PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	It's ok to move! A protocol for a randomised controlled trial
	investigating the effect of a video designed to increase people's
	confidence becoming more active despite back pain.
AUTHORS	O'Hagan, Edel; Traeger, Adrian; Schabrun, Siobhan; O'Neill, Sean;
	Wand, Benedict; Cashin, Aidan; Williams, Christopher; Harris, Ian A;
	McAuley, James

VERSION 1 – REVIEW

REVIEWER	Thompson, Bronwyn
	University of Otago, Orthopaedic Surgery & Musculoskeletal
	Medicine
REVIEW RETURNED	12-Apr-2022

GENERAL COMMENTS	Thank you for the opportunity to review this intriguing protocol for an RCT investigating the impact of a video on self-efficacy for moving despite back pain. It is good to see an extension of the original Buchbinder study. The research question is clear, and the method used to pilot two options plus a control is appropriate. I was a little uncertain as to why self efficacy for movement despite back pain was chosen as the dependent variable, and wondered if the authors had considered intention to take action as an alternative given previous work examining this construct (or perhaps employing both questions as an outcome measure). I was also uncertain why the authors chose researchers to be the influencers in the video scenarios given some loss of confidence in research and science over Covid-19, and in contrast with the broad acknowledgement of clinicians as the key informants for low back pain beliefs. Some justification for both of these aspects would be helpful. Given the authors are located in Australia, and the organisation funding the study is also in Australia, I wondered how 'transferable' the results from a study carried out with participants from around the world would be for Australians, and especially reflecting the cultural perspectives of indigenous Australians, and especially reflecting the cultural perspectives of indigenous Australians, and especially reflecting the cultural perspectives of indigenous Australians hold similar concerns about trusting scientists and healthcare as Māori and given the adverse health statistics about pain, quality of life, and healthcare seeking for this population, wonder what steps had been taken to reflect the preferences and needs in the video messaging. This could be expanded on in more detail, as it may be incorporated in the consumer analysis of the qualitative/open-ended questions could be quite onerous given the numbers of participants, had the authors considered ways to manage the volume of data? Or to automate some of the analysis?

REVIEWER	Ben-Ami, Noa
	Ariel University, Faculty of Health Sciences
REVIEW RETURNED	24-May-2022

GENERAL COMMENTS	I would like to congratulate the authors on this great work! The research idea is very innovative. The thought of using an advertising agency to produce a video that will convince the public that physical activity is good for the back - It's a great idea. And also, online randomization is different and special. The manuscript is well written and can help improve LBP patients. Minor comments
	1. The primary outcome is item 10 of the Pain Self-Efficacy Questionnaire (PSEQ). Is it valid? Just one question?
	2. I was hoping to see the videos

VERSION 1 – AUTHOR RESPONSE

Reviewer: 1. Dr. Bronwyn Thompson, University of Otago Comments to the Author: Thank you for the opportunity to review this intriguing protocol for an RCT investigating the impact of a video on self-efficacy for moving despite back pain. It is good to see an extension of the original Buchbinder study.

The research question is clear, and the method used to pilot two options plus a control is appropriate. I was a little uncertain as to why self efficacy for movement despite back pain was chosen as the dependent variable, and wondered if the authors had considered intention to take action as an alternative given previous work examining this construct (or perhaps employing both questions as an outcome measure). I was also uncertain why the authors chose researchers to be the influencers in the video scenarios given some loss of confidence in research and science over Covid-19, and in contrast with the broad acknowledgement of clinicians as the key informants for low back pain beliefs. Some justification for both of these aspects would be helpful.

Thank you for your comment. We included self-efficacy as an outcome measure as recent evidence suggests that changes in pain self-efficacy in people with low back pain, measured using the PSEQ, may lead to clinically meaningful improvements in disability. Improving self-efficacy may facilitate symptom management, a proximal component of the broader, distal target of self-management.

