

## PEER REVIEW HISTORY

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### ARTICLE DETAILS

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| <b>TITLE (PROVISIONAL)</b> | Modifiable facilitators and barriers to exercise adherence in older adults with MCI/dementia using the Theoretical Domains Framework: a systematic review protocol |
| <b>AUTHORS</b>             | Zhen, xueting; Lina, Wang; Yan, Hang; Tao, Hong; Cai, Yaxiu; Wang, Jie; Chen, Haiqin; Ge, Chenxi   |

### VERSION 1 – REVIEW

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| <b>REVIEWER</b>        | Kenneth Miller<br>Oklahoma State University CHS<br>USA |
| <b>REVIEW RETURNED</b> | 27-Nov-2019  |

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| <b>GENERAL COMMENTS</b> | <p>bmjopen-2019-034500 - Modifiable enablers and barriers of exercise adherence in older adults with MCI/dementia using the Theoretical Domains Framework: a systematic review protocol<br/>Xueting Zhen, Lina Wang, Hang Yan, Yaxiu Cai, Haiqin Chen, Jie Wang, Chenxi Ge</p> <p>Review: This is an intriguing protocol and the results of the study should be applicable to enhancing exercise adherence in older adults with MCI/dementia. The use of the Theoretical Domains Framework is a strength of the protocol. For the most part, the protocol is well written and organized. The Methods/Design section is clear.</p> <p>The following are places of concern:<br/>In "(4) The absence of research on discussing adherence from different people's insights", the authors do not describe the "insights of patients" and describe instead the insights of 'carers' and professionals. This needs to be corrected.<br/>'Carers' is a term used in many places of the world. An alternative term used in North America is 'caregiver'. I would suggest including this term in the manuscript.<br/>It is unclear how "statistical software package NVivo" will be used. Please clarify this section.</p> <p>Editing:<br/>There are a number of sentences throughout the manuscript that should be split into two sentences. I have identified them by the interior numbering in the manuscript.<br/>#64-68; #118-122; #126-130; #145-149; #169-173; #176-183; #236-240<br/>Other grammatical issues should be corrected.<br/>Do not start a sentence with 'And'.<br/>#130; #155; #280; #394<br/>Please make sure that verb tense is correct and sentences are complete.<br/>#97; #99; #118; #121; #125; #164-166; #170; #207; #210; #229; #234; #358-360; #364; #368; #378; #395-396</p> |
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| <b>REVIEWER</b>        | Jacob Crawshaw<br>Ottawa Hospital Research Institute, Ottawa, Ontario, Canada |
| <b>REVIEW RETURNED</b> | 28-Nov-2019   |

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| <b>GENERAL COMMENTS</b> | <p>This manuscript details the protocol for a systematic review investigating predictors of exercise adherence in older adults with mild cognitive impairment (MRI)/dementia. Synthesizing the evidence-base to better understand the challenges of exercise adherence is an important area of research. The methodology of the review is generally sound; however, the manuscript contains many punctuation and grammatical errors and some section are lacking important detail.</p> <p>Comments</p> <p>Abstract</p> <ul style="list-style-type: none"> <li>- The abstract feel bloated, especially the introduction section. This should be cut down to be more concise.</li> <li>- Define upon first use of the MCI acronym.</li> <li>- P2, L64 – reword Aims sentence, too long and confusing.</li> <li>- Add in additional detail in the Ethics and Dissemination paper – add here what this study will add.</li> </ul> <p>Strength and limitations</p> <ul style="list-style-type: none"> <li>- Not conducting a meta-analysis only mentioned here. Also provide justification in the main body of the manuscript.</li> </ul> <p>Introduction</p> <ul style="list-style-type: none"> <li>- The introduction feels too long. Additional evidence should be presented around the evidence-base for exercise treatment.</li> <li>- P6, L156 – reword this sentence.</li> <li>- Define RCT acronym on first use – be consistent.</li> <li>- L6, L163 – ‘fifty-eight percent’ <math>\diamond</math> 58%.</li> <li>- P6, L169 – formatting error – Lowery D.</li> <li>- P6, L183 – define PA if first time using.</li> <li>- P7, L192 – reword this sentence.</li> <li>- P7, L209 – ‘the cognitive impairment disease’ – rephrase?</li> <li>- Feel the justification for exploring perspectives of different stakeholders is quite weak (this is a really interesting aspect of the study). I feel this argument should also be introduced earlier.</li> <li>- P8, L228 – ‘living environment factors’ – rephrase?</li> <li>- P8, L239 – ‘good for generate’ – rephrase.</li> <li>- P8, L241 – ‘all those discussed above – rephrase.</li> <li>- Perhaps think about defining what you mean by ‘adherence’.</li> </ul> <p>Methods</p> <ul style="list-style-type: none"> <li>- The authors need to be clearer on how they will synthesis the different data types (cohort studies, RCTs, qualitative etc.) and perspectives (patient, HCP, family etc.) they are hoping to capture. Most SRevs do not capture both quant and qual data, please include information about how this will be synthesized (e.g. <a href="https://www.ncbi.nlm.nih.gov/pubmed/27146132">https://www.ncbi.nlm.nih.gov/pubmed/27146132</a>). Is the expected heterogeneity of the data a contributing reason for not undertaking meta-analysis? If so, state this in the manuscript.</li> <li>- P10, L305 – ‘Studies will be no language restrictions’ – rephrase.</li> <li>- P12, L325 – PRISMA-P? – be consistent.</li> </ul> <p>Discussion</p> <ul style="list-style-type: none"> <li>- P14, L378 – reword this sentence.</li> <li>- P14, L386 – Reword this sentence. Also, be careful when referring to the TDF as a theory when it is not. It is a framework synthesized from existing behaviour change theories. Try to be explicit.</li> </ul> <p>Punctuation and grammar (all these points should be consistent throughout the manuscript)</p> <ul style="list-style-type: none"> <li>- P3, L66 – should be the Theoretical Domains Framework.</li> </ul> |
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|  | <ul style="list-style-type: none"> <li>- Insert a space before the using brackets.</li> <li>- P4, L111, change to 'non-pharmacological'.</li> <li>- P5, L130, don't start sentences with And.</li> <li>- References – formatting, some of the journal names have been shortened.</li> </ul> |
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| <b>REVIEWER</b>        | Song Dan<br>Zhejiang Chinese Medical University |
| <b>REVIEW RETURNED</b> | 24-Dec-2019                                     |

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| <b>GENERAL COMMENTS</b> | <p>Abstract: Can not find the searching strategies of the systematic review, as well as the data synthesis methods.</p> <p>Background:</p> <ol style="list-style-type: none"> <li>1.The review include both MCI and dementia patients, why focus more on MCI, but give little rationale on the effects of exercise on dementia patients.</li> <li>2.Why TDF is an ideal theory framework for this review, need to give stronger evidence.</li> <li>3.Under "Why is it important to do this review", it seems that point 2 and 3 are overlapped.</li> </ol> <p>Methods: The authors aimed to identify the factors associated with the adherence at carers and healthcare providers'a perspective, but your searching strategies , specifically the "Population" searching, may not be able to give the desired results.</p> <p>Discussion: The rationale using TDF should not be discussed here, instead, the authors need to discuss the strength, and implications of this review.</p> |
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| <b>REVIEWER</b>        | Felipe Schuch<br>UFMS, Brazil |
| <b>REVIEW RETURNED</b> | 07-Jan-2020                   |

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| <b>GENERAL COMMENTS</b> | <p>The manuscript presents a systematic review protocol evaluating the enablers and barriers of exercise adherence in older adults with MCI/dementia, using the theoretical domains framework. This study is interesting and has merit. The methods seem appropriate and the inclusion criteria are adequate. However, the introduction is very long and could be significantly shortened. The analytical plan should be more detailed and explored. For example, how will the authors summarize the findings? For example, if an RCT detect that, for example, increased depressive symptoms is a barrier for exercise practice, but a qualitative study found that dep symp is not a barrier in this population, how data will be interpreted and summarized? Information from different study types will have different weights in this counting? About the inclusion and exclusion criteria: Yoga and other mind-body interventions will be considered within this exercise definition? If so, the search strategy will need to include these terms. Why the "Theme of studies" section is relevant? There are also some grammatical, spelling and other mistakes that a review by a native speaker in English could solve.</p> |
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### VERSION 1 – AUTHOR RESPONSE

Reviewer 1:

Thank you very much for your comments and suggestions. We have made changes in the revised manuscript according to your suggestions. All revisions have been highlighted **in yellow in the paper.**

| Reviewer comments   | Author responses and revisions  |
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| <p>1.This is an intriguing protocol and the results of the study should be applicable to enhancing exercise adherence in older adults with MCI/dementia. The use of the Theoretical Domains Framework is a strength of the protocol. For the most part, the protocol is well written and organized. The Methods/Design section is clear.</p>  | <p>Thank you for your encouragement.</p>  |
| <p>2.In“(4) The absence of research on discussing adherence from different people’s insights”, the authors do not describe the ‘insights of patients’ and describe instead the insights of ‘carers’ and professionals. This needs to be corrected.</p> <p>‘Carers’ is a term used in many places of the world. An alternative term used in North America is ‘caregiver’. I would suggest including this term in the manuscript.</p> | <p>Thank you for your suggestions.</p> <p>(1)We have increased related contents about ‘insights of patients’. <b>Please see ‘BACKGROUND’ on page6, lines166-169.</b></p> <p>(2)According to your suggestion, we searched the MeSH term about ‘carers ’/‘caregiver’ in the PubMed (<a href="https://www.ncbi.nlm.nih.gov/mesh/?term=carers">https://www.ncbi.nlm.nih.gov/mesh/?term=carers</a>).The result shows that the MeSH term of ‘carer ’ /‘caregiver’ is ‘caregiver’. We changed all ‘carers’ with ‘caregivers’ in the full text.</p> |
| <p>3. It is unclear how ‘statistical software package NVivo’ will be used. Please clarify this section.</p>   | <p>We apologize for the confusion and thank you so much for raising this important question.</p> <p>According to your suggestion, we have added the details of method about NVivo usage. <b>Please see ‘METHODS/DESIGN’ on pages12-13, lines316-366.</b></p>  |

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| <p>4. Editing:</p> <p>There are a number of sentences throughout the manuscript that should be split into two sentences. I have identified them by the interior numbering in the manuscript.</p> <p>#64-68; #118-122; #126-130; #145-149;#169-173;<br/>#176-183;#236-240</p> <p>Other grammatical issues should be corrected.</p> <p>Do not start a sentence with 'And'.</p> <p>#130; #155;#280;#394</p> <p>Please make sure that verb tense is correct and sentences are complete.</p> <p>#97;#99; #118; #121; #125;#164-166;#170;<br/>#207; #210; #229; #234;#358-360;#364;#368;<br/>#378;#395-396</p> | <p>Thank you so much for pointing these out.</p> <p>According to your suggestion, these sentences have been split into two sentences, <b>please see the page3, lines72-76; page5, lines127-130; page5, lines131-137; page5, lines150-152; page6, lines157-160; Page7, lines185-186.</b></p> <p>For the sentences of #126-130, we have deleted it due to the great revision of background section.</p> <p>Thank you so much for your comments.</p> <p>'And' has been deleted in these sentences which you pointed, and the sentences have been revised according to your suggestion. <b>Please see the page5, lines142-145; page9, lines255-256; page14, lines375-377.</b></p> <p>For the sentence of #130, we have deleted it due to the great revision of background section.</p> <p>Thank you so much for your comments.</p> <p>We have checked the full text carefully to ensure all sentences complete and correct verb tense. Some sentences have been deleted to make more concise in 'BACKGROUND', and some sentences which you pointed have been revised according to your suggestion. <b>Please see the page4, lines113-115; page5, lines127-128; page5, lines146-148,lines151-152; page6, line176; pages13, lines349-351;page14, lines377-379;</b></p> <p>For the sentences of #121; #125;#207;#210;#229;#364;#368;#378; we have deleted them due to the great revision of background</p> |
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**Reviewer2:**

