

# FAST IMPROVEMENT IN A SHORT ACT INTERVENTION

Katariina Keinonen, Heidi Kyllönen, Piia Astikainen & Raimo Lappalainen, University of Jyväskylä, Finland

## ABSTRACT

Fast change during psychological treatments has been associated with superior treatment results. Several studies have also reported that significant changes can happen early in the treatment.

The current study aimed to investigate fast improvement in a six-session ACT intervention for diagnosed depression delivered by students of psychology. Fast improvement was defined as the status of recovered or improved in the RCI-classification after two sessions.

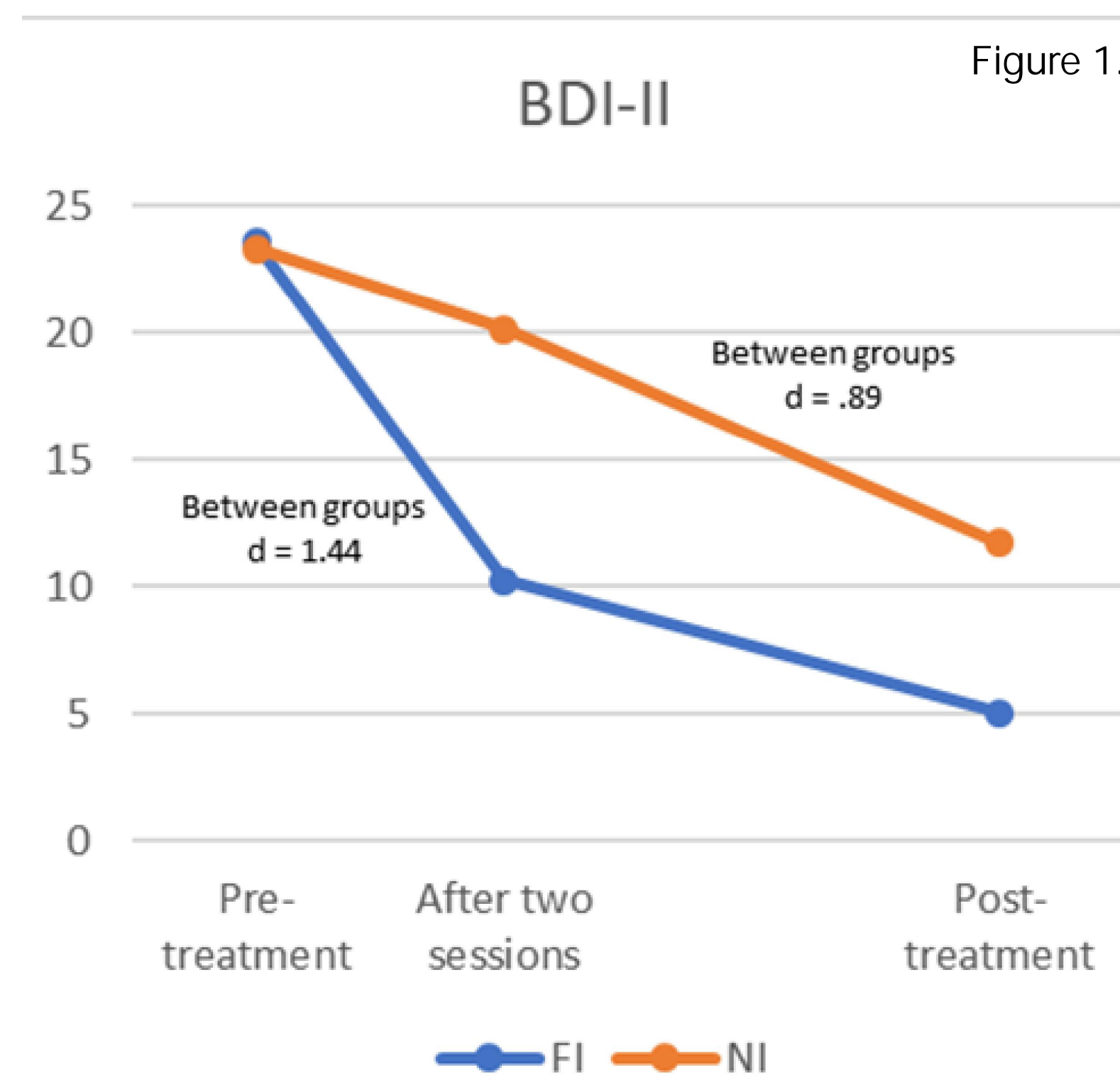
13 participants (23 %, total n=56) met the RCI-based criteria for fast improvement. The fast improvers experienced significantly larger changes during the intervention. The treatment results were superior both for symptomatology and psychological flexibility. There were no pretreatment differences between the groups.

The results offer evidence of fast improvement during a brief ACT intervention delivered by novice therapists. The results also suggest fast improvement may have clinical importance.

**INTRODUCTION** Sudden gains (SG), abrupt reductions in symptom severity between two consecutive sessions, have been reported in various treatments. SG have been associated with superior treatment outcome at post-treatment and at follow-up (e.g. Lemmens, DeRubeis, Arntz, Peeters & Huibers, 2016). Up to one in three (often around 30-40 %; e.g. Tang et al., 2007, Hunnicutt-Ferguson, Hoxha & Gollan, 2012) of participants with depression experience SG at some point of their treatment, which suggests that rapid improvements may frequently be a part of the treatment process. Several studies have found that SG was most likely to happen within the three first sessions (Dour et al., 2013; Hunnicutt-Ferguson et al., 2012; Masterson et al., 2014). As the SG criteria requires the change to be at least 7 points on the BDI (or equally large on another measure), these results suggest a relatively large portion of clients may benefit considerably during the first few sessions. To our knowledge, SG or temporal discontinuities more generally, have not previously been explored in studies using Acceptance and Commitment Therapy (ACT) delivered by novice therapists.

**AIM OF THE CURRENT STUDY** The current study aimed to investigate early fast improvement in a six-session ACT intervention delivered by un-experienced therapists. The focus was on (1) finding how many participants diagnosed with major depressive disorder would experience fast improvement (FI) in a 6-session ACT intervention delivered by psychology students, (2) examining if demographic variables could be associated with FI and (3) analyzing if FI could be associated with treatment outcome on the level of symptomatology or psychological flexibility.

**METHOD** The data (n=56) for the current study is a part of a randomized controlled trial to evaluate efficacy of ACT delivered by student therapists. The treatment was a semi-structured six-session (à 60 minutes) intervention. The first two sessions were highly structured, whereas the four last sessions could be partly individualized. FI status was based on changes in BDI-II after

