

Attitudes Toward Opioid Agonists Among Opioid-Dependent Individuals In and Out of Treatment

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BACKGROUND

- Most heroin-addicted individuals in the U.S. are not enrolled in treatment.
- Attitudes towards pharmacotherapy for heroin addiction may play an important role in the decision to enter and remain in treatment.
- Negative attitudes towards methadone have been documented for the past three decades among heroin-addicted individuals in treatment (Brown, Benn, & Jansen, 1975; Brown, Jansen, & Benn, 1975) and out of treatment (Bovelle & Taylor, 1984).
- Attitudes toward buprenorphine were found to be neutral among drug-abuse patients across treatment modalities (Rieckmann et al., 2007).

PURPOSE

The purpose of this study is to determine differences in attitudes toward buprenorphine and methadone among heroin-addicted individuals either in methadone treatment, buprenorphine treatment, or out of treatment.

METHODS

Participants:

- 417 opioid-addicted individuals who were either:
 - entering buprenorphine treatment ($n=132$);
 - entering methadone treatment ($n=191$); or
 - out of treatment ($n=94$) and not seeking treatment recruited from the streets of Baltimore through targeted sampling

Measures:

- All participants were administered the Attitudes Toward Methadone questionnaire (Brown, 1975) and the Attitudes Toward Buprenorphine questionnaire (Schwartz et al., 2008). Each of the 28 Likert-type items was rated from 1 (strongly disagree) to 5 (strongly agree), yielding:

- 1) Total-item scale (28 items; Range 28-140)
- 2) Aid to Behavior Change subscale (8 items; Range 8-64)

Statistical Analysis:

- General Linear Mixed Model analysis was used to compare scores among the three groups and across the two measures.
- All models controlled for gender, age, race (Caucasian v. African American/other), education, marital status, and whether participants had prior buprenorphine treatment.

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RESULTS

Table 1. Participant characteristics

Variable	Total sample ($N = 417$)	Buprenorphine treatment group ($n = 132$)	Methadone treatment group ($n = 191$)	Out of- treatment group ($n = 94$)	Test Statistic	p
Male, n (%)	221 (53.0)	76 (57.6)	92 (48.2)	53 (56.4)	$\chi^2(1) = 3.33$.189
African American/other, n (%)	350 (83.9)	126 (95.5)	150 (78.5)	74 (78.7)	$\chi^2(1) = 19.0$	< .001
Married, n (%)	101 (24.2)	41 (31.1)	48 (25.1)	12 (12.8)	$\chi^2(1) = 10.2$.006
Unemployed past 30 days, n (%)	311 (74.6)	101 (76.5)	134 (70.2)	76 (80.9)	$\chi^2(1) = 4.18$.124
Mean age (SD)	42.4 (7.6)	43.6 (6.9)	41.8 (8.0)	41.7 (7.6)	$F(2, 414) = 2.53$.081
Mean no. of years of education (SD)	11.3 (1.7)	11.7 (1.6)	11.2 (1.6)	11.0 (1.7)	$F(2,414) = 5.91$.003

Figure 1. Comparison of mean scores by instrument for methadone and buprenorphine total-item scales and aid to behavior change subscales

