

## Abstract

This project examined the feasibility of administering an intensive cognitive behavioral intervention for trauma recovery in an inpatient psychiatric unit regardless of variable patient stays and comorbidities. Large effect sizes were found at 1-week post-intervention for PTSD, self-harm, and emotional lability, which were maintained at 2-3 week follow-up. Additionally, depression and anxiety symptoms showed large effects at follow-up.

## Background

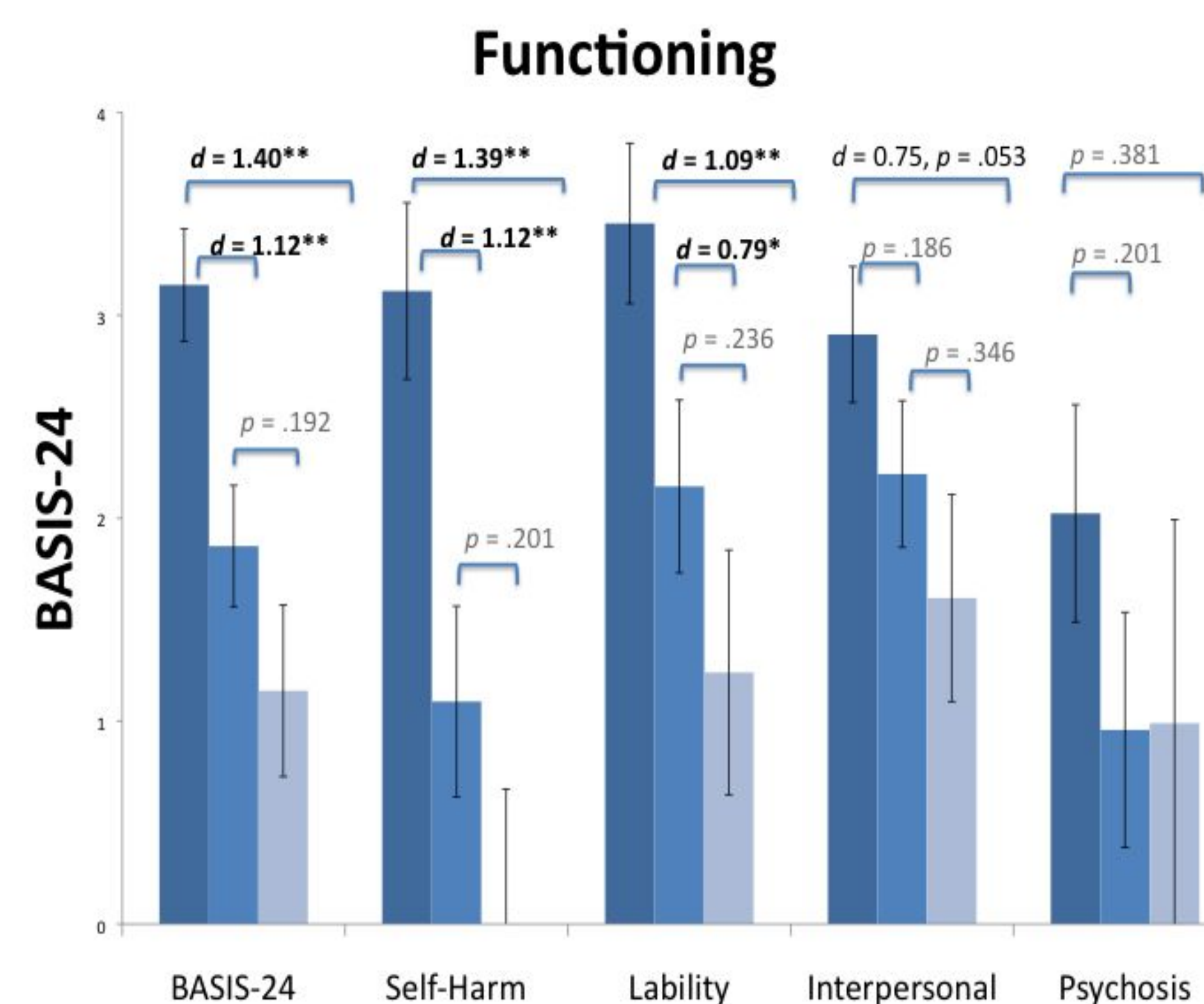
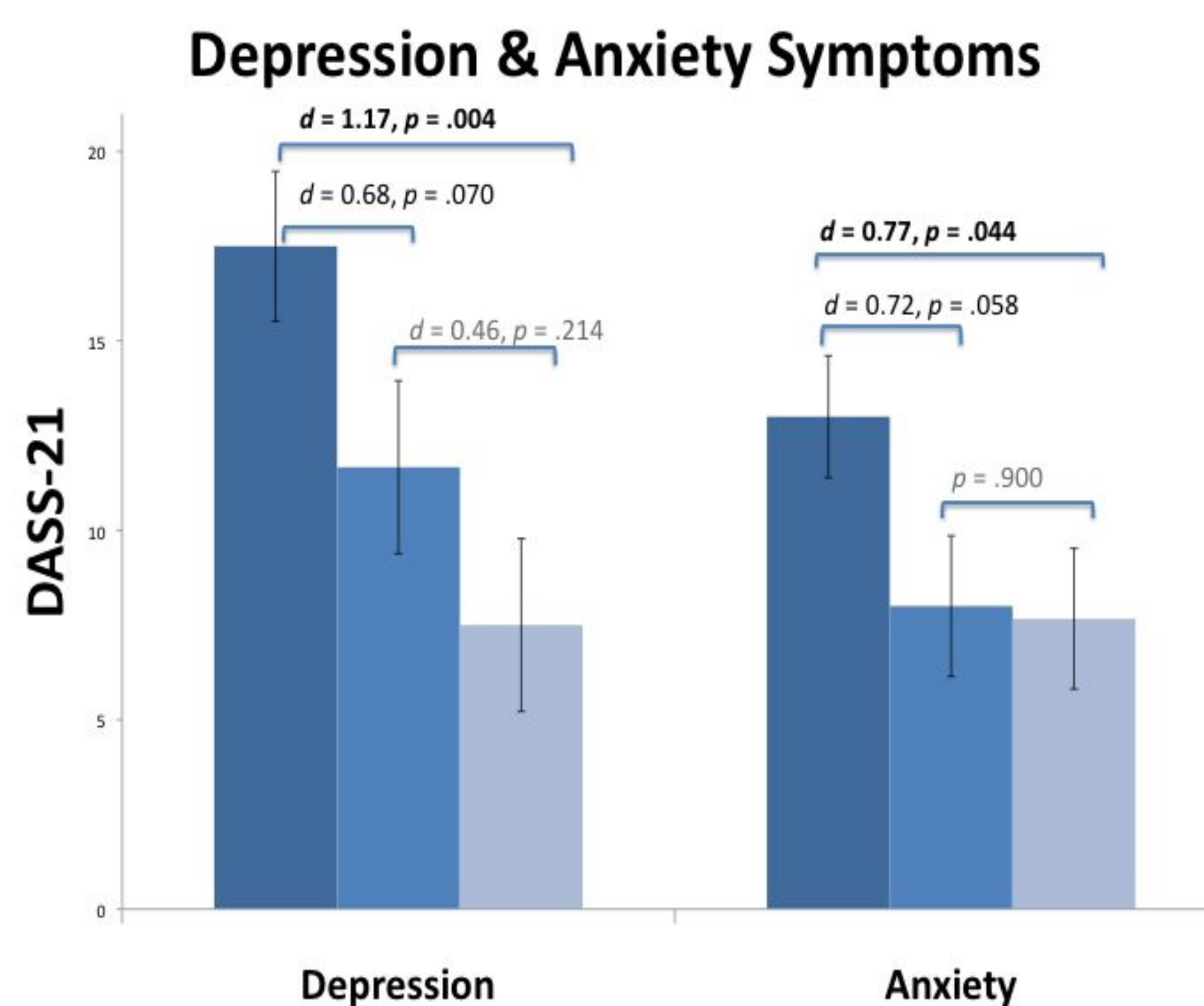
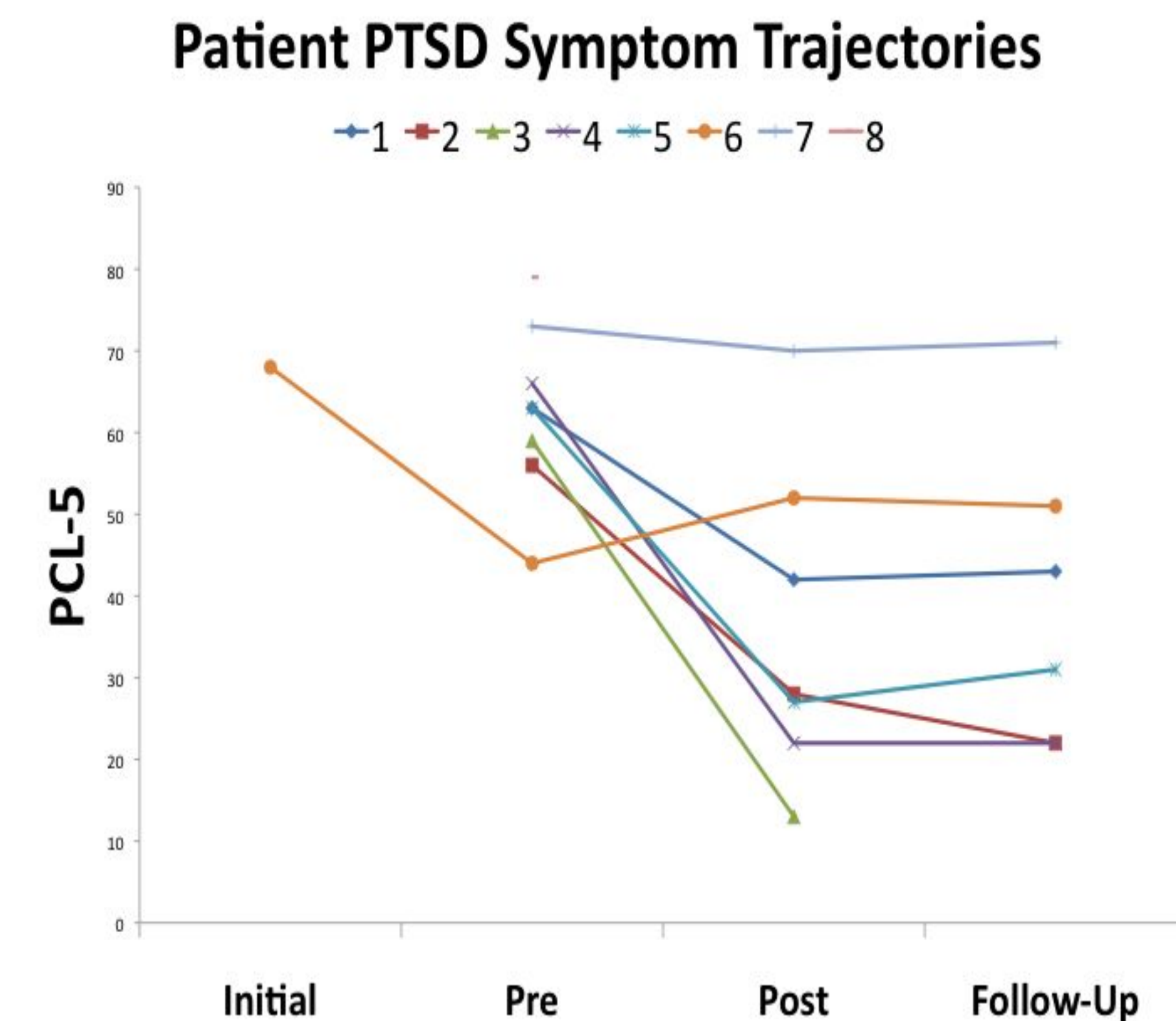
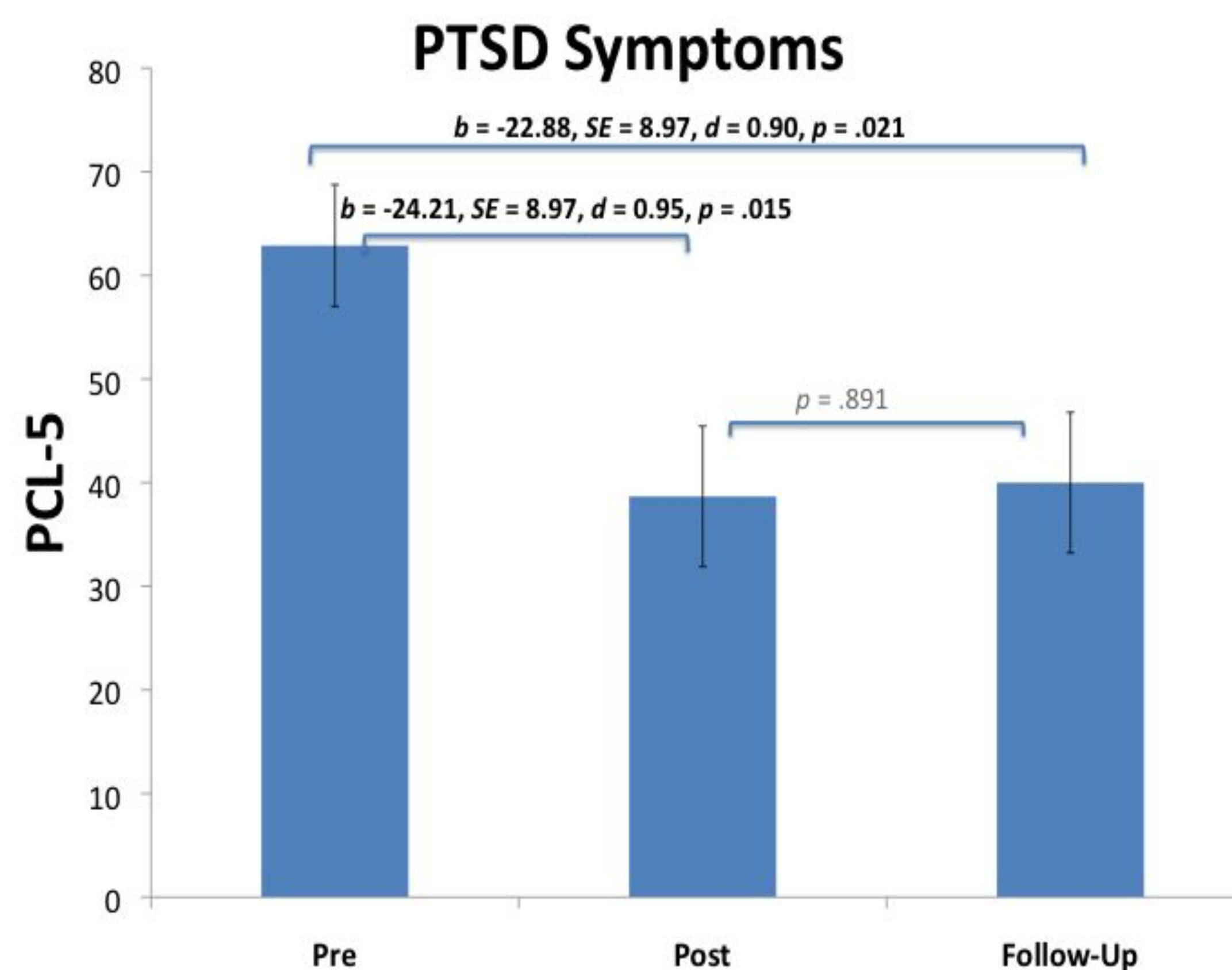
- A strong association exists between PTSD and healthcare utilization (Gawronski et al., 2014) due to physical (Pacella et al., 2013) and mental health problems including psychiatric hospitalizations (Nemeroff et al., 2006; Pennebaker & Chung, 2011).
- Evidence-based psychotherapies for PTSD exist (e.g., prolonged exposure [PE; Foa et al., 2007], cognitive processing therapy [CPT; Resick et al., 2007]), but require 8-12 sessions of 60- or 90-minutes, precluding them from use in short-term settings.
- Therefore, brief, stand-alone CBT exercises while trauma victims are in contact with mental health, could reduce trauma burden and repeat admissions.
- Meta-analyses of a brief 3-session intervention for adjustment to trauma (expressive writing [EW]) show that sessions spaced closer together yield the same results as those spaced days or weeks apart (Frattaroli, 2006). Others have “collapsed” dosage into a single day (Chung & Pennebaker, 2008).
- A randomized control trial (Alessandri, 2016) showed large and medium effect sizes, respectively, in reducing PTSD and depression symptoms following a single 2-hour block of a highly directive intervention called **Brief Trauma Organizer (BTO; 75-120 min)**.
- We piloted BTO in male veterans in an inpatient setting.

