

## PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form ([see an example](#)) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below. Some articles will have been accepted based in part or entirely on reviews undertaken for other BMJ Group journals. These will be reproduced where possible.

### ARTICLE DETAILS

<b>TITLE (PROVISIONAL)</b>	Resilience does matter: evidence from a ten-year cohort record linkage study
<b>AUTHORS</b>	Elliott, Alison; Burton, Christopher; Hannaford, Phil

### VERSION 1 - REVIEW

<b>REVIEWER</b>	West, Caryn James Cook University
<b>REVIEW RETURNED</b>	31-Oct-2013

<b>GENERAL COMMENTS</b>	<p>I think it is clear and concise, easy to read and covers all elements required of such a manuscript. My advice would be to clarify the labeling in Figure 1 - apply the terms used on page 9 rather than a descriptor and term IE: Non resilient, resilient, vulnerable and non-vulnerable.</p> <p>You quite importantly point out that further studies need to be performed regarding how and why some individuals become resilient and what factors influence resilience. There is already some information available regarding the particular traits, practices and activities that influence resilience - looking at Walsh, McCubbin &amp; McCubbin and Rutter might be beneficial.</p> <p>In your study I would have liked to read clearer definitions of resilience and had it been possible, even retrospectively, to have seen a resilience scale used, I think it would have added weight to your study. Resilience is an interesting phenomenon in that it is rarely static, but rather a fluid state that is influenced by many number of things (family, mood, finances, life events etc) - much like chronic pain. Further as our individual resilience levels fluctuate the concept that the family or community is greater than the sum of the individuals may bolster and individuals resilience so a period of time.</p> <p>I think exploring resilience further in application to your study and manuscript would have supported your your overall claim that resilience does matter.</p>
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<b>REVIEWER</b>	Nicholas, Michael University of Sydney at Royal North Shore Hospital, Pain Management Research Institute
<b>REVIEW RETURNED</b>	18-Nov-2013

<b>GENERAL COMMENTS</b>	This is a very interesting study and these well-established researchers have used a number of existing databases in very creative ways to shed some light on what happens to people in the
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	<p>community who live with chronic pain over a 10 year period. They make use of the concepts of resilience and vulnerability. Certainly, in the pain literature, the idea of resilience is increasingly applied to understanding how people manage chronic pain conditions. In other fields, both resilience and vulnerability have been employed in relation to how people manage a range of chronic conditions. Their definition of both resilience and vulnerability in this study was novel, and did not rely upon specific measures (which were not available during the recruitment phase anyway), but they could be thought of as 'operational' in nature. By this I mean they defined those high or low on resilience and vulnerability in terms of their pattern of responses to the Chronic Pain Grade scale. This use of the scale is novel and has the virtues of simplicity and replicability, but some may criticize it for being more of an outcome measure than a trait measure. Still, in the current context it is defensible as it appears to reflect what people with high vs low resilience/vulnerability might be expected to report. But it remains a weakness and the researchers seem to acknowledge that, but it might have helped if they had provided a brief reference to research findings with measures of resilience and chronic pain (e.g. by some of the Dutch researchers, such as Peters). Also, they acknowledged the possible limitations of their original definition resilience only and not vulnerability, so they should add mention of their definition of vulnerability as a limitation as well.</p> <p>I also recommend the researchers should make it clearer in the Methods section exactly when the CPG questionnaire was completed. It seems to be inferred and is not stated explicitly. This should be possible.</p>
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### VERSION 1 – AUTHOR RESPONSE

Reviewer: Caryn West

1) My advice would be to clarify the labeling in Figure 1 - apply the terms used on page 9 rather than a descriptor and term IE: Non-resilient, resilient, vulnerable and non-vulnerable.

We have amended the figure accordingly.

2) You quite importantly point out that further studies need to be performed regarding how and why some individuals become resilient and what factors influence resilience. There is already some information available regarding the particular traits, practices and activities that influence resilience - looking at Walsh, McCubbin & McCubbin and Rutter might be beneficial.

Much of the work by Walsh, McCubbin and Rutter is about building family resilience specifically and isn't directly relevant to the current manuscript. We have, however, added text to the discussion to acknowledge existing information regarding traits and activities that influence resilience and referenced some of McCubbin and Rutter's work as requested.

3) In your study I would have liked to read clearer definitions of resilience and had it been possible, even retrospectively, to have seen a resilience scale used, I think it would have added weight to your study.

We accept that use of a formal resilience scale in this study would have provided useful information and would have added weight to the study. Unfortunately it wasn't possible to apply a resilience scale, even retrospectively, in this cohort. We have endeavoured to make our definitions of resilience and

vulnerability as clear as possible, using measures that were available in the cohort to categorise people in a meaningful way. We have amended the text in the Discussion to further acknowledge the limitations of not using a resilience scale in this work.

Reviewer: Michael Nicholas

1) This use of the scale is novel and has the virtues of simplicity and replicability, but some may criticize it for being more of an outcome measure than a trait measure. Still, in the current context it is defensible as it appears to reflect what people with high vs low resilience/vulnerability might be expected to report. But it remains a weakness and the researchers seem to acknowledge that, but it might have helped if they had provided a brief reference to research findings with measures of resilience and chronic pain (e.g. by some of the Dutch researchers, such as Peters).

We have added text to the Discussion to acknowledge the use of resilience scales in previous chronic pain work including Peters and referenced this work as suggested.

2) They acknowledged the possible limitations of their original definition of resilience only and not vulnerability, so they should add mention of their definition of vulnerability as a limitation as well.

We have amended the text in the Discussion to acknowledge that the lack of standardised definitions of vulnerability and resilience and the lack of a formal resilience scale are limitations of our study.

3) I also recommend the researchers should make it clearer in the Methods section exactly when the CPG questionnaire was completed. It seems to be inferred and is not stated explicitly.

We have amended the Methods section to clearly state that the baseline postal questionnaire was undertaken in 1996.

We hope this response addresses each of the reviewer's points and clarifies our work.