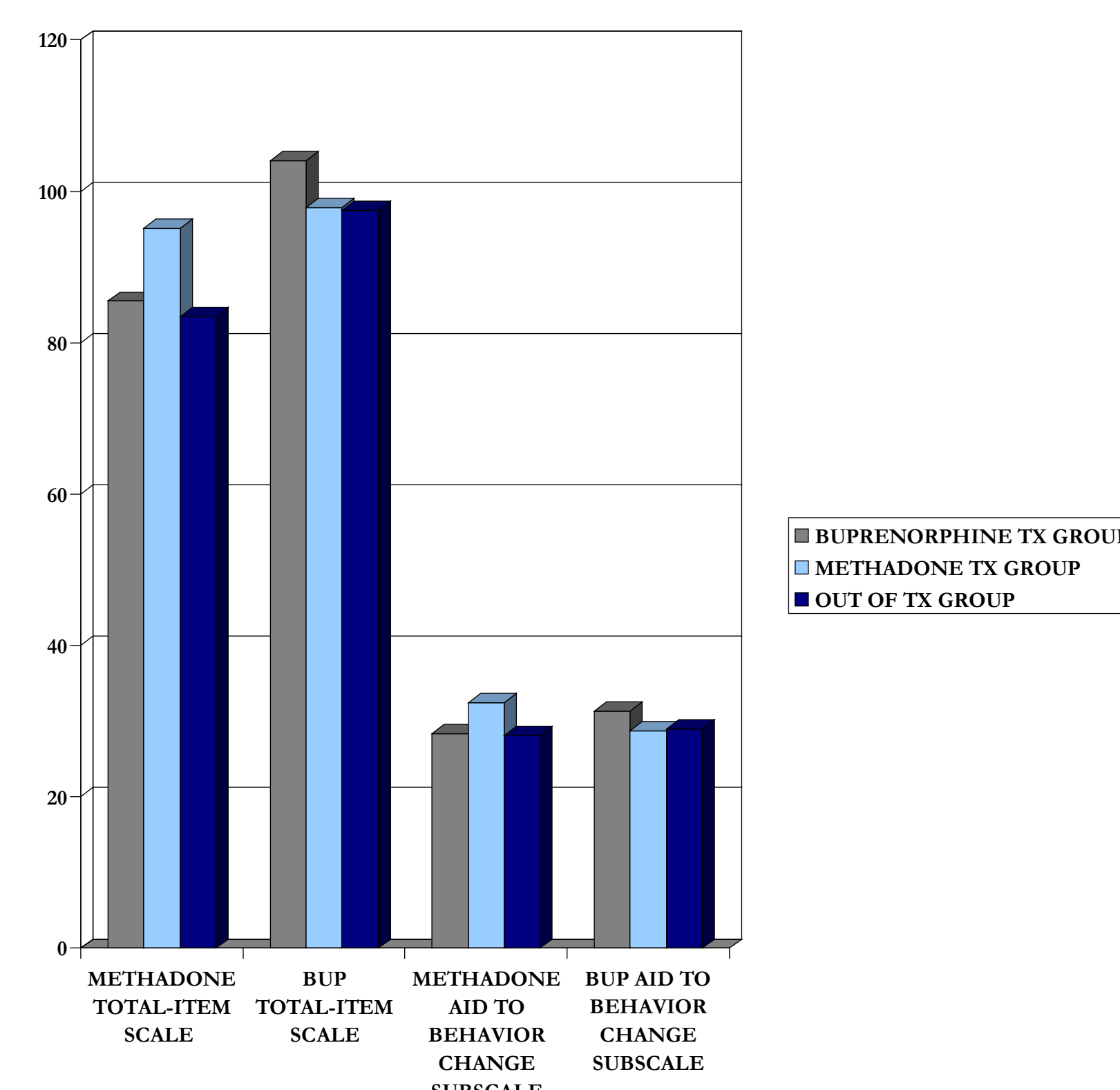
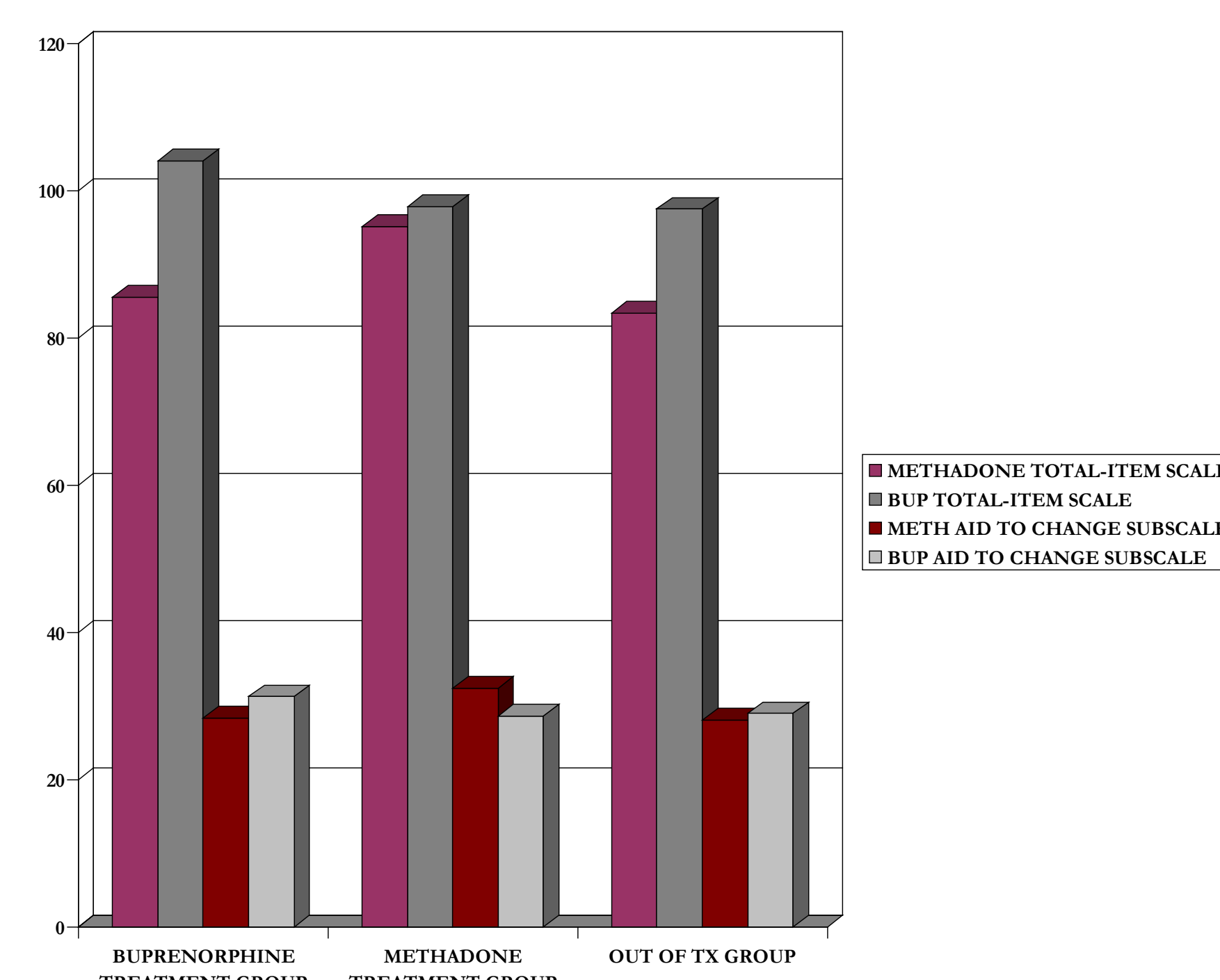


