Automating the identification of sudden gains within psychological therapy datasets: A new R package

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Overview

Sudden gains are **large and stable changes** on an outcome variable between consecutive measurements of an intervention such as psychological therapy (see Tang & DeRubeis, 1999). Researching these occurrences in repeated-measures data may help to understand why treatments work and thus improve their efficacy and efficiency. This new R package identifies sudden gains within a longitudinal dataset, producing plots and exportable data sets for further analysis.

Definition of sudden gains
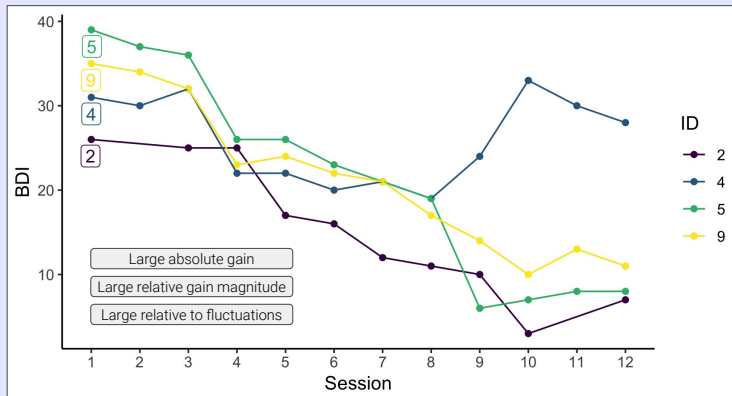
Sudden gains studies
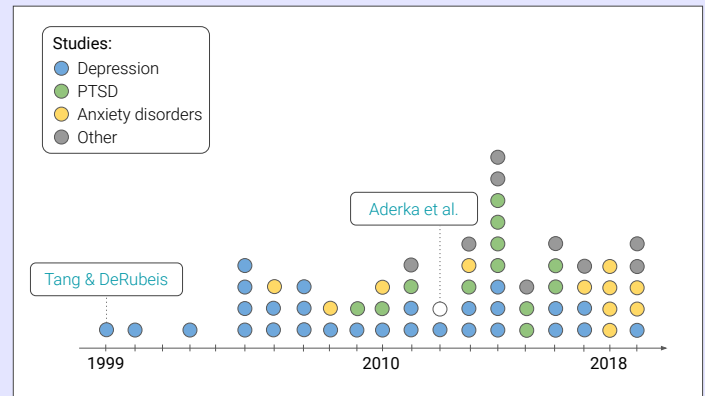
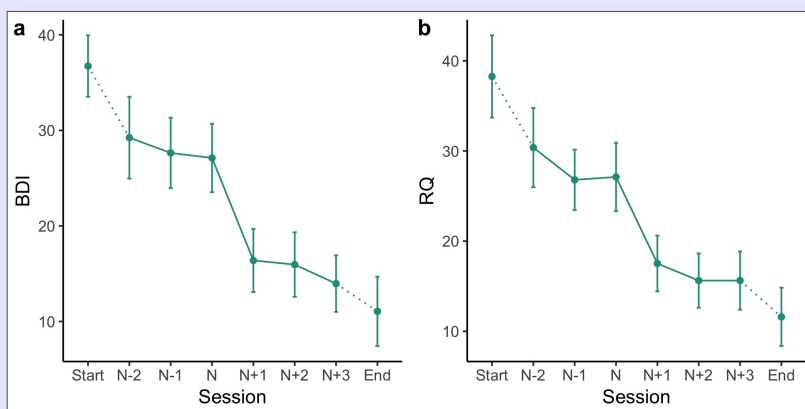## Identify sudden gains and create datasets

One row per gain: *bysg*

id	id_sg	sg_crit_123	sg_freq_byperson	sg_session_n
1	1_3	1	2	3
1	1_8	1	2	8
2	2_2	1	1	2
3	3_2	1	2	2
3	3_7	1	2	7

One row per person: *byperson*

id	id_sg	sg_crit_123	sg_freq_byperson	sg_session_n
1	1_3	1	2	3
2	2_2	1	1	2
3	3_2	1	2	2
4	*NA*	0	*NA*	*NA*
5	3_7	1	1	7

Create plots

Help us design a logo!
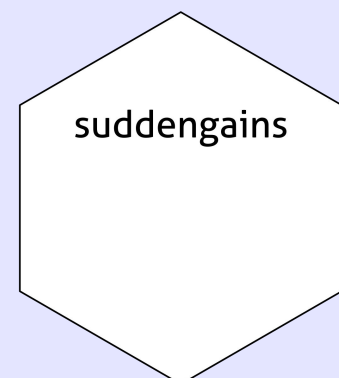
suddengains

R package
tiny.cc/sh8h8y

Preprint
tiny.cc/1j8h8y

PsyArXiv

Aderka, I. M., Nickerson, A., Boe, H. J., & Hofmann, S. G. (2012). Sudden gains during psychological treatments of anxiety and depression: A meta-analysis. *Journal of Consulting and Clinical Psychology*, 80(1), 93–101.
Tang, T., & DeRubeis R. (1999). Sudden gains and critical sessions in cognitive-behavioral therapy for depression. *Journal of Consulting and Clinical Psychology*, 67(6), 894-904.
Vittengl, J. R., Clark, L. A., Thase, M. E., & Jarrett, R. B. (2015). Detecting sudden gains during treatment of major depressive disorder: Cautions from a monte carlo analysis. *Current Psychiatry Reviews*, 11(1), 19–31.