# Appendix F. Risk of bias assessments

All studies in this review were individually randomised, hence all assessments use the ROB 2 tools for trials with a parallel design. Assessments are presented in alphabetical order by study ID.

For each study, an assessment was done for each outcome and comparison contributing to the MA (or where results could not be included in the MA but were tabulated).

For each study we report

- the comparison for the assessment,
- the outcome domain for the assessment,
- other outcomes included in MAs for the study (noting if the assessment was the same for these or other comparisons),
- the study design (parallel trial)

Where the RoB assessment was the same for all outcomes, comparisons or both, only one assessment is reported.

The assessment includes

- The overall risk of bias judgement
- The judgement for each domain, with an explanation provided for each signalling questions for which the response could lead to a judgement of high risk of bias or some concerns
- The response to each signalling question (numbers, the questions are reported in full below)

We did not assess studies that were counted as 'missing results' (i.e. those studies where the result was judged to be uninterpretable or where there were major concerns about the integrity of the data such that it would be misleading to report the results). In such cases, concerns about bias leading to an under- or over-estimate of effect are inconsequential compared to the impact of major errors in reported data or the interpretation of that data.

**Box F1**. Signalling questions from the revised Cochrane risk of bias (ROB 2) tool for randomised trials (parallel design)

| **Parallel (individually randomised)** |
|---|
| **Domain 1.** Bias arising from the randomisation process |
| 1.1 Was the allocation sequence random? |
| 1.2 Was the allocation sequence concealed until participants were enrolled and assigned to interventions? |
| 1.3 Did baseline differences between intervention groups suggest a problem with the randomization process? |
| **Domain 2.** Bias due to deviations from intended interventions |
| 2.1 Were participants aware of their assigned intervention during the trial? |
| 2.2 Were carers and people delivering the interventions aware of participants' assigned intervention during the trial? |
| 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention that arose because of the trial context? |
| 2.4 If Y/PY to 2.3 Were these deviations likely to have affected the outcome? |
| 2.5 If Y/PY to 2/4: Were these deviations from intended intervention balanced between groups? |
| 2.6 Was an appropriate analysis used to estimate the effect of assignment to intervention? |
| 2.7 If N/PN/NI to 2.6: Was there potential for a substantial impact (on the result) of the failure to analyse participants in the group to which they were randomized? |
| **Domain 3**. Bias due to missing outcome data |
| 3.1 Were data for this outcome available for all, or nearly all, participants randomized? |
| 3.2 If N/PN/NI to 3.1a or 3.1b: Is there evidence that the result was not biased by missing data? |
| 3.3 If N/PN to 3.2 Could missingness in the outcome depend on its true value? |
| 3.4 If Y/PY/NI to 3.3: Is it likely that missingness in the outcome depended on its true value? |
| **Domain 4**. Bias in the measurement of the outcome |
| 4.1 Was the method of measuring the outcome inappropriate? |
| 4.2 Could measurement or ascertainment of the outcome have differed between intervention groups? |
| 4.3 If N/PN/NI to 4.1 and 4.2: Were outcome assessors aware of the intervention received by study participants? |
| 4.4 If Y/PY/NI to 4.3: Could assessment of the outcome have been influenced by knowledge of intervention received? |
| 4.5 If Y/PY/NI to 4.4: Is it likely that assessment of the outcome was influenced by knowledge of intervention received? |
| **Domain 5**. Bias from selection of the reported result |
| 5.1 Were the data that produced this result analysed in accordance with a pre-specified analysis plan that was finalized before unblinded outcome data were available for analysis? |

| **Parallel (individually randomised)** |
|---|
| 5.2 … multiple eligible outcome measurements (e.g. scales, definitions, time points) within the outcome domain? |
| 5.3 … multiple eligible analyses of the data? |

## Appendix F. Risk of bias assessments – parallel randomised trials

| **Study ID.** **Lundblad 1999** | **Outcome domain.** Pain<br>**Assessments**. Pain | | **Comparison.** inactive - wait list control<br>**Design.** parallel (individually randomised) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Domain** | **Judgment** | **Explanation** (for concerns that lead to high or some concerns about RoB) | **Response to signalling questions** | | | | | | |
| | | | SQ1 | SQ2 | SQ3 | SQ4 | SQ5 | SQ6 | SQ7 |
| 1. Bias arising from the randomisation process | Some concerns | Stratified randomisation based on age and degree of highly repetitive work tasks. | PY | NI | N | | | | |
| 2. Bias due to deviations from the intended intervention | Low | Intervention group received Feldenkrais and comparator no intervention (i.e. not a sham/placebo or 'active' standard care), so it is likely that participants were aware of their assigned intervention.<br>Modified intention-to-treat (mITT) analysis (excluding participants with missing outcome data). Low numbers in both groups. 13/33 (40%) of participants in intervention group and 9/32 (28%) in the control group did not received allocated intervention. | Y | Y | PN | NA | NA | Y | NA |
| 3. Bias due missing outcome data | Some concerns | I: 13/33 (40% missing); C: 9/32 (28%) missing<br>In both groups, participants withdrew for a variety of reasons. Most reasons were balanced between the groups (exception of dismissals - 6 in intervention group; 1 in control group). | N | N | NI | PN | | | |
| 4. Bias in the measurement of the outcome | High | Participants (i.e. the outcome assessors) were aware that they had received Feldenkrais or no intervention.<br>The outcome assessor's knowledge of the intervention received could have influenced their response. Participants were likely to have had a prior belief about the benefits of Feldenkrais compared to no treatment that were likely to influence the outcome. | N | N | Y | PY | PY | | |
| 5. Bias in the selection of the reported results | Some concerns | Multiple measures eligible for the meta-analysis of pain are fully reported in the paper, at multiple time points. It is unlikely that there were other results from which these measures were selected.<br>Results are reported as summary statistics or with minimal analysis, and it is unlikely that these were selected from other analyses. | NI | N | PN | | | | |
| **OVERALL risk of bias** | **High** | | | | | | | | |

| **Study ID.**<br>**Lundqvist 2014** | **Outcome domain.** Pain<br>**Assessments**. Pain, Physical function (disability) | | **Comparison.** inactive - wait list control<br>**Design.** parallel (individually randomised) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Domain** | **Judgment** | **Explanation** (for concerns that lead to high or some concerns about RoB) | **Response to signalling questions** | | | | | | |
| | | | SQ1 | SQ2 | SQ3 | SQ4 | SQ5 | SQ6 | SQ7 |
| 1. Bias arising from the randomisation process | Some concerns | | Y | NI | N | | | | |
| 2. Bias due to deviations from the intended intervention | Low | Intervention group received Feldenkrais and comparator no intervention (was a wait-list control, i.e. not a sham/placebo or 'active' standard care), so it is likely that participants and people delivering the intervention were aware of their assigned intervention.<br>Intention-to-treat analysis (ITT), where missing data have been imputed using methods that treat the imputed data as if they were observed (last observation carried forward). | Y | Y | PN | NA | NA | Y | NA |
| 3. Bias due missing outcome data | Low | I: 25/30 (17% missing) C: 26/31 (16% missing)<br>Analysis method did not correct for bias; no sensitivity analysis<br>In both groups, X participants withdrew because of scheduling/personal reasons. None of the participants in either group reported neck/scapular pain as the reason for leaving the study. | N | N | PN | NA | | | |
| 4. Bias in the measurement of the outcome | High | Participants (i.e. the outcome assessors) were aware that they had received Feldenkrais or no intervention (wait list).<br>The outcome assessor's knowledge of the intervention received could have influenced the outcome assessment.<br>Participants were likely to have had a prior belief about the benefits of Feldenkrais compared to no treatment that were likely to influence the outcome. | N | PN | Y | PY | PY | | |
| 5. Bias in the selection of the reported results | Some concerns | No protocol or analysis plan, however the registry record shows pre-specified outcomes, measures and timepoints that are fully reported in the study report. There is an additional pain measure that was not pre-specified (our selected measure).<br>Measures eligible for the meta-analysis appear fully reported in the paper, at multiple time points. It is unlikely that there were other results from which these measures were selected.<br>Results are reported as summary statistics and it is unlikely that these were selected from other analyses | PN | PN | PN | | | | |
| **OVERALL risk of bias** | **High** | | | | | | | | |

| **Study ID.** **Mohan 2020** | **Outcome domain.** Pain<br>**Assessments**. Pain, Breathing patterns | | **Comparison.** inactive control - physiotherapy (co-intervention<br>**Design.** parallel (individually randomised) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Domain** | **Judgment** | **Explanation** (for concerns that lead to high or some concerns about RoB) | **Response to signalling questions** | | | | | | |
| | | | SQ1 | SQ2 | SQ3 | SQ4 | SQ5 | SQ6 | SQ7 |
| 1. Bias arising from the randomisation process | Low | Block randomisation used, block size and person allocating participants not reported. Unclear if the person allocating participants to groups could have predicted the allocation sequence, or if they had motivation to change the allocation (excluding participant or delaying enrolment) | Y | PY | PN | | | | |
| 2. Bias due to deviations from the intended intervention | Low | Participants were aware that they had received either Feldenkrais in addition to physiotherapy, or physiotherapy alone.Those delivering care were aware of the participants' assigned intervention.<br>Modified intention-to-treat (mITT) analysis (excluding participants with missing outcome data) | PY | PY | PN | NA | NA | PY | NA |
| 3. Bias due missing outcome data | Low | I: 17/20 (15% missing) C: 17/20 (15% missing)<br>Analysis method did not correct for bias; no sensitivity analysis<br>In each group, 3 participants withdrew because they were unable to meet the follow-up requirements. | N | N | PN | NA | | | |
| 4. Bias in the measurement of the outcome | Low | Participants (i.e. the outcome assessors) were aware that they had received either Feldenkrais in addition to physiotherapy, or physiotherapy alone.<br>It is unlikely that participants would have prior beliefs about which intervention was more beneficial. | N | N | PY | PN | NA | | |
| 5. Bias in the selection of the reported results | Some concerns | No registry entry or protocol.<br>Results are reported as summary statistics or with minimal analysis, and it is unlikely that these were selected from other analyses. | NI | N | PN | | | | |
| **OVERALL risk of bias** | **Some concerns** | | | | | | | | |

