MIDWESTERN PREVENTION PROJECT (MPP)

A Blueprints Legacy Program for Violence and Drug Use Prevention

Funded by grants from NIDA, NIAA, SCAP, Kauffman and Lilly Foundations

What is STAR?

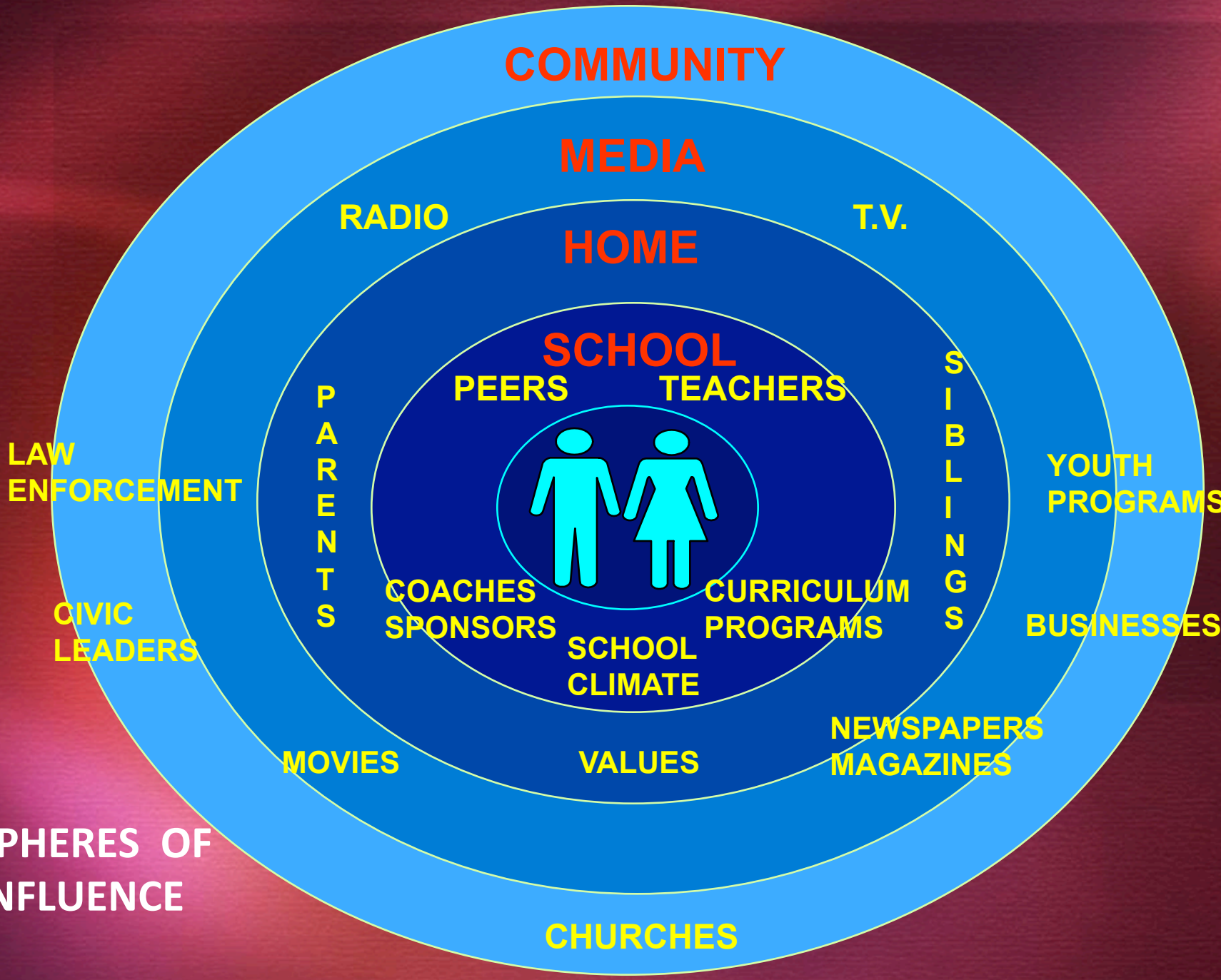
- A comprehensive multi-component, community and school program for drug abuse prevention involving youth, parents, teachers, and community leaders

Why Was It Developed?

To improve what works in prevention

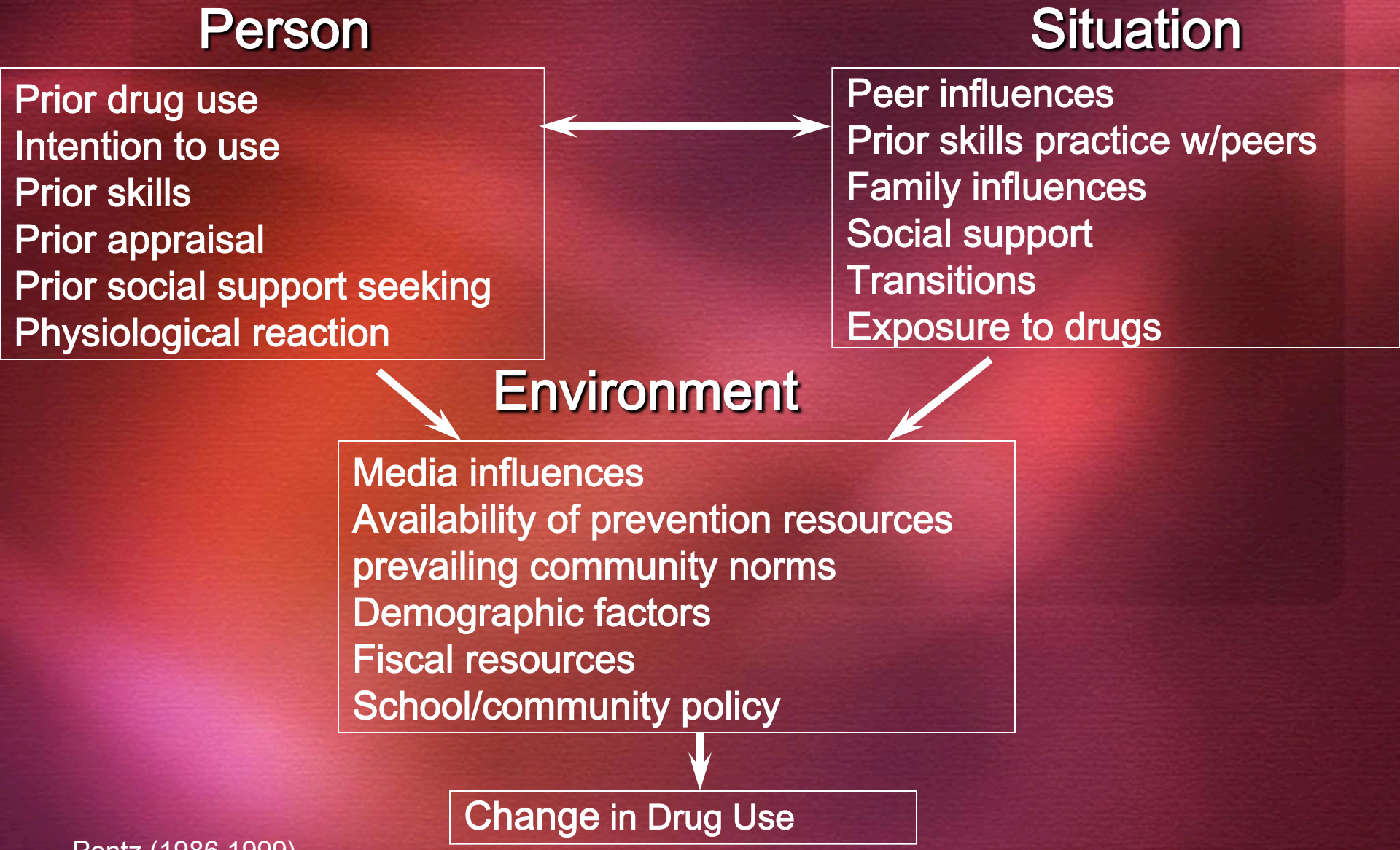
What Works in Prevention?