Thank you very much for your comments and suggestions. We have made changes in the revised manuscript according to your suggestions. All revisions have been highlighted **in yellow in the paper.**

| Reviewer comments  | Author responses and revisions   |
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| <p>1.This manuscript details the protocol for a systematic review investigating predictors of exercise adherence in older adults with mild cognitive impairment (MRI)/dementia. Synthesizing the evidence-base to better understand the challenges of exercise adherence is an important area of research. The methodology of the review is generally sound; however, the manuscript contains many punctuation and grammatical errors and some section are lacking important detail.</p> | <p>Thank you so much for your encouragement and pointing these punctuation and grammatical errors out.</p>   |
| Abstract   |  |
| <p>1.The abstract feel bloated, especially the introduction section. This should be cut down to be more concise.</p> <p>2. Define upon first use of the MCI acronym.</p> <p>3. P2, L64 – reword Aims sentence, too long and confusing.</p>   | <p>Thank you for pointing this out. We have reduced the contents of introduction. <b>Please see ‘Introduction’ on page3, lines 69-76.</b></p> <p>Thanks for your comments, we have revised it. <b>Please see the page3, line70.</b></p> <p>Thank you so much for your suggestion. We have reworded the sentence of ‘Study Aims’. <b>Please see ‘ABSTRACT’ on the pages3, lines72-76.</b></p> <p>Thanks for your comments. We have added more</p> |

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| <p>4. Add in additional detail in the Ethics and Dissemination paper – add here what this study will add.</p>  | <p>details about ‘<b>Ethics and Dissemination</b>’ and ‘<b>what this study will add</b>’. Please see the <b>page3, lines89-94</b>.</p>   |
| <p>Strength and limitations</p>  |  |
| <p>Not conducting a meta-analysis only mentioned here. Also provide justification in the main body of the manuscript.</p>  | <p>Thank you for your suggestion.</p> <p>Not conducting a meta-analysis is one of the main limits in our study because there is considerable heterogeneity in the included studies in terms of methods, participants, interventions and so on. We have provided justification of absence of a meta-analysis according to your suggestion. <b>Please see the page12, lines307-310</b>.</p>  |
| <p>Introduction</p>  |  |
| <p>1.The introduction feels too long. Additional evidence should be presented around the evidence-base for exercise treatment.</p> <p>2.P6, L156 – reword this sentence.</p> <p>3.Define RCT acronym on first use – be consistent.</p> | <p>Thanks for your comments.</p> <p>We have simplified the contents of introduction and added corresponding evidence about exercise interventions according to your suggestion. <b>Please see the page3, lines69-76</b>.</p> <p>Thanks for your comments.</p> <p>We have revised the sentences. <b>Please see the page5, lines142-145</b>.</p> <p>Thanks for your comments.</p> <p>We have revised the word. <b>Please see the page5, line141</b>.</p> |

