Outcome Expectations and Associated Treatment Outcomes in Motivational Enhancement Therapy Delivered in English and Spanish

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Abstract

Background and Objectives—The relationship between patients' baseline expectations regarding treatment outcome and actual outcomes has not been widely studied within the field of substance use disorders. We hypothesized that outcome expectations would be unrelated to outcomes in a study investigating Motivational Enhancement Therapy delivered in English (MET-E) consistent with our earlier work, and conducted exploratory analyses in a separate study that investigated the same treatment delivered in Spanish (MET-S).

Methods—These secondary analyses compared patient outcome expectations and substance use treatment outcomes in two large, multisite randomized controlled clinical trials that evaluated three sessions of MET-E or MET-S. The MET-E sample included 461 participants and the MET-S sample included 405 participants. Outcome expectations were measured by a single item regarding expectations about abstinence prior to initiating treatment.

Results—Outcome expectations were strongly associated with most substance use outcomes in the MET-S trial (but not in MET-E), even after controlling for severity of substance use at baseline. In MET-S, those who indicated that they were 'unsure' that they would achieve abstinence during treatment submitted a greater percentage of drug-positive urine toxicology screens during the treatment period than those who were 'sure' they would achieve abstinence ($F = 18.83$, $p < .001$).

Discussion and Conclusions—Patients' outcome expectations regarding the likelihood of abstinence may be an important predictor of drug use treatment outcomes among Spanish-speakers, but not necessarily for English-speakers.

Scientific Significance—Individual differences and cultural factors may play a role in the association between outcome expectations and treatment outcomes.

1. Introduction

Treatment expectations have been identified as one of the major factors that affect psychotherapy treatment outcomes, and they have been defined as the set of expectancies an individual holds regarding treatment processes.[1] Although there are different types of treatment-related expectations, such as therapist role or treatment duration,[3,4] outcome expectations in particular have been well-studied.[1] Outcome expectations have been operationalized as the "prognostic beliefs about the consequences of engaging in treatment".[2] Within substance use treatment, this typically pertains to the expected substance-related outcomes of treatment (e.g., achieving complete abstinence, reducing substance use, etc.). A meta-analysis of the general psychotherapy literature suggests that outcome expectations are associated with treatment outcomes, with a modest effect size (d = .24, $p < .001$).[2]

Within the general psychotherapy literature, several studies have found that substance use is associated with more negative outcome expectations.[5,6] However, there are very few studies that focus specifically on the association between outcome expectations and actual treatment outcomes within samples of individuals with substance use disorders. While some studies have found positive outcome expectations to be associated with greater client retention and fewer days of substance use,[7,8] others have reported no association with substance use outcomes or treatment retention.[9,10] In a pooled sample of cocaine-dependent individuals participating in one of four clinical trials, we found outcome expectations at baseline were not associated with treatment outcomes.[10]

With regards to Motivational Enhancement Therapy (MET), there have been no studies that have assessed the relationship between outcome expectations and treatment outcomes. Similar to outcome expectations, motivation has been associated with substance use treatment outcomes and treatment retention.[11] While motivation for treatment and treatment expectations are related, there is some evidence that these two constructs may be discriminable.[8] For instance, an individual may be motivated to change substance use behaviors, but at the same time expect that treatment will not be effective in doing so. Motivation prior to treatment entry has been associated with single-item ratings regarding treatment expectations (i.e., "Being in drug treatment would help you with a lot of your problems").[11]

There are also very little data regarding cultural differences and treatment outcomes. There are likely cultural differences in how effective substance use treatment is perceived, the degree of stigma associated with treatment, and whom should seek treatment.[12,13] Latinos, in particular, have been less likely to seek treatment for substance use, report greater barriers to accessing and utilizing substance use treatment, and tend to have shorter duration of treatment than White clients.[14] We hypothesize that these factors may affect treatment

outcome expectations, such that due to these barriers Latinos may be less sure of achieving abstinence through treatment.

This secondary analysis used data from two multisite randomized controlled trials of MET for individuals with a range of substance use disorders conducted as part of the NIDA Clinical Trials Network (CTN).[15] One of the trials was conducted in English (MET-E) and the other used an identical protocol with all interventions conducted in Spanish for monolingual Spanish-speaking adults (MET-S). We hypothesized that participants in MET-S would have poorer outcome expectations (i.e., more unsure that they would reach abstinence) than participants in the MET-E sample due to the fact that the monolingual Spanish-speakers typically encounter multiple treatment barriers.[14] We also hypothesized that outcome expectations would not be associated with treatment outcomes in the MET-E sample, consistent with our earlier work in a cocaine-using sample.[10]

2. Method

2.1 Overview of the Two Trials

2.1.1 English-delivered Motivational Enhancement Therapy (MET-E)—The MET-E trial compared the efficacy of three sessions of MET versus three sessions of Counseling as Usual (CAU) at reducing substance use among 461 participants in a multisite randomized clinical trial. The treatment period was four weeks, with a 12-week follow-up. The trial was conducted at five outpatient clinics as part of the National Drug Abuse Treatment Clinical Trials Network.[16]

2.1.2 Spanish-delivered Motivational Enhancement Therapy (MET-S)—The MET-S trial was designed as a parallel to the MET-E trial (e.g., MET vs. CAU; 3 sessions, 4 weeks, 12 weeks follow-up), but conducted entirely in Spanish, as all participants were required to have Spanish as their primary language. There were 405 participants randomized to either MET or CAU at five outpatient clinics across the U.S. All treatment and assessment sessions were conducted in Spanish.[17, 18]

2.2 Participants

Inclusion/exclusion criteria were similar for both studies. Participants were eligible if they: (1) were seeking outpatient treatment for a substance use disorder, (2) reported substance use within the previous 28 days, (3) were over the age of 18, (4) were speakers of English or Spanish, respectively, and (4) were appropriate for outpatient care at that site. Participants were excluded if they had severe psychiatric or substance use symptoms that required a more intense level of treatment (e.g., inpatient/detox), or if they would not be able to complete the 4-week treatment period due to anticipated incarceration or a planned change of residence.

2.3 Measures

2.3.1 Demographic and baseline characteristics—All participants completed a demographic questionnaire before beginning treatment, which included age, ethnicity (including country of origin in MET-S trial), marital status, education level, employment status, and relationship status.

2.3.2 Outcome expectations—As part of the baseline assessment prior to randomization, participants completed an adapted version of the Attitudes and Expectations form.[19] Based on our prior work with this assessment measure,[10] a single item was used as the indicator of outcome expectations for the current study: "Do you think you will reduce or stop your use of drugs or alcohol as a result of this treatment?". This item was rated on the following scale "I think I will still use", "I think I might stop", "I probably will stop", and "I am sure I will stop". While the Attitudes and Expectations measure has many items, only this item evaluated outcome expectations and thus was used for analyses.

A frequency distribution was used to evaluate the outcome expectations item within the MET-E and MET-S samples. As with our previous study,[10] very few participants reported that they expected to continue substance use as a result of the treatment ($n = 15$ (3.3%) in MET-E and $n = 21$ (5.2%) in MET-S). Additionally, because the language of two of the item's responses was very similar ("might stop" using and "probably stop" using), we dichotomized the variable into participants who endorsed being 'Unsure' they would quit or reduce their substance use as a result of treatment, and those that were 'Sure'. The 'Unsure' category contained the first three levels of the item ("still use", "might stop", or "probably stop") and the 'Sure' category was comprised of the participants who indicated they were sure they would stop using.

2.3.3 Substance Use and Addiction Severity—The Substance Use Calendar was used to assess substance use over the course of treatment and follow-up.[20] This measure uses a calendar-based method for recording days of substance use over a defined time period similar to the Timeline Followback.[21] Urine toxicology screens were conducted at each study visit. Participants also completed an abbreviated version of the Addiction Severity Index (ASI),[22,23] in order to assess consequences and correlates of drug use across several life domains. The ASI consists of seven composite scores (medical, employment, legal, family/social, psychiatric, alcohol and drug use), with higher scores indicating greater severity of problems in that area.