- Counteract personal, social and environmental influences on drug use
- Follow sound theoretical, process and structural models
- Implement with active social learning methods



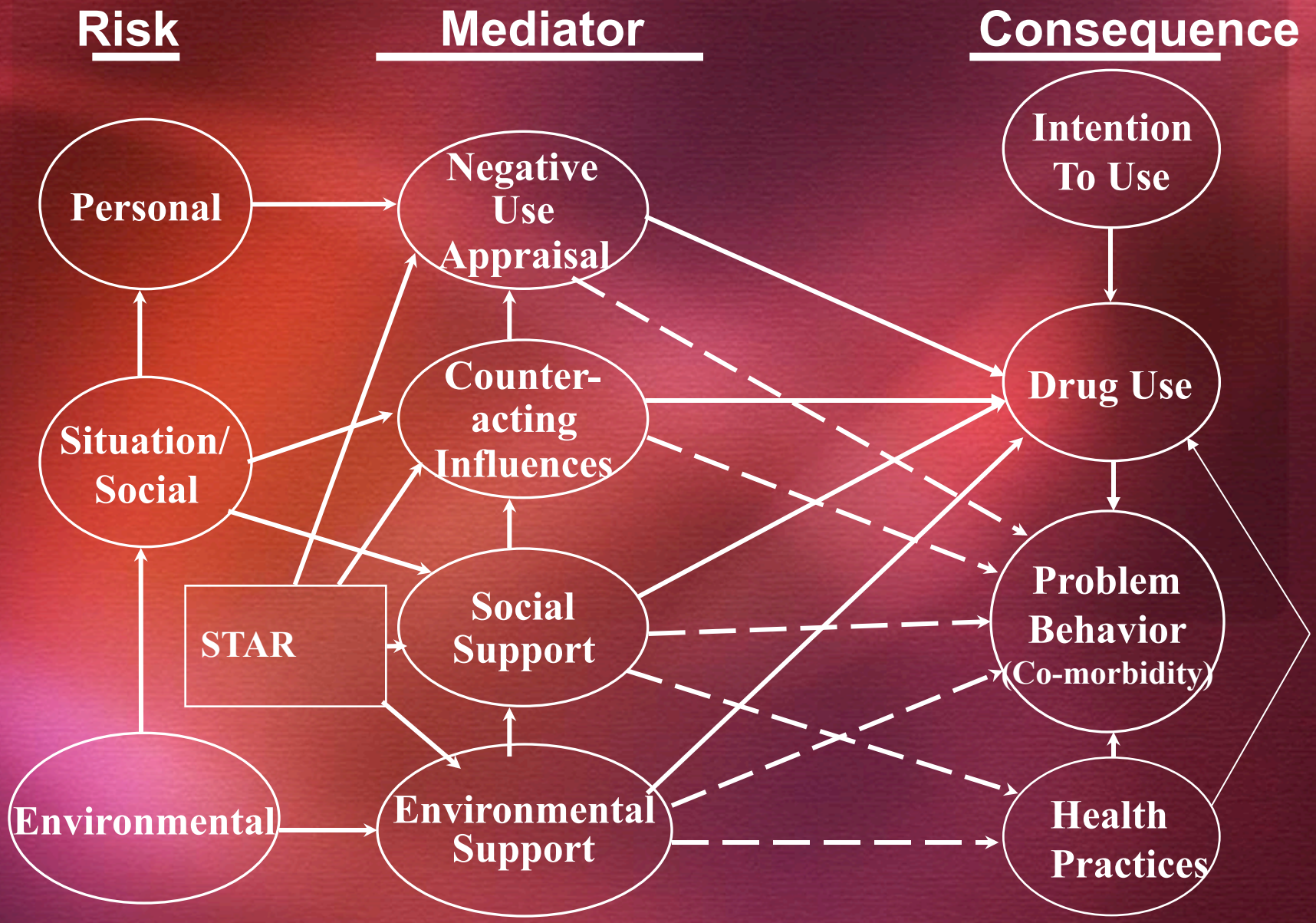
SPHERES OF INFLUENCE

Integrative Transactional Theory (ITT)

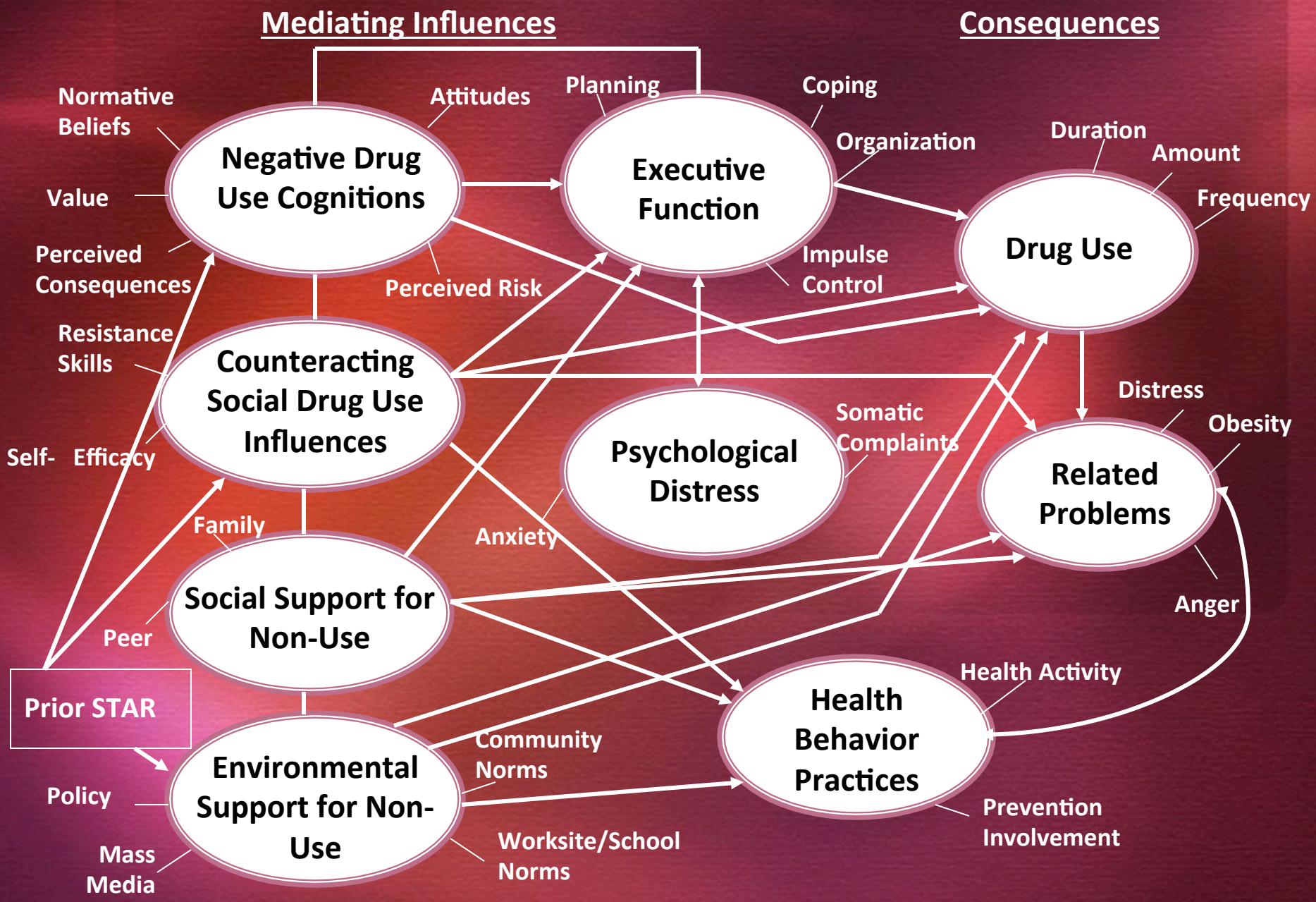


Pentz (1986,1999)

