

INTRODUCTION

- There is growing interest in the use of Acceptance and Commitment Therapy (ACT) in stroke rehabilitation, and a recent RCT suggests that it can be effective in this context (Majumdar and Morris, 2019).
- ACT may be advantageous in supporting adjustment during stroke rehabilitation. ACT's focus on connecting with values and acceptance of distress may offer additional psychological resources during a period of major personal transformation and adjustment (Kangas & McDonald, 2011).
- Open-group formats can be advantageous in inpatient rehabilitation settings because healthcare needs and variable lengths of stay can make commitment to a fixed program challenging (McCluskey et al., 2013).
- Estimations of efficacy in studies using data from clinical services has been found to substantially differ from those of clinical trials (Boswell et al., 2015), highlighting the importance of supplementing research with evaluations of retrospective clinical service data.

RESEARCH QUESTIONS

- Is successive session attendance associated with a reduction in depression scores?
- Do those who score above the cut-off for depression in their first session score below the cut-off in their last?
- Are reductions in depression associated with the number of sessions attended?

METHODS

- **Design:** a retrospective repeated-measures design with no control arm. Mood ratings were taken each session. Because of the open-group format, participants were not clustered into cohorts. There was a natural sample attrition associated with increased cumulative session attendance.
- **Participants:** 117 participants attended at least two sessions. Mean age: 74 (SD: 11.75). 53% male. Median session attendance: 2 (IQR: 2).

Cumulative session attendance	Total (n)	n above cut-off for depressed mood (%)
1 or more	224	93 (41%)
2 or more	117	56 (48%)
3 or more	73	40 (55%)
4 or more	47	27 (57%)
5 or more	27	15 (55%)
6 or more	19	11 (58%)
7 or more	10	6 (60%)
8 or more	5	3 (60%)
9 or more	3	2 (67%)
10 or more	1	1 (100%)
11	1	1 (100%)

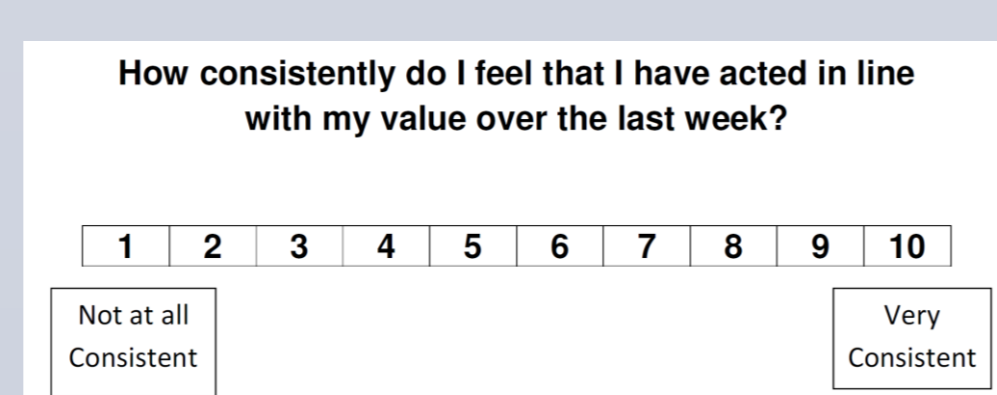
- **Measure:** Depression Intensity Scale Circles (DISCs). Cut-off: ≥ 2 (Turner-Stokes et al., 2005)
- **Procedure:** Delivered weekly. Two alternating session protocols, (1) an acceptance session, and (2) a values and committed action session. Content adapted from "ACT Made Simple" (Harris, 2009). Content includes:



Quicksand metaphor



Acceptance-based mindfulness



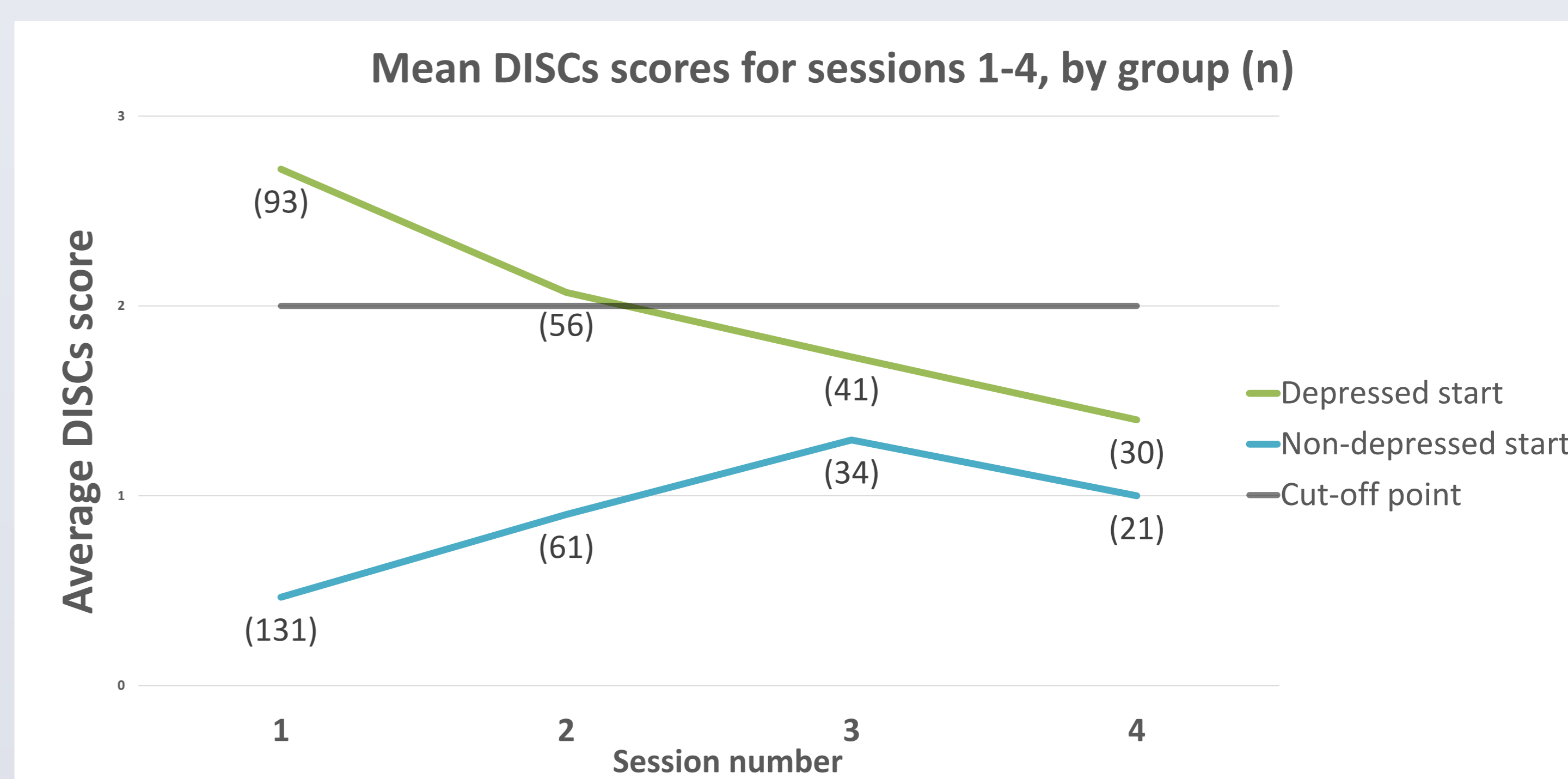
Values rating and commitment to action

RESULTS

- **RQ A:** Friedman's test was used. Data were sufficient to analyse changes across the first four sessions. All changes were significant. Changes graphically represented in figure 1

Sessions	Mean ranked DISCs scores (Friedman's): depressed-only sample					
	n	1	2	3	4	p
2	56	1.68	1.32			.001**
3	40	2.40	1.95	1.65		<.001**
4	27	3.19	2.69	2.19	1.94	<.001**

- **RQ B:** Of the 56 participants who met the criterion for depression at baseline, 28 were "recovered" in their last session, a 50% recovery rate. A McNemar's test found that the change in percentage "caseness" did was not significant, McNemar's $\chi^2(1, N=117) = 1.36, p = .24$, which indicates no effect of session attendance on clinical "caseness".
- **RQ C:** A Spearman's rho test found no significant association between the number of sessions attended and the size of change scores, for either the overall sample, $r_s(117) = .09, p = .33$; or for the depressed-only group, $r_s(54) = .07, p = .56$.



CONCLUSIONS

- Though we found evidence for pre-post reductions in DISCs scores, these scores were not substantial enough to elicit a statistically significant reduction in clinical "caseness", and the number of attended sessions was not found to correlate with DISCs change scores.
- Overall, our findings are mixed; we found partial support for the benefit of an open-group ACT intervention in stroke rehabilitation.
- The findings of the current pre-post study appeared to be more modest than those of Majumdar & Morris (2019) which confirms the importance of supplementing clinical trial findings with analyses of routine service data (Boswell et al., 2015; Hansen et al., 2006).
- Limitations include an absence of a control arm, psychometric shortfalls associated with using a single-item measure, and non-equivalency of the intervention received between patients.
- For future research, we suggest a process-based approach to identifying key psychological moderators and mediators of change in stroke. We suggest the use of outcome measures that capture changes associated with acceptance, values, and life satisfaction, as ACT does not aim to directly reduce negative emotional experience.

KEY REFERENCES

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