## Materials and Methods

- 11 inpatients were offered assessment for BTO based on mutual availability while the first author was on the unit.
- 8 patients met PTSD criteria and consented to the intervention; 7 were White, 1 Latino. All were male, had comorbid substance use disorders, and had multiple recent psychiatric admissions.
- Measures were re-administered at 1 week post intervention, and follow-ups were conducted by phone at 2-3 weeks post. One patient withdrew after 30% dosage and completed no post- or follow-up measures. Another was not reached for follow-up. The 7 who completed post measures also received a 20-40 minute review of BTO.
- SPSS (v.20) MIXED procedure was used for hypothesis testing. All 8 cases were included in analyses; MIXED does not drop incomplete cases but uses maximum likelihood estimation for missing data. Linear Mixed Modeling was used to test whether a random effects model (e.g., unconstrained baseline) would improve upon a fixed effects-only (i.e., time) model. The random effects model was not superior.

### MEASURES:

- Life Events Checklist (LEC-5; Weathers et al., 2013a).
- PTSD Checklist (PCL-5; Weathers et al., 2013b). Diagnosis of PTSD was based on meeting symptom cluster (A-E) criteria.
- Depression Anxiety and Stress Scales (DASS-21; Lovibond & Lovibond, 1995).
- Behavior and Symptom Identification Scale (BASIS-24; Cameron et al., 2011). Subscales assess self-harm, emotional lability, interpersonal functioning, psychosis, depression, and substance-related problems.



## Results

- PTSD symptoms showed a large reduction at post that was mostly maintained at follow-up. Five treatment-completing patients (71%) no longer met PTSD criteria at post or follow-up.
- Depression showed a large reduction that achieved statistical significance at 2-3 week follow-up.
- Anxiety showed a fairly large reduction that was maintained.
- Changes on the overall BASIS-24 were very large at post and follow-up. This appears largely due to large reductions in self-harm and emotional lability.
- Perceived interpersonal functioning showed more than a moderate improvement although statistical significance was marginal.
- Psychotic symptoms were not exacerbated.

Patient	Age	Comorbid with PTSD			
		TBI	SUD	Psychosis	Suicide Attempts
1	32	✓	✓		1
2	26		✓	✓	1
3	32		✓	✓	1
4	46	✓	✓	✓	26
5	35		✓	✓	0
6	42	✓	✓	✓	2
7	33		✓	✓	1
8	28		✓	✓	6

## Conclusions

- These preliminary results suggest it is feasible to address PTSD in short-term settings without harm, even with comorbid TBI, substance use, psychosis, and history of suicide attempts.
- Benefits were found for symptoms of PTSD, depression, and anxiety, as well as reduced self-harm ideation, emotional lability, and interpersonal dysfunction. Although no significant benefits were found for psychosis, these symptoms were not exacerbated.

## Discussion

- Despite wide awareness of a strong association between PTSD (and trauma exposure in general) with higher healthcare utilization, brief trauma-oriented treatments are not readily available.
- BTO was applied regardless of comorbidities. It showed loss of PTSD diagnosis in 5 out of 7 treatment-completing patients (71%), and large effect sizes for PTSD and depression symptoms, and for self-harm and emotional lability. Anxiety decrease was more modest.
- These preliminary results suggest short-term facilities can offer BTO without harm to address PTSD despite variable patient stays and comorbid conditions.
- A positive experience with BTO may facilitate engagement with longer trauma-focused therapies.
- The review of BTO offered at 1-week post-intervention assessment may have helped maintain gains. It may be most meaningful to understand BTO as a brief training in PTSD recovery that can be adapted to short-term settings.
- Two patients who did not complete (#8) or benefit (#7) manifested extreme levels of avoidance, such as continuous use of headphones with loud music “to drown out thoughts and memories.” #7 also avoided a more disturbing trauma (MST) than was addressed.
- This study was limited by several factors. All patients were receiving additional pharmacologic and milieu treatments at the time of the intervention, which may have confounded our results. A larger study is needed to obtain better estimates of effect sizes, and to ascertain which patient subtypes are most likely to benefit from treatment.