

Section and Topic	Item #	Checklist item	Location where item is reported
<b>TITLE</b>			
Title	1	Identify the report as a literature review.	1
<b>ABSTRACT</b>			
Abstract	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings.  See the PRISMA 2020 for Abstracts checklist for the complete list.	1
<b>INTRODUCTION</b>			
Rationale	3	Describe the rationale for the review in the context of existing knowledge, i.e., what is already known about your topic.	2
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	2-3
<b>METHODS</b>			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses with study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	3-5
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	3-4
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	3-4
Selection process	8	State the process for selecting studies (i.e., screening, eligibility).  Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	4
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	4-5
<b>RESULTS</b>			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	3 (PRISMA flow)
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	3, the reason the studies being excluded were mentioned in the PRISMA flow
Study characteristics	17	Cite each included study and present its characteristics (e.g., study size, PICOS, follow-up period).	5-12
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	4, appendix document
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	5-12
<b>DISCUSSION</b>			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	12-15
	23b	Discuss any limitations of the evidence included in the review.	12-15
	23c	Discuss any limitations of the review processes used.	15



## KIN 4400 Independent Research Study in Kinesiology | PRISMA 2020 Checklist

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	23d	Discuss implications of the results for practice, policy, and future research.	15
<b>OTHER INFORMATION</b>			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	2-3
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	Not applicable
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	Not applicable
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	15
Competing interests	26	Declare any competing interests of review authors.	16
Availability of data, code, and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	Not applicable

The checklist has been adapted for KIN 4400 Independent Research Study in Kinesiology at the University of Guelph-Humber. Last updated: Dec 9, 2021

*Adapted From:* Page, M.J.; McKenzie, J.E.; Bossuyt, P.M.; Boutron, I.; Hoffmann, T.C.; Mulrow, C.D.; Shamseer, L.; Tetzlaff, J.M.; Akl, E.A.; Brennan, S.E.; et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ* **2021**, 372, n71. <https://doi.org/10.1136/bmj.n71>.

For more information, visit: <http://www.prisma-statement.org/>

## SUPPLEMENTARY MATERIALS

### The details of the mixed method appraisal tool (MMAT) assessment

No	Author	Type of study	Score	1.1 Is the qualitative approach appropriate to answer the research question?	1.2 Are the qualitative data collection methods adequate to address the research question?	1.3 Are the findings adequately derived from the data?	1.4 Is the interpretation of results sufficiently substantiated by data?	1.5 Is there coherence between qualitative data sources, collection, analysis, and interpretation?	2.1 Is the sampling strategy relevant to address the research question?	2.2 Is the sample representative of the target population?	2.3 Are the measurements appropriate?	2.4 Is the risk of non-response bias low?	2.5 Is the statistical analysis appropriate to answer the research question?
1	Chen, Krupp, and Lo 2022 [38]	Quantitative	80%						Yes	Yes	Yes	Cannot tell	Yes
2	Inglin et al. 2022 [39]	Quantitative	80%						Yes	Yes	Yes	Cannot tell	Yes
3	Maeda et al. 2022 [40]	Quantitative	100%						Yes	Yes	Yes	Yes	Yes
4	Seidu et al. 2022 [41]	Quantitative	80%						Yes	Yes	Yes	Cannot tell	Yes
5	Palanca et al. 2021 [42]	Quantitative	80%						Yes	Yes	Yes	Cannot tell	Yes

No	Author	Type of study	Score	1.1 Is the qualitative approach appropriate to answer the research question?	1.2 Are the qualitative data collection methods adequate to address the research question?	1.3 Are the findings adequately derived from the data?	1.4 Is the interpretation of results sufficiently substantiated by data?	1.5 Is there coherence between qualitative data sources, collection, analysis, and interpretation?	2.1 Is the sampling strategy relevant to address the research question?	2.2 Is the sample representative of the target population?	2.3 Are the measurements appropriate?	2.4 Is the risk of non-response bias low?	2.5 Is the statistical analysis appropriate to answer the research question?
6	Al Harthi et al. 2021 [43]	Quantitative	80%						Yes	Yes	Yes	Cannot tell	Yes
7	Carr et al. 2021 [44]	Quantitative	80%						Yes	Yes	Yes	Cannot tell	Yes
8	Forde et al. 2020 [49]	Quantitative	80%						Yes	Yes	Yes	Cannot tell	Yes
9	Fisher et al. 2020 [50]	Quantitative	80%						Yes	Yes	Yes	Cannot tell	Yes
10	Yeoh et al. 2020 [51]	Quantitative	80%						Yes	Yes	Yes	Cannot tell	Yes

## The Joanna Briggs Institute Critical Appraisal

No	Author	Is the review question clearly and explicitly stated?	Were the inclusion criteria appropriate for the review question?	Are the findings adequately derived from the data?	Were the sources and resources used to search for studies adequate?	Were the criteria for appraising studies appropriate?	Was critical appraisal conducted by two or more reviewers independently?	Were there methods to minimize errors in data extraction?	Were the methods used to combine studies appropriate?	Was the likelihood of publication bias assessed?	Were recommendations for policy and/or practice supported by the reported data?	Were the specific directives for new research appropriate?
1	Mohseni et al. 2021[45]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
2	Yin et al.2021[46]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
3	Sciberras et al. 2020 [47]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
4	Wicaksana et al. 2020 [48]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes