This document accompanies the additional files that belong to the manuscript:

**The effect of exercise-induced muscle fatigue on gait parameters among older adults: a systematic review and meta-analysis.**

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The additional documents are divided in 9 ‘categories’ and in the name of the document the number at the beginning of the name indicates to what category this document belongs. In the following pages per category the documents are explained.

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# Search and inclusion related documents

|  |  |
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| Documents: | 1. Search plans  1. Email authors |
| Data Type: | OpenDocument Text (.odt)  Microsoft Word document (.docx) |
| Required software (and version we used): | Microsoft Word for .docx files (Microsoft 365, version 2302) |
| What can be found in the documents: | 1. 1. Search plans   In the search plans the search strategy per database is listed. The search strategy is built with different blocks based upon the PICO framework and built up with the use of Boolean operators. In the document the search plans for following databases can be found: Cinahl, Cochrane, PubMed, Scopus, and Web of Science.   1. 1. Email authors   This document is the template we used to get in contact with authors to ask for additional data, unpublished data, or other questions. Per article we had specific questions that we inserted in the template before sending. The text between square brackets ([ ]) needed adjustments. This template was based upon the template shared by Moreau, D., & Gamble, B. (2022). *Conducting a Meta-Analysis in the Age of Open Science: Tools, Tips, and Practical Recommendations*. Psychological Methods, 27 (3), 426-432. [OSF | Template5\_OpenCallForData.odt](https://osf.io/zq9mp) |
| Abbreviations used and not explained in the document: | Not applicable |

# R-script and excel file for the interrater reliability

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| Documents: | 2. Interrater-reliability (irr) fulltext  2. Interrater-reliability (irr) screening  2. irr\_fulltext  2. irr\_screening |
| Data format: | R-document (.R)  Plain text file (.txt)  OpenDocument Spreadsheets (.ods)  Microsoft Excel document (.xlsx) |
| Required software (and version we used): | R-Studio  Wordpad  Micorsoft Excel (Microsoft 365, version 2302) |
| What can be found in the documents: | 1. 2. Interrater-reliability (irr) screening & 2. Interrater-reliability (irr) fulltext:   In the .R files the R-script of the analysis can be found for calculating the interrater-reliability of the screening process and the fulltext assessment. The packages used are described in the script and can be installed with the use of the script.  In case the .R files cannot be opened the script is also available in .txt file.   1. 2. irr\_screening & 2. irr\_fulltext   In the .ods/.xlsx files the necessary data is found for the calculations. Make sure you name the file as mentioned in the R-script and save it in the same folder as the r-script. |
| Abbreviations used and not explained in the document: | Not applicable |

# Risk of Bias and GRADE documents

|  |  |
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| Documents: | 3. GRADE outcomes table  3. ROBINS-I summary plot  3. ROBINS-I traffic light |
| Data format: | OpenDocument Text (.odt)  Microsoft Word document (.docx)  Portable Network Graphic (.png) |
| Required software (and version we used): | Microsoft Word for .docx files (Microsoft 365, version 2302)  Microsoft Photos (Microsoft, 2023) |
| What can be found in the documents: | 1. 3. GRADE outcomes table:   Detailed description of the GRADE Certainty assessment per cluster of gait-related outcomes.  Colours indicate: poor (red), intermediate (orange) and good grading (green).   1. 3. ROBINS-I summary plot & 3. ROBINS-I traffic light   Visual reflection of the Risk of Bias assessment with the use of the ROBINS-I tool. |
| Abbreviations used and not explained in the document: | Not applicable |

# Summary of Findings table

|  |  |
| --- | --- |
| Documents: | 4. Summary of Findings table |
| Data format: | OpenDocument Spreadsheets (.ods)  Microsoft Excel document (.xlsx) |
| Required software (and version we used): | Microsoft Excel (Microsoft 365, version 2302) |
| What can be found in the documents: | In this spreadsheet all information that is published in table 1 of the original manuscript can be found. |
| Abbreviations used and not explained in the document: | A-P = Anterior – Posterior  CR-10 = (Perceived) intensity measured by Borg’s Category Rating scale (0-10)  CR-20 = (Perceived) intensity measured by Borg’s Category Rating scale (6-20)  LDE = Local Divergence Exponent  min = minute  M-L = Medio – Lateral  N = number of participants  NI = No Information |