| **Study ID.** **Smith 2001** | **Outcome domain.** Pain<br>**Assessments**. Pain, EFMH | | **Comparison.** inactive - other (story)<br>**Design.** parallel (individually randomised) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Domain** | **Judgment** | **Explanation** (for concerns that lead to high or some concerns about RoB) | **Response to signalling questions** | | | | | | |
| | | | SQ1 | SQ2 | SQ3 | SQ4 | SQ5 | SQ6 | SQ7 |
| 1. Bias arising from the randomisation process | Low | Mixed unlabelled envelopes containing a card marked either "Group I (Feldenkrais) or "Group 2" (Control) were distributed by the researcher (within treatment centres) for this purpose. | PY | PY | N | | | | |
| 2. Bias due to deviations from the intended intervention | Low | Intervention group received Feldenkrais and comparator audiotape of a story (i.e. not a sham/placebo or 'active' standard care), so it is likely that participants and | Y | Y | PN | NA | NA | Y | NA |

| **Study ID.** Smith 2001 | **Outcome domain.** Pain<br>**Assessments**. Pain, EFMH | | **Comparison.** inactive - other (story)<br>**Design.** parallel (individually randomised) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Domain** | **Judgment** | **Explanation** (for concerns that lead to high or some concerns about RoB) | **Response to signalling questions** | | | | | | |
| | | | SQ1 | SQ2 | SQ3 | SQ4 | SQ5 | SQ6 | SQ7 |
| | | those delivering the intervention were aware of their assigned intervention.<br>Modified intention-to-treat (mITT) analysis (excluding participants with missing outcome data) | | | | | | | |
| 3. Bias due missing outcome data | Low | I: 14/14 (0% missing) C: 12/14 (15% missing) | PY | NA | NA | NA | | | |
| 4. Bias in the measurement of the outcome | High | Participants (i.e. the outcome assessors) were aware that they had received Feldenkrais or a story.<br>Participants' knowledge of the intervention they received could have influenced their response. Participants were likely to have had a prior belief about the benefits of Feldenkrais compared to hearing a story that were likely to influence the outcome. | PN | PN | Y | Y | PY | | |
| 5. Bias in the selection of the reported results | Some concerns | Multiple measures eligible for the meta-analysis of the pain outcome are fully reported in the paper, at a single post-intervention timepoint. It is unlikely that there were other results from which these measures were selected. For the mental distress outcome, there was only one possible way in which the outcome can be measured (and at a single timepoint). | NI | PN | PN | | | | |
| **OVERALL risk of bias** | **High** | | | | | | | | |

| **Study ID.** Stephens 2001 | **Outcome domain.** Physical function (disability)<br>**Assessments**. Physical function (disability), Falls | | **Comparison.** inactive - other (MS education)<br>**Design.** parallel (individually randomised) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Domain** | **Judgment** | **Explanation** (for concerns that lead to high or some concerns about RoB) | **Response to signalling questions** | | | | | | |
| | | | SQ1 | SQ2 | SQ3 | SQ4 | SQ5 | SQ6 | SQ7 |
| 1. Bias arising from the randomisation process | Some concerns | | PY | NI | N | | | | |
| 2. Bias due to deviations from the intended intervention | Low | Intervention group received Feldenkrais and comparator general MS education (i.e. not a sham/placebo or 'active' standard care), so it is likely that participants were aware of their assigned intervention. The principal investigator delivered the Feldenkrais classes.<br>Intention-to-treat (ITT) analysis | Y | PY | PN | NA | NA | Y | NA |
| 3. Bias due missing outcome data | Low | I: 6/6 (0% missing); C: 6/6 (0% missing) | Y | NA | NA | NA | | | |
| 4. Bias in the measurement of the outcome | High | Participants (i.e. the outcome assessors) were aware that they had received Feldenkrais or general MS education.<br>Participants' knowledge of the intervention they received could have influenced their response. Participants were likely to have had a prior belief | N | PN | Y | Y | PY | | |

| **Study ID.** Stephens 2001 | **Outcome domain.** Physical function (disability)<br>**Assessments**. Physical function (disability), Falls | | **Comparison.** inactive - other (MS education)<br>**Design.** parallel (individually randomised) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Domain** | **Judgment** | **Explanation** (for concerns that lead to high or some concerns about RoB) | **Response to signalling questions** | | | | | | |
| | | | SQ1 | SQ2 | SQ3 | SQ4 | SQ5 | SQ6 | SQ7 |
| | | about the benefits of Feldenkrais compared to general MS education that were likely to influence the outcome. | | | | | | | |
| 5. Bias in the selection of the reported results | Some concerns | For disability, multiple measures eligible for the meta-analysis are fully reported in the paper, for a single post-intervention timepoint. It is unlikely that there were other results from which these measures were selected. For falls, there is only one possible way in which the outcome can be measured.<br>Results are reported as summary statistics or with minimal analysis, and it is unlikely that these were selected from other analyses. | NI | PN | PN | | | | |
| **OVERALL risk of bias** | **High** | | | | | | | | |

