

CASP Checklist: 10 questions to help you make sense of a Systematic Review

How to use this appraisal tool: Three broad issues need to be considered when appraising a systematic review study:

- Are the results of the study valid? (Section A) What are the results? (Section B)
- Will the results help locally? (Section C)

The 10 questions on the following pages are designed to help you think about these issues systematically. The first two questions are screening questions and can be answered quickly. If the answer to both is "yes", it is worth proceeding with the remaining questions. There is some degree of overlap between the questions, you are asked to record a "yes", "no" or "can't tell" to most of the questions. A number of italicised prompts are given after each question. These are designed to remind you why the question is important. Record your reasons for your answers in the spaces provided.

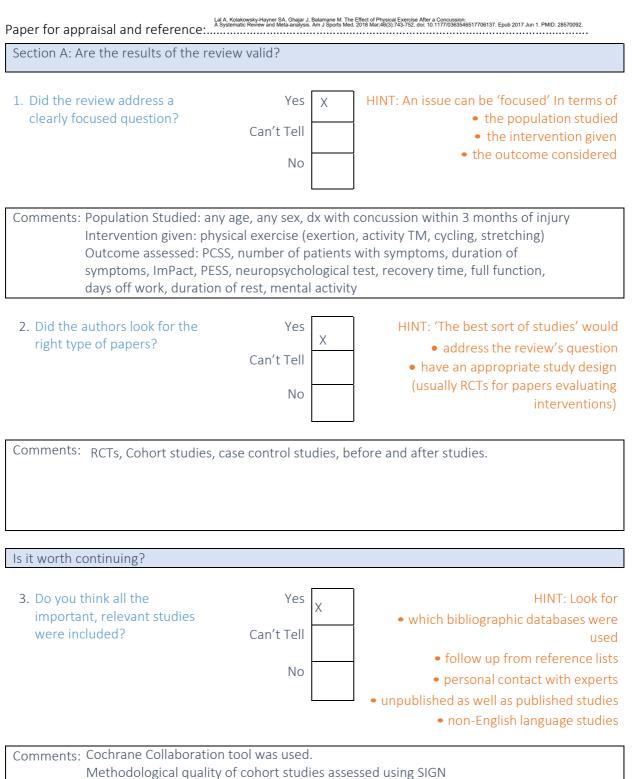
About: These checklists were designed to be used as educational pedagogic tools, as part of a workshop setting, therefore we do not suggest a scoring system. The core CASP checklists (randomised controlled trial & systematic review) were based on JAMA 'Users' guides to the medical literature 1994 (adapted from Guyatt GH, Sackett DL, and Cook DJ), and piloted with health care practitioners.

For each new checklist, a group of experts were assembled to develop and pilot the checklist and the workshop format with which it would be used. Over the years overall adjustments have been made to the format, but a recent survey of checklist users reiterated that the basic format continues to be useful and appropriate.

Referencing: we recommend using the Harvard style citation, i.e.: *Critical Appraisal Skills Programme (2018). CASP (insert name of checklist i.e. Systematic Review) Checklist. [online] Available at: URL. Accessed: Date Accessed.*

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Methodological quality of cohort studies assessed using SIGN methodological quality of before and after studies assessed using the NIH quality assessment tool



4. Did the review's authors do enough to assess quality of the included studies? Can't

Yes X Can't Tell No HINT: The authors need to consider the rigour of the studies they have identified. Lack of rigour may affect the studies' results ("All that glisters is not gold" Merchant of Venice – Act II Scene 7)

 Comments: Evidence was assessed using GRADE process

 5. If the results of the review have been combined, was it reasonable to do so?
 Yes
 X

 Can't Tell
 Image: Can't Tell with the included studies are clearly displayed with the included studies are clearly displayed with the include studies are similar form study to study with the include studies are clearly displayed with the include studies are similar form studies are simila

• reasons for any variations in results are discussed

Comments: Results were combined, but also separated into categories compareing differences among groups for those who exercised and those who had not; symptoms, balance, neuropsychological tests, recovery time, days off work or duration of rest.

Section B: What are the results?

neuropsychological functions.

6. What are the overall results of the review? HINT: Consider
6. What are the overall results of the review?
6. If you are clear about the review's 'bottom line' results
6. What these are (numerically if appropriate)
6. how were the results expressed (NNT, odds ratio etc.)

Comments: Demonstrated clear benefits of physical exercise decreasing the PCSS score, percentage of the patients with symptoms of concussion and duration of symptoms; without affecting balance and



7. How precise are the results?

HINT: Look at the confidence intervals, if given

| Comments: Unclear | | |
|---|---------------------------|---|
| | | |
| Section C: Will the results help locally | ? | |
| 8. Can the results be applied to the local population? | Yes X Can't Tell No | HINT: Consider whether the patients covered by the review could be sufficiently different to your population to cause concern your local setting is likely to differ much from that of the review |
| Comments: | | |
| | | |
| 9. Were all important outcomes considered? | Yes X Can't Tell No | HINT: Consider whether • there is other information you would like to have seen |
| Comments: Would have been interested to see how physical exertion impacted vesitbular scores (VOMS). As dynamic exertion may exacerbate symptoms. | | |
| 10. Are the benefits worth the harms and costs? | Yes X Can't Tell No | HINT: Consider • even if this is not addressed by the review, what do you think? |
| Comments: This is a low cost intervention with benefit. | | |