# Data file for the main analysis (coding form)

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| Documents: | 5. coding form for R |
| Data format: | OpenDocument Spreadsheets (.ods)  Microsoft Excel document (.xlsx) |
| Required software (and version we used): | Microsoft Excel (Microsoft 365, version 2302) |
| What can be found in the documents: | Tab Data file  This document is necessary for the analysis and is used as input for the R-script. Per column different data from primary studies is reported. Make sure you name the file as mentioned in the R-script and save it in the same folder as the R-script.  Cell’s with a red color contains no information, but instead of using NI we kept them empty, by doing so NI was not taken into account in the moderator in analysis.  Cell’s with a orange color indicate that the unit of measure is converted.  Cell’s with a yellow color indicate that data is imputed or handmeasured.  Please note that the clusters used in the manuscript are named slightly different in the excel file;  Lower Limb Kinematics = Foot Movement;  Phase/Symmetry = Symmetry;  Velocity = Walking Capacity.  Tab Background information  The tab with background information is used to explain the information that is found in the different columns. |
| Abbreviations used and not explained in the document: | AP / A-P = Anterior – posterior  ASIS = anterior supiror iliac spine  BW = body weight  CoM = Centre of Mass  CoV / CV = coefficient of Variation CR-10 = (Perceived) intensity measured by Borg’s Category Rating scale (0-10)  CR 6-20 = (Perceived) intensity measured by Borg’s Category Rating scale (6-20)  FIG = figure HR = Heart rate HS = Heel strike LDE = Local divergence exponent LyE = Lyapunov exponent ML / M-L= medio – lateral MVC = maximal voluntary contraction NI = No Information RMS = root mean square RPE = Ratings of perceived exertion SD = Standard deviation STS = sit-to-stand TO = toe-off V = Vertical VAS = visual analog scale |

# Analysis files (main, sensitivity, and power analysis)

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| Documents: | 6. Main analysis and sensitivity analysis R-script.R  6. Main analysis and sensitivity analysis R-script.txt  6. Power analysis a priori.pdf  6. Power analysis a priori R-script.R  6. Power analysis a priori R-script.txt  6. Power analysis Post factor R-script.R  6. Power analysis Post factor R-script.txt |
| Data format: | R-document (.R)  Plain text file (.txt)  Portable Document Format (.pdf) |
| Required software (and version we used): | R-Studio  Wordpad  Adobe |
| What can be found in the documents: | 1. 6. Main analysis and sensitivity analysis R-script   The R-script (.R) file is necessary for the main and sensitivity analysis. In the beginning of the script all necessary packages are installed and loaded. Furthermore the script is divided in 3 parts: part 1: absolute data, part 2: clustered data, and part 3: sensitivity analysis.  The packages used are described in the script, are freely accessible and can be installed with the use of the script.  The text file (.txt) serves as an extra back-up in case the R-script (.R) cannot be opened. Please note that the clusters used in the manuscript are named slightly different in the R-script.   1. 6. Power analysis a priori R-script   The R-script (.R) file is necessary for the a priori power analysis.  The packages used are described in the script, are freely accessible and can be installed with the use of the script.  The text file (.txt) serves as an extra back-up in case the R-script (.R) cannot be opened.   1. 6. Power analysis a priori   The pdf file (.pdf) is documentation of the r-script including the results of the a priori power analysis.   1. 6. Power analysis Post factor R-script   The R-script (.R) file is necessary for the post factor power analysis.  The packages used are described in the script, are freely accessible and can be installed with the use of the script.  The text file (.txt) serves as an extra back-up in case the R-script (.R) cannot be opened. |
| Abbreviations used and not explained in the document: | Abbreviations are mentioned in coding form, outcomes, or are part of R packages. |

# Outcomes of the analyses with the different between measurement correlations

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| Documents: | 7. Outcomes meta-analysis |
| Data format: | OpenDocument Spreadsheets (.ods)  Microsoft Excel document (.xlsx) |
| Required software (and version we used): | Microsoft Excel (Microsoft 365, version 2302) |
| What can be found in the documents: | Outcomes of all analyses done for the meta-analysis. In this spreadsheet outcomes are presented for different imputed correlations.  The different tabs show different calculations or the same calculations but with absolute or raw data. |
| Abbreviations used and not explained in the document: | CI = confidence interval  df = degrees of freedom  ES = effect sizes  LB = lower bound  NI = No information  P / p-val / p\_val =p-value PI = prediction interval RPE = Ratings of perceived exertion SE = standard error SMCR = Standardized mean change UB = upper bound |

# Outcomes of the sensitivity analysis,

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| --- | --- |
| Documents: | 8. Outcomes meta-analysis – Sensitivity analysis |
| Data format: | OpenDocument Spreadsheets (.ods)  Microsoft Excel document (.xlsx) |
| Required software (and version we used): | Microsoft Excel (Microsoft 365, version 2302) |
| What can be found in the documents: | In this spreadsheet the outcomes of the sensitivity analysis can be found. The different outcomes are clustered per type of analysis and can be found in different tabs. |
| Abbreviations used and not explained in the document: | CI = confidence interval  LB = lower bound  NA = not available  SE = standard error  UB = upper bound |

# PRISMA checklist Abstract + Main

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| --- | --- |
| Documents: | 9. PRISMA Checklist Abstract + Main |
| Data format: | OpenDocument Text (.odt)  Microsoft Word document (.docx) |
| Required software (and version we used): | Microsoft Word (Microsoft 365, version 2302) |
| What can be found in the documents: | A completed PRISMA checklist for both the Abstract and the main text of the manuscript |
| Abbreviations used and not explained in the document: | Not applicable |