| **Study ID.** Stephens 2005 | **Outcome domain.** HR-QoL<br>**Assessments**. HR-QoL | | **Comparison.** inactive - no intervention<br>**Design.** parallel (individually randomised) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Domain** | **Judgment** | **Explanation** (for concerns that lead to high or some concerns about RoB) | **Response to signalling questions** | | | | | | |
| | | | SQ1 | SQ2 | SQ3 | SQ4 | SQ5 | SQ6 | SQ7 |
| 1. Bias arising from the randomisation process | High | The sequence for allocating participants to groups was based on alternation (following stratification by age and gender). Each group was further stratified by dividing equally into younger and older age group. The person enrolling participants had knowledge of the forthcoming allocation. | N | N | PN | | | | |
| 2. Bias due to deviations from the intended intervention | Low | Intervention group received Feldenkrais and comparator no intervention (i.e. not a sham/placebo or 'active' standard care), so it is likely that participants were aware of their assigned intervention. It was not reported who delivered the intervention.<br>Modified intention-to-treat (mITT) analysis (excluding participants with missing outcome data) | Y | NI | PN | NA | NA | Y | NA |
| 3. Bias due missing outcome data | Low | I: 14/15 (7% missing); C: 17/17 (0% missing). | PY | NA | NA | NA | | | |
| 4. Bias in the measurement of the outcome | High | Participants (i.e. the outcome assessors) were aware that they had received Feldenkrais or no intervention.<br>Participants' knowledge of the intervention they received could have influenced their response. Participants were likely to have had a prior belief about the benefits of Feldenkrais compared to no treatment that were likely to influence the outcome. | N | N | Y | Y | PY | | |

| **Study ID.** Stephens 2005 | **Outcome domain.** HR-QoL<br>**Assessments**. HR-QoL | | **Comparison.** inactive - no intervention<br>**Design.** parallel (individually randomised) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Domain** | **Judgment** | **Explanation** (for concerns that lead to high or some concerns about RoB) | **Response to signalling questions** | | | | | | |
| | | | SQ1 | SQ2 | SQ3 | SQ4 | SQ5 | SQ6 | SQ7 |
| 5. Bias in the selection of the reported results | High | Results are only available for SF-36 emotional well-being and vitality subscales for the prioritised outcome, despite it being usual to report all subscale scores. Authors report "Two of the 8 SF-36 subscales showed significant change" suggesting these were selected from other SF-36 subscales and domains measured on the basis of statistical significance. For this outcome domain, we would have selected the SF-36 physical domain had it been reported.<br>Authors reported collapsing the SF-36 data across the age variable, whereas other outcomes were analysed considering age. | NI | PY | PY | | | | |
| **OVERALL risk of bias** | **High** | | | | | | | | |

| **Study ID.** Stephens 2005 | **Outcome domain.** Physical function (mobility)<br>**Assessments**. Physical function (mobility) | | **Comparison.** inactive - no intervention<br>**Design.** parallel (individually randomised) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Domain** | **Judgment** | **Explanation** (for concerns that lead to high or some concerns about RoB) | **Response to signalling questions** | | | | | | |
| | | | SQ1 | SQ2 | SQ3 | SQ4 | SQ5 | SQ6 | SQ7 |
| 1. Bias arising from the randomisation process | High | The sequence for allocating participants to groups was based on alternation (following stratification by age and gender). Each group was further stratified by dividing equally into younger and older age group. The person enrolling participants had knowledge of the forthcoming allocation. | N | N | PN | | | | |
| 2. Bias due to deviations from the intended intervention | Low | Intervention group received Feldenkrais and comparator no intervention (i.e. not a sham/placebo or 'active' standard care), so it is likely that participants were aware of their assigned intervention. It was not reported who delivered the intervention.<br>Modified intention-to-treat (mITT) analysis (excluding participants with missing outcome data) | Y | NI | PN | NA | NA | Y | NA |
| 3. Bias due missing outcome data | Low | I: 14/15 (7% missing); C: 17/17 (0% missing). | PY | NA | NA | NA | | | |
| 4. Bias in the measurement of the outcome | Low | The outcome measure was observer reported but did not involve judgement | N | N | NI | N | NA | | |
| 5. Bias in the selection of the reported results | Some concerns | Multiple measures eligible for the meta-analysis of <outcome> are fully reported in the paper, at a single post-intervention timepoint. It is unlikely that there were other results from which these measures were selected.<br>Results are reported as summary statistics or with minimal analysis, and it | NI | PN | PN | | | | |

