ENHANCING SUBSTANCE ABUSE TREATMENT

AND HIV PREVENTION FOR WOMEN OFFENDERS

Final Report
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A. SPECIFIC AIMS

This study involved a cooperative agreement between UCLA Integrated Substance Abuse Programs and Mental Health Systems, Inc. (MHS) and examined MHS' Readiness and Capacity for Practice Improvement as it incorporated women-focused treatment into four MHS program sites serving female drug court participants. The study further included an experimental component to determine the relative effectiveness of a *women's integrated treatment (WIT) program* based on relational theory (Miller, 1976; Covington, 1999; 2003) compared to the standard mixed-gender (MG) outpatient treatment program delivered to women offenders deferred from incarceration through drug court. The WIT curriculum was fully developed (Covington, 1999; 2003).

The specific aims are as follows:

1. To conduct staff focus groups to identify and address barriers to coordinating and integrating new and appropriate WIT services, including HIV prevention, for substance dependent women.
2. To coordinate and integrate a theoretically based WIT protocol into the existing MHS program.
3. To develop effective fidelity measures to assess staff performance, adherence, and retention of newly integrated curriculum.
4. To test the efficacy of the theoretically based, WIT curriculum to promote positive behaviors among women offenders (i.e., increased self-efficacy and psychological well-being, treatment participation, and reductions in drug use, recidivism, and HIV risk behaviors) compared to the impact of the standard MG program.
5. To qualitatively assess women's perceptions of their treatment experience between those in the WIT program vs. those in the standard MG program.

The consistent findings regarding the greater severity of women's drug abuse, past trauma, and psychological disorders have led many researchers, theorists, and clinicians to propose gender-responsive treatment for women as a more appropriate and effective way to facilitate their recovery, rather than "gender neutral" programs that are more typical. In particular, *relational theory* describes women's psychological development in the context of women's relationships and their connection to others, which is very different from models of development for men, which focus on separation and independence. Some advocates for women's programs suggest that relational theory, with its emphasis on the role that relationships and intimate partners play in women's addiction and recovery, could provide a useful basis for developing substance abuse treatment strategies for women. Thus, Covington (1999; 2002a; 2003) developed "Helping Women Recover: A Program for Treating Substance Abuse" and "Beyond Trauma" for women offenders, which focuses services on women's specific needs and incorporates services that are implemented in a manner that promotes women's psychological growth and helps them to discontinue the cycle of substance abuse and criminal behavior.

The expectation is that WIT programs provide services that are focused towards women's drug use and other specific needs, and that they are implemented in a manner that promotes women's psychological growth. This expectation, however, lacks support in the literature, since previous studies of gender-responsive treatment are limited in number, and most have not used rigorous designs.

Hypotheses are listed below[3]:

Hypothesis 1. Women in the WIT treatment condition will have more positive in-treatment outcomes than will the women in the MG treatment condition.

Hypothesis 2. Women in the WIT treatment condition will be less likely to report post-treatment drug use than will women in the MG treatment condition.

Hypothesis 3. Women in WIT treatment condition will have reduced trauma symptomology and be more likely to have improved psychological functioning, compared with women in the MG treatment condition.

Hypothesis 4. Women in the WIT treatment condition will be more likely to have positive treatment experience than those in the MG treatment condition.

B. STUDY DESIGN

Random Assignment: 150 women were recruited from four drug court programs within San Diego County. Those who agreed to participate were randomly assigned to one of the two study conditions (WIT or MG treatment programs) using assignment cards in sealed envelopes that were prepared by UCLA ISAP's Data Management Center. [4]

Mixed-Gender Treatment: Drug court treatment programs are required to provide individual and group counseling (with a strong emphasis on vocational/educational counseling and referral), 12-step meetings, recreational/mutual self-help group discussions, and random urine testing throughout the three phases of treatment. The MG drug court programs are typical outpatient programs, where participants spend 2-3 hours, 5 days a week in group counseling, with one-on-one counseling given on an as-needed basis. MHS programs often provide additional services beyond the minimum requirements, including relapse prevention, family planning, anger management, HIV/AIDS education, and referrals for psychological, medical, and/or legal services. Pregnant and postpartum women may also have access to perinatal services.

Women's Integrated Treatment Protocol "Helping Women Recover" & "Beyond Trauma": MHS also operated the WIT programs. The WIT programs included the components listed above for the MG programs, but with a focus on issues specific to women's recovery in a setting compatible with women's interactional styles. The treatment protocols of the WIT programs are specifically based on relational theory (e.g., the safety and comfort of same-gender environments, nonconfrontational and nonhierarchical learning experiences). The treatment protocol of the WIT program is based on clinical experience and relational theory. The manualized, multi-faceted curriculum is specifically designed to be relevant to the needs of drug-dependent women under criminal justice supervision.

Interviews: Participants were asked to participate in three interviews throughout the course of the study. The baseline interview was conducted within seven days of admission to the program. On average, the baseline interviews took approximately one hour (including the self-

[3] Originally we had hypothesized that women in the WIT group would have reduced criminal activity and HIV risk behavior compared with those in the MG group; however, the number of women in either group reporting these behaviors was too minimal to conduct analyses assessing change over time.

[4] Nine women in total were determined to be violations of randomization. Six women were randomized to the MG groups, but moved shortly thereafter to the WIT groups for clinical reasons. Three women were moved from the WIT group to the MG groups to accommodate their work scheduled. We followed the intent to treat model and thus randomization violations were analyzed in their originally assigned groups (Nich & Carroll, 2002).

administered surveys). The baseline interview took place within the programs. There was an in-treatment services interview and a four-month post-treatment follow-up interview (or 18 months from baseline).

Focus Group Data Collection: Focus group interviews were conducted with randomly selected women volunteers at the MG and WIT programs. Each group consisted of approximately 4-6 women. Each focus group had a research staff facilitator experienced in qualitative research and a note-taker, lasted approximately 90 minutes, and was recorded on audiotape (with participants' permission) to ensure accuracy in the transcription and analysis of data.

Records Data: UCLA research staff abstracted relevant data from clinic records at the participating treatment programs, from drug court records at participating drug courts, and from criminal justice records. Clinic data included program drug testing results, program violations, individual and group session attendance, services received, discharge and reason, and time in program. Drug court records data included court sanctions related to program violations and case dispositions.

Data Sources and Outcome Measures: The study assessed the impact of theoretically based gender-responsive substance abuse treatment using specific outcome measures including, treatment participation, post-treatment drug use, psychological well-being and self-efficacy, and recidivism, compared to the impact of standard drug court treatment. The measures used to describe the study participants and to test hypotheses were collected from standardized instruments such as the Addiction Severity Index-Lite (McLellan, Alterman, Cacciola, Metzger, & O'Brien, 1992), and the Post Traumatic Stress Diagnostic Scale (PDS) (Foa, 1997). Drug court treatment intake procedures, self-administered surveys, and official record data, were used to test hypotheses.

Participant Characteristics: ANOVA was used to compare the WIT program and the MG program for characteristics represented by a single continuous variable. For categorical and binary variables, chi-square analysis was used. Participants were predominantly either White (58%) or Hispanic (22%), and 47% had never been married at the time of program admission (36% reported being divorced, separated, or widowed). On average, participants were approximately 36 years old (SD = 8.9) with 12 years (SD = 1.8) of completed education. A majority of the women were either not in the labor force or unemployed (74%) prior to program entry. Fifty-five percent of the women reported histories of depression and 31% met the criteria for a diagnosis of PTSD via the Post Traumatic Stress Diagnostic Scale. Methamphetamine was the primary drug problem (71%). There were significant differences in primary drug categories reported between the two groups, as more of the women in the WIT group reported cocaine/crack use and much less opiate use compared with the MG group. A majority of the women also reported histories of sexual abuse (55%) and physical abuse (37%), as well as substantial histories of other trauma. No other significant differences were found in background characteristics between the two randomized groups (see Table 1 and Table 2).

Although the baseline comparisons revealed only one significant difference at the conventional $p < .05$ alpha level (primary drug problem), it was apparent that there were some "practical differences" with regard to race/ethnicity, and histories of trauma between the two groups. Results indicated approximately a 10 percentage point or greater difference among the indicators within these variables. A greater proportion of women from the WIT program were Black (16% vs. 3%) compared to the MG program women. Both groups reported high percentages of trauma during childhood and adulthood; however, the WIT group once again appeared to have higher percentages among several categories of traumatic experiences (e.g., childhood sexual abuse, sexual assault by a stranger, termination of parental rights, and serious accident). Exposure, severity, duration, and level of functioning are considered when a

diagnosis of PTSD is calculated. The women in the WIT program appeared to meet this criteria at a higher rate than those in the MG group (36% vs. 26%). These practical differences may indicate that women in the WIT program were at a substantial disadvantage at program admission than women in the MG program.

Table 1: Sample Characteristics at Treatment Admission, by Program

Characteristics	WIT (n = 85)		MG (n = 65)		Total (N = 150)[a]	
	%	M(SD)	%	M(SD)	%	M(SD)
Race/Ethnicity						
White	54		65		58	
Black	16		3		10	
Hispanic	20		24		22	
Other	11		8		10	
Marital Status						
Never Married	45		50		47	
Married	19		16		17	
Divorced/Sep./Widowed	37		34		36	
Age at Admission		35.6 (8.2)		36.3(9.6)		35.9(8.9)
Number of Years of Education		12.0 (1.7)		12.0(2.0)		12.0(1.8)
Employment Status						
Full Time/Part Time	24		29		26	
Unemployed/Not Looking	76		71		74	
Ever Experienced Depression	54		55		55	
Ever Have Suicidal Thoughts	27		23		25	
Ever Take Psychotropic Meds.	41		40		40	
Primary Drug Problem*						
Methamphetamine	74		66		71	
Cocaine/Crack	13		3		9	
Opiates	9		20		14	
Other	4		11		7	
Age of 1st Primary Drug Use		19.6(6.0)		20.6(7.5)		19.8(6.7)
On Probation/Parole	82		89		85	

[a] N's vary slightly due to missing data.
*p<.05

Cumulatively, the women endorsed family abuse as the most traumatic event experienced (24% - sexual abuse in childhood by a family member; 24% - physical abuse in childhood by family member). Sixty-seven percent of the women reported that the most traumatic event occurred during childhood or more than 5 years ago, and 68% reported being extremely bothered by the traumatic event within the past 30 days. Thirty-seven percent of the women reported experiencing five or more traumatic events as listed on the PDS (see Table 2).

Table 2. Prevalence of Traumatic Events *and* Diagnosis of PTSD

	WIT (N=85) %	MG (N=65) %	TOTAL (N=150 %
Victimization			
Sexual abuse in childhood (<18)	**62**	**46**	**55**
Sexual assault by family member (attempted rape/rape)	**46**	**42**	**44**
Sexual assault by stranger (attempted rape/rape)	**31**	**17**	**25**
Sexual abuse over lifetime (any unwanted touching/sexual contact)	**56**	**50**	**53**
Physical abuse in childhood (<18)	**41**	**32**	**37**
Serious physical assault by family member (mugging, shot, stabbed, attacked)	**56**	**52**	**54**
Serious physical assault by stranger (mugging, shot, stabbed, attacked)	**33**	**29**	**31**
Physical abuse over lifetime (domestic violence)	**67**	**64**	**66**
Torture	**14**	**9**	**12**
Other Trauma			
Child protective services court order	**23**	**32**	**27**
Termination of parent rights for at least 1 child	**79**	**62**	**70**
Incarceration	**23**	**32**	**29**
Significant period of homelessness past 3 years	**13**	**9**	**11**
Serious accident, fire, or explosion	**41**	**29**	**36**
Natural disaster	**13**	**11**	**12**
Life threatening illness	**21**	**25**	**23**
Total Number of Traumatic Events Endorsed via PDS (0 – 12)[a]			
None	**13**	**15**	**14**
One	**17**	**20**	**18**
Two	**11**	**9**	**10**
Three	**11**	**14**	**12**
Four	**11**	**8**	**9**
>Five	**39**	**34**	**37**
Met DSM-IV Criteria for PTSD at Admission	**36**	**26**	**31**

[a] Twelve traumatic events listed on the Posttraumatic Stress Diagnostic Scale.

Table 3: Motivation and Readiness for Treatment, by Program

Characteristics	WIT (n = 85) %	WIT (n = 85) M(SD)	MG (n = 65) %	MG (n = 65) M(SD)	Total (N = 150) %	Total (N = 150) M(SD)
Problem Recognition		1.58(.29)		1.58(.26)		1.58(.28)
Desire for Help		2.92(.22)		2.92(.19)		2.92(.21)
Treatment Readiness		2.76(.29)		2.77(.36)		2.76(.32)

Table 3 shows that there were no significant differences with regard to motivation and readiness for treatment scores between treatment groups. Scores range from 1 to 3, with higher scores indicating more motivation for treatment. Both groups appeared to have a strong desire for help and acceptance for treatment. However, both groups scored much lower with regard to their problem recognition.

C. STUDY PROGRESS

Initially we developed our subcontracts and memoranda of understanding with UCLA Integrated Substance Abuse Programs for all research and evaluation activities (under the direction of Dr. Nena Messina) and our treatment consultant, Dr. Stephanie Covington. As per the subcontract, Dr. Messina hired and trained interview staff and set up the data management system and procedures. We also finalized our study design and instruments. We requested that UCLA act as our IRB and our procedural changes were submitted to the UCLA Internal Review Board for approval and full IRB approval was obtained.

The first round of focus groups was conducted with MHS staff (with regard to Aim 1, assessing barriers to treatment implementation) late in September 2006. Specialized trainings in the Helping Women Recover curriculum were conducted for the treatment staff in October 2006 and the second round of staff focus groups were conducted early in November 2006 (to assess satisfaction with training and coordination of new curricula). The Beyond Trauma: A Healing Journey for Women training took place in January 2007. Participant focus groups began in January 2008 and were completed in May 2008.

Study recruitment began in February 2007 and ended in March 2009 with a total sample of 150 subjects (85 WIT; 65 MG). A total of 94 (75%) of the sample completed the 18-month follow-up (77% of the WIT group and 71% of the MG group), one subject was found to be deceased and 23 subjects remained in treatment and were removed from the potential follow up sample. Two women were located and contacted but the interview could not be scheduled.

The average time to complete post-baseline follow up interview was 22.2 (s.d. 6.9) months for the WIT group and 20.6 (s.d. 5.7) months for MG group. During the course of the study the drug court significantly increased their course of outpatient treatment, which resulted in a much longer phase of treatment. Thus we moved the date of follow up to be 18 months post-baseline to enable us to capture a minimum of 4 months post treatment on average. The change in the drug court protocol ultimately affected our ability to track and locate participants as our planned timeframe to conduct follow up interviews was shortened.

D. OUTCOME FINDINGS FOR IN-TREATMENT AND 18-MONTH FOLLOW UP

Analyses: Hypotheses assess the difference between the two groups looking at specific post-treatment measures. ANOVA was used to compare the WIT program and the MG program for outcomes represented by a single continuous variable. For categorical and binary outcome

variables, chi-square analysis was used. A General Linear Modeling for repeated measures approach was used to consider change over time (e.g., ASI composite score changes from baseline to 18 month follow-up).

Attrition: Participants lost to follow-up were compared to those who were located and interviewed on their baseline characteristics. There were no significant differences in age, race, education, or marital status between those interviewed and those not interviewed at 18 months post release. There were also no significant differences in criminal history or drug use history.

In-Treatment Performance (Hypothesis 1)

Table 4 displays the results from the in-treatment data collection in support of Hypothesis 1. Approximately 58% of both groups completed the drug court program over approximately 15 months of outpatient treatment (15% were still in treatment at the time of the program records data collection). Removing those who remained in and/or were transferred out of treatment, the graduation rate was 69% overall. Treatment completion was not included in our main hypotheses because drug court participants are extensively monitored and subject to sanctions (e.g., lack of attendance or drug use can result in brief incarcerations), thus differences in completion rates between WIT and MG groups was likely to be minimal.

Graduated sanctions are used within the drug court system as a way to encourage program participation and to enhance program completion. As rules are violated in treatment, participants are given a variety of graduating sanctions in response to their misconduct. Seventy-nine percent of the women in the WIT group and 83% of the women in the MG group received a sanction for any reason during the 15-24 months of treatment. There were no differences in the number of sanctions received in total during the course of treatment between the groups (WIT mean = 3.1, s.d. = 3.2 and MG mean = 4.0, s.d. = 3.5; $p<.10$); however, WIT participants were less likely than those in the MG group to receive sanctions as treatment progressed. During the first 6 months of treatment, drug court participants received sanctions at equal rates; however, during the second and most intensive phase of treatment the WIT group received significantly less disciplinary sanctions (WIT mean = .65, s.d.=1.2; MG mean = 1.2, s.d.=1.8, $p<.03$) compared with those in the MG group (see Figures 1 and 2).

The most serious sanction is for a client to be remanded to jail for a period of time. The number of times a sanction resulted in detention in jail was also significantly different between the two groups with WIT participants less likely to be remanded to jail (WIT mean = 1.9, s.d. = 1.2 and MG mean = 2.4, s.d. = 1.5, $p \leq .05$).

Violations of court mandated attendance or other program rules can further result in early dismissal from the program. Data collected from the respective drug court programs indicates that the women in the WIT groups were significantly less likely to be terminated from treatment due to unsatisfactory progress during the first 6 months (13% vs. 16%, $p < .05$).[5]

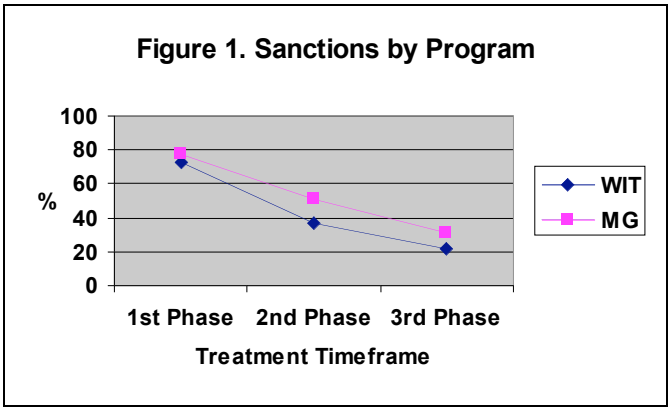
Taken together, the findings regarding in-treatment performance indicate support for our first Hypothesis. Although some of the indicators above did not reach statistically significant differences, the percentages and means reported are in the expected direction. In addition, the fact that the women in the WIT group appeared to report more sexual abuse and childhood trauma suggests that they could have been expected to have more difficulty adjusting to treatment initially.

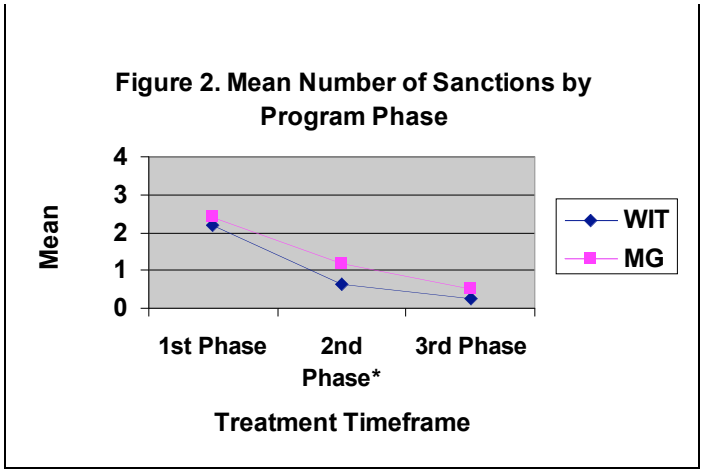
[5] Urinalysis tests are randomly given throughout the course of drug court treatment. However, we could not assess the difference in positive urines tests between the groups due to a very low number of any positive test for either group (respondents tested positive an average of 1.5 times over 15 months of treatment).

Table 4: In-Treatment Performance

	WIT (n = 85)		MG (n = 65)		Total (N = 150)	
	%	$M(SD)$	%	$M(SD)$	%	$M(SD)$
Completed Treatment						
Completed Treatment	57		58		58	
Disciplinary Removal/Court Removal	25		27		26	
Remain in Treatment	16		14		15	
Other[a]	2		1		1	
Received Sanction During Treatment	79		83		81%	
Months to First Sanction		2.6(3.0)		1.9(2.4)	2.3(2.8)	
Total Number of Sanctions		3.1(3.2)		4.0(3.5)	3.5(3.4)	
Total Number of Times Sanctions/Jail[b]		1.9(1.2)		2.4(1.5)	2.1(1.3)	
Sanction Resulted in Jail Time*	53		65		58%	

[a] Removal for health reasons, transferred to Proposition 36 treatment, or died.
[b] Calculated for those who received a sanction.
*p<.05.
ES = .26 for the number of all sanctions received during treatment (p <.10).
ES = .38 for the number of times a sanction resulted in jail (p <.05).





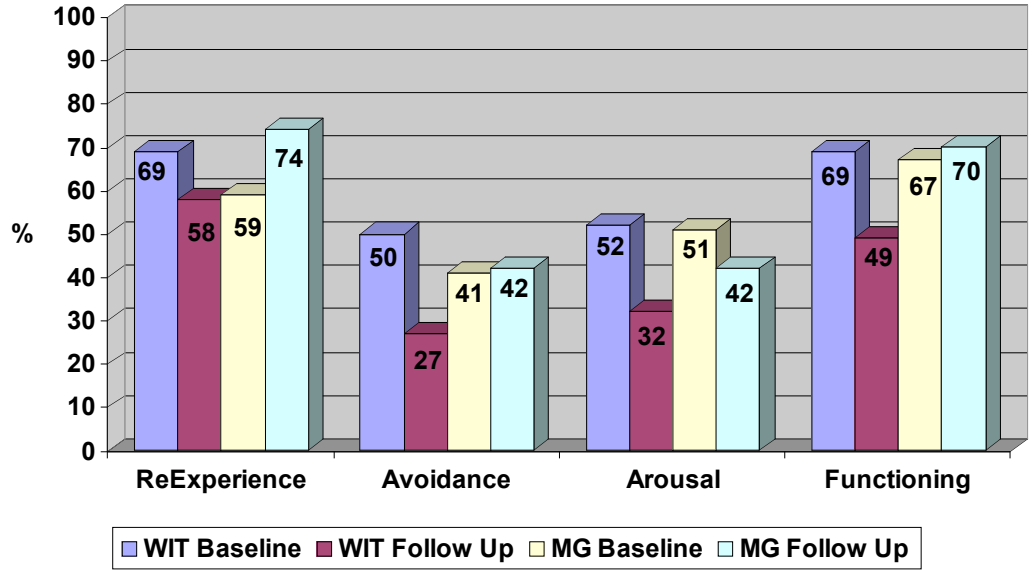
Post-Treatment Outcome Study Results (Hypotheses 2 & 3)

Reductions in Drug Use: Addiction Severity Index Composite Score change from baseline to follow up was explored with regard to Hypothesis 2. This hypothesis was not supported, but mean change over time between groups approached significance, $p < .06$.

Reductions in Trauma Symptomology and Improved Psychological Functioning: Hypothesis 3 was explored via change in PTSD symptomology and overall psychological functioning over time. The essential feature of PTSD is the development of characteristic symptoms following exposure to an extreme traumatic stressor. The person's response to the event must involve intense fear, helplessness, or horror. The characteristic symptoms resulting from the traumatic event include persistent *re-experiencing* of the traumatic event, persistent *avoidance* of stimuli associated with the trauma, and persistent symptoms of increased *arousal*. The full symptom picture must be present for more than 1 month, and the disturbance must cause clinically significant distress or impairment in social, occupational, or other important areas of *functioning*. All of these symptoms are taken into account before a diagnosis of PTSD is given.

Thirty-one percent of the total sample met the PTSD criteria at baseline, as assessed by the Posttraumatic Diagnostic Scale following DSM-IV PTSD criteria. At follow-up, only 13% of the total sample assessed met the full criteria for current PTSD (36% at baseline reduced to 9% of the WIT group; 26% at baseline reduced to 18% of the MG group). As only 8 women met full criteria for PTSD at follow-up, chi-square significance tests were not possible. However, the reduction in a current PTSD diagnosis for the WIT group was twice that of the MG group. When we explored the change in endorsement of specific symptoms for the total sample (i.e., re-experience, avoidance, arousal, functioning), we found that the WIT group consistently reported reduced symptoms for each symptom measured. In contrast, the women in the MG groups reported an increase in re-experiencing of their traumatic event from baseline to follow up, and no change in their other symptoms (see Figure 4).

Figure 4. Reductions in PTSD Symtoms by Time Point, by Group



The ASI Psychological Composite Score and Self Efficacy changes over time were further analyzed in exploration of Hypothesis 3. Both groups' mean composite scores significantly improved from baseline to follow up with regard to their ASI Composite Score and Self Efficacy Score. Thus Hypothesis 3 was partially supported, as the WIT group showed significant reductions in PTSD symptomology compared with those in the MG group, but both groups showed improved psychological functioning overtime.

E. FOCUS GROUPS WITH PARTICIPANTS AND STAFF

Participant Treatment Satisfactions (Hypothesis 4)

Qualitative Analysis of Focus Group Transcripts was performed using ATLAS.ti, 5.0 a software program designed for qualitative data analysis. Content analysis of the transcript was undertaken by one analyst trained in qualitative methods. Content coding consisted of marking and coding specific passages of text according to content.

Results from the participant focus groups support Hypothesis 4 and show that the women in the WIT group were highly satisfied with their treatment experience and reported a positive treatment experience. The women in the WIT group felt they were able to talk about sensitive issues pertinent to their recovery that they would not discuss in groups where men were present.

> *Our 7:30a.m. Women's Group is one of the strongest components in my recovery. The members of this group take care like my sisters; we have a kind of solidarity I missed being an only child and that I need for my recovery. We talk about real issues and trust each others' opinions and respect the suggestions we receive. I believe our group is so successful because we exhibit honesty, open-mindedness, and willingness. (WIT Client)*
>
> *I like the Stephanie Covington group because it is more intimate and I feel comfortable being able to talk about my issues. The steps help me to focus on the positive. For so long, all I knew was negative. The Woman's Journal has helped me get to know, understand and love myself. It has been very helpful being in this group and working in the workbooks (WIT Client)*
>
> *My name is _____. I joined Drug Court on May 29th. This group is a huge help for my recovery. This group is family to me, my counselor and fellow ladies (clients). I like the fact that it's early in the morning, this way I start my day off to a good start. I really enjoy and thank not just my morning group but the whole entire Drug Court staff (WIT Client)*
>
> *This group at 7:30am in my opinion is going to be very helpful in my recovery because we are all women and can share about personal issues that can help me to overcome the reasons behind my addiction. Being able to address and share between women is easier for me and getting personal with my peers who may be going through the same thing is a good way of letting go (WIT Client)*
>
> *I feel that this group is helping me because it is somewhere that I can be open about anything. I am in the first phase of the program and I think it is important to be in the group where I can get out my issues and have feedback from other females who have been through the same things. If I was in a group that was both males and females, I don't feel that it would be as beneficial to me (WIT Client).*

The majority of the women in this group also reported that they felt comfortable talking about personal traumatic events during their group sessions. In contrast, the women in the MG group reported that the men in their group often dominate the discussions and that they are not comfortable discussing personal traumatic events in their group sessions.

> *Well, because I've learned that that's what I need to do. I've learned that when I need to use a group, I need to use it for myself, so I can go there with whatever it is I need to do. But like I said, I feel like if I had an all women's group, that I could benefit more from it because then I could get more feedback from other women, their feedback and what they did to keep themselves clean and sober. It would be more beneficial for me. (MG Client)*

> *They can't relate. When she talks about her son and what's going on with her son, I can relate. I have son and I'm a woman. I know what she's feeling. I can't relate to a man. I don't know what he's feeling, you know? He's a man, I'm a woman. I don't know, I can't, so I don't like sharing. I don't really feel comfortable. When I came in I was like you. I didn't like women's group. But then I started realizing, and it's the same they say in NA, you know, "a man's going to slap you in the ass, and woman's going to pick your ass up." And that's how I feel in men's group. If I share something- and men are pigs, they're dogs here- you know, and if I share something, they're going to take advantage of it one way or another, and they're going to take advantage of me. (MG Client)*

> *Well, it's a lot easier with the women. I feel a lot more comfortable with these fine ladies. But men, no not really. I have a really tough time. It's hard. So, I mean, I think that would be a benefit to have just women in groups. For me… Men run at the mouth too much. They're issues are a lot different. (MG Client)*

> *But I just felt, my issues a lot has to do with men. And it shows me where I am, like, when I'm with men, I want to f*cking act out. Big time. So I just, I shut down the other day, when they brought it up.*
> *…I feel much different right now sitting in here with the ladies. (MG Client)*

> *Um, I guess one of the things that I kind of wish was a little bit different is, um, when I come to my groups, I'd rather sit with a group of women, and relate to them, and talk about things in my life, you know? It doesn't really bother me the men are there, but sometimes, men just, they just don't get it. You know what I'm saying? They think completely different than women do. And sometimes I think it'd just be easier to share more in-depth certain things. And not only that, we're kind of out-numbered in our group. There's only like two of us, right? Two of us now. And the rest of it is all men. And sometimes men, when they get to talking about things, sometimes they just forget that women are there. You know what I'm saying? They get just downright you know, they're just nasty sometimes. They're not even thinking that we're standing there. You know what I'm saying? But I just think sometimes that women can get down to a lot deeper things and progress probably a lot better if they were just, you know a woman's support group. But I think sometimes that the group gets distracted easily to other subjects. If I was the only woman there sharing that problem, I think other women could share that same problem at the same time. All share together and get a better understanding of how to deal with that in our lives, how we think and stuff. And I think I could get better feedback, you know? More positive feedback from other women on how they dealt with it. She's [female 1] been here for a long time, like she said, and her mother being sick and stuff like that, and I went through a lot of that myself, you know? If I was to go there with it, she could give me more positive feedback on how she dealt with it. It'd be easier*

to take that information and apply it to my life. Most of the men, they just like, they're like, "I don't know." (MG Client)

Thus, the women in the WIT group are able to address and process issues relevant to them in a way that is beneficial to their recovery whereas the women in MG group are not given this same opportunity.

Women in both groups tended to agree that their programs did a good job in providing or helping them get the services (e.g. employment, medical, transportation) that they need.

