RoB – Mills & Allen 2000

Risk of bias assessment (High/unclear/low)	
Random sequence generation (selection bias)	Unclear – First matched on basis of ADL scores, then randomly allocated from that pair only
Allocation concealment (selection bias)	Unclear – Not mentioned in the paper
Blinding of assessors (performance bias)	Unclear – Not mentioned in the paper
Blinding of outcome assessment (detection bias) (patient reported outcomes)	High – Paper suggests in discussion that study would be enhanced by including a 'blind or more objective rater'
Incomplete outcome data addressed (attrition bias)	Unclear – Some data is reported in methods, but participant data has been omitted on the basis of not being 'complete'. Unclear what this means.
Selective outcome reporting (reporting bias)	High – This study is also reported in another paper with different outcome data: Mills N, Allen J, Carey-Morgan S. Does tai chi/qi gong help patients with multiple sclerosis? Journal of Bodywork and Movement Therapies. 2000 Jan 1;4(1):39-48.
Other sources of bias (i.e. baseline bias)	Unclear – Nothing else of note mentioned in paper

RoB - Grossman et al. 2010

Risk of bias assessment (High/unclear/low)	
Random sequence generation (selection bias)	Low – Baseline assessments prior to randomisation. PI randomised blind, using <u>www.randomizer.org</u> in blocks of 4 - 6
Allocation concealment (selection bias)	Low – PI sent allocation list to co-ordinator who in formed participants in writing of their assignment. This was then re-checked by PI, no deviations found
Blinding of assessors (performance bias)	Low – Investigators blinded to assignment
Blinding of outcome assessment (detection bias) (patient reported outcomes)	Low – All PRO measures were entered into a database by blinded personnel
Incomplete outcome data addressed (attrition bias)	Low – Consort flow diagram included in report with n randomized, n analysed etc. ITT employed. Missing data imputed by multiple linear regression that adjusted for age, gender, and isease progression
Selective outcome reporting (reporting bias)	Low – All pre-specified outcomes were reported
Other sources of bias (i.e. baseline bias)	Low – Well conducted and reported study

RoB – Bogosian et al. 2015

Risk of bias assessment (High/unclear/low)	
Random sequence generation (selection bias)	Low – Randomisation took place once cohort of 10 participants consented, screened and baseline data collected. Independent unit at KCL Clinical Trials Unit (CTU) handled randomisation, with fixed block sizes of 2
Allocation concealment (selection bias)	Low – As above. Then CTU sent assignment list to PI
Blinding of assessors (performance bias)	Low – Trial assessor blinded to allocation
Blinding of outcome assessment (detection bias) (patient reported outcomes)	Low – Statistician, health economist blinded to assignment
Incomplete outcome data addressed (attrition bias)	Low – Consort flow diagram included in report with n randomized, n analysed etc. ITT employed. Informative missingness processes explored by sensitivity analysis. Missing baseline variables handled using the missing indicator method
Selective outcome reporting (reporting bias)	Low – All pre-specified outcomes were reported
Other sources of bias (i.e. baseline bias)	Low – Well conducted and reported study

RoB – Kolahkaj & Zargar 2015

Risk of bias assessment (High/unclear/low)	
Random sequence generation (selection bias)	Low – A random number table was used to assign participants to MBSR or control group
Allocation concealment (selection bias)	Unclear – not reported in the paper
Blinding of assessors (performance bias)	Unclear – not reported in the paper
Blinding of outcome assessment (detection bias) (patient reported outcomes)	Unclear – not reported in the paper
Incomplete outcome data addressed (attrition bias)	High – Although consort flow diagram used, reasons accounting for attrition not reported. Eight people excluded from analysis for largely unclear reasons put down to missing two sessions or not returning measures
Selective outcome reporting (reporting bias)	Low – All pre-specified outcomes were reported
Other sources of bias (i.e. baseline bias)	High – Convenience sampling used prior to eventual randomisation

RoB – Amiri et al. 2016

Risk of bias assessment (High/unclear/low)	
Random sequence generation (selection bias)	Unclear – Paper states that 20 volunteers were randomly placed in experimental group and 20 in control
Allocation concealment (selection bias)	Unclear – Paper states only that participants were unaware of their groups
Blinding of assessors (performance bias)	Unclear – Not reported in the paper
Blinding of outcome assessment (detection bias) (patient reported outcomes)	Unclear – Not reported in the paper
Incomplete outcome data addressed (attrition bias)	High – Paper reports no dropouts, but does not indicate how many data (n) were included in analyses or amount of missing data. No consort flow diagram included
Selective outcome reporting (reporting bias)	Low – All pre-specified outcomes were reported
Other sources of bias (i.e. baseline bias)	Unclear – Poor reporting of participant characteristics

RoB – Mahdavi et al. 2016

Risk of bias assessment (High/unclear/low)	
Random sequence generation (selection bias)	Unclear – Paper only states that participants were selected using a random sampling method
Allocation concealment (selection bias)	Unclear - Paper only states that participants were selected using a random sampling method
Blinding of assessors (performance bias)	Unclear – Not reported in the paper
Blinding of outcome assessment (detection bias) (patient reported outcomes)	Unclear – Not reported in the paper
Incomplete outcome data addressed (attrition bias)	Unclear – Attrition not reported, nor numbers included in analyses or details regarding missing data. No consort flow diagram.
Selective outcome reporting (reporting bias)	Low – All pre-specified outcomes were reported
Other sources of bias (i.e. baseline bias)	High – No reporting of baseline participant characteristics at all