| **Study ID.** Stephens 2005 | **Outcome domain.** Physical function (mobility) | | **Comparison.** inactive - no intervention | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Assessments**. Physical function (mobility) | | **Design.** parallel (individually randomised) | | | | | | |
| **Domain** | **Judgment** | **Explanation** (for concerns that lead to high or some concerns about RoB) | **Response to signalling questions** | | | | | | |
| | | | SQ1 | SQ2 | SQ3 | SQ4 | SQ5 | SQ6 | SQ7 |
| | | is unlikely that these were selected from other analyses. | | | | | | | |
| **OVERALL risk of bias** | **High** | | | | | | | | |

| **Study ID.** Torres-Unda 2017 | **Outcome domain.** Physical function (mobility) | | **Comparison.** inactive - no intervention | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Assessments**. Physical function (mobility) | | **Design.** parallel (individually randomised) | | | | | | |
| **Domain** | **Judgment** | **Explanation** (for concerns that lead to high or some concerns about RoB) | **Response to signalling questions** | | | | | | |
| | | | SQ1 | SQ2 | SQ3 | SQ4 | SQ5 | SQ6 | SQ7 |
| 1. Bias arising from the randomisation process | Low | | PY | PY | N | | | | |
| 2. Bias due to deviations from the intended intervention | Low | Intervention group received Feldenkrais and comparator no intervention (i.e. not a sham/placebo or 'active' standard care), so it is likely that participants were aware of their assigned intervention.<br>Modified intention-to-treat (mITT) analysis (excluding participants with missing outcome data) | Y | PN | PN | NA | NA | Y | NA |
| 3. Bias due missing outcome data | Low | I: 16/21 (25% missing); C: 16/20 (20% missing)<br>In both groups, participants withdrew because of personal decisions or illlness. | N | N | PN | NA | | | |
| 4. Bias in the measurement of the outcome | Low | The outcome assessor(s), specialists experienced in working with people with ID, were aware of the intervention received by participants because they were not blinded to group allocation.<br>The outcome measure was observer reported but did not involve judgement | N | PN | Y | N | NA | | |
| 5. Bias in the selection of the reported results | Low | No protocol or analysis plan, however the registry record shows pre-specified outcomes, measures and timepoints that are fully reported in the study report.<br>Multiple measures eligible for the meta-analysis of mobility are fully reported in the paper, at a single end-of-intervention time point. It is unlikely that there were other results from which these measures were selected.<br>Results are reported as summary statistics or with minimal analysis, and it is unlikely that these were selected from other analyses. | PY | PN | PN | | | | |
| **OVERALL risk of bias** | **Low** | | | | | | | | |

| **Study ID.** Ullmann 2010 | **Outcome domain.** EFMH<br>**Assessments**. EFMH | | **Comparison.** inactive - wait list control<br>**Design.** parallel (individually randomised) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Domain** | **Judgment** | **Explanation** (for concerns that lead to high or some concerns about RoB) | **Response to signalling questions** | | | | | | |
| | | | SQ1 | SQ2 | SQ3 | SQ4 | SQ5 | SQ6 | SQ7 |
| 1. Bias arising from the randomisation process | Some concerns | Startified randomisation (TUG score, age) was used for 41 participants, however a further 6 participants were allocated to the intervention group for practical attendance purposes. | N | NI | N | | | | |
| 2. Bias due to deviations from the intended intervention | Low | Intervention group received Feldenkrais and comparator were waitlisted (i.e. not a sham/placebo or 'active' standard care), so it is likely that participants were aware of their assigned intervention. The investigator, a certified<br>Feldenkrais teacher, taught all Feldenkrais classes.<br>Intention-to-treat (ITT) analysis (all participants, including dropouts, included in the analysis, with exception of 2 participants who dropped out post-randomisation but before study start) | Y | Y | PN | NA | NA | PY | NA |
| 3. Bias due missing outcome data | Low | I: 24/25 (4%); C: 20/22 (9%) | Y | NA | NA | NA | | | |
| 4. Bias in the measurement of the outcome | High | Participants (i.e. the outcome assessors) were aware that they had received Feldenkrais or were waitlisted.<br>Participants' knowledge of the intervention they received could have influenced their response. Participants were likely to have had a prior belief about the benefits of Feldenkrais compared to no treatment (waitlist) that were likely to influence the outcome. | N | N | Y | PY | PY | | |
| 5. Bias in the selection of the reported results | Some concerns | Multiple measures eligible for the meta-analysis are fully reported in the paper, at a single post-intervention time point. It is unlikely that there were other results from which these measures were selected.<br>Results are reported for multiple ways of analysing/handling the outcome, and it is unlikely that these were selected from other analyses. | NI | PN | PN | | | | |
| **OVERALL risk of bias** | **High** | | | | | | | | |

| **Study ID.** Ullmann 2010 | **Outcome domain.** HR-QoL<br>**Assessments**. HR-QoL | | **Comparison.** inactive - wait list control<br>**Design.** parallel (individually randomised) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Domain** | **Judgment** | **Explanation** (for concerns that lead to high or some concerns about RoB) | **Response to signalling questions** | | | | | | |
| | | | SQ1 | SQ2 | SQ3 | SQ4 | SQ5 | SQ6 | SQ7 |
| 1. Bias arising from the randomisation process | Some concerns | Startified randomisation (TUG score, age) was used for 41 participants, however a further 6 participants were allocated to the intervention group for practical attendance purposes. | N | NI | N | | | | |

