Mahan-Prospective Memory Rehabilitation in ABI

Figure Legends

Figure 1. The eligibility (inclusion and exclusion) criteria employed for the systematic review

Figure 2. The appraisal criteria applied to each record for screening of quality and risk of bias

Figure 3. The formulas for calculating ES for records included within the systematic review

Figure 4. A PRISMA flow diagram detailing the exclusion of papers at each search stage

Figures

Figure 1:

Inclusion criteria:

- (1) Intervention studies addressing prospective memory outcomes
- (2) Peer-reviewed journal articles

Exclusion criteria:

- (1) Articles not addressing intervention
- (2) Articles relating to older adults (65+)
- (3) Theoretical articles or descriptions of rehabilitation programmes with no specific intervention
- (4) Review articles
- (5) Articles without adequate specification of interventions
- (6) Articles that did not include participants with a primary diagnosis of ABI or TBI
- (7) Articles that included participants with a learning disability, psychiatric diagnosis, and/or dementia
- (8) Articles that included participants with a primary diagnosis of Mild-TBI
- (9) Articles describing surgical or pharmacological interventions
- (10) Articles not written in English

Figure 2:

Score 1 if met, 0 if not met or unable to determine

- (1) Were specific hypotheses and/or objectives stated?
- (2) Were the settings and locations where data was collected stated?
- (3) Is the method of randomization appropriate?
- (4) Was the total sample size >20 participants?
- (5) Was the total sample size >40 participants?
- (6) Were at least some of the measures standardized assessment tools?
- (7) Were the measures appropriate for age group?
- (8) Did the article specify the severity of the brain injury for participants with acquired brain injury and was the method of diagnosis appropriate (e.g. by a medical professional, Glasgow Coma Scale)?
- (9) Did the injury occur at least 6mo ago (to ensure the results were not a reflection of the recovery process)?
- (10) Were follow-up data collected after post-intervention data (i.e. to see if effects were maintained post intervention)?
- (11) If not, was intent-to-treat analysis used? (Award 1 point if a point is granted on the above item)
- (12) Were those assessing the outcomes blind to the group?
- (13) Was the intervention described in detail (i.e. how it was administered, etc.) or was there reference to a manual?
- (14) Were the characteristics of participants clearly described (e.g. demographic information such as age, sex)?
- (15) Did the results relate to the initial hypotheses?
- (16) Was statistical analysis appropriate?
- (17) Were data adequately described (mean, range etc.)?
- (18) Were effect sizes calculated?
- (19) Were effect sizes moderate or larger (for studies with small sample sizes n<10)?
- (20) Was there sufficient information to calculate effect size (i.e. mean and SD)?
- (21) Was age taken into account as a possible confounding factor?

CONSORT questions applicable to group studies:

- (22) Was a power calculation used or sample size justified?
- (23) Were the inclusion/exclusion criteria clearly stated?
- (24) Control or comparison group used?
- (25) Were participants randomly allocated to groups?
- (26) Were all participants included in the analysis?
- (27) Was intention to treat analysis used if randomized? (0 for nonrandomized)

SCED questions applicable only to single case studies:

- (22) Was there a clearly defined target behaviour that reflected the cognitive function the intervention aimed at improving?
- (23) Were sufficient baseline assessments conducted to ensure stability prior to intervention?
- (24) Was there sufficient sampling during intervention to differentiate a treatment response from fluctuations in behaviour that may have occurred at baseline?
- (25) Was replication performed? (study on two patients at least)?
- (26) Was inter-rater reliability of the target behaviour used in baseline and intervention assessed?
- (27) Did the design allow examination of cause and effect?

Total quality rating ____ / 27

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Figure 3:

The formula below was employed for ES calculation in single group pre- and postintervention research designs:

$$ES = (M_{\text{post, exp}} - M_{\text{pre, exp}})/SD_{\text{pre, exp}}$$

The formula below was employed for ES calculation in independent group pre- and post- intervention research designs:

ES =
$$[(M_{\text{post, exp}} - M_{\text{pre, exp}})/SD_{\text{pre, exp}}]$$

- $[(M_{\text{post, com}} - M_{\text{pre, com}})/SD_{\text{pre, com}}]$

In these formulas, M is the mean, exp is the experimental group, com is the comparison group, pre is the pre-intervention score, post is the post-intervention score, and SD is the standard deviation.

Figure 4:

