

Background- Why did we do this research?

Chronic pain affects at least 20% of people worldwide. Physical activity is recommended for people to better manage their chronic pain. However, being physically active, especially at the level recommended by global public health organizations, such as Public Health Agency of Canada (150+ minutes per week of moderate to vigorous physical activity), can be very difficult for adults living with chronic pain.

Therefore, the goal of the research was to gain a better understanding of pain-related psychological beliefs that might help people living with chronic pain participate in regular physical activity.

What was measured?

Given that some people with chronic pain avoid physical activity because of their pain, we chose to examine physical activity, pain intensity, and pain-related psychological beliefs.

The pain-related psychological beliefs included:

- (a) **Psychological flexibility** - people's capacity to be present and adapt to their pain in order to pursue a valued goal, like physical activity.
- (b) **Pain anxiety** - the anticipation of pain from activity participation; and
- (c) **Self-efficacy** (confidence) to cope with pain-related barriers, like stiffness, to being active.

Note: We know that we haven't measured everything that might be important for determining whether people engage in physical activity or not. However, examining what we did was an appropriate starting point in this type of research.

How was the research done?

Our research consisted of three online surveys: (1) baseline, (2) two weeks after baseline, and (2) four weeks after baseline. We measured physical activity, pain intensity, and pain-related beliefs. **With your help, we collected data from 316 adults of all different ages who reported having chronic pain. Thank you!**

What did we find?

Overall, people who reported **higher levels of physical activity** also reported:

- **Higher psychological flexibility**
- **Lower pain anxiety**
- **Higher self-efficacy to overcome pain-related barriers.**

What about pain intensity? Wasn't it related to physical activity levels?

Often times, it is assumed that pain is THE main barrier to regular participation in physical activity. **However, in this research, people's pain intensity had NO relationship to their physical activity levels.**

What do these findings mean?

This research showed that pain itself is not a barrier to being physically active. Rather, how people psychologically respond to their pain appears to be very important.

These findings are the first of their kind. If the findings are found to be the same in future research, then programs can be developed to help adults with chronic pain be more active. For example, people would first have to work with their health care providers to get their pain managed as best as possible. Then a program that helps people learn how to become more psychologically flexible, better manage their pain anxiety, and learn strategies to cope with pain and related barriers might be helpful in getting them to start and stick with being active.

We are very excited about the potential of our research. We hope to one day be able to assist people to better manage their chronic pain by finding ways to make physical activity a realistic and possible option for daily life.

Thank you once again for **your involvement in this research.**

Sincerely,



Miranda Cary (PhD Student Researcher)

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