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| <p>4.58%. L6, L163 – ‘fifty-eight percent’ .</p> <p>5.P6, L169 – formatting error – Lowery D.</p> <p>6.P6, L183 – define PA if first time using.</p> <p>7.P7, L192 – reword this sentence.</p> <p>8.P7, L209 – ‘the cognitive impairment disease’ – rephrase?</p> <p>9. Feel the justification for exploring perspectives of different stakeholders is quite weak (this is a really interesting aspect of the study). I feel this argument should also be introduced earlier.</p> | <p>Thanks for your comments.</p> <p>We have deleted the word due to the great revision of background section.</p> <p>Thanks for your comments.</p> <p>We have corrected the mistake. <b>Please see the page5, lines150-152.</b></p> <p>Thanks for your comments.</p> <p>It should be ‘physical activity’. We have deleted this phrase because of the revision of background section.</p> <p>Thank you for pointing this out.</p> <p>We have changed the <a href="#">expression</a> to this sentence. <b>Please see the page7, lines196-198.</b></p> <p>We apologize for this confusion. It should be ‘the cognitive impairment’. We have adjusted the content of this part, and have deleted this phrase because of the great revision of background section.</p> <p>Thanks for your comments.</p> <p>According to your advice, we have adjusted the priorities of argument. We introduced ‘perspectives of different stakeholders’ as point (1) and supplemented corresponding content about this part. <b>Please see the pages6-7, lines164-186.</b></p> |
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| <p>1. The authors need to be clearer on how they will synthesis the different data types (cohort studies, RCTs, qualitative etc.) and perspectives (patient, HCP, family etc.) they are hoping to capture. Most SRevs do not capture both quant and qual data, please include information about how this will be synthesized (e.g. <a href="https://www.ncbi.nlm.nih.gov/pubmed/27146132">https://www.ncbi.nlm.nih.gov/pubmed/27146132</a>). Is the expected heterogeneity of the data a contributing reason for not undertaking meta-analysis? If so, state this in the manuscript.</p> <p>2.P10, L305 – ‘Studies will be no language restrictions’ – rephrase.</p> <p>3.P12, L325 – PRISMA-P? – be consistent.</p> | <p>We apologize for the confusion and thank you so much for raising this important question.</p> <p>According to your suggestion, the methods of synthesis the different data types have been added in the revised manuscript based on the literature. We will adopt the narrative synthesis to synthesize all related qualitative and quantitative literatures. We further add the content about how to synthesis perspectives (patients, HCP and caregivers). <b>Please see the pages12-14, lines 306-366.</b></p> <p>Meanwhile, this important reason for absence of meta-analysis have been added in the revised manuscript according to your guidance. <b>Please see ‘METHODS/DESIGN’ section on page12, lines 307-310.</b></p> <p>Thanks for your comments. We have changed ‘Studies will be no language restrictions’ into ‘Searches will be no limitation in language publications’. <b>Please see the page10, line273.</b></p> <p>Thanks for your comments.</p> <p>We have revised PRISMA-P acronym on first use.</p> <p><b>Please see the page8, lines226-227.</b></p> <p>This protocol is written in accordance with the recommendation of the Preferred Reporting Items for Systematic Review and Meta-Analysis Protocols (PRISMA-P).</p> |
| <p>Discussion</p>  |   |
| <p>1.P14, L378 – reword this sentence.</p>   | <p>Thanks for your comments.</p> <p>This sentence has been deleted due to the great revision of background section.</p>   |

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| <p>2.P14, L386 – Reword this sentence. Also, be careful when referring to the TDF as a theory when it is not. It is a framework synthesized from existing behaviour change theories. Try to be explicit.</p> <p>3.Punctuation and grammar (all these points should be consistent throughout the manuscript)</p> <p>4.P3, L66 – should be the Theoretical Domains Framework.</p> <p>5.Insert a space before the using brackets.</p> <p>6.P4, L111, change to 'non-pharmacological'.</p> <p>7. P5, L130, don't start sentences with And.</p> | <p>Thank you so much for your suggestion. TDF does play an important role in synthesizing various factors to explain the change of behaviour. However, as you say, TDF is a framework not a classical theory. According to your suggestion, we have revised all sentences about the <a href="#">expression</a> of TDF, <b>please see page7, line192; page13, line339; page14, line383 and line388.</b></p> <p>Thank you for your suggestion.</p> <p>We have revised the punctuation and grammar.</p> <p>Thanks for your comments.</p> <p>We have revised the sentence. <b>Please see the 'ABSTRACT' section on page3, line75.</b></p> <p>Thank you for your suggestion.</p> <p>We have checked our full text about this.</p> <p>Thank you for your suggestion.</p> <p>We have revised the format. <b>Please see the page5, line131.</b></p> <p>Thank you for your suggestion.</p> <p>We have checked our full text and made changes.</p> <p>We apologize for the confusion and thank you so much. We have reedited all references according to</p> |
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| 8.References – formatting, some of the journal names have been shortened. | the BMJ reference style. |
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**Reviewer 3:**

