

Supplementary Material

Supplementary File S2 Critical Appraisal Skills Program (CASP) assessment of included studies

CASP checklist for RCTs (see below for details of assessments)

| Study | 1 | 2 | 3 | 4a | 4b | 4c | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|---------------------------------|---|---|---|----|----|----|---|---|---|---|---|----|----|
| Allam (2015) | Y | Y | Y | Y | N | C | Y | Y | Y | N | Y | Y | Y |
| Allen (2021) | Y | Y | Y | N | Y | C | Y | Y | Y | N | Y | Y | Y |
| Ferwerda (2017) | Y | Y | Y | N | N | C | N | Y | Y | N | Y | Y | Y |
| Khan (2020) | Y | Y | Y | N | N | C | Y | Y | Y | N | N | Y | Y |
| Knudsen (2024) | Y | Y | Y | N | N | C | Y | Y | Y | Y | N | Y | Y |
| Kurt (2024) | Y | Y | C | N | Y | C | Y | Y | Y | Y | Y | Y | Y |
| Li (2025) | Y | Y | Y | N | Y | Y | Y | Y | Y | Y | Y | Y | Y |
| Li (2020) | Y | Y | Y | N | N | Y | Y | Y | Y | Y | Y | Y | Y |
| Lorig (2008) | Y | C | Y | N | N | C | Y | Y | Y | N | Y | Y | Y |
| Pouls (2022) | Y | Y | Y | N | N | Y | Y | Y | Y | Y | N | Y | Y |
| Rodríguez Sánchez-Laulhé (2022) | Y | Y | Y | N | Y | C | N | Y | Y | Y | Y | Y | Y |
| Shigaki (2013) | Y | C | Y | N | C | C | Y | Y | Y | N | Y | Y | Y |
| Song (2022) | Y | Y | Y | N | Y | C | Y | Y | Y | Y | Y | Y | Y |
| van den Berg (2006) | Y | Y | Y | N | Y | C | Y | Y | Y | Y | Y | Y | Y |
| Zuidema (2019) | Y | Y | Y | N | N | C | Y | Y | Y | Y | Y | Y | Y |

CASP questions: Did the study address a clearly formulated research question? 2: Was the assignment of participants to interventions randomised? 3: Were all participants who entered the study accounted for at its conclusion? 4: (a) Were the participants ‘blind’ to intervention they were given? (b) Were the investigators ‘blind’ to the intervention they were giving to participants? (c) Were the people assessing/analysing outcome/s ‘blinded’? 5: Were the study groups similar at the start of the randomised controlled trial? 6: Apart from the experimental intervention, did each study group receive the same level of care (that is, were they treated equally)? 7: Were the effects of intervention reported comprehensively? 8: Was the precision of the estimate of the intervention or treatment effect reported? 9: Do the benefits of the experimental intervention outweigh the harms and costs? 10: Can the results be applied to your local population/in your context? 11: Would the experimental intervention provide greater value to the people in your care than any of the existing interventions?

Y, Yes; N, No; C; Can’t tell

Appraisal summary of CASP checklist for RCTs

| Study | Positive/ Methodologically sound | Negative/Relatively poor methodology | Unknowns |
|--------------------|---|---|---|
| Allam (2015) | 1, 2, 3, 4a, 5, 6, 7, 9, 10, 11 | 4b – the investigators were not blinded to allocation into intervention and control group 8 – no confidence intervals were reported | 4c – it is not mentioned whether the people analysing the outcomes were blinded |
| Allen (2021) | 1, 2, 3, 4b, 5, 6, 7, 9, 10, 11 | 4a – participants were not blinded to the timing of when to receive the intervention 8 – no confidence intervals were reported | 4c – it is not mentioned whether the people analysing the outcomes were blinded |
| Ferwerda (2017) | 1, 2, 3, 6, 7, 9, 10, 11 | 4a – participants were not blinded because they either received standard care or additional treatment 4b – investigators were not blinded because they had contact to participants 5 – intervention group showed significantly less negative mood, lower levels of self-care, mobility, and lower impact of RA on daily life 8 – no confidence intervals were reported | 4c – it is not mentioned whether the people analysing the outcomes were blinded |
| Khan (2020) | 1, 2, 3, 5, 6, 7, 10, 11 | 4a - randomisation groups were made known to participants 4b – investigators were not blinded because they had contact to participants 8 – no confidence intervals were reported 9 – no effect size was calculated | 4c – it is not mentioned whether the people analysing the outcomes were blinded |