Staff Perceptions of Barriers to Integrating Treatment

Focus groups were conducted with Mental Heath Systems, Inc. (MHS) staff volunteers from the four MHS drug court sites. UCLA Researchers designed and conducted two separate sets of focus groups; one for participating MHS drug courts Managers (n=4) and another group for Facilitators (n=4). Both Supervisors and Facilitators were invited to participate in two separate focus groups. Supervisors and counseling staff volunteers were separated in order to avoid fear of reprisal from supervisors and to allow counseling staff to discuss concerns they may have freely. Thus a total of 3 staff focus groups occurred, one for counseling staff or group Facilitators before they receive training on the program curriculum, another focus group with Managers or Supervisors before they are exposed to the curriculum. Finally, another focus group was conducted again with Counselors/Facilitaors after their completion of an intensive training on the WIT curriculum.

Focus groups were designed to help identify barriers to coordinating and integrating Women Focused services for substance dependent women. Specifically, input was solicited from existing MHS program staff with respect to the following topics was divided in three research questions as illustrated below:

Research question 1: Do Facilitators want to learn a new treatment protocol?

Research question 2. How well equipped do they feel in their ability to master the new curriculum?

Research question 3. What concerns do they have about the implementation of the new curriculum and the evaluation study?

Attitudes and readiness to learn and implement a new treatment protocol: Half of the Facilitators reported that they are somewhat familiar with the new curriculum and/or the authors´ work. All four Facilitators verbally showed positive attitudes and high motivation to learn and be trained in a new curriculum. All of them also showed a positive attitude to overcome challenges that may arise.

"I do think, though, that I, I am not familiar with this curriculum enough. I didn't realize it was - it sounds like it's extremely in-, intensely goes deeply into sexual issues - I wasn't aware of that, but, so I would like to see the curriculum and, and talk about what people who have presented it prior ha-, what have they learned about how to do this the best way we can. I'm not - after hearing this, I'm not afraid to do it. I would certainly wanna do it carefully and, and with all the tools…"
(MHS Counselor A)

Facilitators' opinions on the importance of a gender specific approach on substance abuse treatment for women: All Facilitators expressed their support to gender specific

approaches on substance using women's treatment. Facilitators mentioned two main reasons on the importance of a gender specific approach to substance using women:

Facilitators discussed how highly emotional experiences may be very hard to share in front of men for women in general but particularly for those who have been traumatized or stigmatized. They have mentioned that the stigma of being substance users and being under the control of the criminal justice system makes it more complicated for them to openly discuss certain issues in front of men. Openly sharing experiences related to substance use, motherhood, sexual abuse, trauma, depression, etc. might be extremely embarrassing for women to discuss in front of men. Also, discussing and openly showing feelings such as shame, blame, sadness (crying) may not happen inside mixed-gender group interventions.

> *"I think it's appropriate to have a woman's group and to separate the women from the men. Once a week, I do that - I, I have a, a woman's group, and a mixed group - and the women do talk about deeper issues and put out more information than they do in a mixed group. Well, from my own experience, I know I couldn't cry about my, my - what a, a bad mother I was in front of men… and my shame and my guilt, in front of men - or cry in front of men, or talk about my relationships."*
> *(MHS Facilitator B)*

> *"Yes, I do feel it's important to have gender-specific groups. I have worked in a women's prison and seen the difference that women - how they participate in a group, and the type of issues that they really work on…versus in an outpatient treatment program where there's coed, and where they don't even touch those issues".*
> *(MHS Facilitator D)*

> *"Women share very different information on a much deeper level in the women's group than they do in the mixed group. It's a very different feeling - it's a different tone. I think there are certain things that they're not having to think about in the women-only group, and some things that they do think about that they wouldn't get to."*
> *(MHS Facilitator A)*

Facilitators have mentioned strengths related to their clinical skills such as being empathic, being a good listener and even using their own personal experience with trauma and recovery. Facilitators also mentioned the use of other internal or external sources (supervisors, clinicians, referrals, etc.) when they feel unable to deal with some issues.

> *"I could basically be ready for anything 'cause I feel I'm very strong inside and going through one of the best treatments in programs in San Diego, and doing a twenty-seven month program myself, I, I've been through the healing process myself…and, and I, and I can empathize and I can relate to a lot of women, and I, and it's like it's about them, not me, so I'm pretty always ready to, to take on whatever comes my way, except for the fact that, you know, like you said, issues that are really, really deep - I, I, I'm not ready because of the time that, that we have - I don't even have time to progress note sometimes because of our court summary. Mind you, we're a out-patient program…"*

Facilitators expressed their readiness to work with small groups and their disposition to learn more and work with the curriculum once they have the proper tools and training.

Facilitators concerns of not feeling ready to deal with traumatic events :

"I'm afraid of opening up a can of worms and not being able to put it back together". (MHS Counselor B)

"My concern is when I have a women's group and if it gets really deep - my concern is, is they don't walk out that door the same way they walked in…That's my main concern - that they don't go out there and use, because an addict doesn't, you know, doesn't know how to stay clean, especially…with pain, or, or hurt, or feelings - they don't even know how to feel anything in the early stages of recovery. So my concern is to, to not let them walk out that door all tore up." (MHS Counselor B)

Three out of four Facilitators expressed their fears in regards to their own traumatic experiences. The mentioned about having the experience on being in treatment themselves and having to deal with their own traumatic experiences. Hearing from the clients traumatic stories could bring back to Facilitators' memories their own traumas. This, together with the fact that they lack of the necessary training on treatment makes things more complicated for these Facilitators.

"One of my biggest fears is as, as a client, myself, sitting in a, in a prison-based program - it wasn't one of the programs that you mentioned, it was the ---------- - my Facilitators used to run out the room and start crying and get all hysterical - not from something I said, but from the effects of what was said in group - they used to literally run out of the room and start, you know, hysterical". (MHS Counselor B)

In addition to Facilitators' traumas, it was also mentioned that discussing traumatic issues in group may also affect other clients on treatment.

