity. This recruitment method may explain the low initial clinical and behavioral score as compared to previous literature.

Dr. Gibbs said further research is needed to understand if involving individuals in the prescription process to find the type of [exercise](#) to best benefit the person—regarding overall health and adherence—provides better outcomes for people with [chronic low back pain](#).

More information: Mitchell T Gibbs et al, Does a powerlifting inspired exercise programme better compliment pain education compared to bodyweight exercise for people with chronic low back pain? A multicentre, single-blind, randomised controlled trial, *Clinical Rehabilitation* (2022). [DOI: 10.1177/02692155221095484](https://doi.org/10.1177/02692155221095484)

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