Effectiveness of the Adolescent Community Reinforcement Approach for Justice-Involved Youth: Results from an Independently Conducted Randomized Controlled Trial

Craig Henderson, Lindsey North, Vivian Lotts, Laadan Gharagozloo, Amy Wevodau, Katrina Rufino, Abisola Oseni, Scholar Colbourn
Sam Houston State University
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Juvenile-Justice Involved Youth

- Substance abuse
- Mental health
- Criminal behavior
- High risk sex, HIV and STD risk
- School failure
- Antisocial and drug using peers
- Unstable family situations – relationships
- Economic disadvantage
- High risk neighborhoods

Hawkins et al., 1998; Teplin et al., 2002; Abrams et al., 2002; Pliszka et al., 2000
Substance Use Among Young Offenders

- Compared to peers, teens who have been arrested are:
  - More than twice as likely to have used alcohol
  - More than 3.5 times more likely to have used marijuana
  - More than 3 times more likely to have used prescription drugs for non-medical purposes
  - More than 9 times more likely to have used cocaine
  - More than 20 times more likely to have used heroin

CASA, 2004; Rosenblatt et al., 2000; OJJDP, 1998; Dembo et al., 2008; Fombonne, 1998; Abrantes et al., 2005
Comorbid Problems of Young Offenders

- 60-75% of incarcerated teens have a psychiatric disorder
- 80% of incarcerated teens have a learning disorder
- 20% of incarcerated teens +STD; 75% multiple partners
- Young offenders generally face multiple interrelated risk factors in the home, peer group, school, and community
- They often lack resources in the community, school, and family to counteract these risk factors
- Comprehensive, intensive intervention is needed at multiple levels to lower risk and bolster protective factors

Steinberg, 2004; CASA 2004; Teplin et al., 2005; Canterbury et al., 1995; D’Angelo & DiClemente, 1996; Pack, et al., 2000; Magura et al., 1994
Current Study

- Randomized controlled trial with two treatment conditions: Adolescent Community Reinforcement Approach (A-CRA) + Assertive Continuing Care (ACC) and Services as Usual (SAU)
  - Youth in both interventions were on probation lasting approximately 6 months. Urine testing routine part of probation visits.

- Participants recruited from juvenile probation department north of Houston, Texas

- Eligible youth between 13 and 17 years of age and currently experiencing substance use problems (identified in pre-intake screening or by JPO)
A-CRA + ACC

• Behavioral treatment adapted from CRA.
  – Added family sessions
  – Revised Happiness Scale to make more relevant to adolescents
  – Examples in manual focus on adolescent issues

• Focus is on helping make life worthwhile and fun without alcohol and drugs

• Menu approach
  – Can pick different A-CRA procedures depending on different client situations

• Home-based service delivery
A-CRA Procedures

- Assessment and Planning Procedures
  - Functional Analysis of Substance Use and Pro-Social Behaviors, Happiness Scale, Goals of Counseling

- Behavioral Skills Training
  - Communication, Problem Solving, Job Finding, Social and Recreational, Relapse Prevention, Anger Management, Job Finding, Homework

- Other
  - Use of individualized reinforcers
  - Caregiver support through improved communication and parenting practices/relationship counseling
  - Systematic Encouragement
Services as Usual

- Variety of services ranging in intensity
  - Probation alone
  - Drug education
  - Outpatient substance abuse treatment program (group-based CBT)
  - Placement in a drug treatment facility
Sample

- N=129
- 76% male; 71% White Non-Hispanic, 14% Latino, 15% other ethnicities
- Average age 15.1 years (SD = 1.1)
- 52% single-parent families
- 78% report weekly substance use (15% drugs other than alcohol and marijuana); 88% meet criteria for SUD
- 67% meet criteria for comorbid externalizing disorders, 53% internalizing (45% both)
- 94% report violence or illegal activity in past year
Outcomes and Measures

- Global Appraisal of Individual Needs
  - Substance Problems Scale: Measures severity of problems associated with substance use
  - Substance Use Disorder Symptoms: Symptom count based on DSM-IV SUD criteria
  - Substance Frequency Scale: Measures frequency of substance use using a TLFB-like procedure
Analyses

- Repeated measures multivariate analysis of variance (MANOVA) used to measure change in substance problems at intake and 3, 6, and 12-month follow-up

- Interim findings

- Missing data treated with listwise deletion
  - Follow-up rates exceed 90% at each assessment

- Final analyses will use latent growth curve modeling with Full Information Maximum Likelihood estimation to accommodate missing data
Results - Substance Problem Scale

\[ p = .034, \eta^2 = .027 \]
Results - Substance Use Disorder Symptoms

\[ p = .056, \eta^2 = .024 \]
Summary and Conclusions

- Results suggest that adolescents receiving A-CRA/ACC improve their problems associated with substance use and SUD symptoms more than youth receiving SAU.
  - No significant treatment differences in frequency of substance use

- Both intervention conditions effective through the 6-month follow-up.

- ACRA/ACC shows superior long-term effects once JPO monitoring ends.

- Future analyses will examine putative treatment mediators (stay tuned).
Thank you!!

For copies of the presentation, please contact:

Craig Henderson
Department of Psychology
Sam Houston State University
chenderson@shsu.edu