2.3.4 Motivation—The University of Rhode Island Change Assessment Questionnaire (URICA) was used to assess levels of motivation.[24] The URICA corresponds to the stages of the Transtheoretical Model of Change.[25] We used the Readiness score from the URICA, which is a composite variable that measures how ready an individual is to change their substance use.[26]

2.3.5 Acculturation—Participants in MET-S completed the Bicultural Involvement Questionnaire (BIQ).[27] The BIQ has two subscales: Hispanicism and Americanism. Both subscales measure the degree to which individuals have been socialized to the Hispanic and American cultures, respectively.

2.4 Data Analytic Plan

Because the studies were not designed for a direct comparison, we chose to primarily examine the association between outcome expectations and treatment outcomes separately within each study (MET-E and MET-S). The frequency distribution of the 'Unsure' and

'Sure' responses according to baseline variables (e.g., demographic variables, clinical characteristics, and substance use severity) were examined within each sample. Chi-square tests were used to compare the rates of those 'Unsure' and 'Sure' across the MET-E and MET-S samples, as well as across treatment conditions and study site within each sample. We used ANOVAs and chi-square tests to evaluate relationships between treatment outcomes and baseline expectations by study. Primary treatment outcome variables included the percentage of drug-positive urine screens during the treatment period, the percentage of days abstinent from primary drug during the treatment period, the percentage of days abstinent from primary drug through the follow-up period, and the number of days retained in treatment. Lastly, we conducted a repeated measures ANOVA to examine the URICA readiness score at pre-treatment and post-treatment by participant initial outcome expectations in both samples.

3. Results

3.1 Participants

There were 866 total participants who completed the outcome expectations item and provided data for these analyses: 461 in the MET-E sample and 405 in the MET-S sample. The MET-E sample was majority male (70.8%), with an average age of 34.7 years ($SD =$ 10.2), and ethnicity distribution as follows: 43% Caucasian, 42.1% African American, 11.6% Hispanic, <1% Asian, and 2.4% other. On average, participants reported 9.8 days ($SD = 8.4$) of primary drug use in the previous 28 days. Alcohol was the most commonly reported primary drug (34.1%), followed by cocaine (17.8%), marijuana (17.8%), opiates (9.7%), methamphetamine (4.9%), and PCP (1.6%), with the remainder of the sample reporting a combination of the above drugs or "Other". The criminal justice system referred 32.2% of the sample. Table 1 displays demographic characteristics according to response on the outcome expectations item. As compared to participants who reported being 'Sure' regarding a positive treatment outcome, participants in MET-E who were 'Unsure' were younger, more likely to be never married/living alone, reported more days of marijuana and alcohol use in the previous 28 days, had a higher legal composite score from the ASI, and a lower 'readiness' score on the URICA.

For MET-S, 88.4% were male, with an average age of 32.5 ($SD = 9.1$), and an ethnic distribution as follows: 36.8% Mexican, 24.2% Hispanic, 14.3% Puerto Rican, 8.6% Cuban, 5.2% Caucasian, 2.7% Guatemalan, .7% African American, 5.7% Other, and 1.7% Multiracial. Participants reported living in the United States an average of 14.7 years ($SD = 12.1$). The majority reported alcohol as their primary drug (61.5%), followed by cocaine (20.3%), opiates (8.3%), marijuana (7.8%), and methamphetamine (2.1%). As seen in Table 1, compared to those who were 'Sure', participants who were 'Unsure' of a positive treatment outcome reported more days of primary drug use, cocaine use, and marijuana use in the 28 days prior to treatment entry. They were also more likely to be never married/living alone, had a lower ASI legal composite score, reported more time incarcerated during their lifetime, and had a lower 'readiness' score on the URICA.