Thank you very much for your comments and suggestions. We have made changes in the revised manuscript according to your suggestions. All revisions have been highlighted **in yellow in the paper.**

| Reviewer comments  | Author responses and revisions  |
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| Abstract   |   |
| Can not find the searching strategies of the systematic review, as well as the data synthesis methods.   | <p>We apologize for the confusion and Thank you so much for raising these important questions.</p> <p>According to your suggestion, we have added search strategies and data synthesis methods. <b>Please see the ‘ABSTRACT’ section on page3, lines77-88.</b></p>  |
| Background   |   |
| 1.The review include both MCI and dementia patients, why focus more on MCI, but give little rationale on the effects of exercise on dementia patients. | <p>Thank you for the question and we apologize for the confusion.</p> <p>Considering lots of studies have verified the effects of exercise interventions on cognitive function, and expounded the current situations of exercise adherence about these two types of population (MCI and Dementia), this study will focus on the studies of these people to ensure that factors affecting exercise adherence can be collected comprehensively.</p> <p>As your comments referred, it is not sufficient to state about the impact of exercise intervention on dementia. Therefore, according to your advices, we added the argument about the impact of exercise on dementia and the current situations with respect to exercise adherence of people with dementia. We also further balanced the <a href="#">proportion</a> of these two populations in this study. <b>Please see the ‘BACKGROUND’ section on page5, lines131-</b></p> |

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Thank you so much for raising this important question.

The TDF is a comprehensive framework with 14 domains and 84 constructs that synthesizes a number of behavior change theories.<sup>[1-2]</sup> It has been successfully used in many medical systems for clinical performance improvement to assess barriers and facilitators.<sup>[3-4]</sup> This framework offers an appropriate [structure](#) for [supporting](#) an evidence synthesis of barriers and enablers of adherence as it will help these factors to be linked to evidence based behaviour change techniques.

According to your suggestion, we have added some evidence of application of TDF based on previous studies. **Please see the 'BACKGROUND' section on page 7, lines 195-204.**

2. Why TDF is an ideal theory framework for this review, need to give stronger evidence.

[1] Cane J, O'Connor D, Michie S. Validation of the theoretical domains framework for use in behaviour change and implementation research. *Implementation Science* 2012;7(1):37.

[2] Michie S, Johnston M, Abraham C, *et al.* Making psychological theory useful for implementing evidence based practice: a consensus approach. *Quality and Safety in Health Care* 2005;14(1):26-33.

[3] Amemori M, Korhonen T, Kinnunen T, *et al.* Enhancing implementation of tobacco use prevention and cessation counselling guideline among dental providers: a cluster randomised controlled trial. *Implementation Science* 2011;6(1):13.

[4] Mosavianpour M, Sarmast HH, Kisson N, *et al.* Theoretical domains framework to assess barriers to change for planning health care quality interventions: a systematic literature review. *Journal of Multidisciplinary Healthcare* 2016;9:303.

Thank you so much for your suggestion.

According to your suggestion, we have deleted point (

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| <p>3. Under “Why is it important to do this review”, it seems that point 2 and 3 are overlapped.</p>   | <p>2) and integrated relevant Content. <b>Please see on pages7-8, lines205-216.</b></p>   |
| <p>Methods</p>   |   |
| <p>The authors aimed to identify the factors associated with the adherence at carers and healthcare providers’ perspective, but your searching strategies, specifically the “Population” searching, may not be able to give the desired results.</p> | <p>We apologize for the confusion.</p> <p>For this question, our consideration is as follows and we will appreciate if you can give us your further guidance.</p> <p>This study didn’t define other relevant groups except for the population of exercise intervention. After screening of the literature, we will adopt the manual retrieval to further screen relevant literature involving patients, healthcare professionals and caregivers one by one. The purpose for doing this is to include literature to the maximum extent and ensure that analytical literature is sufficient and accurate.</p> |
| <p>Discussion</p>  |   |
| <p>The rationale using TDF should not be discussed here, instead, the authors need to discuss the strength, and implications of this review.</p>   | <p>Thank you for your suggestion.</p> <p>According to your guidance, we have rearranged the contents of the discussion section. We focus more on the implications and strengths of this review to theoretical research and practice. <b>Please see the ‘DISCUSSION’ section on pages14-15, lines367-392.</b></p>  |