| **Study ID.** Ullmann 2010 | **Outcome domain.** HR-QoL<br>**Assessments**. HR-QoL | | **Comparison.** inactive - wait list control<br>**Design.** parallel (individually randomised) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Domain** | **Judgment** | **Explanation** (for concerns that lead to high or some concerns about RoB) | **Response to signalling questions** | | | | | | |
| | | | SQ1 | SQ2 | SQ3 | SQ4 | SQ5 | SQ6 | SQ7 |
| 2. Bias due to deviations from the intended intervention | Low | Intervention group received Feldenkrais and comparator were waitlisted (i.e. not a sham/placebo or 'active' standard care), so it is likely that participants were aware of their assigned intervention. The investigator, a certified<br>Feldenkrais teacher, taught all Feldenkrais classes.<br>Intention-to-treat (ITT) analysis (all participants, including dropouts, included in the analysis, with exception of 2 participants who dropped out post-randomisation but before study start) | Y | Y | PN | NA | NA | PY | NA |
| 3. Bias due missing outcome data | Low | I: 24/25 (4%); C: 20/22 (9%) | Y | NA | NA | NA | | | |
| 4. Bias in the measurement of the outcome | High | Participants (i.e. the outcome assessors) were aware that they had received Feldenkrais or were waitlisted.<br>Participants' knowledge of the intervention they received could have influenced their response. Participants were likely to have had a prior belief about the benefits of Feldenkrais compared to no treatment (waitlist) that were likely to influence the outcome. | N | N | Y | PY | PY | | |
| 5. Bias in the selection of the reported results | Some concerns | There is only one possible way in which the outcome can be measured (and at a single timepoint).<br>Results are reported for multiple ways of analysing/handling the outcome, and it is unlikely that these were selected from other analyses. | NI | PN | PN | | | | |
| **OVERALL risk of bias** | **High** | | | | | | | | |

| **Study ID.** Ullmann 2010 | **Outcome domain.** Physical function (mobility)<br>**Assessments**. Physical function (mobility) | | **Comparison.** inactive - wait list control<br>**Design.** parallel (individually randomised) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Domain** | **Judgment** | **Explanation** (for concerns that lead to high or some concerns about RoB) | **Response to signalling questions** | | | | | | |
| | | | SQ1 | SQ2 | SQ3 | SQ4 | SQ5 | SQ6 | SQ7 |
| 1. Bias arising from the randomisation process | Some concerns | Startified randomisation (TUG score, age) was used for 41 participants, however a further 6 participants were allocated to the intervention group for practical attendance purposes. | N | NI | N | | | | |
| 2. Bias due to deviations from the intended intervention | Low | Intervention group received Feldenkrais and comparator were waitlisted (i.e. not a sham/placebo or 'active' standard care), so it is likely that participants were aware of their assigned intervention. The investigator, a certified<br>Feldenkrais teacher, taught all Feldenkrais classes. | Y | Y | PN | NA | NA | PY | NA |

| **Study ID.** Ullmann 2010 | **Outcome domain.** Physical function (mobility) | | **Comparison.** inactive - wait list control | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Assessments**. Physical function (mobility) | | **Design.** parallel (individually randomised) | | | | | | |
| **Domain** | **Judgment** | **Explanation** (for concerns that lead to high or some concerns about RoB) | **Response to signalling questions** | | | | | | |
| | | | SQ1 | SQ2 | SQ3 | SQ4 | SQ5 | SQ6 | SQ7 |
| | | Intention-to-treat (ITT) analysis (all participants, including dropouts, included in the analysis, with exception of 2 participants who dropped out post-randomisation but before study start) | | | | | | | |
| 3. Bias due missing outcome data | Low | I: 24/25 (4%); C: 20/22 (9%) | Y | NA | NA | NA | | | |
| 4. Bias in the measurement of the outcome | Low | The outcome assessor (likely the principal investigator) was aware of the intervention received by participants because they delivered the Feldenkrais intervention and assigned participants to groups (incl those outside of the randomisation process).<br>The outcome measure was observer reported but did not involve judgement | N | N | PY | N | NA | | |
| 5. Bias in the selection of the reported results | Some concerns | There is only one possible way in which the outcome can be measured (and at a single timepoint).<br>Results are reported for multiple ways of analysing/handling the outcome, and it is unlikely that these were selected from other analyses. | NI | PN | PN | | | | |
| **OVERALL risk of bias** | **Some concerns** | | | | | | | | |