3.2 Outcome Expectations Between Samples

Results of the chi-square test comparing treatment outcome expectations ('Unsure' and 'Sure') by sample (MET-E and MET-S) indicated the two samples had a significantly different distribution of participants who reported being 'Unsure' or 'Sure' regarding abstinence [$x^2(1, N = 861) = 4.07, p = .026$]. Participants in MET-S were more likely to be 'Unsure' (47%, $n = 192$) than those in MET-E (40.6%, $n = 185$). The distribution of participants who were 'Unsure' or 'Sure' did not differ across the assigned treatment conditions (MET vs. CAU) in either the MET-E or MET-S samples. The distribution also did not differ across study site in the MET-E sample, but there were site differences in the MET-S sample ($\chi^2 = 11.75, p = .019$).

3.3 Outcome Expectations and Treatment Outcomes

Table 2 depicts the results of ANOVAs and chi-square tests that evaluated the association between treatment outcome expectations and treatment outcomes (both within treatment and through the follow-up period). In the MET-E sample, expectations were not associated with any within-treatment or follow-up substance use outcome measures, including the number of days retained in treatment. However, in the MET-S sample, nearly all outcome measures differed according to whether participants responded as being 'Unsure' or 'Sure' regarding outcome expectations. For instance, those who were 'Sure' submitted fewer drug positive urines within the treatment period [$F(1, 1,163) = 18.83, p = .000$], and reported a greater percentage of days abstinent from their primary drug during treatment [$F(1, 1,350) = 15.41, p = .000$], and through follow-up [$F(1, 1,293) = 10.58, p = .001$], compared to those who were 'Unsure'. The number of days retained in treatment through follow-up did not differ according to outcome expectations. Results of an alternative analysis that re-classified the outcome expectations variable (e.g., 'Unsure' = "will still use" and "might stop"; 'Sure' = "probably will stop" and "sure I will stop") were consistent with the findings in Table 2.

Additional analyses controlling for baseline variables (those that differed according to treatment outcome expectations in the MET-S sample, such as days of primary drug use at baseline) produced identical results. All outcome variables maintained significance with most at $p < .01$, with the exception of the percentage of days abstinent from primary drug use through the follow-up period, which was significant at $p = .016$. ANOVAs using the URICA Readiness Score to assess motivation resulted in no significant differences by group (level of outcome expectations), time, or the interaction between the two.

To further evaluate whether the relationships between outcome expectations and treatment outcomes differed across the two samples, we conducted separate analyses that combined the two samples and included an interaction term (e.g., 'outcome expectations' × 'study protocol') . Results indicated the interaction term was significant for the same treatment outcome variables reported as significant for the MET-S sample in Table 2 (the 'percentage of drug positive urine' variable was not included in this additional analysis because of differences in how this variable was calculated across the two studies).

4. Discussion

This study examined patient outcome expectations regarding abstinence from substance use by using data from two trials that evaluated the effectiveness of 4-weeks of Motivational Enhancement Therapy delivered in either English (MET-E) or Spanish (MET-S). We first found that participants in MET-S were more likely to be 'Unsure' regarding their treatment outcome expectations, indicating that they were less sure that they would achieve abstinence as a result of treatment at baseline. We also found that outcome expectations were not associated with treatment outcomes in MET-E; however, in MET-S, nearly all treatment outcomes were significant. To our knowledge, this is the first study to indicate an association between patients' initial outcome expectations and substance use outcomes within a monolingual Spanish-speaking sample participating in a substance use treatment trial.

The findings from the English-speaking sample differ from that found for the general psychotherapy literature, which has found strong associations between initial outcome expectations and subsequent treatment outcomes.[1] However, the current results are consistent with other reports in substance users,[9] as well as our own prior findings using this same outcome expectations classification in a sample of primary cocaine users.[10] There are several possibilities for the lack of association between outcome expectations and treatment outcomes in substance users. For instance, these findings may be due to differences in the type of assessment, the timing of administration of the assessment, or the type of expectancy assessed (i.e., outcome, role, duration, or credibility expectations). Yet, it may also be that substance users' initial outcome expectations are not as salient with respect to outcomes as they are in populations seeking treatment for other psychiatric conditions. For instance, perhaps substance use intoxication, craving, or withdrawal renders outcome expectations as less salient.

