

Despite the well-documented health disparities faced by minority youth, the field of substance abuse treatment has only addressed the most elementary questions regarding the effectiveness of evidence-based treatments (EBTs) with minority youth. Similarly, randomized controlled trials testing EBTs for substance-abusing youth are dominated (numerically speaking) by males. While several recent reviews have indicated that a number of EBTs are effective with substance abusing, juvenile justice-involved, ethnic minority, adolescent populations, many important questions remain unanswered. Fundamentally, the question of whether standard EBTs are equally beneficial for ethnic minority and European American, as well as male and female, youth remains unanswered because most studies lack adequate statistical power to detect moderator effects (ethnicity by treatment interaction). Further, we know even less about how EBTs achieve their effects among girls and minority populations—largely because researchers have only begun using sophisticated methods to examine mediators of treatment effects irrespective of gender/ethnicity—and have not begun to address whether different treatment mechanisms operate in different ethnicities and genders. Curran et al. (2008) introduced a promising method for integrating data from numerous longitudinal studies, even when the observed outcome measures for a construct vary across studies, Integrative Data Analysis (IDA). We propose to use IDA methods to link measures of substance use, delinquency, and family functioning from 10 longitudinal randomized controlled trials testing the effectiveness of Multidimensional Family Therapy (MDFT), an empirically-supported treatment for substance abusing, juvenile-justice-involved youth (Liddle, 2009) and address the following specific aims:

Aim 1: Intervention Effectiveness – To compare the clinical outcomes of MDFT to those achieved by comparison treatments across 10 randomized controlled trials.

Aim 2: Moderating Effects – To examine the extent to which ethnicity and gender moderate intervention outcomes.

Aim 3: Mechanisms of Action – To identify the mechanisms through which MDFT achieves its effects in male and female youth from diverse ethnic backgrounds.

Measures of substance use, delinquency, and family functioning from a total of 1532 youth collected across 10 RCTs will be analyzed. State-of-the-art statistical techniques, including latent growth curve modeling (LGM) and mediation tests using the asymptotic bootstrap confidence interval method, will be used to examine study hypotheses.