ORIGINAL STAR THEORETICAL MODEL OF BEHAVIOR CHANGE



FROM EARLY ADOLESCENCE THROUGH END OF EARLY ADULTHOOD



Structural Model

Community Entry and Preparation

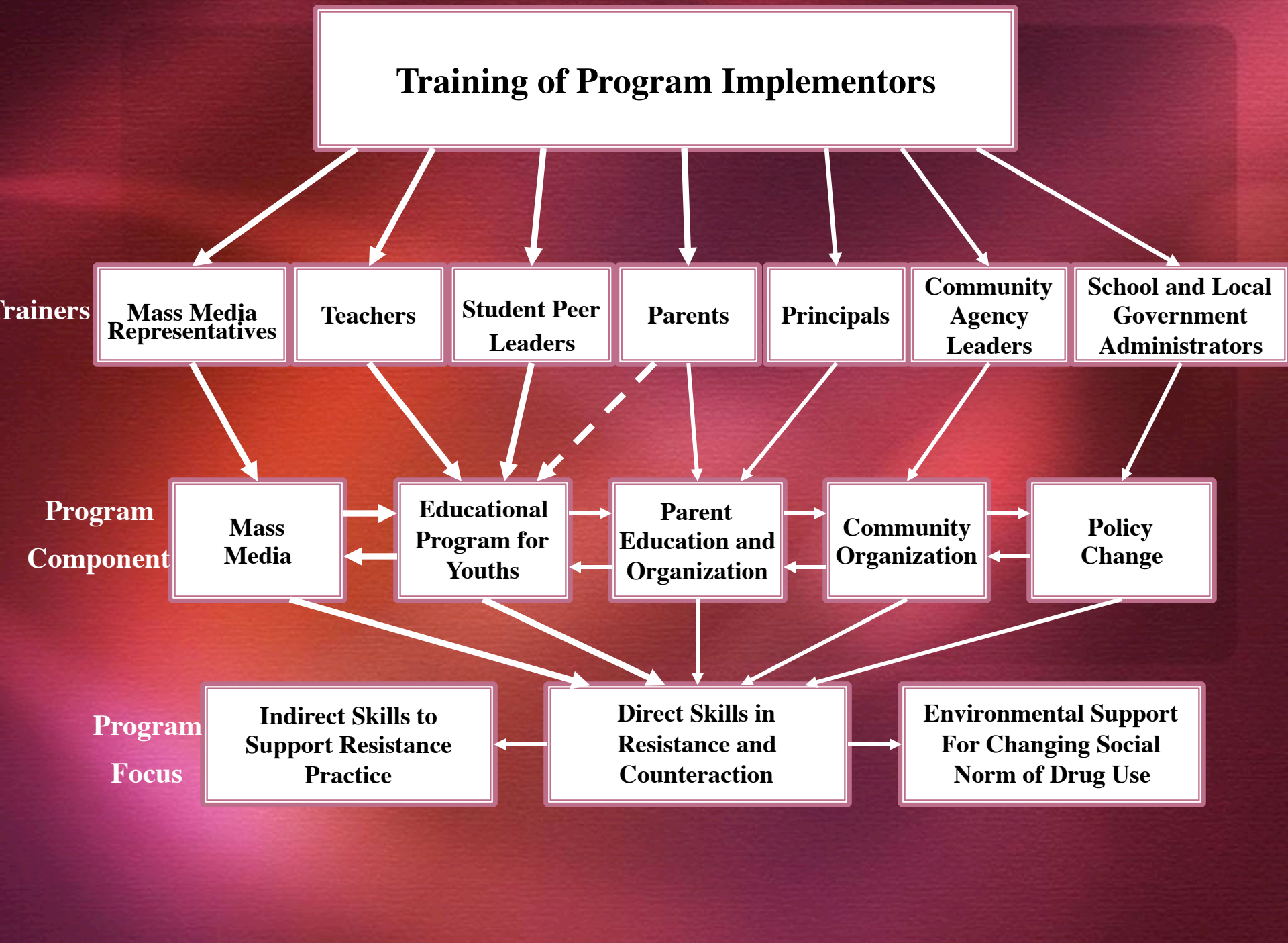
Assessment of Community Drug Use Problem and Prevention Needs and Resources

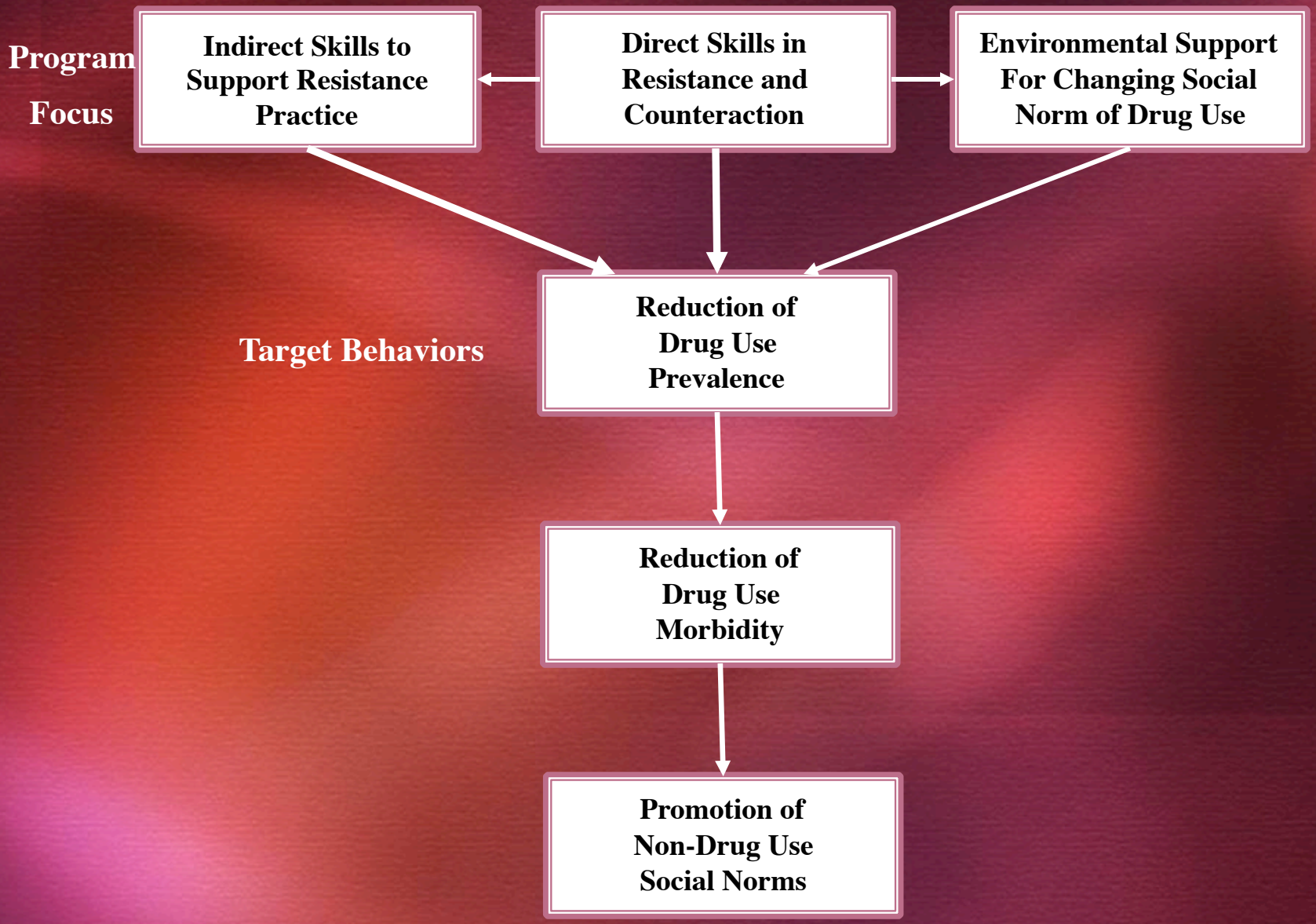
Introductory Training of Community Leaders in Problem Awareness and Program Need