In contrast, the findings in the MET-S sample are more consistent with the broader psychotherapy literature, as nearly all treatment outcome variables differed according to patients' initial expectations. The reasons why this was true in a Spanish-speaking, as opposed to an English-speaking, sample are not entirely clear. One likely explanation involves demographic and cultural differences. The MET-S sample included a larger percentage of participants referred by the criminal justice system compared to the MET-E sample (60% vs. 32%, respectively). This may have impacted the findings in that Latinos may perceive the criminal justice system as less fair, which may in turn impact the influence of their expectations on treatment.[28] Within the MET-S sample, those in the 'Unsure' group had more lifetime months spent incarcerated versus those in the 'Sure' group. Perhaps individuals who have spent more time incarcerated may have a bleaker outlook on the likelihood of treatment success, or may be more ambivalent about changing their substance use (as indicated by a lower readiness score on the URICA).

There may also be cultural considerations that affect expectations and outcomes. In the Latino psychotherapy literature, the cultural values of *personalismo* and *formalismo* may be related to treatment processes, which in turn impact outcomes.[29,30] *Personalismo* has been defined as responsiveness to the personal quality of relationships as well as an orientation toward personal relationships rather than impersonal ones, while *formalismo* has been

defined by values of respect and deference within relationships.[31] While these cultural values were not assessed in this study, it may be that they facilitated the association between outcome expectations and substance use treatment outcomes. That is, an emphasis on personal qualities (such as expectations) perhaps is made more salient, and may be communicated and reinforced within the formal treatment relationship between client and clinician. Additionally, some Latinos make religious vows of abstinence, known as *juramentos* or *promesas*, which are often recited in front of a priest and typically reflect a commitment to abstain from substance use during a specified amount of time.[32] Another possibility is that lower expectations are more accurate for complex disorders such as substance use disorders, and thus are more likely to be related to outcomes. These interpretations are preliminary, however, as this is the first study to evaluate outcome expectations in a predominantly Latino, monolingual population.

Finally, we found that participants in MET-S tended to be more likely to report that they were unsure as whether they would be abstinent as a result of treatment (in comparison to participants in MET-E). Perhaps Spanish speakers have lower expectations due to increased stigma and shame surrounding treatment.[12] In addition to stigma, Latinos face many barriers to receiving treatment due to health disparities,[33] including insufficient Spanish-speaking healthcare providers, which may impact outcome expectations.[34, 35] We did not find differences between level of acculturation and outcome expectations.

The results of this study have several potential clinical implications. First, as demonstrated in the MET-E sample, outcome expectations prior to starting treatment were not related to treatment success. This may suggest that an individual's expectation regarding abstinence at treatment entry may have little bearing on whether or not he/she actually achieves reductions in substance use. Second, outcome expectations may play a greater role in treatment outcomes in Spanish-speaking samples, and may become a potential target for future interventions. Providers may wish, then, to assess expectations upon intake to a substance use treatment facility.

This study had several limitations. First, only one item was used to measure outcome expectations, as we did not have a well-validated assessment of patient outcome expectations. Due to the wording of this single item, it is possible that overlapping constructs were being assessed, such as motivation, self-efficacy, and credibility of treatment. For instance, there is some overlap between a "treatment readiness statement" and the language in the item, as the item uses the words "*I will*", which explicitly taps into commitment language.[11] This may have caused some individuals to respond as 'Unsure', as opposed to using wording without commitment language for the item (e.g., "What do you expect will be the outcome of your treatment?"). We also found that those with a higher motivation score were more likely to be in the 'Sure' group, indicating that while the constructs of outcome expectations and motivation are distinct, they may be related. It is important to note that the samples were separate in that they recruited participants by language spoken and not by ethnicity; that is to say, there were some individuals that identified as Hispanic in the MET-E sample, and some individuals that identified as Caucasian in the MET-S sample.