"…It's kind of scary to sit there and listen to any client talk about being molested when you haven't been molested and you can't deal with their issues, you don't know if, if whatever that client says is going to affect that client, or if it's going to affect another client and, you know, us, as Facilitators, we're not trained to deal with that…unless we have, you know, done that kind of training on our own. But I just, I don't feel that we're trained enough to, to open up that book and try to close it. It's gonna be tough". (MHS Counselor C)

All Facilitators mentioned how critical they think it is to have the proper training, constant supervision as well as proper referrals to send the clients. All expressed their need of being well trained to implement the curriculum and deal with women's groups and trauma. Facilitators also mentioned about the importance of being constantly supervised and supported by an on-site experienced clinician. Supervisors are critical to support Facilitators both professinally and emotionally. Some Facilitators revealed that they do not have an in-house supervisor or mental health specialist to help them deal personally and professionally with their daily work (C & D) and they showed their concern about this issue.

Facilitators have mentioned that the training quality on the curriculum will be enhanced if several conditions are followed, as illustrated below:

a) Facilitators have access to the curriculum materials in advance
b) Facilitators are trained by the author on the curriculum

c) Facilitators hear from professionals who have implemented it before
d) Training also focuses on how to deal with clients trauma and vicarious trauma
e) Facilitators have the opportunity to practice
f) Training is well organized and gives them time to learn
g) Training is easily accessible (local)
h) Facilitators have continuing training and constant supervision
i) Facilitators have meetings and hear how each one implements their program

Issues on the program logistics and program implementation: Facilitators expressed their concerns about the size, scheduling, dynamics and stability of the groups. Regarding the size, one Facilitator (C) have mentioned her concern about not having a minimum number of women to start a group. Two Facilitators (C&D) also mentioned concerns on the group stability, since some women need to go back to jail after starting treatment.

> *"The only concern I have is, again, getting a large enough group of women together that come in at the same time, you know, that actually stay in the program, whether they, you know, either return back to jail or are referred to another treatment program for residential treatment. We have a lot of that with, with the women that we serve. I see that that being a barrier to getting this off and running. Also, the other thing is, you know, if, if the women coming - once we have groups started and it was going good and everything else, the women coming afterwards - the, the resentments that they're gonna have that - well, why I'm, why am I not in there?*
> *(Counselor D)*

Two facilitators (B&C) also expressed her concern regarding scheduling issues for the additional groups since it will imply a bigger load of work and therefore new staff and additional resources and infrastructure will be necessary. These facilitators also expressed their concerns about scheduling conflicts that may arise on men and womens' groups and the fact that Facilitators will have to run too many groups in insufficient facilities (C) where keeping intimacy may be a problem (B)

Fidelity: As previously planned and as a result of the staff focus groups, a fidelity design was implemented. Fidelity to program curricula and to the creation of a gender-responsive and trauma-informed environment was assessed via direct observations and multiple site visits by the evaluation staff. Additional data was collected on each site regarding staff turnover and trained staff on site. Initially, programs were provided with on-site technical assistance by an expert in Helping Women Recover and Beyond Trauma. As facilitator's expertise and program procedures were assessed, assistance was provided to improve implementation as necessary. However, it was concluded that programs varied in their fidelity to the treatment protocol initially and continually. One site was conducting the WIT group with very high fidelity and continued to do so throughout the course of the study. Another site was assessed as having moderate fidelity initially with high fidelity after on-site assistance and guidance. The two remaining sites were implementing the WIT groups with low fidelity, but improved to moderate fidelity after assistance was provided.

F. CONCLUSIONS AND RECOMMENDATIONS

This pilot study begins to address the gap in the literature regarding appropriate treatment for drug-dependent women under criminal justice supervision. Although there is a paucity of literature on the *outcomes* of treatment for women offenders, the large body of literature on the *specific needs* of drug-dependent women is overwhelmingly consistent. These

needs are multi-faceted and complex - the greater severity of women's drug abuse, past trauma, and physical and mental health problems compared with their male counterparts has led many researchers, clinicians, and theorists to advocate for gender-responsive treatment for women as a more effective way to facilitate their recovery. Yet, there has been a lack of rigorous empirical studies to support these beliefs, particularly experimental studies that apply rigorous controls. For practical and ethical reasons, random assignment of participants to either a treatment or control group is rare in evaluations of treatment programs. A major strength of our design was the use of random assignment, allowing all participants to receive minimally the standard treatment of care, with some participants receiving enhanced treatment designed specifically for women offenders (i.e., Helping Women Recover and Beyond Trauma). This rigorous design enhances the strength of our findings for this pilot study by eliminating potential confounds due to self-selection into groups.

Predominantly the findings were in the hypothesized direction, with WIT model participants showing more success during treatment and at the follow-up compared to the standard MG treatment group of women. WIT participants had better In-treatment performance, reductions in PTSD symptomology, and more positive treatment perceptions than women in the standard MG treatment condition. However, both groups of women improved in their self reported psychological well-being and self-efficacy over study time periods, and both groups reported reductions in post treatment drug use (this comparison approached significance $p < .06$).

The finding that the WIT participants had greater reduction in their PTSD symptomology is an important area of research, as there is currently great debate over addressing trauma issues during substance abuse treatment. Although many of the staff initially reported having inadequate skills to deal with the severity of the traumatic experiences of most of the women, they were dedicated to learning a curriculum that could help them navigate such issues. Staff also had very positive attitudes towards integrating trauma-informed services into their programs and to have a facilitator's guide to aid them. Additionally, the WIT participants were very engaged in their women's groups and expressed gratitude to have the chance to safely discuss their histories of trauma and abuse with other women who share in their experiences. The women felt that the Beyond Trauma curriculum informed them of the trauma – addiction connection. The reduction in PTSD symptomology for the WIT participants suggests that integrating trauma-informed services may play a vital part in women's recovery. In contrast, the MG group of women actually reported an increase in re-experiencing their trauma symptoms from baseline to follow up and no change in other symptom areas. Some literature suggests that MG treatment settings may actually be harmful to women; however, findings of outcomes for women in MG settings are mixed. A variety of studies have shown that women who complete treatment are more likely to have reductions in drug use and criminal activity. These are widely accepted findings. However, the consistent literature outlining the extensive trauma histories of women as compared to men and the undeniable link between childhood trauma and adult addictive behaviors suggest that these issues need to be addressed safely and systematically for women in order to best meet their treatment needs.

