

# Social Support in Individuals with Concurrent Posttraumatic Stress Disorder and Opioid Use Disorder



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## INTRODUCTION

Almost all individuals (~90%) with opioid use disorder (OUD) report lifetime trauma exposure and one-third of these individuals meet criteria for PTSD (Mills et al., 2005, 2006; Pierce et al., 2009). Those with co-occurring PTSD and OUD are at greater risk for negative outcomes than those with OUD alone (MOUD; Ecker & Hundt, 2018; Havens et al., 2011; Mills et al., 2005). Prolonged exposure (PE) therapy is associated with reduction in PTSD symptom severity in patients receiving treatment for co-occurring OUD (Peck et al., 2018, 2023; Schacht et al., 2017). The stress-buffering hypothesis suggests that the absence of social support may lead to increased psychological distress following a traumatic event (Cohen & Wills, 1985). In line with this hypothesis, individuals with lower levels of social support experience more severe levels of PTSD symptoms, as well as poor substance use treatment retention and treatment outcomes (Brewin et al., 2000; Jarnecke et al., 2022). However, no studies have studied social support and its association among population that has both PTSD and OUD. In this secondary analysis, we examined family and social problems in a sample of individuals with concurrent PTSD and OUD to evaluate whether social and family problems were associated with and PE attendance, PTSD symptom severity, or substance use.

## METHODS

### Participants & Procedure

- Participants were 60 adults with co-occurring PTSD and OUD who completed the Addiction Severity Index (ASI) at intake and were enrolled in one of two 12-week randomized trials evaluating the feasibility and initial efficacy of a novel PE protocol for improving PE attendance and PE symptoms among buprenorphine- or methadone-maintained adults with PTSD (Peck et al., 2023, in preparation).
- At monthly assessments participants completed the ASI, Clinician Administered PTSD Scale for DSM-5 (CAPS-5), Beck Anxiety Inventory (BAI), Beck Depression Inventory (BDI), and Posttraumatic Stress Disorder Checklist for DSM-5 (PCL-5).
- Participants were randomized to receive either: (a) continued MOUD treatment as usual (TAU; n=20), (b) Prolonged Exposure therapy (PE; n=20), or (c) PE with financial incentives delivered contingent upon PE session attendance (PE+; n=20).

### Statistical Methods:

- Chi-square tests were used to compare participants with and without social and family problems (SFPs) on treatment completion and PTSD diagnostic remission at Week 12 (end of treatment).
- Mixed model repeated measures analyses were used to compare temporal changes between groups on continuous outcomes assessed at intake and Week 12 (end of treatment).

## RESULTS

**Table 1**

### Demographic and Clinical Characteristics (n = 60)

Age, years	40.4 (10.26)
Female, N (%)	39 (65)
Male, N (%)	20 (33.3)
Education, years	
Employed full-time, N (%)	15 (25.0)
Duration of illicit opioid use, years	7.7 (7.2)
Ever overdosed, N (%)	23 (38.3%)
OAT medication	
Buprenorphine, N (%)	38 (63.3%)
Daily dose, mg	15.6 (5.9)
Methadone, N (%)	22 (36.7%)
Daily dose, mg	86.2 (39.6)
Duration of OAT, years	4.5 (4.5)
History of PTSD treatment, N (%)	38 (63.3%)
CAPS-5	40.3 (8.6)
BAI	25.2 (12.3)
BDI	31.5 (10.8)
PCL	53.9 (12.2)

Note. Values represent mean (SD) unless otherwise indicated.