In conclusion, important constructs of motivation and self-efficacy are commonly evaluated in substance use treatment research, yet outcome expectations have received little attention. These findings indicate that outcome expectations were related to treatment outcomes in a Spanish-speaking sample, yet not in an English-speaking sample. The divergent findings highlight the need for future research to assess cultural variants of outcome expectations and their association on substance use outcomes. Investigating how client demographic factors (e.g., language, ethnicity) affect outcome expectations and treatment outcomes may prove to be a meaningful addition to the larger outcome expectations literature.

Acknowledgements

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Table 1

Treatment Expectations and Baseline Characteristics

	MET-E N = 461				MET-S N = 405			
	'Unsure' n (%)	'Sure' n (%)	X^2 (df)	p	'Unsure' n (%)	'Sure' n (%)	X^2 (df)	p
Gender: Female	52 (28.1)	81 (29.9)	.17 (1)	.681	19 (9.9)	28 (13.1)	1.04 (1)	.308
Ethnicity			16.78 (4)	.002			12.57 (8)	.127
Caucasian	98 (53)	98 (36.2)			6 (3.1)	15 (7.0)		
African-American	64 (34.6)	128 (47.2)			0	3 (1.4)		
Hispanic	15 (8.1)	38 (14)			47 (24.5)	51 (23.9)		
Asian	3 (1.6)	1 (.4)			-	-		
Mexican	-	-			74 (38.5)	75 (35.2)		
Puerto Rican	-	-			34 (38.5)	24 (11.3)		
Cuban	-	-			12 (6.3)	23 (10.8)		
Guatemalan	-	-			5 (2.6)	6 (2.8)		
Multiracial	-	-			2 (1.0)	5 (2.3)		
Other	5 (2.7)	6 (2.2)			12 (6.3)	11 (5.2)		
Never married/Living Alone	160 (86.5)	213 (78.6)	4.6 (1)	.032	126 (65.6)	112 (52.6)	7.09 (1)	.008
Unemployed	106 (57.3)	147 (54.2)	.42 (1)	.519	78 (40.6)	78 (36.6)	.68 (1)	.408
Referred by Criminal Justice	69 (37.3)	78 (28.8)	3.65 (1)	.056	111 (57.8)	128 (60.1)	.22 (1)	.641
	M (SD)	M (SD)	F (df)	p	M (SD)	M (SD)	F (df)	p
Years of Education	12.7 (2.1)	12.5 (2.1)	1.35 (1, 454)	.246	9.5 (2.9)	9.6 (3.5)	.02 (1, 402)	.904
Age	33.1 (10.2)	35.8 (10.1)	7.35 (1, 454)	.007	32.4 (9.2)	32.6 (8.9)	.07 (1, 403)	.789
Days of primary drug use[1]	10.7 (8.7)	9.1 (8.1)	3.7 (1, 418)	.055	8.5 (9.1)	6.2 (7.9)	7.35 (1, 403)	.007
Days of cocaine use[1]	3.2 (5.9)	3.9 (6.4)	1.54 (1, 449)	.215	3.2 (6.8)	1.9 (4.6)	4.66 (1, 403)	.031
Days of heroin use[1]	1.6 (4.9)	1.4 (4.2)	.2 (1, 449)	.656	1.1 (4.3)	0.6 (3.2)	1.86 (1, 403)	.174
Days of marijuana use[1]	4.7 (8.2)	2.8 (6.4)	8.13 (1, 449)	.005	2.2 (6.4)	2.1 (6.3)	.03 (1, 403)	.867
Days of alcohol use[1]	7.2 (7.9)	5.5 (6.8)	5.74 (1, 449)	.017	5.7 (7.5)	4.2 (6.2)	5.2 (1, 403)	.023

