

Results of a Randomized Intervention Trial to Reduce HIV Risk Behavior and Substance Use and Increase Social Support Among Vulnerable African American/Black Men

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Background

- African American/Black men who have sex with men (BMSM) have a disproportionately high HIV infection rate compared to MSM of other ethnicities.
- Studies from the past 10 years show that BMSM do not exhibit greater sexual risk behavior, in the form of unprotected anal intercourse (UAI), either receptive (RUAI) or insertive (IUAI), than Caucasian/White counterparts. Further, young black MSM are less likely than White or Latino counterparts to report UAI. However, some studies have shown more African American/Black MSM do engage in trading, selling, or buying sex than men of other races/ethnicities.
- Though some studies show that Black MSM report frequent stimulant use, there is no definitive evidence to suggest that African American/Black MSM are more likely to abuse drugs that increase their risk for HIV infection.
- African American/Black MSM experience more arrests, homelessness, and abuse than MSM of other ethnicities.
- Recent literature suggests that BMSM have less social support from peers, friends, and family due to negative attitudes toward same-sex behavior in African American communities or a fear of rejection.

Purpose and Methods

Purpose: The purpose of this analysis is to present primary outcome measures from a randomized intervention trial that sought to reduce substance use and HIV transmission risk. The present focus on BMSM is due to evidence suggesting the presence of elevated risk factors among this population and the potential linkages between inadequate support and substance use and HIV transmission risk.

Methods: Data from 108 BMSM are presented. Participants were recruited through targeted sampling strategies and randomized to a four-session small group empowerment theory-based intervention or to a single session individual resilience theory-based counseling condition. To examine the extent of change over time in these outcomes between baseline and 12-month follow-up, we constructed multilevel linear models for repeated measures, controlling, successively, for age and HIV serostatus. These controls had no effect on rates of behavior change over the course of the study. Therefore, Cohen's D (effect size) statistics are reported for ease of interpretation.

Data presented combine both study arms, as no significant differences in outcomes by condition were found.

Eligibility:

- Reported unprotected anal intercourse in the past 90 days
- Substance use or alcohol to intoxication at least three times or marijuana use at least 20 days in the past 30 days.
- Between ages of 18-55

BMSM were interviewed using a modified version of the Global Appraisal of Individual Needs (Dennis 2002) structured interview, which included measures of:

- Demographics / Environment
- Substance Use
- Mental Health
- Sexual Risk Behaviors

Dennis M.L., Titus J.C., White M.K., Unsicker J.I., Hodgkins D. (2002). Global Appraisal of Individual Needs-Initial (GAIN-I). Bloomington, IL: Chestnut Health Systems.

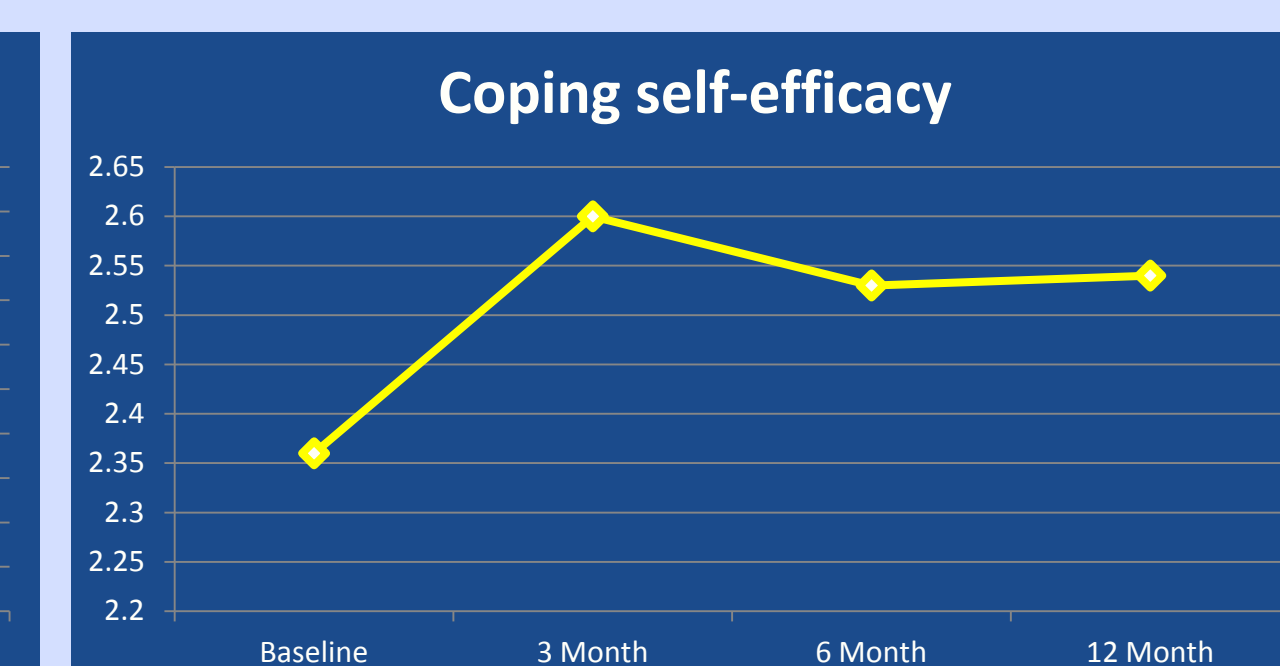
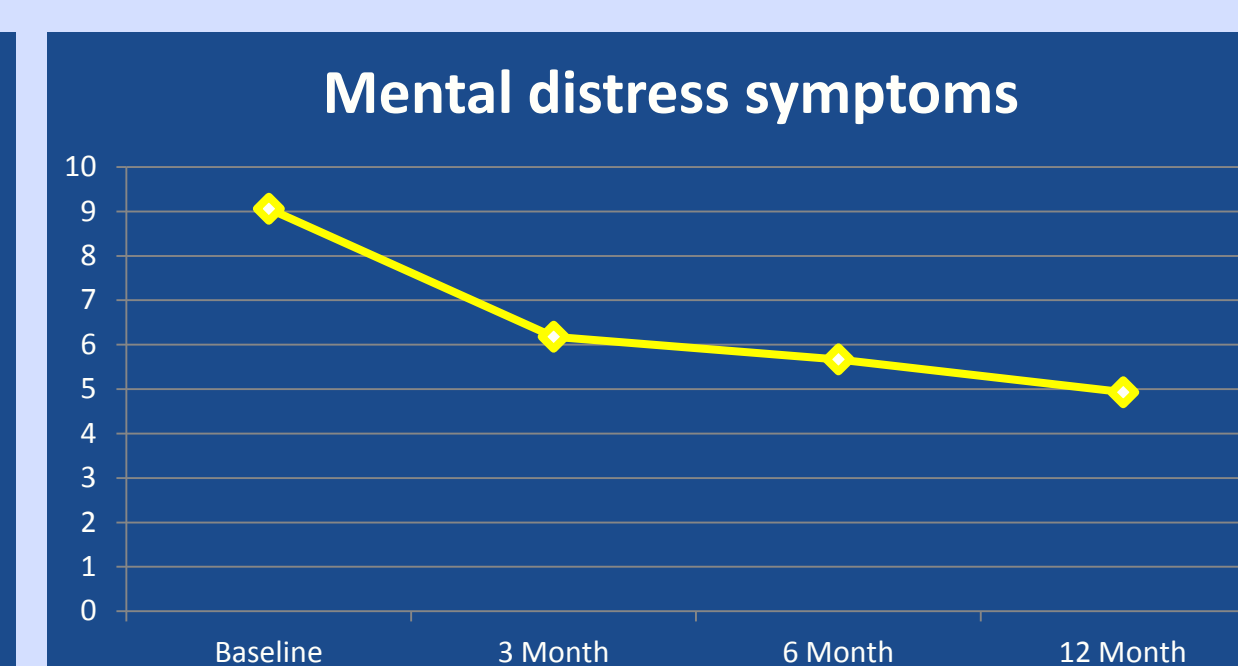