**Table 2**

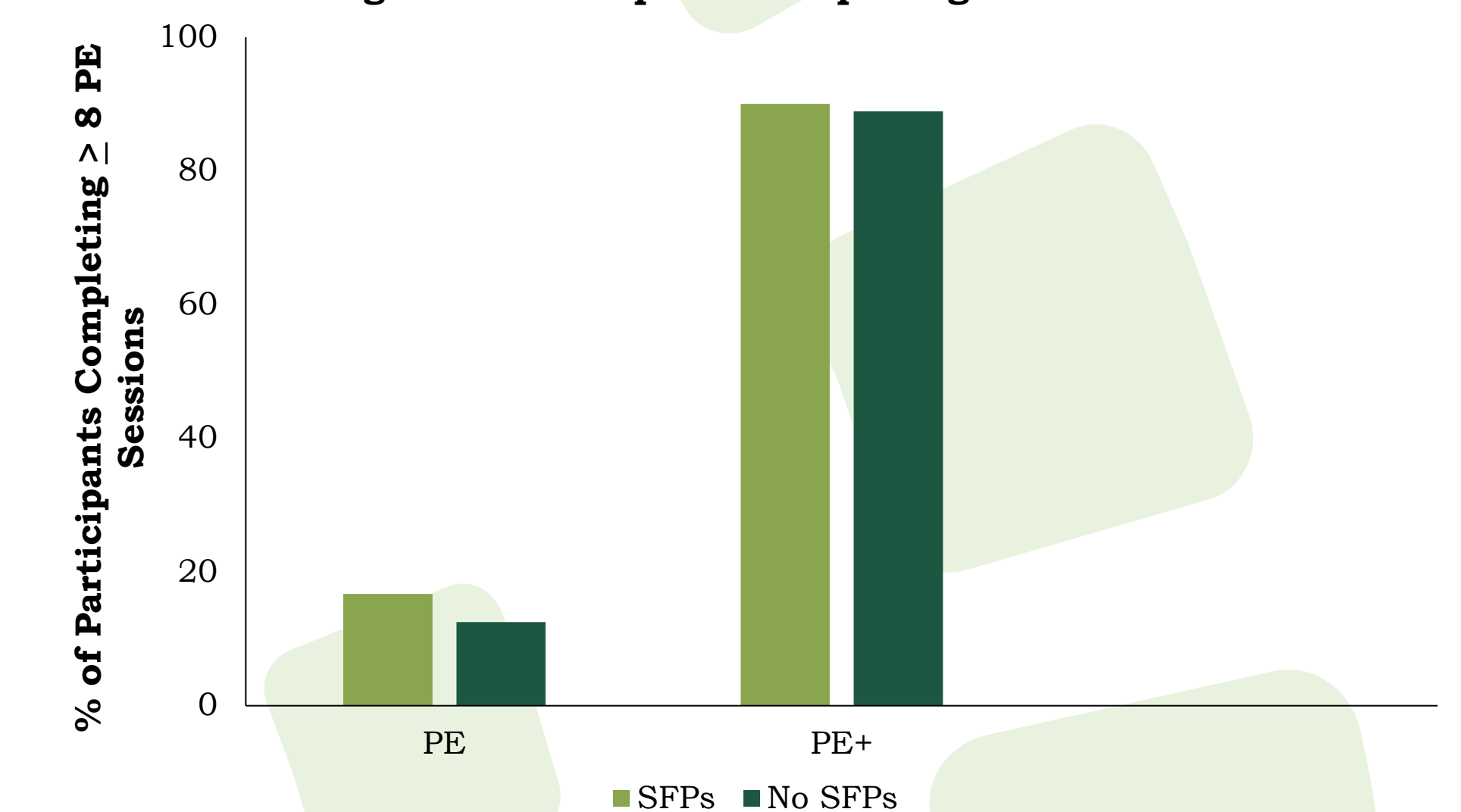
### Pearson correlations between ASI Family/Social Composite score and four measures of psychiatric distress among adults with co-occurring PTSD and OUD (N = 60)

Measure	1	2	3	4	5
1. PCL	-	.26*	.66*	.56*	.63*
2. Family/ Social Severity Score	-	-	.34*	.10	-.02
3. PTSD Total Severity	-	-	-	.38*	.43*
4. BAI	-	-	-	-	.49*
5. BDI	-	-	-	-	-