| **Study ID.** Ullmann 2010 | **Outcome domain.** Falls | | **Comparison.** inactive - wait list control | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Assessments**. Falls | | **Design.** parallel (individually randomised) | | | | | | |
| **Domain** | **Judgment** | **Explanation** (for concerns that lead to high or some concerns about RoB) | **Response to signalling questions** | | | | | | |
| | | | SQ1 | SQ2 | SQ3 | SQ4 | SQ5 | SQ6 | SQ7 |
| 1. Bias arising from the randomisation process | Some concerns | Startified randomisation (TUG score, age) was used for 41 participants, however a further 6 participants were allocated to the intervention group for practical attendance purposes. | N | NI | N | | | | |
| 2. Bias due to deviations from the intended intervention | Low | Intervention group received Feldenkrais and comparator were waitlisted (i.e. not a sham/placebo or 'active' standard care), so it is likely that participants were aware of their assigned intervention. The investigator, a certified<br>Feldenkrais teacher, taught all Feldenkrais classes.<br>Intention-to-treat (ITT) analysis (all participants, including dropouts, included in the analysis, with exception of 2 participants who dropped out post-randomisation but before study start) | Y | Y | PN | NA | NA | PY | NA |
| 3. Bias due missing outcome data | Low | I: 24/25 (4%); C: 20/22 (9%) | Y | NA | NA | NA | | | |

| **Study ID.** Ullmann 2010 | **Outcome domain.** Falls<br>**Assessments**. Falls | | **Comparison.** inactive - wait list control<br>**Design.** parallel (individually randomised) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Domain** | **Judgment** | **Explanation** (for concerns that lead to high or some concerns about RoB) | **Response to signalling questions** | | | | | | |
| | | | SQ1 | SQ2 | SQ3 | SQ4 | SQ5 | SQ6 | SQ7 |
| 4. Bias in the measurement of the outcome | High | Participants (i.e. the outcome assessors) were aware that they had received Feldenkrais or were waitlisted.<br>Participants' knowledge of the intervention they received could have influenced their response. Participants were likely to have had a prior belief about the benefits of Feldenkrais compared to no treatment (waitlist) that were likely to influence the outcome. | N | N | PY | PY | PY | | |
| 5. Bias in the selection of the reported results | Some concerns | Multiple measures eligible for the meta-analysis of <outcome> are fully reported in the paper, at a single post-intervention timepoint. It is unlikely that there were other results from which these measures were selected<br>Results are reported as per methods, however it is unclear why summary statistics were reported for three other outcome domains, but not for the falls outcome domain. | NI | PN | NI | | | | |
| **OVERALL risk of bias** | **High** | | | | | | | | |

| **Study ID.** Vrantsidis 2009 | **Outcome domain.** HR-QoL<br>**Assessments**. HR-QoL, Physical function (disability), Falls | | **Comparison.** inactive - no intervention<br>**Design.** parallel (individually randomised) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Domain** | **Judgment** | **Explanation** (for concerns that lead to high or some concerns about RoB) | **Response to signalling questions** | | | | | | |
| | | | SQ1 | SQ2 | SQ3 | SQ4 | SQ5 | SQ6 | SQ7 |
| 1. Bias arising from the randomisation process | Low | Randomisation method not described ("use of randomly ordered opaque envelopes by a research officer not involved in the assessments") | PY | PY | N | | | | |
| 2. Bias due to deviations from the intended intervention | Low | Intervention group received Feldenkrais and comparator no intervention (i.e. not a sham/placebo or 'active' standard care), so it is likely that participants and those delivering the intervention were aware of the assigned intervention.<br>Modified intention-to-treat (mITT) analysis (excluding participants with missing outcome data) | Y | Y | PN | NA | NA | PY | NA |
| 3. Bias due missing outcome data | Low | I: 26/29 (10% missing) C: 29/33 (12% missing)<br>Analysis method did not correct for bias; no sensitivity analysis<br>Reasons for withdrawing from both groups included medical problems not<br>related to the study (n = 3), prior commitments (n = 1), health issues in the family (n = 1), and no longer being interested (n = 2). | PN | PN | PN | NA | | | |

| **Study ID.** Vrantsidis 2009 | **Outcome domain.** HR-QoL<br>**Assessments**. HR-QoL, Physical function (disability), Falls | | **Comparison.** inactive - no intervention<br>**Design.** parallel (individually randomised) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Domain** | **Judgment** | **Explanation** (for concerns that lead to high or some concerns about RoB) | **Response to signalling questions** | | | | | | |
| | | | SQ1 | SQ2 | SQ3 | SQ4 | SQ5 | SQ6 | SQ7 |
| 4. Bias in the measurement of the outcome | High | Participants (i.e. the outcome assessors) were aware that they had received Feldenkrais or no intervention.<br>Participants' knowledge of the intervention they received could have influenced their response. Participants were likely to have had a prior belief about the benefits of Feldenkrais compared to no treatment that were likely to influence the outcome | PN | PN | Y | PY | PY | | |
| 5. Bias in the selection of the reported results | Some concerns | Measures eligible for the meta-analysis appear fully reported in the paper, and there is a single follow-up timepoint. It is unlikely that there were other results from which these measures were selected.<br>Results are reported as summary statistics or with minimal analysis, and it is unlikely that these were selected from other analyses. | NI | PN | PN | | | | |
| **OVERALL risk of bias** | **High** | | | | | | | | |

