PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form (**http://bmjopen.bmj.com/site/about/resources/checklist.pdf**) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Determinants of Seatbelt Use Behavior: A Protocol for a Systematic Review
AUTHORS	Ghaffari, Mohtasham; Armoon, Bahram; rakhshanderou, Sakineh; mehrabi, Yadollah; Soori, Hamid; simsekoghlu, ozelem; harooni, javad

VERSION 1 – REVIEW

REVIEWER	Alison Teyhan University of Bristol, UK
REVIEW RETURNED	20-Nov-2017

GENERAL COMMENTS	This paper is a protocol for a systematic review to identify determinants of seat belt use. The protocol is generally clear, and the authors have obviously thought through their methods in detail. I have some comments/suggestions that I hope will be helpful: 1. Avoid use of the term 'accident' where possible. Accident suggests something that is unpredictable and occurs by chance, whereas many road traffic accidents are both predictable and preventable. The BMJ no longer allows use of the term accident for this reason: http://www.bmj.com/content/322/7298/1320. Collision would be a better choice of word. 2. The authors plan to search 5 databases but no information is given on why they chose these ones, or why they excluded others. 3. The study inclusion period (2000-2017) is relatively short. I think this needs to be justified. 4. The authors state that they will contact the corresponding author of each selected paper for data and if they do not receive a reply after three attempts they will exclude the research (page 8). This does not make sense to me. Do the authors not expect that they will be able to extract data direct from the paper for most studies? This contacting author stage is not represented in Figure 1. 5. I am not familiar with the NNR Index (page 8, line 22) and think it would be helpful for readers if this was referenced. 6. With regards the search terms, given that all studies have a factor or determinant or predictor etc., I am unsure whether these terms will add anything to the search over and above just using the seat belt related terms. Did the authors consider searching for more general terms such as 'road safety', as papers on this topic may include items on seat belt use.

	7. There are some grammatical errors and in places the English is quite clunky, meaning that sometimes the point being made doesn't come across as clearly as it should. For example, I feel in the Introduction that the main rationale for this review is lost because the authors list factors that affect seat-belt use but then go on to say that they need a review to identify determinants of seat belt use. The authors need to clearly state what their review will add to the current knowledge-base. If the purpose of the review is ultimately to identify factors amendable to interventions in order to increase seat-belt use, this point should be made clearly.

REVIEWER	Yoonjin Yoon KAIST, South Korea
REVIEW RETURNED	06-Dec-2017

GENERAL COMMENTS	The objective and contribution of the systematic review are highly valuable. Protocols are well defined.

REVIEWER	Dr. Chad Cotti University of Wisconsin - Oshkosh, USA
REVIEW RETURNED	09-Dec-2017

GENERAL COMMENTS	This paper is a protocol type of article. This is not a common in my discipline of economics. What is most common in our literature is that the research protocol utilized is described as part of the completed research project. As such, a typical referee report would evaluate the motivation of the question at hand (including relevance), the protocol and empirical methods used (including whether the specific identification method used is effective), the appropriateness of the data, and the results/conclusion. In this case, only the motivation and protocol are available for evaluation. The empirical methods that would be utilized are not described with enough detail for me to be able to judge the quality of the empirical specification(s) with any confidence. That being said, this is a very policy relevant topic, and the protocol outlined seems sound and well thought out. It seems like a comprehensive and appropriate method for collecting and reviewing the literature on this topic.

VERSION 1 – AUTHOR RESPONSE

Editorial Requirements:

Comment 1:

Please work to throughout the manuscript, either with the help of a native speaking colleague or with the assistance of a professional copyediting agency

Response:

We improve the quality of English with American journal experts (Certificate Verification Key: 6376-B971-3BB2-09CB-34C5). You can check this certificate at https://secure.aje.com/certificate/verify. Also, we re-edited the article again. Certificate is attached

Comment 2

Please ensure the PROSPERO registration number provided is correct.

Response

PROSPERO registration number amended. The correct is CRD42017067511

Comment 3

Please revise the Strengths and Limitations section (after the abstract) to focus on the methodological strengths and limitations of your study rather than summarizing the results

Response

Thank you very much for this comment. Most of the Strengths and Limitations are metodological. Also we add another Strength:

We will use the NNR (number needed to read) index for assessing the sufficiency of the number of articles

Reviever 1: Alison Teyhan

Thank you very much for your comments and suggestions

Comment 1:

Avoid use of the term 'accident' where possible. Accident suggests something that is unpredictable and occurs by chance, whereas many road traffic accidents are both predictable and preventable.