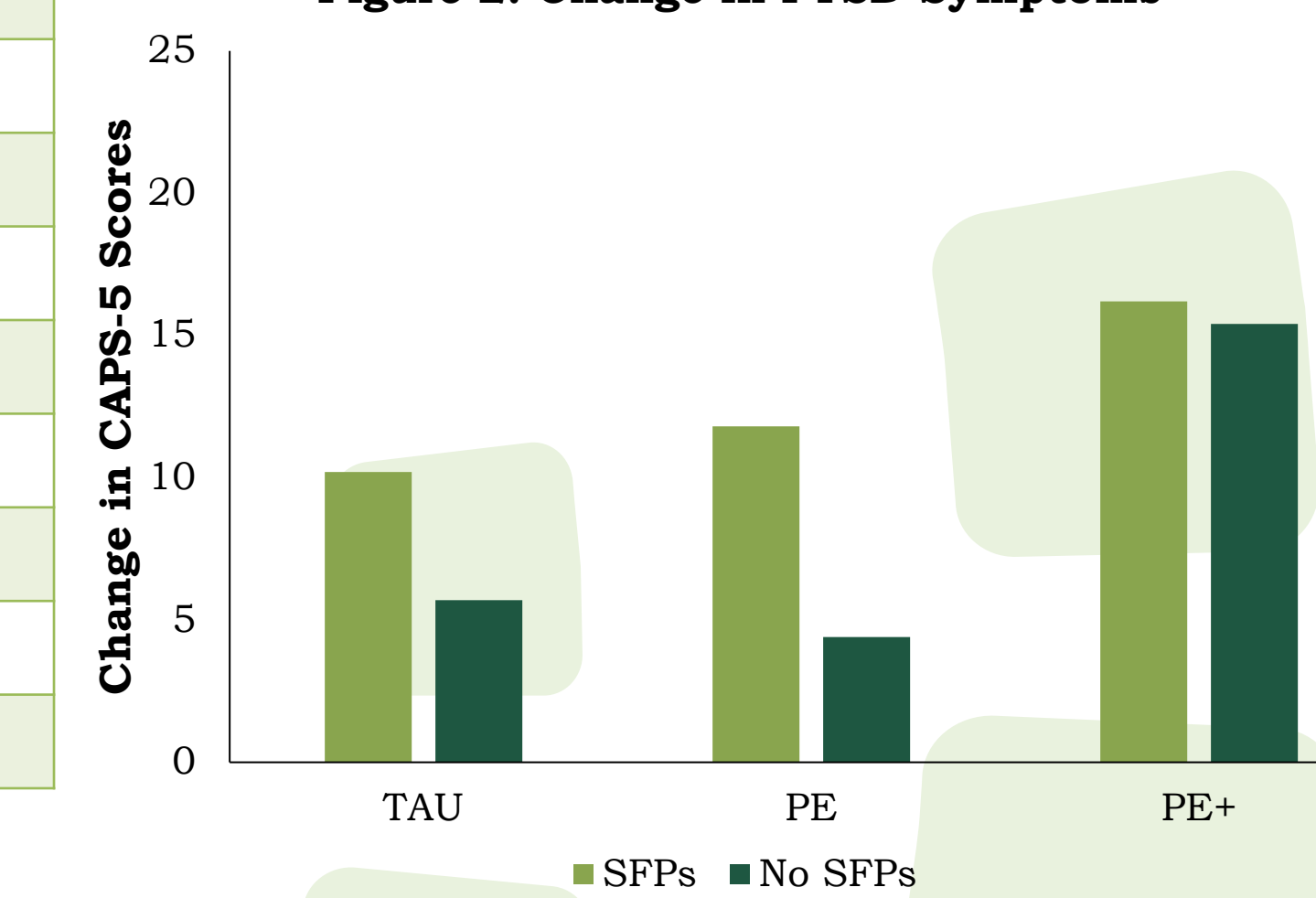
Note. Asterisks indicates significant correlations at  $p < .05$ .

- Participants with and without SFPs did not differ on the CAPS-5, BAI, BDI, or PCL-5 at intake (Table 1).
- At intake, the ASI, Family/ Social Severity composition score was significantly associated with the PCL-5 and CAPS-5 ( $ps < .05$ ; Table 2).