Establishment of Community Coordinating Structure

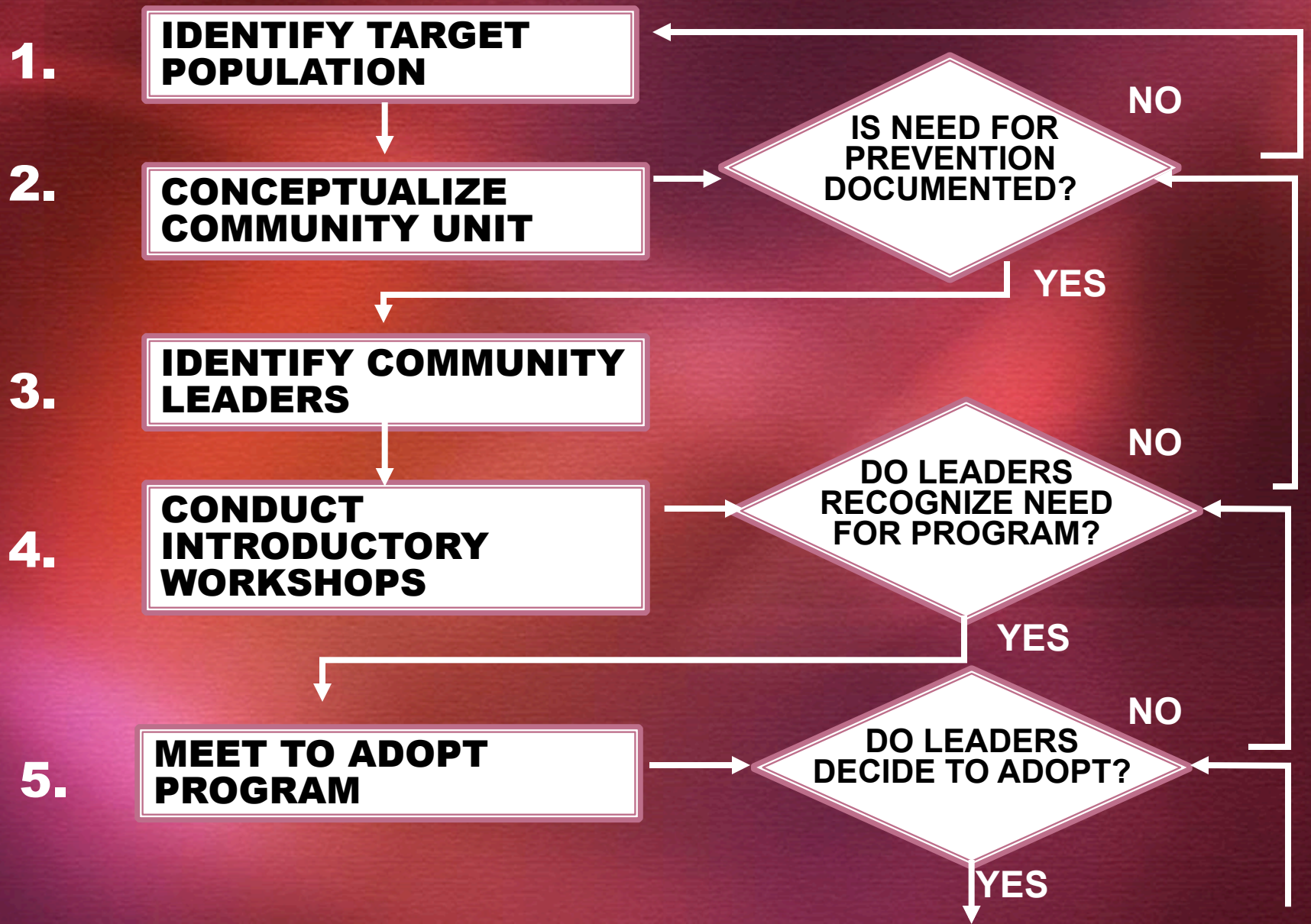
Training of Program Implementors

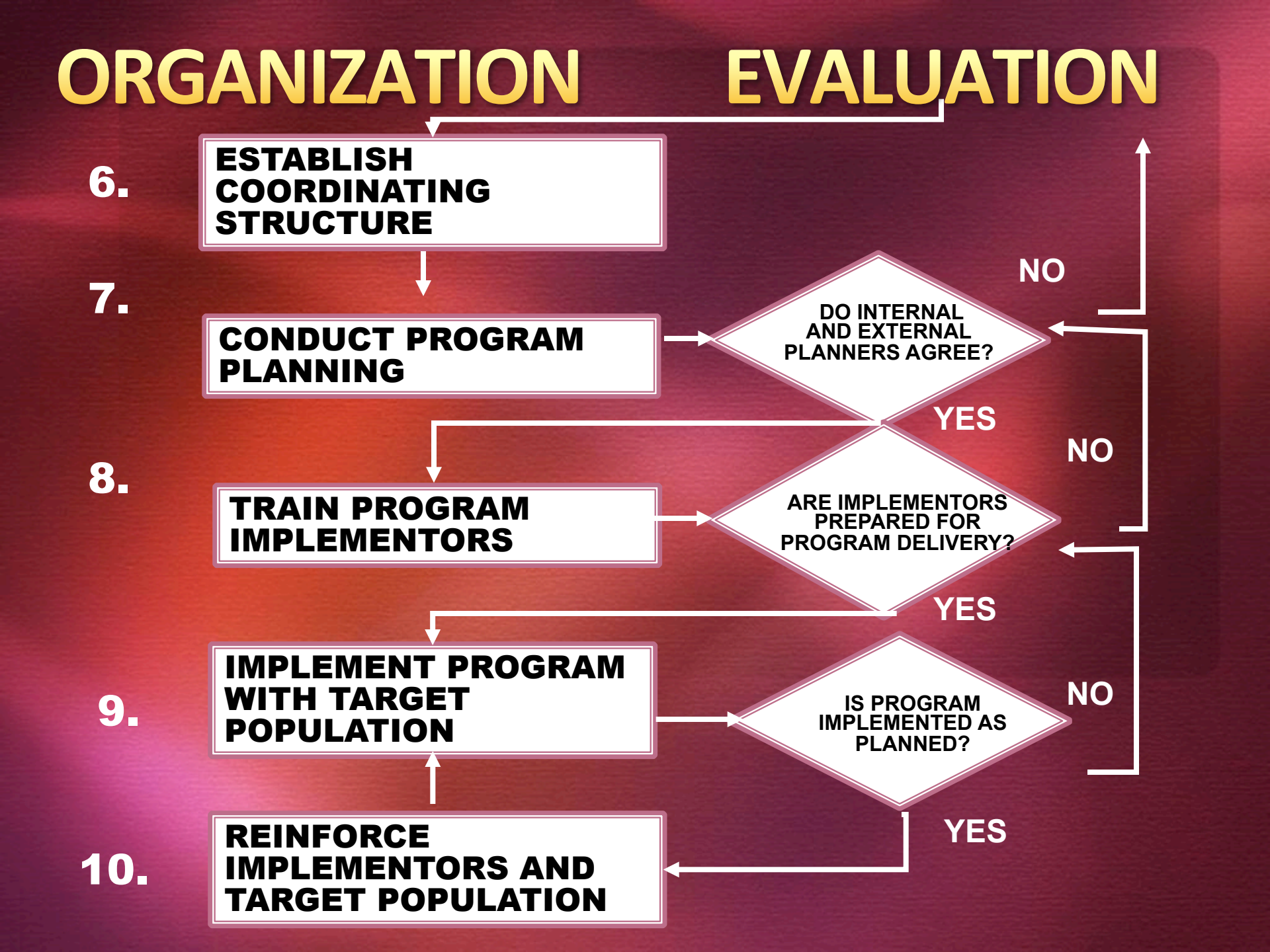
Pentz, et al (1986, 1989)


Training of Program Implementors
rainers
Mass Media Representatives
Teachers
Student Peer Leaders
Parents
Principals
Community Agency Leaders
School and Local Government Administrators
Program Component
Mass Media
Educational Program for Youths
Parent Education and Organization
Community Organization
Policy Change
Program Focus
Indirect Skills to Support Resistance Practice
Direct Skills in Resistance and Counteraction
Environmental Support For Changing Social Norm of Drug Use

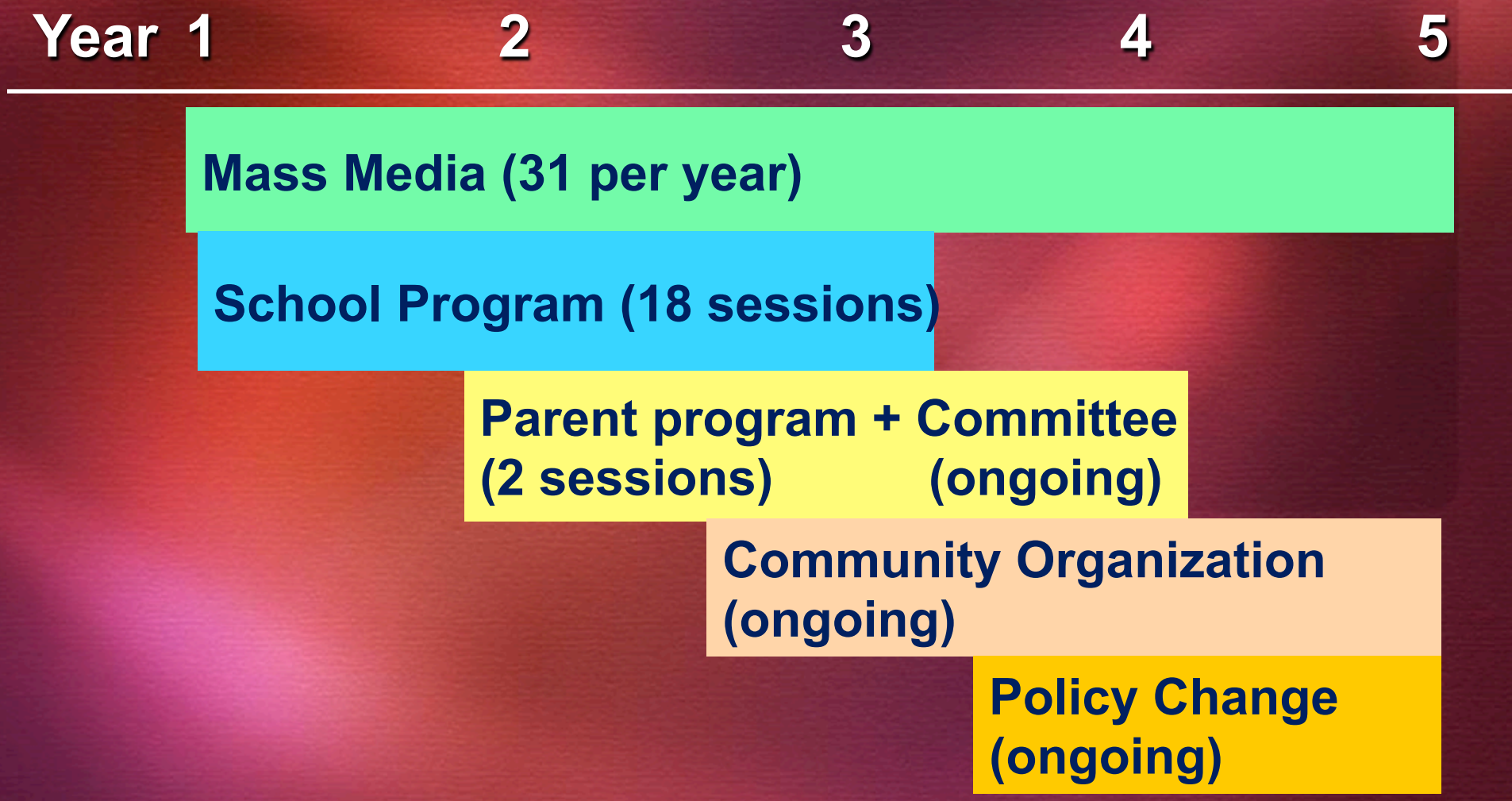

Program Focus
Indirect Skills to Support Resistance Practice
Direct Skills in Resistance and Counteraction
Environmental Support For Changing Social Norm of Drug Use
Target Behaviors
Reduction of Drug Use Prevalence
Reduction of Drug Use Morbidity
Promotion of Non-Drug Use Social Norms

