Author's response to reviews

Title: The Effect of Psychological Interventions on the Prevention of Pain in Adults: A Systematic Review Protocol

Authors:

Mélanie Bérubé (melanie.berube2@mail.mcgill.ca)

Céline Gélinas (celine.gelinas@mcgill.ca)

Manon Choinière (manon.choiniere@umontrea.ca)

Nancy Feeley (nancy.feeley@mcgill.ca)

Géraldine Martorella (gmartorella@fsu.edu)

Stefan Parent (stefan.parent@umontreal.ca)

David Streiner (streiner@mcmaster.ca)

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Reviewer comment #1:

Thank you for making these changes - personally I am not convinced by the approach of including a diverse range of interventions that are grouped under a broad umbrella and then exploring by a raft of subgroup analyses. I believe it would be better to think carefully at the outset about what interventions it is reasonable to combine and what it is not reasonable to combine. What will you results/finding mean? If you are new to systematic reviews, it might be helpful to discuss this locally with someone with more experience.

However, if you chose to approach the review in this way can you provide more detail about the subgroup analyses e.g. how will you test for subgroup differences as well as a justification of why you have decided to combine a range of different types of intervention. Incidentally, are some of your categories of intervention overlapping e.g. mindfulness and self-management?

Response:

Thank you to have brought these issues to our attention. We have discussed the problem of combining interventions for the systematic review and then comparing them with subgroup analyses.
Systematic reviews on psychological interventions in the context of chronic pain (Eccleston et al., 2014; 2015; Williams et al., 2012) have included a diverse range of interventions all based on cognitive and behavioral approach, as we plan to do. Psychological interventions based on this approach are named differently in the literature according, for example, to researchers’ professional discipline and time of publication. Therefore, we consider that combining psychological interventions is appropriate.

However, considering that psychological interventions are all based on the same approach, they cannot be compared in subgroup analyses. We removed this subgroup analysis from the protocol.


Reviewer comment #2:

I am not sure whether I expressed my concern about confounding of multiple interventions clearly - If you have say arm A = mindfulness + physiotherapy versus Arm B = leaflet and you show that A is better than B you cannot conclude that mindfulness training improves pain compared to the leaflet as the benefit may derive from either the physio or the mindfulness (or both). Please think carefully about this and make sure that you are sure that the way you are defining eligibility and making comparisons is actually addressing the questions that you want to ask and that this is expressed clearly in the protocol. The small edits that you made don't really help me follow what you are intending.

Response:

Since we want to specifically determine the efficacy of psychological interventions on the prevention of chronic pain, we won’t include studies combining psychological intervention and standardized physiotherapy program in the experimental arm. We have made the corrections in the “Interventions” section in page 8.

Reviewer comment #3:

One page 11 lines 19 and 26 - please explain what is meant by "preselected studies" - identified studies?

Response:

We changed “preselected studies” for identified studied as suggested.
Reviewer comment #4:

On page 13 lines 25/26 - please explain what is meant by "We will assess heterogeneity with a random-effect regression model for all outcome variables.

Response:

The random-effect regression model will allow to identify causes of heterogeneity. We provided this explanation and specified it in the text how we will assess for heterogeneity by using I-squared statistics.

Reviewer comment # 5:

On page 13 - what sub groups by population are you planning "We will conduct subgroup analyses according to population" (and depending on what these are consider whether you are likely to be able to obtain the granularity of published results needed to perform them).

Response:

We have identified 3 populations in which chronic pain preventive psychological interventions have been tested from our preliminary data search: patients with back pain, whiplash injury and extremity trauma. We added these types of injuries to describe population in the Heterogeneity assessment and Subgroup analyses sections.

We are conscious of the limited amount of published results on preventive interventions. We specified that subgroup analyses will be conducted only if sufficient data are available.