We were unable to determine changes in criminal activity and HIV risk reduction behaviors since the behaviors reported at follow up were extremely low for both groups. Percentages reporting drug injection and/or risky sexual behavior at follow up appeared to be reduced from baseline, but again, cell sizes at follow up often fell below five women per cell, and thus chi square analyses were not possible. Also, the "usual care" group was not a "no treatment" group, thus outcomes measured between groups was possibly minimized.

As this was a pilot study, our design was limited by time, budget, and sample size, but we were able to identify important and positive trends in post-treatment behavior. The findings are strengthened by the rigorous design of the study and thus there is a reasonable probability that the differences we detected are relevant findings to guide our recommendations to those making decisions regarding women under criminal justice supervision.

Recommendations:

There are a number of implementation challenges when integrating a gender-responsive treatment program within an existing program. Our extensive staff interviews resulted in many suggestions and solutions for integrating treatment. There needs to be ongoing staff training and monitoring of their adherence to the protocol. Direct observations from the evaluation team, the clinical director, and Dr. Covington revealed concerns with the fidelity of the implementation and additional training and onsite technical assistance was provided. Low fidelity to the curricula in some of the programs may significantly affect any measured outcomes by reducing the potential strength (i.e., effect) of the intervention.

There is a need for further exploration with larger samples of women in order to determine if findings can be replicated. Experimental studies are needed to continue to address the gap in knowledge regarding drug abuse treatment for women offenders in general and by providing specific information on the types of services, settings, and approaches that should be emphasized when treating women. Future studies would also benefit from a quantitative fidelity measure for the specific curriculum being delivered.

As policy makers and treatment providers consider expanding treatment options for women offenders, it is critical to determine whether theoretically driven woman-focused programs do produce better outcomes than standard MG programs.

G. Literature Cited

Cohen, J. (1988). Statistical power analysis for the behavioral sciences. Hillsdale, NJ: Lawrence Erlbaum.

Covington, S. (1999). Helping women recover: A program for treating substance abuse. Facilitator's Guide - Special Addition for Use in the Criminal Justice System. San Francisco, CA: Jossey-Bass Publishers.

Covington, S. (2000). Helping women recover: Creating gender-specific treatment for substance-abusing women and girls in community correctional settings. In M. McMahon (Ed.), Assessment to assistance: Programs for women in community corrections (pp. 171-233). Latham, MD: American Correctional Association.

Covington, S. (2002). Helping women recover: Creating gender-responsive treatment. In S.L.A. Straussner & S. Brown (Ed.s), The handbook of addiction and treatment for women: Theory and practice (pp. 21-25). San Francisco, CA: Jossey-Bass Publishers.

Covington, S. (2003). Beyond trauma: A healing journey for women. Facilitator's Guide. Center City, MN: Hazelden Press.

Foa, E.B., (1997). Trauma and women : Course, predictors and treatment. Journal of Clinical Psychology, 58, 25-28.

McLellan, A. T., Alterman, A. I., Cacciola, J., Metzger, D., & O'Brien, C. P. (1992). A new measure of substance abuse treatment: Initial studies of the Treatment Services Review. *Journal of Nervous & Mental Disease, 180(2)*, 101-110.

Presentations:

1. Calhoun, S., Messina, N., & Bond, K. Poster: Client Satisfaction with Women-Focused versus Mixed-Gender Drug Court Treatment. American Society of Criminology, San Francisco, California, November 19, 2010.
2. Calhoun, S., Jeter, K., Rodriguez, L., Messina, N., & Grella, C. Promising Models and Practices for Women Offenders. California Department of Alcohol and Drug Programs Training Conference, Sacramento, CA. October 14, 2010.
3. Messina, N. Growing Evidence: Gender Responsive Treatment for Women Offenders. Substance Abuse Research Consortium. Burbank, California, September 20, 2010.
4. Bond, K., Calhoun, S., Messina, N., & Ordille, A. Enhancing Substance Abuse Treatment and HIV Prevention for Women Offenders. Oral presentation at National Association of Drug Court Professionals 16th Annual Drug Court Training Conference, Boston, MA, June 2-5, 2010.
5. Calhoun, S. & Messina, N. Enhancing Substance Abuse Treatment and HIV Prevention among Women Offenders. Addiction Health Services Research Conference, San Francisco, California, October 28, 2009.
6. Messina, N. Gender Responsive Treatment for Women in the Criminal Justice System. National Association of Drug Court Professionals, Anaheim, California, June 13, 2009.
7. Horth, B., Calhoun, S., Jeter, K. & Messina, N. Poster: The Second Chance Women's Re-Entry Court: Creating a Pathway of Success for Women Offenders, Standfort Undergraduate Psychology Conference, Los Angeles, May 16, 2009.
8. Bond, K., Messina, N., Calhoun, S., & Ordille, A. Enhancing Substance Abuse Treatment and HIV Prevention Among Women Offenders. Addiction Health Services Research Conference, Boston, MA, October 20, 2008.
9. Calhoun, S., Messina, N. & Bond, K. Enhancing Substance Abuse Treatment and HIV Prevention among Women Offenders: Six-month treatment outcomes. Poster Presentation at the European Society of Criminology Meeting, Edinburgh, UK, September 12, 2008.
10. Bond, K., Messina, N., & Calhoun, S. Enhancing Substance Abuse Treatment and HIV Prevention for Women Offenders. NIDA Community-Based Grantee Meeting, Bethesda, MD, May 22, 2008.
11. Messina, N. & Chand, N. Women Focused Substance Abuse Treatment. California Association of Drug Court Professionals Annual Conference, Anaheim, California, April 9, 2008.
12. Messina, N. Gender-Responsive Treatment for Women Offenders: Overcoming Research Barriers. American Society of Criminology Conference, Los Angeles, California, November 1, 2006.
13. Messina, N. Chair Panel: Classification and Assessment of Female Offenders. American Society of Criminology Conference, Toronto, Canada, November 17, 2005.

Papers:

1. Calhoun, S., Messina, N., Taube, S., & Horth, B. (In progress). Client satisfaction with women-focused versus mixed-gender drug court treatment.
2. Calhoun, S., Messina, N., & Zarza, M. (In progress). A qualitative analysis of a treatment program's readiness and capacity to incorporate gender responsive treatment to their programming.
3. Messina, N. (In Progress). A Randomized Study of Gender Responsive Treatment for Women in Drug Court.