The interventions for this study were planned in 2018, prior to the COVID-19 pandemic. Our literature review suggested that a characteristic of a successful campaign (original Buchbinder study) was reach. We did not foresee the loss of confidence in research and science over Covid-19 and thought that by including scientists we could provide validation and would nurture credibility.

Page 6, Line 139; Improving self-efficacy may facilitate symptom management, a proximal component of the broader, distal target of self-management. [33]

Page 5, Line 101; The video interventions are between 2 and 3 minutes long. Both follow the same narrative that scientists would like to reassure the public that low back pain is common, and that evidence suggests it is safe to move despite back pain. In addition our previous evidence suggested the value of providing validation to people experiencing low back pain. [33] The earlier results showed that people seek validation on social media, one interpretation is due to feeling dismissed or invalidated by clinicians. We aimed to increase the credibility of the information and provide validation

by using scientists and clinicians to narrate the video.

Given the authors are located in Australia, and the organisation funding the study is also in Australia, I wondered how 'transferable' the results from a study carried out with participants from around the world would be for Australians, and especially reflecting the cultural perspectives of indigenous Australians? My understanding is that indigenous Australians hold similar concerns about trusting scientists and healthcare as Māori and given the adverse health statistics about pain, quality of life, and healthcare seeking for this population, wonder what steps had been taken to reflect the preferences and needs in the video messaging. This could be expanded on in more detail, as it may be incorporated in the consumer analysis by Maridulu Budyari Gumal (SPHERE).

Thank you for your comment. We plan to continue to consult with the consumer group throughout the project and in particular include the needs of people from different communities in future versions.

Page 10, Line 233; We acknowledge that the impact of research can vary depending on where the research is conducted, [39] and there is a risk that the results have less impact with international audiences or minority groups. If successful we will seek guidance from international consumer and minority groups to understand how to reflect the preferences and needs of people from different communities in future iterations of this video.

Thematic analysis of the qualitative/open-ended questions could be quite onerous given the numbers of participants, had the authors considered ways to manage the volume of data? Or to automate some of the analysis?

Overall the intervention is designed to be brief. The participants are advised that the survey should take approximately 10 minutes only, and each question invited only a short reply. Therefore the analysis will be possible. We have included these measures as secondary outcomes.

Page 9, Line 202; We expect brief one line responses from these questions, that would facilitate a qualitative analysis that is useful but not onerous.

Reviewer: 2 Dr. Noa Ben-Ami, Ariel University

Comments to the Author:

I would like to congratulate the authors on this great work! The research idea is very innovative. The thought of using an advertising agency to produce a video that will convince the public that physical activity is good for the back - It's a great idea. And also, online randomization is different and special. The manuscript is well written and can help improve LBP patients.

Minor comments

The primary outcome is item 10 of the Pain Self-Efficacy Questionnaire (PSEQ). Is it valid? Just one question?

Thanks for your comment. A Rasch analysis identified item-10 of the PSEQ as the question most relevant to people completely the questionnaire. Therefore we included only item-10

Page 6, Line 133; A Rasch analysis of the PSEQ investigated each question to identify the extent to which a positive answer to that question reflected the attribute (self-efficacy).[35] The authors determined that item 10, 'increasing confidence becoming more active', was easiest for participants to endorse,[35] meaning, an optimal "self-efficacy" intervention should target that item. I was hoping to see the videos

Thank you for your comment. We did not provide the videos as we do not want to contaminate the results.

Page 5, Line 116: The video interventions will be uploaded to the study page on the Open Science Framework website (https://osf.io/c7j8t/). They will be embargoed until after the trial is completed.

VERSION 2 - REVIEW

REVIEWER	Thompson, Bronwyn University of Otago, Orthopaedic Surgery & Musculoskeletal Medicine
REVIEW RETURNED	20-Jun-2022
GENERAL COMMENTS	The authors are to be commended for this exciting approach to spreading accurate and positive information about the value of moving despite experiencing low back pain. I look forward to seeing this online. Thank you for addressing the few concerns I had, these are nicely addressed.