ORGANIZATION EVALUATION




ORGANIZATION
EVALUATION
6.
ESTABLISH COORDINATING STRUCTURE
7.
CONDUCT PROGRAM PLANNING
DO INTERNAL AND EXTERNAL PLANNERS AGREE?
NO
YES
8.
TRAIN PROGRAM IMPLEMENTORS
ARE IMPLEMENTORS PREPARED FOR PROGRAM DELIVERY?
NO
YES
9.
IMPLEMENT PROGRAM WITH TARGET POPULATION
IS PROGRAM IMPLEMENTED AS PLANNED?
NO
YES
10.
REINFORCE IMPLEMENTORS AND TARGET POPULATION

Midwestern Prevention Project (MPP) Program Components



PROJECT STAR PROGRAM COMPONNETS

Media Program

- Press kits
- News series
- Student video contest
- Video magazine
- Interactive television

School Program

- Basic classroom program (10-13 sessions)
- Booster classroom program (5-7 sessions)

Parent Program

- Involvement in school program through homework assignments
- School guidelines
- Parent skills training (2 sessions)
- School/neighborhood support

Community Organization

- Community leader skills training
- Development of council
- Development of task forces
- Policy support

Policy Program

- Needs assessment
- Government official training
- Referenda on prevention policy changes
- Policy support

Research and Measurement Designs

- Three-year lagged replication in two cities (1989 Kansas City, population N=1.7 million; 1987 Indianapolis, population N=1.4 million)
- Assignment of all middle schools within each school district to community intervention or control condition (N=26 communities, N=107 schools)

Kansas City - 1/3 randomized
2/3 demographically matched

Indianapolis - Randomized

- Longitudinal (annual) measurement (survey,CO)

Long-Term Results

- Effects on Drug Use
- Effects on Need for ATOD, MN Services
- Effects on Health Behavior (Physical Activity, BMI)
- Second generation effects on children of cohort

Table 3.

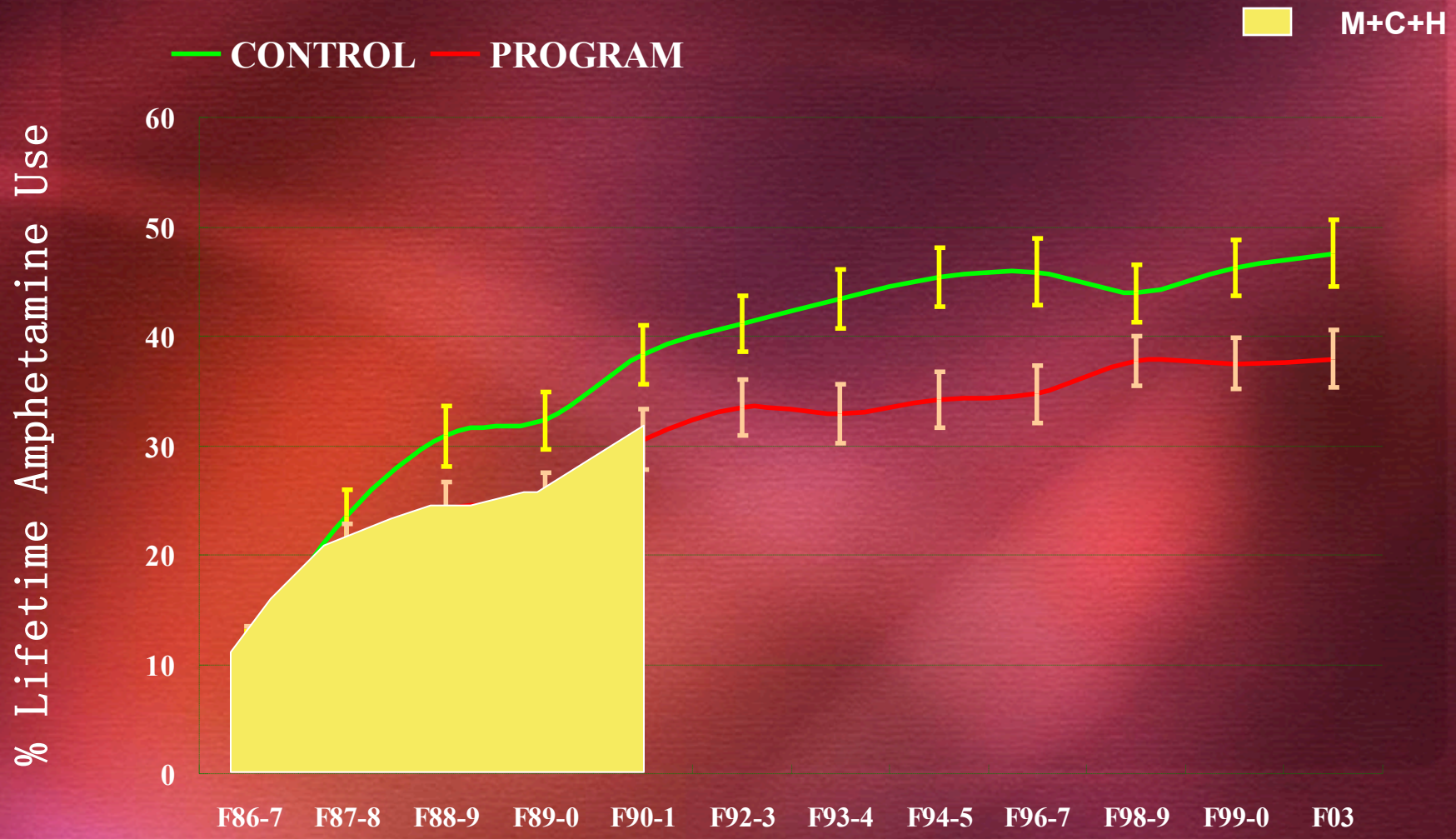
Odds Ratios for being an addictive smoker in early adulthood (confidence intervals)

	Indianapolis (n=1078)
	O. R. *(95% CI)*
Ethnicity	.38(0.21,0.69**
Sex	.75(0.51,1.10)
Grade	.68(0.38,1.20)
Intervention Group	.58(0.39,0.86)**

* = p <.05, = p**<.01,

Note: Sex, 1 = Female, 0 = Male; Ethnicity; 1 = Non-Hispanic white, 0 = Non –white;