**Reviewer 4:**

Thank you very much for your comments and suggestions. We have made changes in the revised manuscript according to your suggestions. All revisions have been highlighted **in yellow in the paper.**

| Reviewer comments  | Author responses and revisions   |
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| <p>The manuscript presents a systematic review protocol evaluating the enablers and barriers of exercise adherence in older adults with MCI/dementia, using the theoretical domains framework. This study is interesting and has merit. The methods seem appropriate and the inclusion criteria are adequate.</p>  | <p>Thank you for your encouragement. We have taken your advice and revised the article.</p>  |
| <p>However, the introduction is very long and could be significantly shortened.</p>  | <p>Thank you for your suggestion.</p> <p>We have shortened introduction. <b>Please see the 'Background' section on pages4-5, lines107-147.</b></p>   |
| <p>The analytical plan should be more detailed and explored. For example, how will the authors summarize the findings? For example, if an RCT detect that, for example, increased depressive symptoms is a barrier for exercise practice, but a qualitative study found that dep symp is not a barrier in this population, how data will be interpreted and summarized? Information from different study types will have different weights in this counting?</p> | <p>We apologize for the confusion and thank you so much for raising this important question.</p> <p>We have reorganized 'Data synthesis and analysis' to illustrate how the different information will be synthesized.</p> <p>When there is a disagreement in different study facing the same factor affecting exercise adherence, we will evaluate the state of the literature (such as literature quality, types of research, sample size and so on) and explain potential differences in results across studies. Studies judged to be of equal technical quality are given equal weight or if not providing a sound justification for not doing so.<sup>[1]</sup></p> <p>More details can be <b>seen in 'METHODS/DESIGN' section on pages12-14, lines306-366.</b></p> |

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|   | [1]Popay J, Roberts H, Sowden A, <i>et al.</i> Guidance on the conduct of narrative synthesis in systematic reviews. <i>A product from the ESRC methods programme Version2006;1: b92.</i>  |
| About the inclusion and exclusion criteria: Yoga and other mind-body interventions will be considered within this exercise definition? If so, the search strategy will need to include these terms. | Thank you for your suggestions.<br><br>Yes, Yoga and other mind-body interventions will be considered within this exercise definition. We have checked our search strategy again about <a href="#">corresponding</a> terms. Please see (Table1.) on pages10-11.  |
| Why the “Theme of studies” section is relevant? There are also some grammatical, spelling and other mistakes that a review by a native speaker in English could solve.                              | Thank you so much for raising these important questions.<br><br>We apologize for the wrong expression about “Theme of studies”, this is a Chi-English expression. We want to use “Theme of studies” to help us select the full text initially. But we found that “Types of outcome measures” has revealed of what we wanted to express. The two parts are overlapping. So, we eventually deleted the “Theme of studies” section.<br><br>We will appreciate if you can give us your further guidance. |
| There are also some grammatical, spelling and other mistakes that a review by a native speaker in English could solve.  | Thank you for pointing this out.<br><br>The revised manuscript has been reviewed and edited by a professional editor throughout the manuscript to ensure the linguistic precision of the language and grammar.   |

#### VERSION 2 – REVIEW

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| <b>REVIEWER</b>        | Felipe Schuch<br>UFMS |
| <b>REVIEW RETURNED</b> | 06-Mar-2020           |



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| <b>GENERAL COMMENTS</b> | The authors improved significantly the manuscript. However, some work is still needed. The English still requires some refinement. |
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### **VERSION 2 – AUTHOR RESPONSE**

Reviewer : 4

The authors improved significantly the manuscript. However, some work is still needed. The English still requires some refinement.

Author responses: Thank you so much for your encouragement and pointing this language problem out we need to improve. According to your suggestion, we have further refined the English expression of this article following the guidance provided by a Senior Research Scientist, Professor Tao, who works at AdventHealth Whole-Person Research, Orlando and has rich experience in writing English articles. We have added Professor Tao to the list of co-authors in the revision. Except for minor word/grammar revision without highlight, all other revisions have been highlighted in yellow in the paper; and all revision keep the same meaning with the original version.