Figure 2. Comparison of mean scores by group for methadone and buprenorphine total-item scales and aid to behavior change subscales



Significant differences were found for the following:

- **Methadone total-item scale ($\alpha = .85$)**
 - methadone group had more positive attitudes than buprenorphine group ($p < .001$)
 - methadone group had more positive attitudes than out-of-treatment group ($p < .001$)
- **Buprenorphine total-item scale ($\alpha = .87$)**
 - buprenorphine group had more positive attitudes than methadone group ($p < .001$)
 - buprenorphine group had more positive attitudes than out-of-treatment group ($p < .001$)
- **Methadone as an aid to behavior change subscale ($\alpha = .79$)**
 - methadone group had more positive attitudes than buprenorphine group ($p < .001$)
 - methadone group had more positive attitudes than out-of-treatment group ($p < .001$)
- **Buprenorphine as an aid to behavior change subscale ($\alpha = .81$)**
 - buprenorphine group had more positive attitudes than methadone group ($p < .001$)
 - buprenorphine group had more positive attitudes than out-of-treatment group ($p = .001$)

Significant differences were found for the following:

- **Buprenorphine treatment group**
 - more positive attitudes toward buprenorphine than methadone for total-item scale ($p < .001$)
 - more positive attitudes toward buprenorphine than methadone as an aid to behavior change ($p < .001$)
- **Methadone treatment group**
 - more positive attitudes toward methadone than buprenorphine as an aid to behavior change ($p < .001$)
- **Out of treatment group**
 - more positive attitudes toward buprenorphine than methadone for total-item scale ($p < .001$)

CONCLUSIONS

- Entry into buprenorphine or methadone treatment appears to be influenced by patient attitudes towards the medications.
- Heroin-addicted individuals entering methadone and buprenorphine treatment have more favorable attitudes toward their medication than individuals remaining out of treatment.
- Since out-of-treatment heroin-addicted individuals hold a more favorable view of buprenorphine than methadone, buprenorphine has the potential to permit an increase in the rate of treatment entry.

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