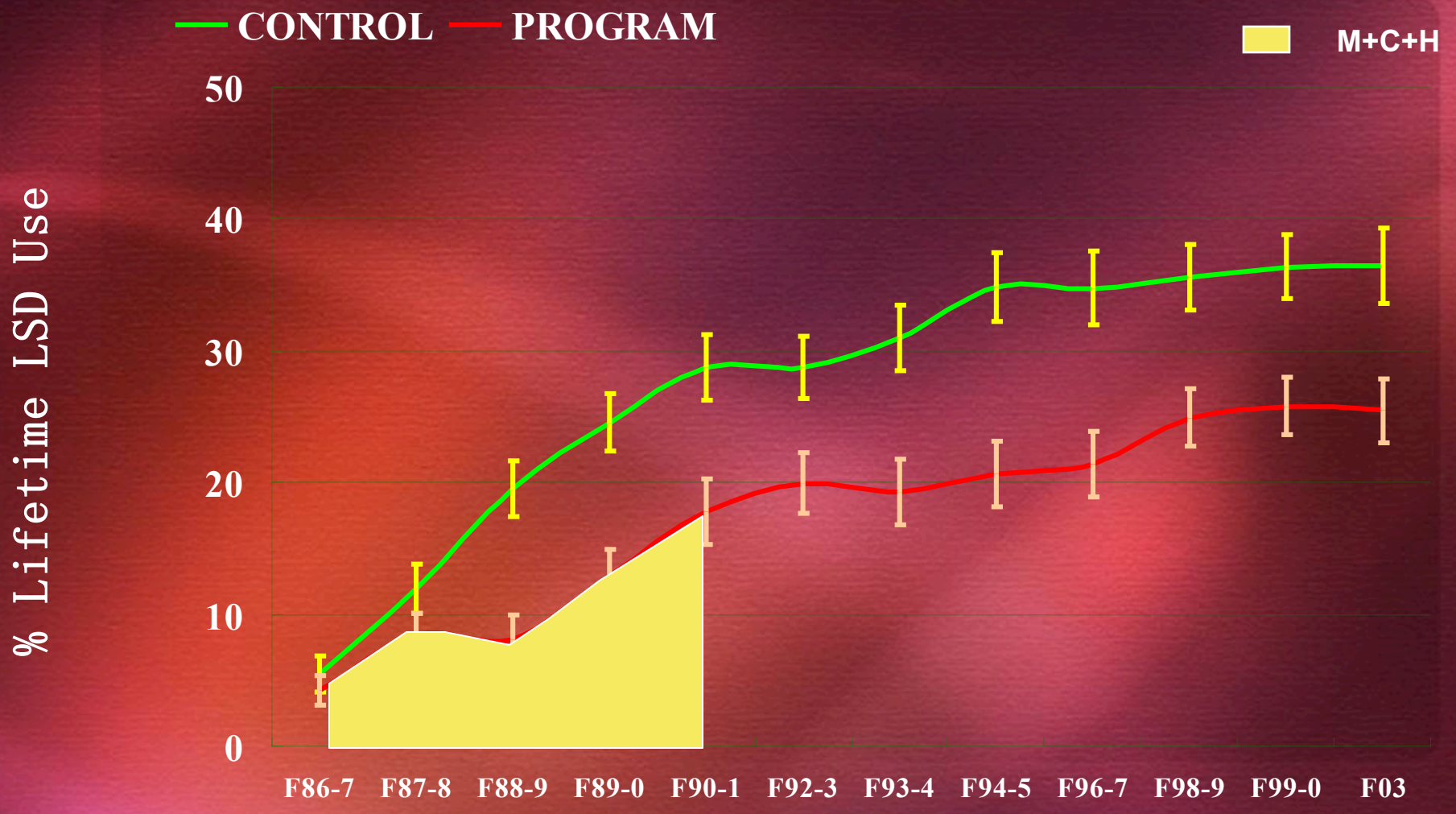
Grade, 7^{th} grade = 1, 6^{th} grade = 0; Intervention Group 1 = intervention, 0 = control.



KANSAS CITY TRACKING STUDY PREVALENCE OF HARD DRUG USE

Individual as Unit N=1167 FALL 1987 -- 2003

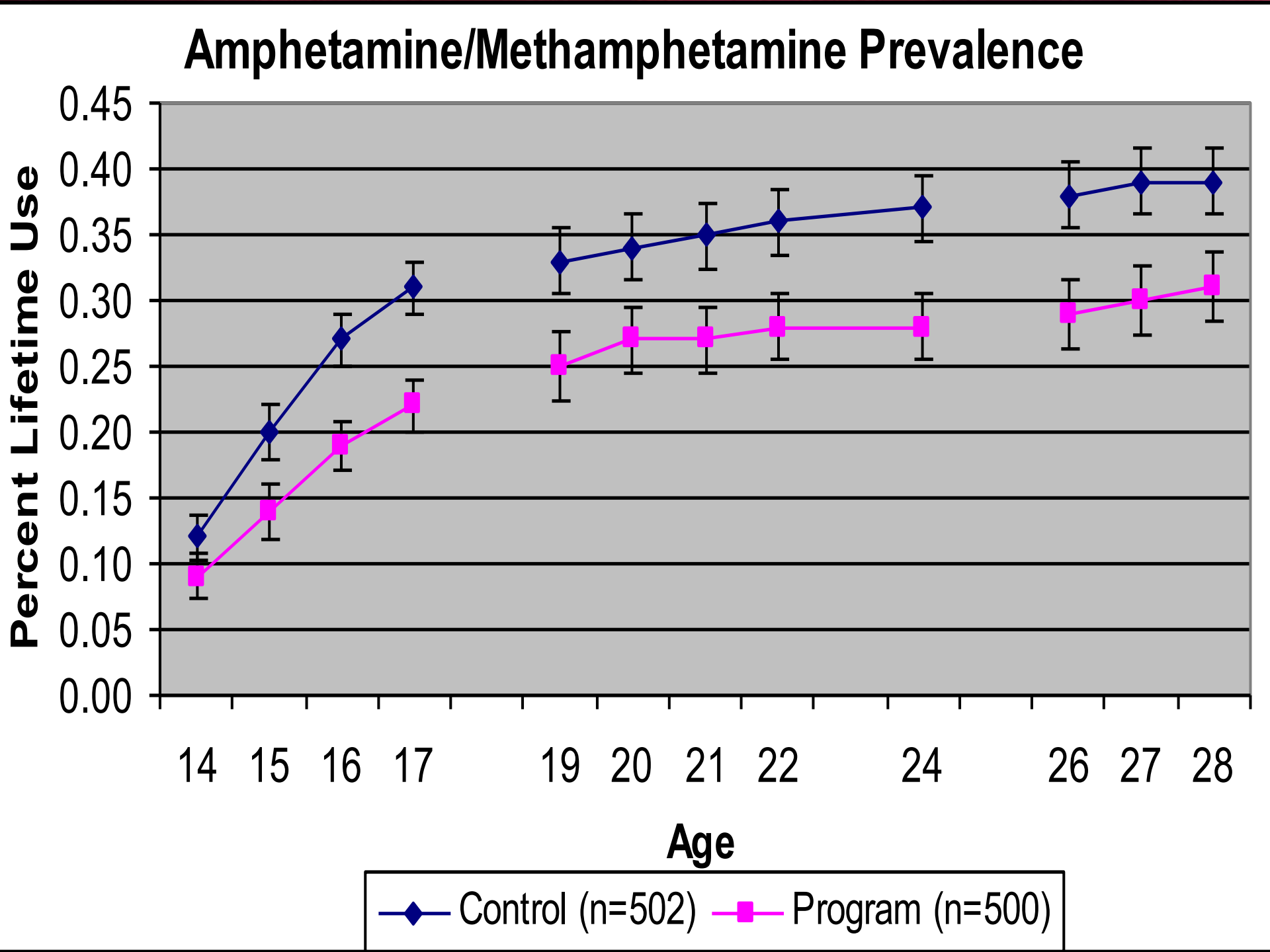
ADJUSTED for Grade, Race, SES, Baseline Composite On Monthly Gateway Drug Use



