Supplementary Material 1. Quality appraisal of reviewed papers. (Green = favourable response, Am

Study Author	Quality appraisal of re Study Design	CASP hecklist used	Q1	Q3	
Ayhan et al. 2021	Prospective cohort study	Cohort study	Q1 Q2 Can't tell Yes		Yes
Grubhofer et al. 2019	Prospective observational study.	Case Control Study	Yes	Yes	Yes
Kaskutas, Powell. 2013	Qualitative	Qualitative	Yes	Yes	Yes
Mercurio et al.2023	Prospective cohort study	Cohort study	Yes Yes		yes
Mottay 2020	Mixed methods	Qualitative	Yes	Yes	Yes
O'Brien. 2010	Qualitative	Qualitative	Yes	Yes	Yes
Roh et al. 2016	Prospective cohort study	Cohort study	Yes	Can't tell	Yes
Savas et al.2022	Prospective cohort study	Cohort study	Yes	Yes	Yes
Silverio, Cheung. 2014	Prospective cohort study	Cohort study	Yes	Can't tell	Can't tell
Mortazavi et al.	Prospective cohort study	Cohort study	Yes	Yes	Yes
Weir et al.	Prospective cohort	Cohort study	Yes	Can't tell	Yes
Cole et al.	Qualitative	Qualitative	Yes	Yes	Yes
Azad et al.	Prospective cohort study	Cohort study	Yes	Can't tell	Yes

|ber = neutral response, Red = non-favourable response)

Q4	Q5/ Q5a	Q5b	Q6/Q6a	Q6b	e response) Q7	
No	No	No	No	Can't tell	Mean extension lag of 12.4 degrees. However, they appear to have excluded semi-compliant patients thereby significantly affecting the ability to interpret these results.	
Can't Tell	Yes	NA	Can't Tell	Can't Tell	Can't tell	
Yes	Yes	NA	Yes	NA	Yes	
yes	No	No	No	Yes	Direct correlation between the female sex and adherence to the brace, direct correlation between adherence to the brace and the number of weeks it was worn according to the medical recommendation. A correlation between lower educational qualifications and poorer outcomes. No correlation emerged between adherence to the brace and functional results. According to the regression analysis, diabetes was found to be a predictor of worse postoperative DASH scores	
Yes	Yes	NA	Can't tell	NA	Yes	
Yes	Yes	NA	No	NA	Can't tell	
Yes	No	No	Can't tell	Can't Tell	Predictors of extensor lag following treatment of a malle injury include age, adherence and health literacy.	
No	Yes	Can't tell	Can't tell	Yes	Adherence is affected by many factors Depression can be a barrier to post op splint adherence Only 1/3 of patients were fully adherent to orthosis wear despite advice	
No	Can't tell	No	Yes	No	No impact of adherence on functional outcome, smokers more likely to be adherent	
Yes	Yes	No	Yes	Yes	Longer cast immobilisation time at the start and fear of movement are important factors that may negatively affe early outcomes after a proximal phalangeal fracture	
Yes	Yes	Yes	No	Yes	Significant difference in patient rported adherece than temperatur sensor reported adherence (patients reported higher!). Factors identified included BMI and sex.	
Yes	Yes	NA	Can't tell	NA	Yes	
Yes	Yes	Yes	No	No	Strong association between success of splint treatment and younger patients and compliance with treatment. most patients did not report any functional limitations. time to treat and baseline extensor lag didn't affecrt treatment success.	

Hand Therapy

Q8	Q9	Q10	Q11
Poorly precise due to the exclusion of participants. Confidence intervals not expressed. They also did not include the results for PIPJ range of motion, despite this being one of their objectives.	Can't tell	No	Yes
Can't tell	Yes	Yes	Yes
No	Yes	Adds to the literature base.	NA
Can't tell	No	Can't tell	Yes
Can't tell	Yes	Adds to the literature base.	NA
Yes	Yes	Adds to the literature base.	NA
They appear appropriately precise and data is expressed with confidence intervals.	Despite some confounding factors being missing (especially occupation and comorbidities), broadly believe that their assertion is correct.	Yes	Yes
Good precision	Yes	Yes	Yes
Limited precision. Did not give confidence intervals, only standard deviation.	Can't tell	Can't tell	No
Good precision	Yes	Yes	Yes
Good precision	Yes	Can't tell	Yes
Yes	Yes	Some Value	NA
Not Prescise	Yes	Yes	Yes