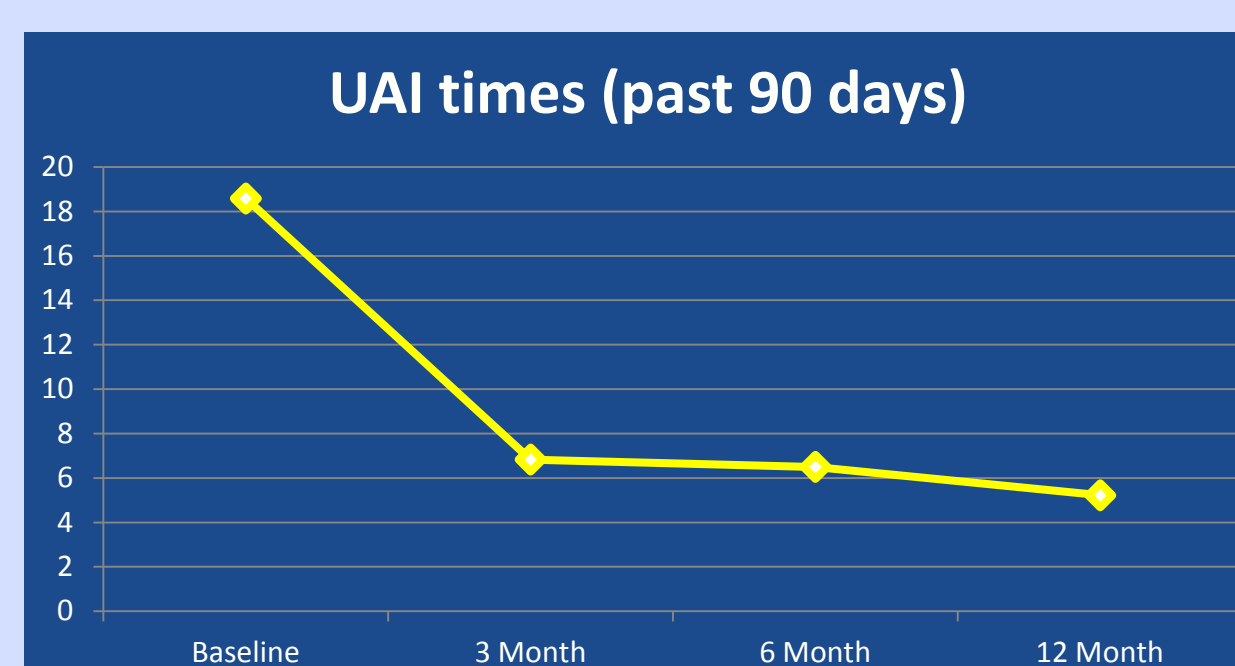
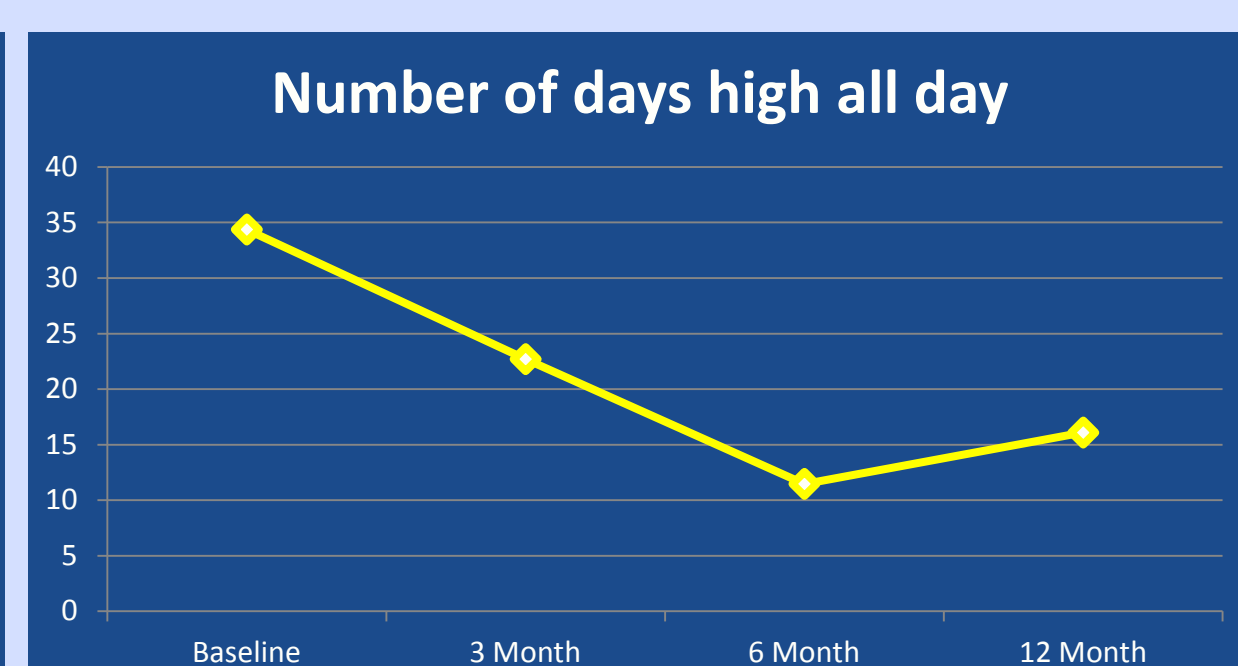