RoB – Nejati et al. 2016

Risk of bias assessment (High/unclear/low)		
Random sequence generation (selection bias)	Low – Each participant's names placed on slip of paper, mixed and drawn randomly	
Allocation concealment (selection bias)	Unclear - Paper only states that participants were selected using a random sampling method	
Blinding of assessors (performance bias)	Unclear – Not reported in the paper	
Blinding of outcome assessment (detection bias) (patient reported outcomes)	Unclear – Not reported in the paper	
Incomplete outcome data addressed (attrition bias)	Unclear – Attrition not reported, nor numbers included in analyses or details regarding missing data	
Selective outcome reporting (reporting bias)	Low – All pre-specified outcomes were reported	
Other sources of bias (i.e. baseline bias)	High – Paper states study population based on convenience sampling	

RoB – Bahrani et al. 2017

Risk of bias assessment (High/unclear/low)	
Random sequence generation (selection bias)	Low – Permuted block randomized method used, 14 blocks, 4 per block
Allocation concealment (selection bias)	Low – Permuted block randomized method used
Blinding of assessors (performance bias)	Low – Randomisation undertaken by external individual to ensure main researchers were blinded to random assignment
Blinding of outcome assessment (detection bias) (patient reported outcomes)	Low – Anonymous data was collected by a blinded research assistant
Incomplete outcome data addressed (attrition bias)	Unclear – ITT not employed, no details on missing data
Selective outcome reporting (reporting bias)	Low – All pre-specified outcomes were reported
Other sources of bias (i.e. baseline bias)	Low – Generally well reported study

RoB – Simpson et al. 2017

Risk of bias assessment (High/unclear/low)	
Random sequence generation (selection bias)	Low – Post-baseline measures an independent statistician undertook block randomisation and sequence generation
Allocation concealment	
(selection blas)	Low – Binded research start undertook treatment allocation
Blinding of assessors	
(performance bias)	Low – Research staff were blinded to treatment allocation and participant ID
Blinding of outcome	
assessment (detection bias)	Low – Anonymous data was collected by a blinded research assistant
(patient reported outcomes)	
Incomplete outcome data addressed (attrition bias)	Low – Detailed reporting of missing data, no imputation. Consort flow diagram and details accounting for participant drop-out
Selective outcome reporting	
(reporting bias)	Low – All pre-specified outcomes were reported
Other sources of bias (i.e. baseline bias)	Low – Well conducted and reported study

RoB – Carletto et al. 2017

Risk of bias assessment (High/unclear/low)	
Random sequence generation (selection bias)	Low – Randomly assigned on 1:1 ratio using a blockwise randomisation sequence
Allocation concealment (selection bias)	Low – Sequence determined by an independent researcher blinded to initial assessment. Study co-ordinator communicated assignment to participants
Blinding of assessors (performance bias)	Low – Clinical Psychologists performing assessments were blinded to participant ID
Blinding of outcome assessment (detection bias) (patient reported outcomes)	Low – Clinical Psychologists performing assessments were blinded to participant ID
Incomplete outcome data addressed (attrition bias)	Low – Both PP and ITT performed - ITT explored missing data – data imputation was used for two participants. Consort flow diagram detailing numbers analysed and dropping out. Comparison between completers and dropouts baseline measures and socio-demographics undertaken.
Selective outcome reporting (reporting bias)	Low – All pre-specified outcomes were reported
Other sources of bias (i.e. baseline bias)	Low – Well conducted and reported study

RoB – Cavalera et al. 2018

Risk of bias assessment (High/unclear/low)	
Random sequence generation (selection bias)	Low – Participants were randomly assigned 1:1 to MBI and control using www.random.org
Allocation concealment (selection bias)	Unclear – Paper only states that participants were randomly assigned to MBI and control
Blinding of assessors (performance bias)	Unclear – Not reported in the paper
Blinding of outcome assessment (detection bias) (patient reported outcomes)	Unclear – Not reported in the paper
Incomplete outcome data addressed (attrition bias)	Unclear – Although consort flow diagram included, detailing attrition, reasons accounting for this were insufficiently described. No mention of missing data
Selective outcome reporting (reporting bias)	Low – All pre-specified outcomes were reported
Other sources of bias (i.e. baseline bias)	Low – Generally well conducted and reported study

RoB – Senders et al. 2018

Risk of bias assessment (High/unclear/low)	
Random sequence generation (selection bias)	Low – Statistician generated randomization scheme stratified by baseline PSS scores with a block size of four (SPSS random number generator)
Allocation concealment (selection bias)	Low – Randomisation scheme maintained by individual external and blinded to study. Allocation concealed from all study staff
Blinding of assessors (performance bias)	Low – Baseline data collected prior to randomisation – PI, statistician and personnel performing data entry were blinded to group assignment
Blinding of outcome assessment (detection bias) (patient reported outcomes)	Low – Baseline data collected prior to randomisation – PI, statistician and personnel performing data entry were blinded to group assignment
Incomplete outcome data addressed (attrition bias)	Low – Low – Consort flow diagram detailing reasons accounting for attrition and numbers analysed.
Selective outcome reporting (reporting bias)	Low – All pre-specified outcomes were reported
Other sources of bias (i.e. baseline bias)	Low – Well conducted and reported study