Response

The term "Collision "replaced the "accident".

Comment

The authors plan to search 5 databases but no information is given on why they chose these ones, or why they excluded others.

Response

In the last critical appraisal tool for systematic
Reviews (AMSTAR 2) that published in BMJ, in question 4 of this tool, the minimum number of required databases is only two databases. However, we considered five databases for comprehensive literature search. [1].

Comment

The study inclusion period (2000-2017) is relatively short. I think this needs to be justified.

Response

The priod changed to (1990 -2017).

Comment

The authors state that they will contact the corresponding author of each selected paper for data and if they do not receive a reply after three attempts they will exclude the research (page 8). This does not make sense to me. Do the authors not expect that they will be able to extract data direct from the paper for most studies? This contacting author stage is not represented in Figure 1.

Response

Actually, we will not use this process for each selected paper and only use for studies that seems to match our objectives, and we will contact the corresponding author(s) for more information to decide about article.
This process is considered as a part of eligbility step (Full text article assessment) in figure1.

Comment

I am not familiar with the NNR Index (page 8, line 22) and think it would be helpful for readers if this was referenced.

Response

The reference of NNR index added to the paper.

Comment
With regards the search terms, given that all studies have a factor or determinant or predictor etc., I am unsure whether these terms will add anything to the search over and above just using the seat belt related terms. Did the authors consider searching for more general terms such as 'road safety', as papers on this topic may include items on seat belt use?

Response
The "Road Safety" Phrase added to search strategy.

Comment
There are some grammatical errors and in places the English is quite clunky, meaning that sometimes the point being made doesn't come across as clearly as it should. For example, I feel in the Introduction that the main rationale for this review is lost because the authors list factors that affect seat-belt use but then go on to say that they need a review to identify determinants of seat belt use. The authors need to clearly state what their review will add to the current knowledge-base. If the purpose of the review is ultimately to identify factors amendable to interventions in order to increase seat-belt use, this point should be made clearly.

Response
We improve the quality of English with American journal experts (Certificate Verification Key: 6376-B971-3BB2-09CB-34C5). You can check this certificate at https://secure.aje.com/certificate/verify. Actualy, although determinants of seat belts behavior have been identified in some studies, since no previous systematic review has identified the determinants of seat belt behavior comprehensively. As mentioned in the article, one of our goals in systematic review is helping to design effective interventions. In the discussion section, we have also explained this.

Reviewer2: Yoonjin Yoon
Comment
The objective and contribution of the systematic review are highly valuable. Protocols are well defined.

Response
Thank you.

Reviewer3: Dr. Chad Cotti
Comment
This paper is a protocol type of article. This is not a common in my discipline of economics. What is most common in our literature is that the research protocol utilized is described as part of the completed research project. As such, a typical referee report would evaluate the motivation of the question at hand (including relevance), the protocol and empirical methods used (including whether the specific identification method used is effective), the appropriateness of the data, and the results/conclusion. In this case, only the motivation and protocol are available for evaluation. The empirical methods that would be utilized are not described with enough detail for me to be able to judge the quality of the empirical specification(s) with any confidence. That being said, this is a very policy relevant topic, and the protocol outlined seems sound and well thought out. It seems like a comprehensive and appropriate method for collecting and reviewing the literature on this topic.

Response
Thank you.

Reference:
1. Shea BJ, Reeves BC, Wells G, Thuku M, Hamel C, Moran J, et al. AMSTAR 2: a critical appraisal tool for systematic reviews that include randomised or non-randomised studies of healthcare interventions, or both. Bmj. 2017;358:j4008.