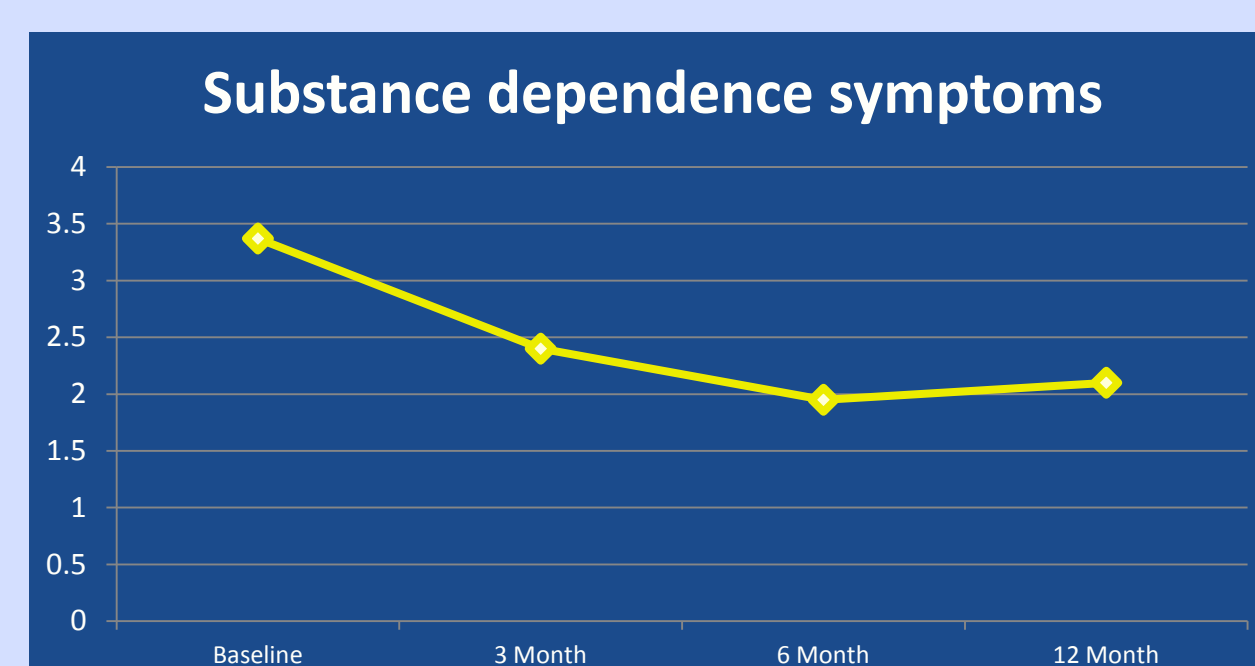
Sample Characteristics