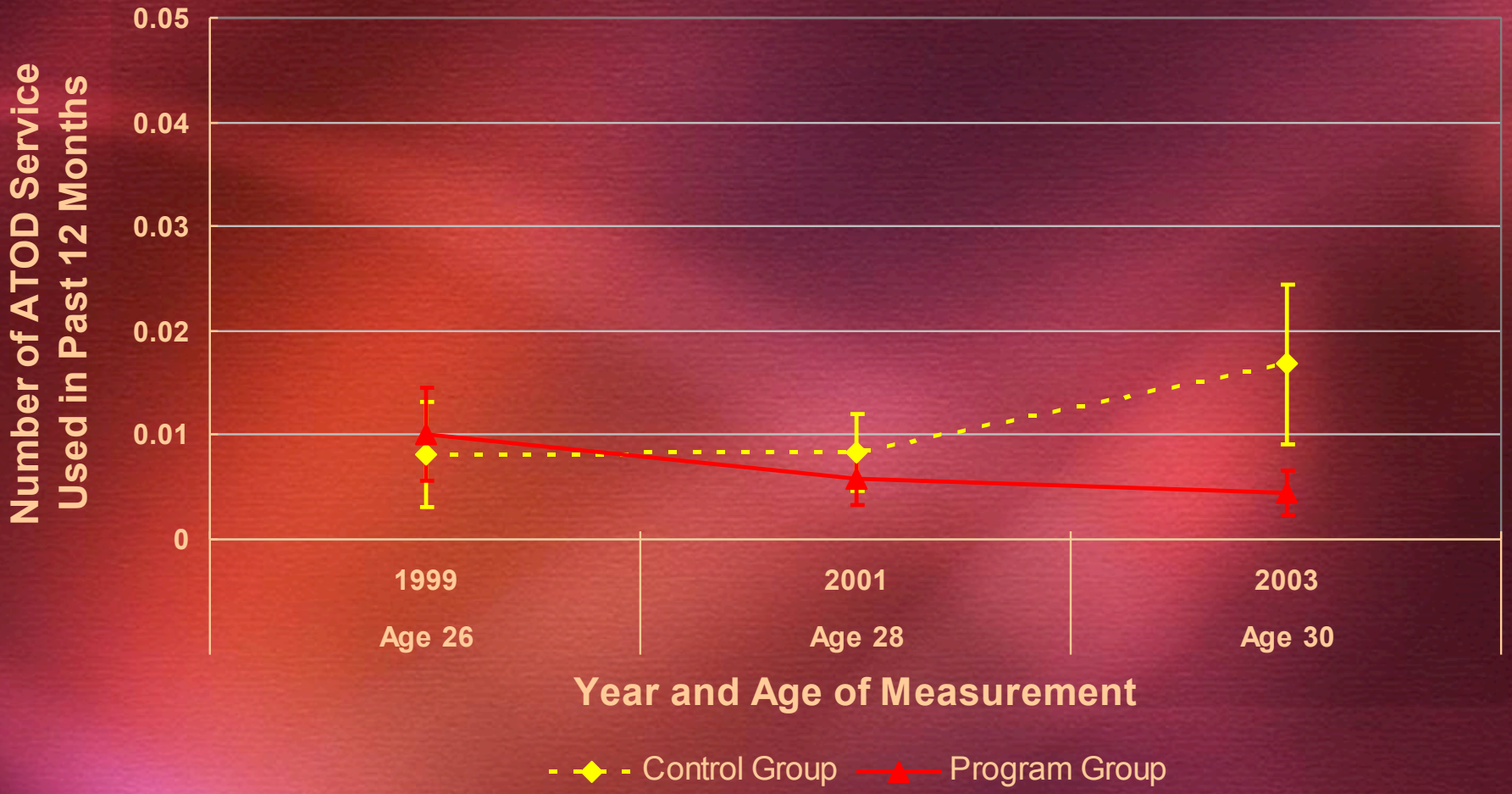
KANSAS CITY TRACKING STUDY PREVALENCE OF HARD DRUG USE

Individual as Unit N=1167 FALL 1987 -- 2003

ADJUSTED for Grade, Race, SES, Baseline Composite On Monthly Gateway Drug Use


Amphetamine/Methamphetamine Prevalence
Percent Lifetime Use
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
14
15
16
17
19
20
21
22
24
26
27
28
Age
Control (n=502)
Program (n=500)

KANSAS CITY

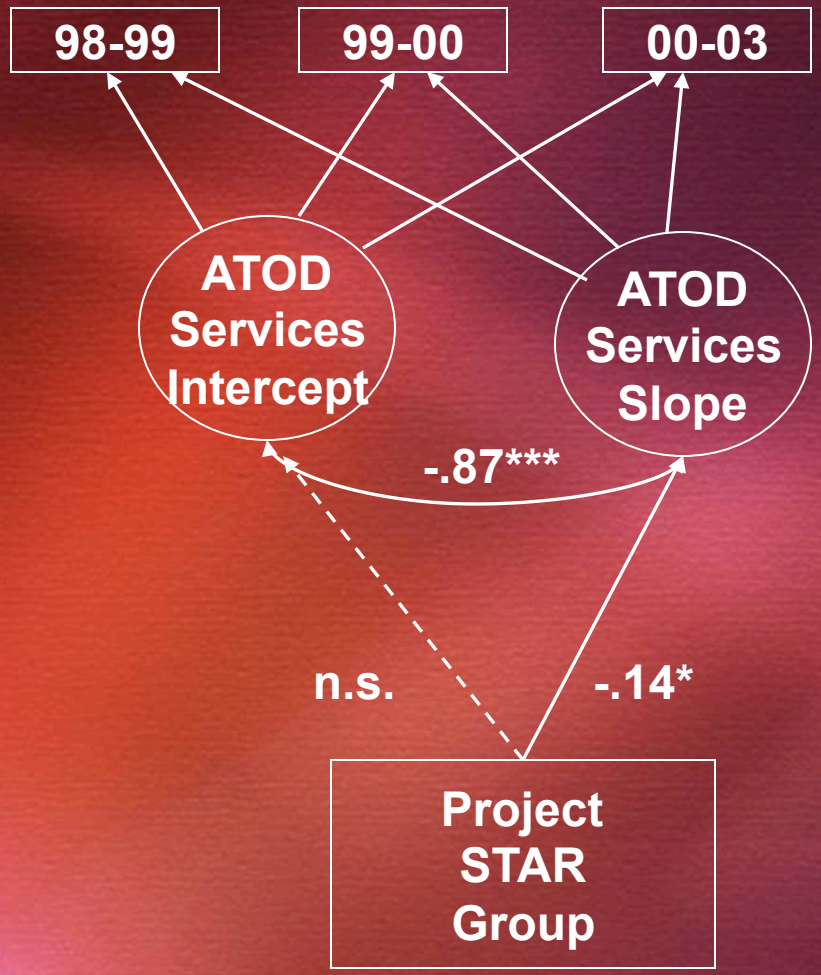


Note: 1. ATOD=Alcohol, Tobacco, and Other drug use.

2. Individual as unit of analysis.

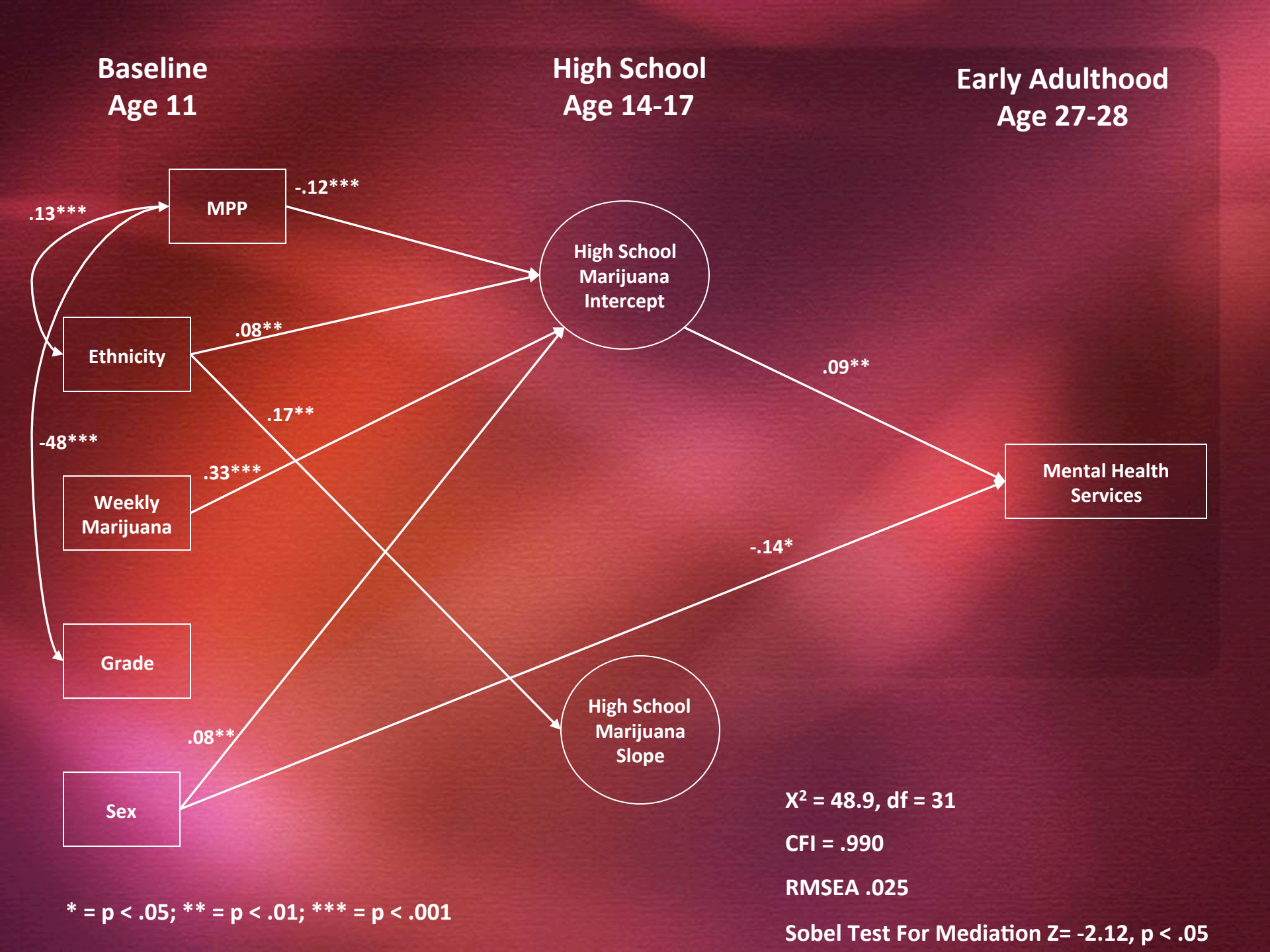
3. In 1999, Control group N=352, Program group N=462