| Study | Positive/ Methodologically sound | Negative/Relatively poor methodology | Unknowns |
|----------------|---|---|--|
| Knudsen (2024) | 1, 2, 3, 5, 6, 7, 8, 10, 11 | 4a – participants were not blinded, intervention group received digital-, and control group face-to-face patient education 4b – investigators were not blinded, intervention and control group were treated differently 9 – no effect size was calculated | 4c – it is not mentioned whether the people analysing the outcomes were blinded |
| Kurt (2024) | 1, 2, 4b, 5, 6, 7, 8, 9, 10, 11 | 4a – participants were not blinded, intervention group received additional counselling | 3 – sample size calculations are not mentioned 4c – it is not mentioned whether the people analysing the outcomes were blinded |
| Li (2025) | 1, 2, 3, 4b, 4c, 5, 6, 7, 8, 9, 10, 11 | 4a – participants were not blinded to the timing of when to receive the intervention | |
| Li (2020) | 1, 2, 3, 4c, 5, 6, 7, 8, 9, 10, 11 | 4a – participants were not blinded to the timing of when to receive the intervention 4b – investigators were not blinded | |
| Lorig (2008) | 1, 3, 5, 6, 7, 9, 10, 11 | 4a – participants were not blinded, intervention group received additional treatment 4b – investigators were not blinded 8 – no confidence intervals were reported | 2 – it is mentioned that participants were randomised but not mentioned how the randomisation was carried out 4c – it is not mentioned whether the people analysing the outcomes were blinded |
| Pouls (2022) | 1, 2, 3, 4c, 5, 6, 7, 8, 10, 11 | 4a – participants were not blinded to the timing of when to receive the intervention 4b – investigators were not blinded 9 – no effect size was calculated | |

| Study | Positive/ Methodologically sound | Negative/Relatively poor methodology | Unknowns |
|---|---|---|--|
| Rodríguez Sánchez- Laulhé (2022) | 1, 2, 3, 4b, 6, 7, 8, 9, 10, 11 | 4a – participants were not blinded, intervention group received additional treatment 5 – differences between groups in the pain and satisfaction domains of a questionnaire | 4c – it is not mentioned whether the people analysing the outcomes were blinded |
| Shigaki (2013) | 1, 3, 5, 6, 7, 9, 10, 11 | 4a – participants were not blinded to the timing of when to receive the intervention 8 – no confidence intervals were reported | 2 – it is mentioned that participants were randomised but not mentioned how the randomisation was carried out 4b – it is not mentioned whether the investigators were blinded 4c – it is not mentioned whether the people analysing the outcomes were blinded |
| Song (2022) | 1, 2, 3, 4b, 5, 6, 7, 8, 9, 10, 11 | 4a – participants were not blinded, intervention group received additional treatment | 4c – it is not mentioned whether the people analysing the outcomes were blinded |
| van den Berg (2006) | 1, 2, 3, 4b, 5, 6, 7, 8, 9, 10, 11 | 4a – participants were not blinded, intervention group received additional treatment | 4c – it is not mentioned whether the people analysing the outcomes were blinded |
| Zuidema (2019) | 1, 2, 3, 5, 6, 7, 8, 9, 10, 11 | 4a – participants were not blinded, intervention group received additional treatment 4b – investigators were not blinded, they informed participants of allocation to either control or intervention group | 4c – it is not mentioned whether the people analysing the outcomes were blinded |