Baseline characteristics of African American/Black MSM N=(108)

	N	%
Demographics		
Age (mean; SD)	39.35	(9.21)
Education - 16 years or more	16	15.4%
Work full-time	12	11.5%
HIV-positive	65	62.5%
Substance Use (past 90 days)		
Alcohol (binge drinking)	86	82.7%
Marijuana	78	75.0%
Poppers	32	30.8%
Cocaine (powder)	60	57.7%
Crack cocaine	43	41.3%
Methamphetamine	14	13.5%
Ecstasy	27	26.0%
Rx sedatives	28	26.9%
Rx opioids	24	23.1%
Uppers (cocaine, crack, methamphetamine)	84	80.8%
Sexual Behavior		
Anal intercourse partners (mean; SD)	13.68	(18.83)
Anal intercourse times (mean; SD)	42.33	(60.69)
Unprotected anal intercourse times (mean; SD)	25.86	(46.50)
Social/environmental Risk Factors		
Severe mental distress (past year)	62	59.6%
DSM-IVR substance dependence	76	73.1%
Homeless (past year)	48	46.2%
Ever abused	80	76.9%
Ever arrested	86	82.7%

Change in Risk/Protective Factors by Wave and Effect Size at 12-month Follow-up

	BL Mean	3 Month FUA Mean	6 Month FUA Mean	12 Month FUA Mean	BL-12Month Mean Difference	Effect Size	CI for Mean Difference		p
							Lower	Upper	
Substance dependence symptoms	3.37	2.40	1.95	2.10	1.27	-0.53	-0.81	-0.25	<.001
Number of days high all day	34.37	22.7	11.47	16.09	18.28	-0.54	-0.87	-0.30	<.001
UAI times (past 90 days)	18.58	6.83	6.50	5.22	13.36	-0.68	-1.11	-0.53	<.001
Mental distress symptoms	9.06	6.18	5.67	4.93	4.13	-0.61	-0.93	-0.36	<.001
Coping self-efficacy	2.36	2.60	2.53	2.54	-0.18	0.40	0.11	0.67	.001



Discussion and Conclusions

Significant effect size for reductions in substance dependence, number of days high, UAI times, and severe mental distress symptoms were all moderate to large. An increase in the measure of coping self-efficacy was moderate and also significant. Although no differences were found by study condition, both interventions addressed substance use and HIV transmission risk, by focusing on individual goals, strengths, motivations, and building positive social support connections and self-efficacy. This suggests that interventions based upon both empowerment theory and resilience theory are efficacious in reducing risk behaviors for BMSM.

Literature suggests that BMSM are more vulnerable than non-Black men due to a lack of adequate coping skills and social support due in part to negative attitudes toward same-sex behaviors in African American communities. Thus, several recent studies of BMSM have demonstrated the negative association between lack of coping skills or social support and risk factors related to substance use and sexual behavior. Our data suggest a risk reduction strategy tailored to BMSM should focus not only substance use or sexual risk behaviors, but also concentrate on providing a safe space to develop coping self-efficacy skills and social and emotional support.

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There are no conflicts to report.

Further Information

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