	MET-E N = 461				MET-S N = 405			
	'Unsure'	'Sure'	X² (df)	p	'Unsure'	'Sure'	X² (df)	p
	n (%)	n (%)			n (%)	n (%)		
ASI Legal Composite	.14 (.19)	.10 (.17)	5.93 (1, 453)	.015	.13 (.17)	.17 (.19)	3.88 (1, 402)	.049
ASI Medical Composite	.24 (.32)	.22 (.32)	.54 (1, 449)	.882	.11 (.24)	.13 (.26)	.98 (1, 402)	.322
ASI Employment Composite	.64 (.29)	.67 (.28)	1.15 (1, 452)	.463	.74 (.24)	.70 (.25)	2.93 (1, 402)	.088
ASI Alcohol Composite	.24 (.24)	.21 (.23)	1.48 (1, 453)	.224	.19 (.19)	.17 (.20)	.54 (1, 402)	.463
ASI Drug Composite	.15 (.12)	.15 (.12)	.07 (1, 452)	.786	.09 (.11)	.08 (.11)	.51 (1, 402)	.474
ASI Family Composite	.20 (.22)	.20 (.23)	.02 (1, 453)	.885	.14 (.18)	.16 (.20)	1.74 (1, 402)	.188
ASI Psychological Composite	.22 (.21)	.20 (.22)	1.69 (1, 453)	.195	.16 (.23)	.18 (.23)	.38 (1, 402)	.537
Months Incarcerated Lifetime	9.2 (20.8)	11.1 (22.5)	.83 (1, 453)	.363	11.6 (27.3)	5.8 (17.6)	6.68 (1, 402)	.01
Previous Alcohol Treatments	2.4 (6.5)	1.6 (3.7)	2.62 (1, 453)	.106	.9 (3.0)	0.8 (2.1)	.33 (1, 402)	.569
Previous Drug Treatments	2.8 (5.6)	2.7 (4.7)	.04 (1, 453)	.845	1.2 (3.3)	0.9 (2.6)	1.21 (1, 402)	.272
Acculturation - Hispanicism	-	-	-	-	4.33 (.71)	4.3 (.73)	.16 (1, 403)	.689
Acculturation - Americanism	-	-	-	-	2.97 (1.29)	3 (1.33)	.06 (1, 399)	.805
URICA Readiness Score	79.36 (15.95)	82.73 (14.12)	5.54 (1, 447)	.019	73.84 (15.54)	77.93 (16.13)	6.74 (1, 403)	.010

Note. – signifies that the response option was not available in the sample.

[1] signifies that the variable accounts for the previous 28 days prior to administration.

Table 2

Pre-Treatment Expectations and Post-Treatment Outcomes

	MET-E N = 388				MET-S N = 388			
	'Unsure'	'Sure'	F (df)	p	'Unsure'	'Sure'	F (df)	p
	M (SD)	M (SD)			M (SD)	M (SD)		
% Drug Positive Urine in Treatment Period (28 days) *	30.3 (40.7)	30.1 (40.7)	0 (1, 386)	.958	49.4 (43.3)	21.9 (35.7)	18.83 (1, 153)	<.001
% Days Abstinent from Primary Drug in Treatment Period (Self-Report)	91.6 (19.0)	91.6 (20.2)	0 (1, 369)	.992	90.0 (19.0)	96.3 (10.6)	15.41 (1, 350)	<.001
% Days Abstinent from Primary Drug through Follow-Up Period (Self-Report)	91.2 (15.8)	92.3 (18.2)	.29 (1, 314)	.590	90.3 (19.8)	96.3 (9.0)	11.57 (1, 288)	.001
Treatment Retention (Days in Treatment through Follow-Up)	67.8 (43.0)	72.7 (42.3)	1.2 (1, 381)	.274	80.2 (38.7)	84.0 (34.6)	1.01 (1, 386)	.303

*
This variable represents % urines positive for any drug in MET-E, but only for primary drug in MET-S