

Guidelines for Authors: CAP–Systematic Reviews & Meta–Analyses

Mission

The *International Journal of Athletic Therapy & Training (IJATT)* publishes peer-reviewed reports pertaining to clinical applications of research findings, procedures that been found effective for the prevention and treatment of sports-related injuries, and professional practice issues. *IJATT* will publish original research reports, but the content must have strong relevance to clinical practice.

Format

Manuscripts (main document file) must be double-spaced and in a single column with 12-point font, 1-inch margins, and numbered lines, and text should not exceed 7 pages (not including title page and references). Concise presentation of content (1,200–2,000 words; 4–7 pages) is required for publication. Author name(s) and/or affiliations should not appear within the manuscript file.

Critically Appraised Paper (CAP) Review Form–SYSTEMATIC REVIEWS & META-ANALYSES

This is NOT a critical appraisal worksheet, but manuscript guidelines for writing a Critically Appraised Paper (CAP), formerly known as Critical Research Reviews (CRR). For more information on critical appraisal of a systematic review article, and a critical appraisal worksheet, please see <http://www.cebm.net/critical-appraisal/>, and select Systematic Reviews under Critical Appraisal Worksheets.

All submitted CAP manuscripts should include all sections as detailed below. Further, beyond just reporting the information from the reference study, a critique of the methods and results of the reference study is required. CAP manuscripts that fail to include critical appraisal and the potential for incorporation into clinical decision-making will be rejected.

Title. The title should capture the central concept(s) of the CAP. Please include “[TITLE]: A Critically Appraised Paper” as part of the title.

Reference. Provide the complete citation of the reference study in AMA format.

Clinical Bottom Line (~ 100 Words, Unstructured). Concisely capture the most important clinical take-home message(s) from the CAP. The Level of Evidence and Grade of Recommendation should be identified. See <http://www.cebm.net/ocebmllevels-of-evidence/> for information on Levels of Evidence and Grades of Recommendation.

Focused Clinical Question. A three or four-part clinical question using the Patient, Intervention, Comparison, Outcome (PICO) format should be generated based on the content of the reference paper. For example, “For elite-level athletes [P], what energy drinks [I] have positive effects on performance [O] compared to placebo [C]?” See <http://www.cebm.net/asking-focused-questions/> for information on generating a focused clinical question. Also, for the role of PICO, see Medina McKeon J, McKeon P. PICO: A hot topic in evidence based practice. *Int J Athl Ther Train.* 2015;20(1):1–3. doi: 10.1123/ijatt.2014-0141.

Search Terms. Report *your* final (last stage) search terms that led you to this systematic review or meta-analysis, including Boolean phrases, and report the resulting number of hits with this final search phase. For example: “Search Terms: (energy drinks) AND (performance) limited to meta-analysis article type (narrow, specific search). This yields only 1 hit: the Cappelletti et al. article was the only one listed.”

Study Design. The study design should be briefly detailed. For these types of CAPs, the study design is a systematic review or systematic review with meta-analysis.

Data Sources. Identify how relevant research articles were identified for the systematic review/meta-analysis. In other words, briefly describe the search strategy (electronic databases, hand search, and so on), databases, timeframe of search, key words, and search limits.

Study Selection. The specific criteria for selection should be listed. In other words, describe the process

through which studies were selected for inclusion for further analysis. This should include demographic information about the population of interest necessary to be included in the systematic review/meta-analysis.

Data Extraction. Briefly describe the specific outcomes that were gathered from the included studies. Examples of primary outcome measures could include: incidence of knee OA following ACL-R, knee flexion angle at peak GRF, compliance or adherence to a weight-reduction program. Actual numbers do not have to be included here, however the outcomes of interest must be defined clearly in this section. Further, describe the type of data that was extracted. For example, means, standard deviations, events, and numbers of participants are types of data that might go into calculating the summary measure(s), and should be listed in this section.

Methodological Assessment. This assessment should address bias and other areas related to methodology.