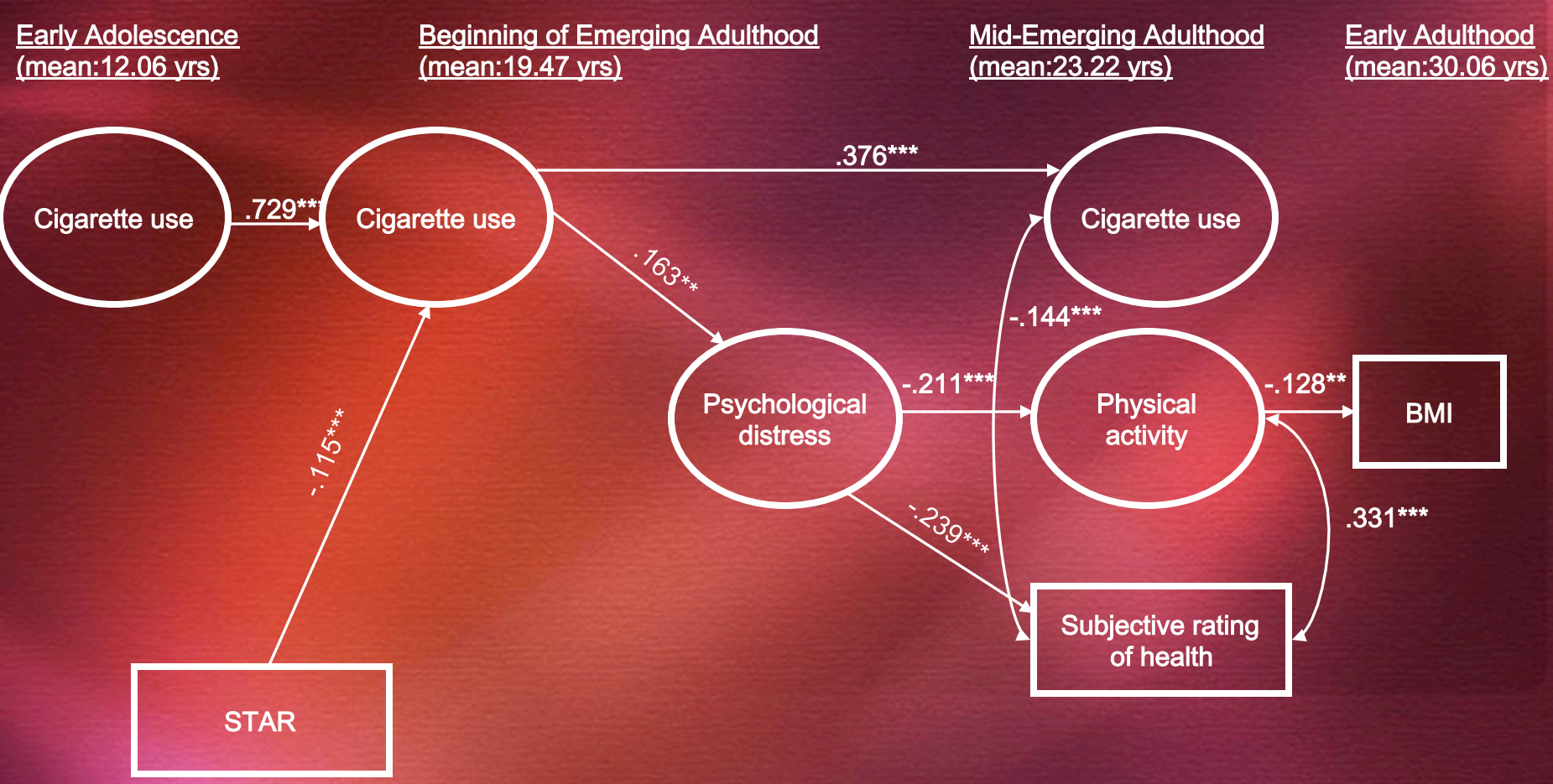
Kansas City



Covariates =
Baseline substance use
Age
Race
Sex

Chi-Square = 5.30
DF = 6
CFI =1.000
NFI = .989
RMSEA = .000
Group Value 1 = Program
Group Value 0 = Control

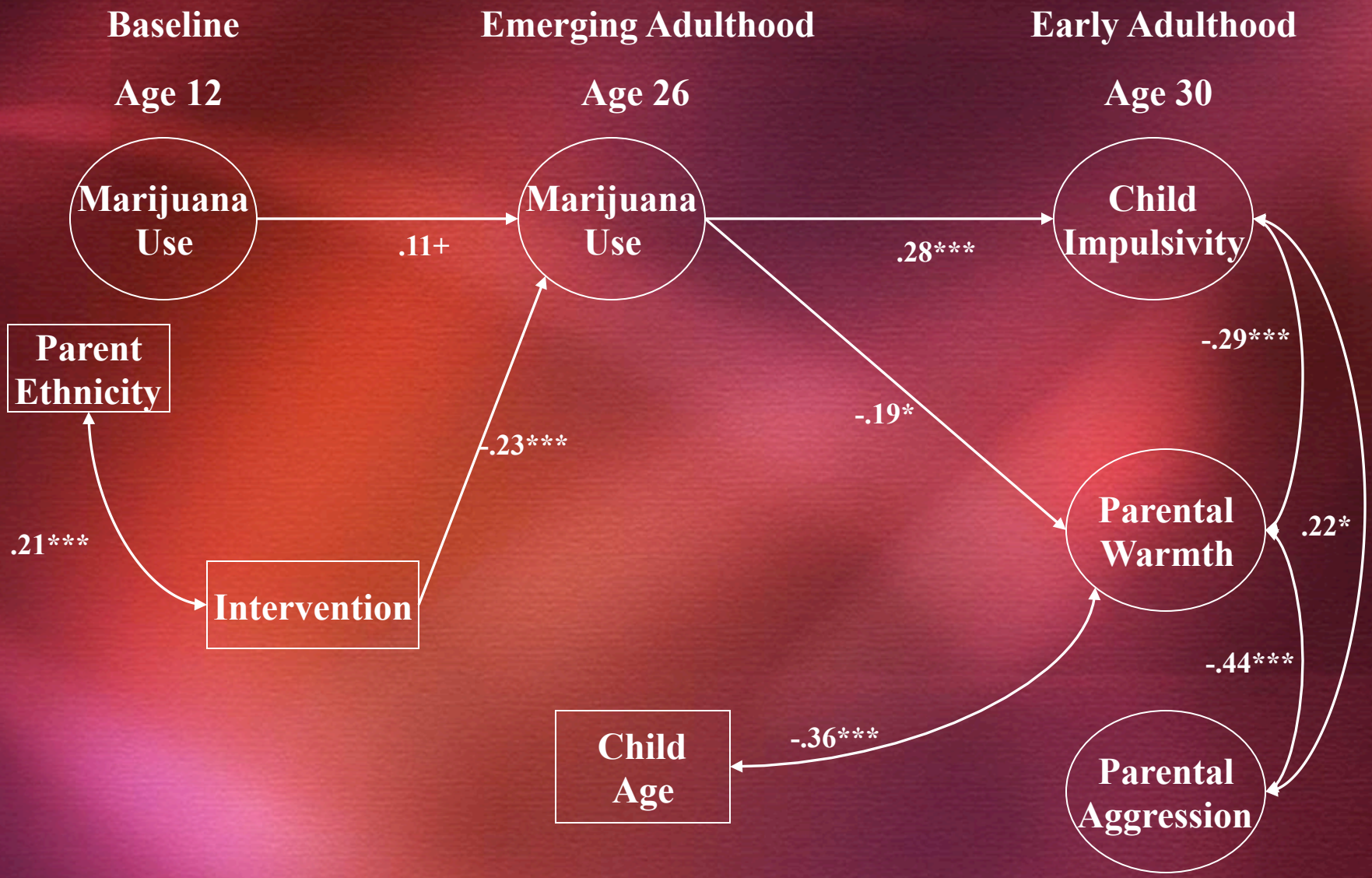

Baseline
Age 11
High School
Age 14-17
Early Adulthood
Age 27-28
MPP
-.12***
.13***
High School
Marijuana
Intercept
Ethnicity
.08**
.09**
.17**
-48***
.33***
Mental Health
Services
Weekly
Marijuana
-.14*
Grade
High School
Marijuana
Slope
.08**
Sex
* = p < .05; ** = p < .01; *** = p < .001
X2 = 48.9, df = 31
CFI = .990
RMSEA .025
Sobel Test For Mediation Z= -2.12, p < .05



*p<.05; **p<.01;***p<.001 (one-tailed test)

Model fit:
NFI=.949
CFI=.957
$\chi 2$ =827.049 (150)
RMSEA=.046
N=2127

Structural Model



Conclusions

- MPP/STAR has demonstrated long-term effects on drug use, need for treatment, multiple health behaviors, and second generation effects on child conduct problems.
- The number and sequencing of program components pose a challenge to dissemination.
- However, the multiple benefits of this program yield substantial savings in health and social costs.

Next Steps

- The STEP trial manualized and streamlined program delivery.
- Materials will be adapted to address multiple health risk behaviors.
- Funding will be sought for an infrastructure to support dissimination and training.