| **Study ID.** Vrantsidis 2009 | **Outcome domain.** Physical function (mobility)<br>**Assessments**. Physical function (mobility) | | **Comparison.** inactive - no intervention<br>**Design.** parallel (individually randomised) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Domain** | **Judgment** | **Explanation** (for concerns that lead to high or some concerns about RoB) | **Response to signalling questions** | | | | | | |
| | | | SQ1 | SQ2 | SQ3 | SQ4 | SQ5 | SQ6 | SQ7 |
| 1. Bias arising from the randomisation process | Low | Randomisation method not described ("use of randomly ordered opaque envelopes by a research officer not involved in the assessments") | NI | PY | N | | | | |
| 2. Bias due to deviations from the intended intervention | Low | Intervention group received Feldenkrais and comparator no intervention (i.e. not a sham/placebo or 'active' standard care), so it is likely that participants and those delivering the intervention were aware of the assigned intervention.<br>Modified intention-to-treat (mITT) analysis (excluding participants with missing outcome data) | Y | Y | PN | NA | NA | PY | NA |
| 3. Bias due missing outcome data | Low | I: 26/29 (10% missing) C: 29/33 (12% missing)<br>Analysis method did not correct for bias; no sensitivity analysis<br>Reasons for withdrawing from both groups included medical problems not<br>related to the study (n = 3), prior commitments (n = 1), health issues in the family (n = 1), and no longer being interested (n = 2). | PN | PN | PN | NA | | | |
| 4. Bias in the measurement of the outcome | Low | Assessors were blinded to participant-group allocation. | PN | PN | N | NA | NA | | |

| **Study ID.**<br>**Vrantsidis 2009** | **Outcome domain.** Physical function (mobility)<br>**Assessments**. Physical function (mobility) | | **Comparison.** inactive - no intervention<br>**Design.** parallel (individually randomised) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Domain** | **Judgment** | **Explanation** (for concerns that lead to high or some concerns about RoB) | **Response to signalling questions** | | | | | | |
| | | | SQ1 | SQ2 | SQ3 | SQ4 | SQ5 | SQ6 | SQ7 |
| 5. Bias in the selection of the reported results | Some concerns | Measures eligible for the meta-analysis appear fully reported in the paper, and there is a single follow-up timepoint. It is unlikely that there were other results from which these measures were selected.<br>Results are reported as summary statistics or with minimal analysis, and it is unlikely that these were selected from other analyses. | NI | PN | PN | | | | |
| **OVERALL risk of bias** | **Some concerns** | | | | | | | | |

## Appendix F. Risk of bias assessments - crossover trials

| **Study ID.** | **Outcome domain.** Fatigue<br>**Assessments**. Fatigue, EFMH, Physical function (disability & mobility) | | **Comparison.** inactive - sham<br>**Design.** crossover trial | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Domain** | **Judgment** | **Explanation** (for concerns that lead to high or some concerns about RoB) | **Response to signalling questions** | | | | | | |
| | | | SQ1 | SQ2 | SQ3 | SQ4 | SQ5 | SQ6 | SQ7 |
| 1. Bias arising from the randomisation process | Some concerns | Subjects were randomly assigned to 1 of 2 groups in a crossover design to control for order effects of treatment. No information re allocation concealment.<br>Baseline characteristics not reported by group at start of first period, only for overall sample. | Y | NI | NI | | | | |
| S. Bias arising from period and carryover effects (XO only) | High | Half of the subjects received 8 weeks of sham followed by 8 weeks of Feldenkrais. The other half of the subjects received Feldenkrais treatment first and then sham.<br>No reporting of a washout period. | Y | NA | PN | | | | |
| 2. Bias due to deviations from the intended intervention | Low | The same bodywork practitioner delivered both active and sham interventions.<br>Likely Intention-to-treat (ITT) analysis; no reporting of dropouts: "Treatment compliance was excellent, with only 5 sessions missed without a subsequent reappointment." | PN | Y | PN | NA | NA | PY | NA |
| 3. Bias due missing outcome data | Low | 20 randomised, and Table 1 reports for n=20 participants (no separate reporting by period group) | PY | NA | NA | NA | | | |
| 4. Bias in the measurement of the outcome | Low | | N | PN | PN | NA | NA | | |
| 5. Bias in the selection of the reported results | High | intervention/sham treatments (at the end of the 1st period), and at the end of the 2nd period. Only 'post' measures were reported. | NI | PN | Y | | | | |

| **Study ID.** | **Outcome domain.** Fatigue<br>**Assessments**. Fatigue, EFMH, Physical function (disability & mobility) | | **Comparison.** inactive - sham<br>**Design.** crossover trial | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Domain** | **Judgment** | **Explanation** (for concerns that lead to high or some concerns about RoB) | **Response to signalling questions** | | | | | | |
| | | | SQ1 | SQ2 | SQ3 | SQ4 | SQ5 | SQ6 | SQ7 |
| | | Authors did not report the analysis that included a period effect on the basis of "no significant order effects". | | | | | | | |
| **OVERALL risk of bias** | **High** | | | | | | | | |