Methodological Bias: Describe how studies were assessed for bias, addressing issues related to the internal (the ability to determine cause and effect) and external (the ability to generalize) validity of the evidence. Within a systematic review or meta-analysis, authors may have used a quality assessment or reporting tool, such as the Physiotherapy Evidence Database (PEDro) scale, the Downs & Black checklist, or the Standards for the Reporting Diagnostic Accuracy (STARD) checklist. While these and other reporting tools may not directly assess quality, these do provide an indication of potential validity threats within the included studies.

Publication Bias: Briefly describe if publication bias was assessed and identify specific tests used to determine this.

Other Critical Appraisal: Briefly describe any other methods of critiquing the included studies, either individually or summarily, utilized in the systematic review or meta-analysis. For example, identify if sensitivity analyses, sub-group analyses, or meta-regressions were performed.

The Evidence. A report of the evidence should include data, bias, and other appraisals.

Data Synthesis: Describe how the main summary measures or analyses were calculated (calculation of effect sizes, odds ratios, mean differences, etc.). In other words, describe how the extracted data were

organized and summarized, how the statistical procedures applied, and the results (e.g., effect sizes, odds ratios, and 95% confidence intervals) of the analysis. Provide numerical evidence of primary and, where appropriate, secondary outcomes. Outcomes such as effect sizes (continuous data), risk ratios (frequency data), and odds ratios (frequency data) are all examples of appropriate outcomes to report. Measures of variability (e.g., confidence intervals) should be reported with all point measures. If the reference paper provides these outcomes, then these may be reported directly from the manuscript. However, if the reference paper only provides raw data, then numerical outcomes should be calculated in the present CAP and reported.

Publication Bias: Briefly report the results of the assessment of publication bias, if assessed.

Other Critical Appraisal: Briefly report the results of any other critical appraisals that were conducted.

Commentary Section. The commentary section should be focused on answering and interpreting the following points. While there are headings here, headings should not be included in the final manuscript. The commentary section represents the main focus of the CAP.

Validity Judgments: Are the Results Valid? Provide *your* critical commentary and interpretation about relative seriousness of any threats to validity. In other words, should the results be believed? Why or why not? Was there a risk of bias associated with how the study was designed, carried out, or reported? Incorporate methodological factors such as quality assessment, bias, and sensitivity as potential areas of discussion.

Appraisal of the Results: What Are the Results? Provide *your* interpretation of the primary and secondary results in terms of summary magnitude of difference between the groups. Comment about precision of point estimates based on widths of CIs; consider the meaningfulness of upper and/or lower bounds of CIs; make judgments about how precision of the estimate or lack thereof affects strength of evidence. In other words, based on reported numerical values, how convincing were the results of the systematic review or meta-analysis?

Clinical Applicability: How Can the Results Be Applied to Patient Care? Provide commentary regarding the clinical applicability of the results of the systematic review or meta-analysis and how the results of this critical appraisal (*your* critique of the methods AND results) might influence clinical decisions. Clear

analysis of (1) judgments about validity threats and level of evidence, (2) judgments about strength and precision of, and/or (3) practical application in a clinical setting when taking clinical expertise, equipment, and more into consideration, should be included.

Submission and Review Policies

Submission: All materials must be uploaded to the following website: mc.manuscriptcentral.com/hk_att. A **single file containing the title page (without author identification), text, and reference list** should be submitted, along with the separate file containing author information. Also include the title as the first element of the blinded manuscript, followed by the abstract (if it is a research report), and/or key points (which should be included with all manuscripts). Tables, graphs, photographs, and figures should be submitted in separate files.

Review policy: An editor and at least one other reviewer will assess the content of each manuscript.

A topic that requires more than 1,200–2,000 words might be approved for publication as a two-part report (which may be published together in the same issue or separately in two successive issues). A two-part report must be presented in two separate manuscripts (1,200–2,000 words each) that are submitted together. A manuscript submitted to *IJATT* must **not** be submitted to any other journal while under review. When a manuscript is accepted for publication, an editorial board member will work with the author to improve the presentation of the work. *IJATT* editors reserve the right to edit all content to correct grammatical errors, to ensure accuracy of the information presented, and to fit space restrictions.

Copyright: Authors of manuscripts accepted for publication must transfer copyright to the publisher. A transfer of copyright form will be sent to the author from Human Kinetics, which must be returned before publication.

Complimentary copies: Upon request, authors will be provided with a final copy of their article.