VERSION 2 – REVIEW

REVIEWER	Alison Teyhan University of Bristol, UK
REVIEW RETURNED	11-Jan-2018

GENERAL COMMENTS	Thank you for the opportunity to review this revised manuscript. The authors have addressed several of the points raised in the first review, and their changes have improved the manuscript (notably the review process has been clarified, the NNR index is now referenced, and the term collision is now used rather than accident). In addition, the authors have increased the time-period they will search by ten years, and have added an additional search term. These changes should increase the likelihood of identifying all relevant literature. However, there a couple of issues which I do not feel have been adequately addressed yet. Firstly, in their response to comments the authors have stated why they chose to include 5 databases. But my comment wasn't really directed at the number of databases (I agree 5 should be adequate), but rather why they chose the ones they did i.e. the authors should give reasoning as to why these five were chosen and others excluded. I presume the authors believe these are the ones most likely to include studies on determinants of seat-belt use, but what about databases such as PsychINFO, which focuses on psychological and behavioural studies? Could this be a useful one to search? (I don't know the answer to this for this subject area, but feel the choice of databases is something the authors should demonstrate they have considered). Secondly, while the article is understandable, the standard of English is not what I would expect from a scientific journal article.The major implication of this for me is that the rationale of the study is still not clear in the Introduction (as per my previous review). Although the authors have added a paragraph stating that there has been no previous systematic review in this area, they have not revised the previous paragraphs which still read as though the determinants of seat-belt use are well-established. These paragraphs need revised so that the point of doing the systematic review is clear (I believe this is mainly an English language issue rather than a scientific one).

VERSION 2 – AUTHOR RESPONSE

Responses to the editor and reviewer
18 Feb, 2018
Reviewing Committee,
Many thanks for your consideration of this manuscript for revision and providing this opportunity for us to submit the revised version . The reviewers' suggestions are very helpful and the authors appreciate

gratefully their guidance. All your concerns have been modified in the revised version of the manuscript. The authors also presented the responses to the comments point by point at the following and the applied alterations and performed revisions have been highlighted in the revised and resubmitted manuscript. The authors hope the applied alterations and revisions will be viewed favorably and the resubmitted manuscript gets reviewed for publication in the current journal.

Sincerely,

The corresponding author

Manuscript ID: bmjopen-2017-020348 R2

Editorial Requirements:

Comment 1:

Please improve the quality of English throughout the manuscript further, either with the help of a native speaking colleague or with the assistance of a professional copyediting agency

Response:

The authors have rewritten whole the manuscript and improved and modified the language of the current manuscript with American journal experts (Certificate Verification Key: 8DFC-F867-D6EC-8F29-741D). It has been tried to clarify more the content of the manuscript. All of the grammatical issues have been omitted and improved and non-understandable sentences have been rewritten.

Reviewer 1: Alison Teyhan

Thank you very much for your highly valuable comments and suggestions on this manuscript.

Comment 1:

However, there a couple of issues which I do not feel have been adequately addressed yet. Firstly, in their response to comments the authors have stated why they chose to include 5 databases. But my comment wasn't really directed at the number of databases (I agree 5 should be adequate), but rather why they chose the ones they did i.e. the authors should give reasoning as to why these five were chosen and others excluded. I presume the authors believe these are the ones most likely to include studies on determinants of seat-belt use, but what about databases such as PsychINFO, which focuses on psychological and behavioural studies? Could this be a useful one to search? (I don't know the answer to this for this subject area, but feel the choice of databases is something the authors should demonstrate they have considered).

Response:

-Unfortunately, we miss the PsycoINFO database. In the resubmitted version of the manuscript the authors added it to the database list and highlighted.

- The criteria for the selection of the studied databases by the research team of the current study were firstly based on the accessibility of database in Iran territory , then based on preliminary search and use of the keywords among the selected database and finally studies on the applied database with similar researches performed previously

-The authors believe that the application of other sources such as gray litrature , reports, and theses etc. along with the applied sources in the current study, will be comprehensive and a complete research work.

Comment 1:

Secondly, while the article is understandable, the standard of English is not what I would expect from a scientific journal article.The major implication of this for me is that the rationale of the study is still not clear in the Introduction (as per my previous review). Although the authors have added a paragraph stating that there has been no previous systematic review in this area, they have not revised the previous paragraphs which still read as though the determinants of seat-belt use are well-established. These paragraphs need revised so that the point of doing the systematic review is clear (I believe this is mainly an English language issue rather than a scientific one).

Response:

The current paragraph has been rewritten and improved. It may be due to some grammatical issues making that to be hard for understanding of the intention of the paragraph.