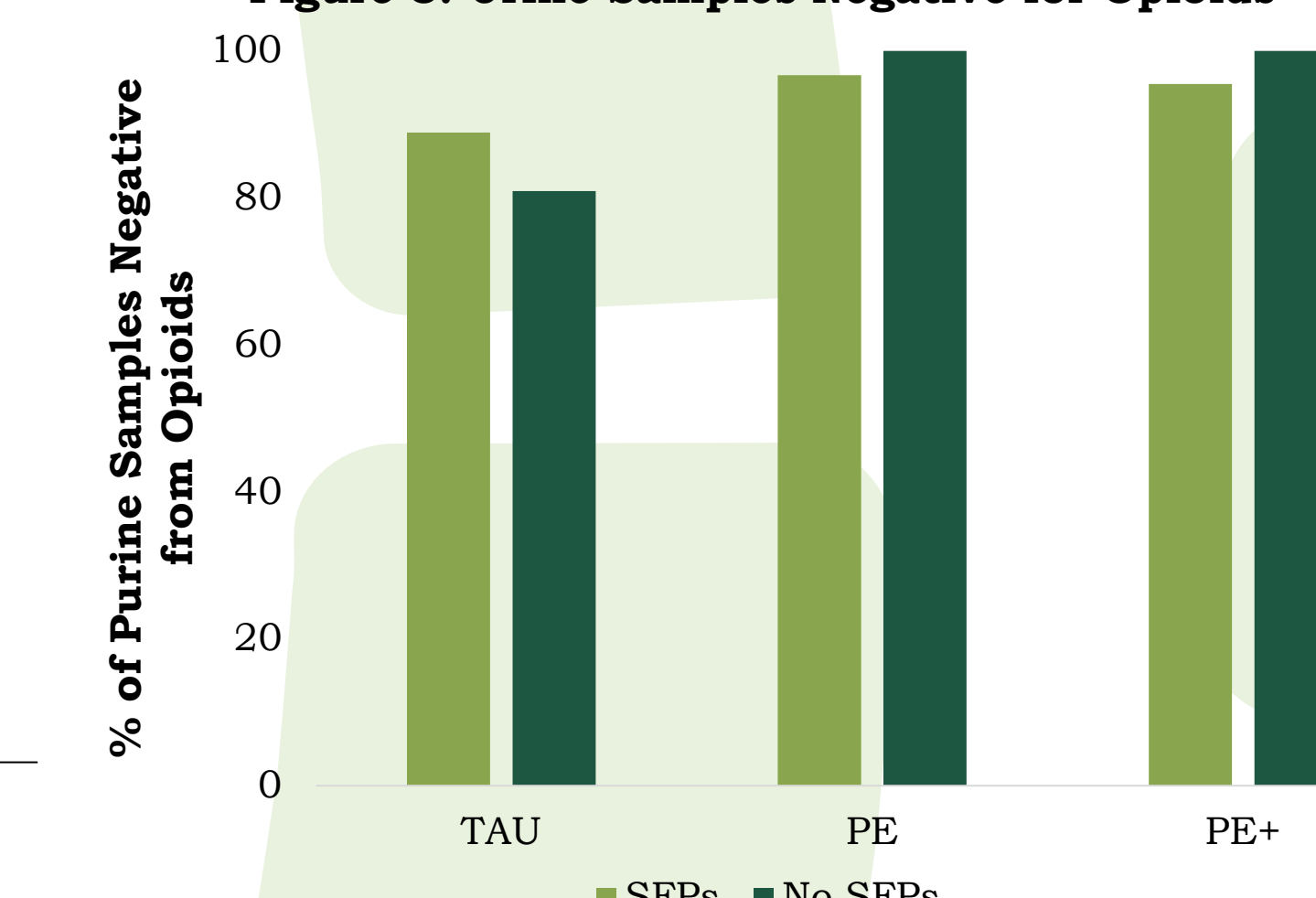
**Figure 1. Participants Completing Treatment**



**Figure 2. Change in PTSD Symptoms**



**Figure 3. Urine Samples Negative for Opioids**



- Although PE+ participants were more likely to complete treatment compared to PE participants ( $p < .05$ ), treatment completion rates were similar for participants with and without SFPs (PE: 17% vs. 13%; PE+: 90% vs. 89%) in both PE conditions (Figure 1).
- PTSD symptom reductions between intake and week 12 as measured by the CAPS-5 were numerically greater for PE+ participants compared to TAU and PE participants (Figure 2).
- However, changes in PTSD symptoms did not differ significantly by SFP status ( $p = .26$ ). In all three experimental groups, treatment completion rates were similar for participants with and without SFPs (TAU: mean decrease=10.1 vs. 5.7,  $p = .51$ ; PE: mean decrease=11.8 vs. 4.4,  $p = .25$ ; PE+: mean decrease=16.2 vs. 15.4,  $p = .90$ ; Figure 2).
- Overall, rates of opioid abstinence were high with >80% of urine samples negative for non-prescribed opioids. However, non-prescribed opioid use did not differ by SFP status ( $p = .99$ ; Figure 3).

## CONCLUSIONS

- Financial incentives increased attendance to PE sessions for individuals with OUD and PTSD.
- PE+ was associated with numerically greater reductions in PTSD symptoms than TAU and PE.
- PE did not appear to prompt opioid relapse in individuals with OUD and PTSD.
- In the current study, there was no significant association between social and family problem and the treatment.

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## REFERENCES

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