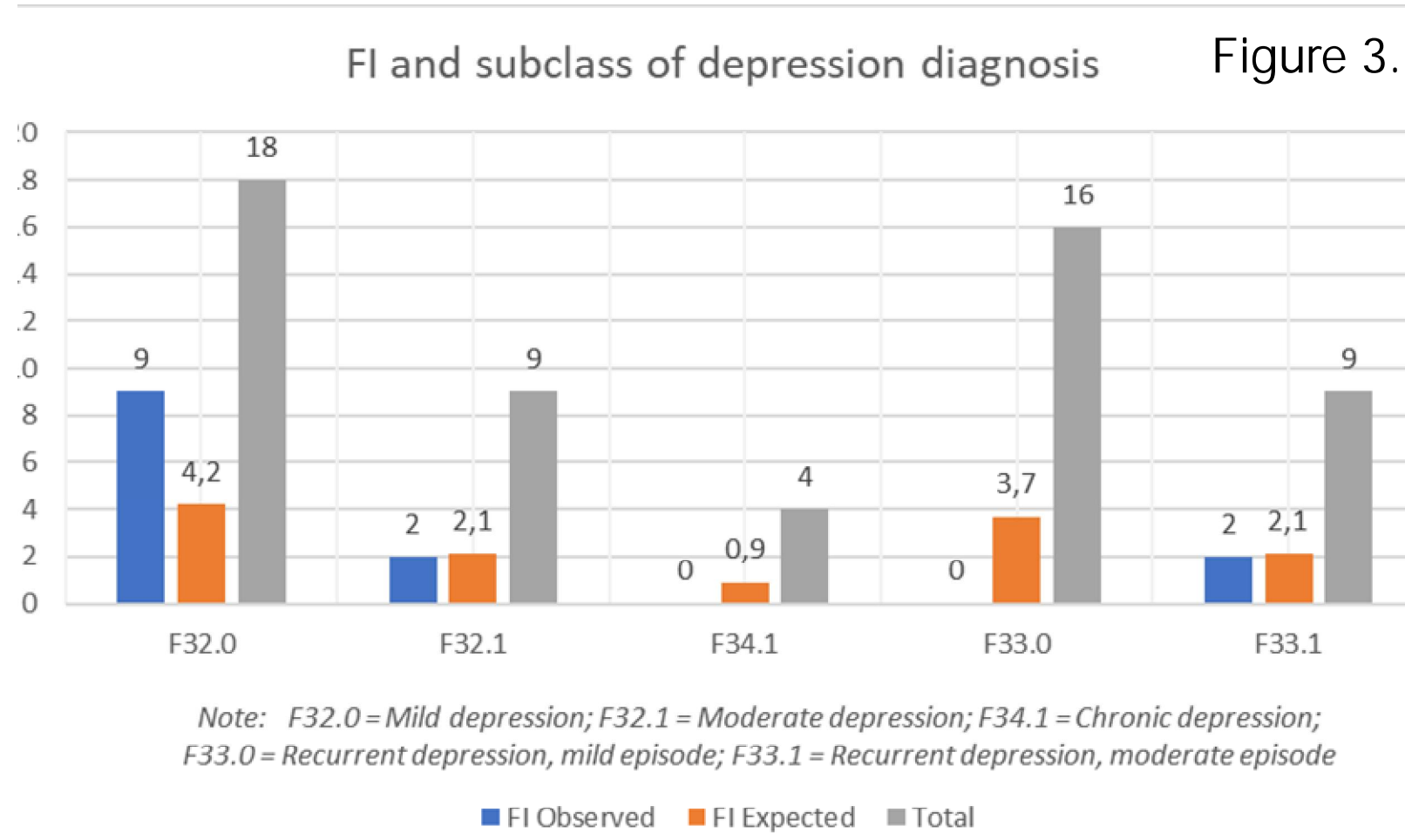


two sessions, and defined as reaching a status of improved or recovered in the RCI-classification (Cutoff C=14,94; Reliable change index; Jacobson & Truax, 1991). Participants classified as unchanged or deteriorated after two sessions were classified as not improved (NI).

