treatment completion was defined as completing the 12-week treatment phase without missing two or more consecutive weeks of treatment.

Gender studies of stimulant drug addiction make clear that prevalence of abuse is only one measure of gender differences, there are many factors that must be considered, from the first experience of cocaine and MA use to the transition to full addiction. These studies also demonstrate that females are more likely to start using stimulant drugs (cocaine, MA) at an earlier age than men, the rate of drug abuse escalates faster than for men, and women report higher cravings and upon entering treatment they have usually consumed greater quantities of these drugs than men (Becker, 2011; Greenfield et al., 2010; Taylor et al., 2013).

Complicating the cocaine and MA problem for female addicts is verification that as a psychostimulant drug, MA poses a neurotoxic effect to dopaminergic frontal areas of the brain and invokes neural deficits in mechanisms of cognition and selective attention (Salo et al., 2010).

While prior research on gender differences consistently failed to include or marginalized the participation of female cocaine and MA addicts, current research does not go far enough to investigate unique situations that are specific to women in terms of their diversity of experiences, the efforts that are required to curb the rise in abuse and more extensive research in the area of PET and FDG assessments and evaluations (van der Plas, 2011; NIDA, 2014).

Statistics analysis

there were gender effect in cognitive response, and treatment competition rate. I would prefer a chi-square test on the independency of gender:

For each of the variables that we are interested in,

2x2 contingent table will be formed and “independency” was tested via right-tailed chi-square test

completion can be test via a regression model with gender, ethnicity, other covariate

test the model and ad hoc test

Data construction:

Derive completion: 1/0

Gender

PatientID

All the measurement