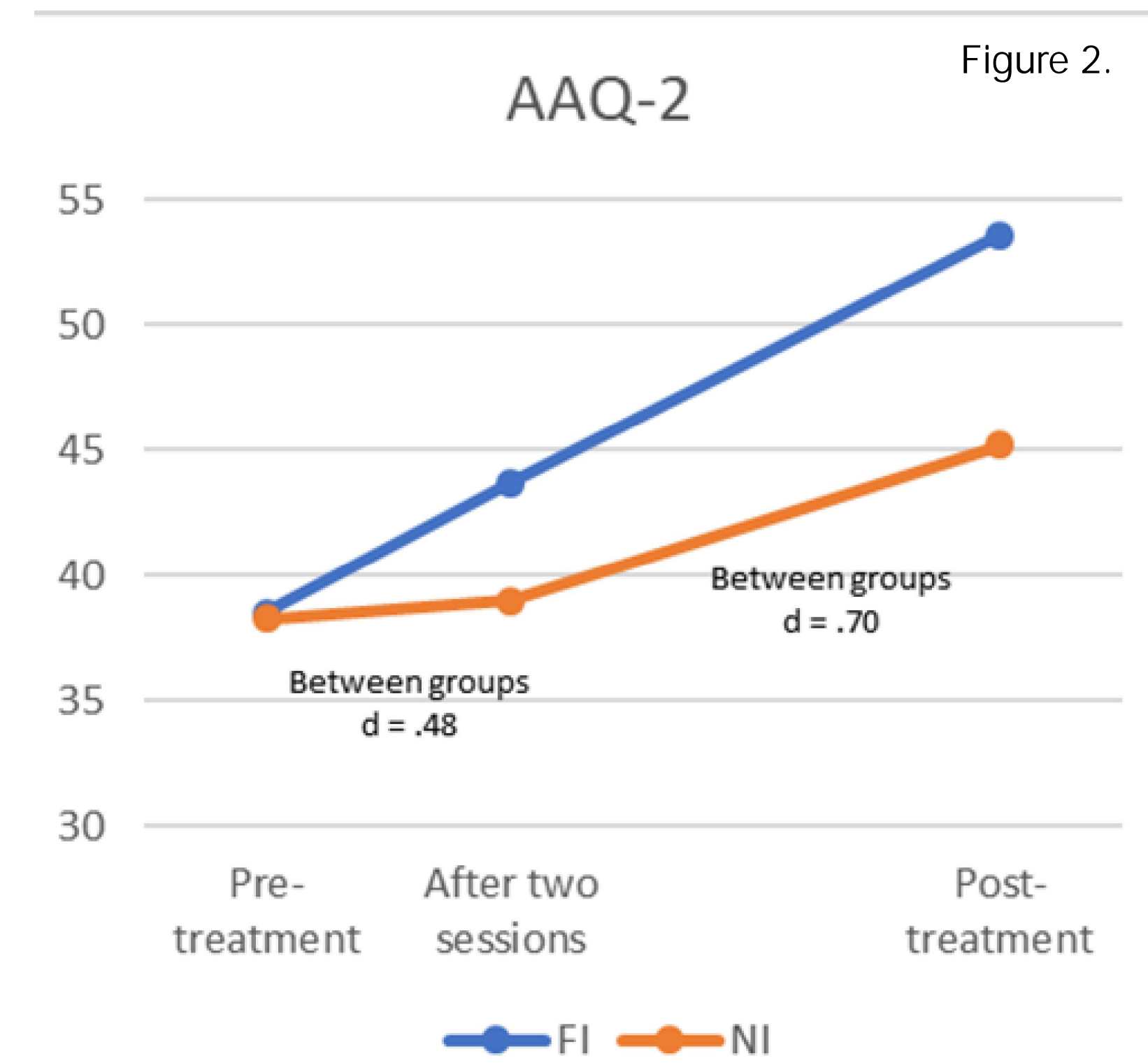
## RESULTS

1. Based on changes in BDI-II after two sessions, the RCI classification identified 13 participants (23 %) as either improved (n = 2, 3 %) or recovered (n = 11, 19 %) and were labeled as fast improvers (FI). 43 (76 %) showed no improvement (NI). The ES for the difference between FI and NI groups was large; 13,3 vs. 3,4 points on the BDI-II,  $d=1.44$ . There were no statistical differences between the groups in pre-treatment level of depression symptomatology of psychological flexibility

2. For the demographic variables, the number of participants diagnosed having mild depression was higher than expected in the FI group, and the number of participants with recurrent depression and than expected (Figure 3.; diagnosis subclass,  $p = .006$ , Cramer's  $V = .49$ ). In addition, unemployment was more frequent and retirement less frequent for the FI group than expected ( $p = .017$ , Cramer's  $V = .45$ ). No other demographic variables were associated with FI.



3. During the six-session intervention, the decrease in depression symptoms, and the increase in psychological flexibility were significantly larger in the FI group (Figure 1. and Figure 2). The between group ES was large for BDI-II, and moderate for AAQ-2. The total change score in depression was 18,5 (SD=5,9) points for the FI group and 11,6 (SD=8,0) for the NI group. Psychological flexibility change score was 15,1 (SD=14,4) points for the FI group and 6,9 (SD=10,9) points for the NI group.



## CONCLUSIONS

- Roughly 25% of participants with diagnosed major depressive disorder experienced fast, clinically significant improvement during the first two sessions when they were offered a brief ACT intervention delivered by psychology students.
- The mean change after two sessions in symptoms of depression (BDI-II) among fast improvers was 13.3 compared to 3.1 among those showing slower improvement (ES,  $d > 0.80$ ).
- The outcome of the six-session intervention was superior for the FI group both on the level of depressive symptomatology and on the level of psychological flexibility.

## Contact information:

Katariina Keinonen, Doctoral student, University of Jyväskylä  
Email: katariina.keinonen@jyu.fi  
Phone: +358 50 378 2810

Dour, H. J., Chorpita, B. F., Lee, S., & Weisz, J. R. (2013). Sudden gains as a long-term predictor of treatment improvement among children in community mental health organizations. *Behaviour Research and Therapy*, 51(9), 564-572.

Hunnicutt-Ferguson, K., Hoxha, D., & Gollan, J. (2012). Exploring sudden gains in behavioral activation therapy for major depressive disorder. *Behaviour Research and Therapy*, 50(3), 223-230.

Jacobson, N. S., & Truax, P. (1991). Clinical significance: A statistical approach to defining meaningful change in psychotherapy research. *Journal of Consulting and Clinical Psychology*, 59(1), 12-19.

Lemmens, L. H. J. M., DeRubeis, R. J., Arntz, A., Peeters, F. P. M. L., Huibers, M. J. H. (2016). Sudden gains in Cognitive Therapy and Interpersonal Psychotherapy for adult depression. *Behaviour Research and Therapy*, 77, 170-176.

Masterson, C., Ekers, D., Gilbody, S., Richards, D., Toner-Clewes, R., & McMillan, D. (2014). Sudden gains in behavioural activation for depression. *Behaviour Research and Therapy*, 60, 34-38.

Tang, T. Z., DeRubeis, R. J., Hollon, S. D., Amsterdam, J., & Shelton, R. (2007). Sudden gains in cognitive therapy of depression and depression relapse/recurrence. *Journal of Consulting and Clinical Psychology*, 75(3), 404-408.

