

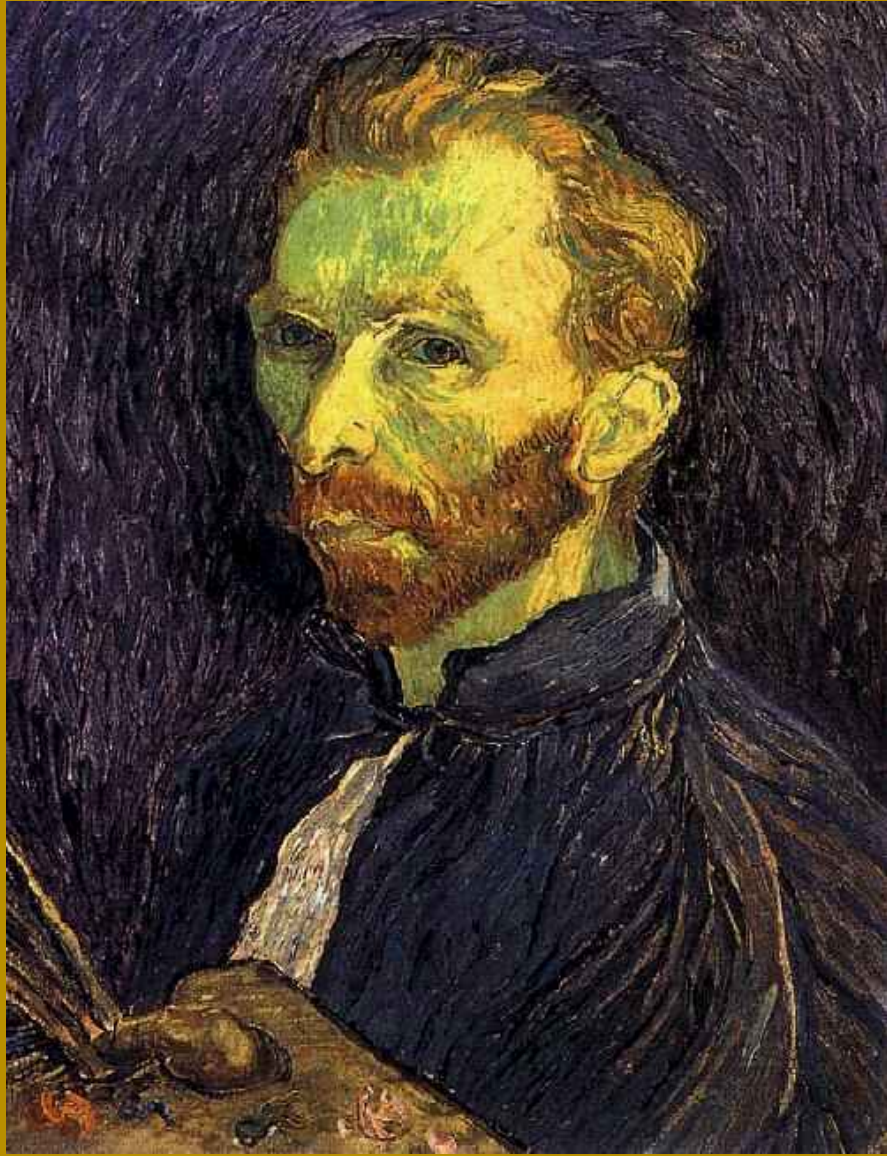
**Co-occurring
Mental Illness and
Substance Use
Disorder**

Bob Drake

Columbia, October, 2006

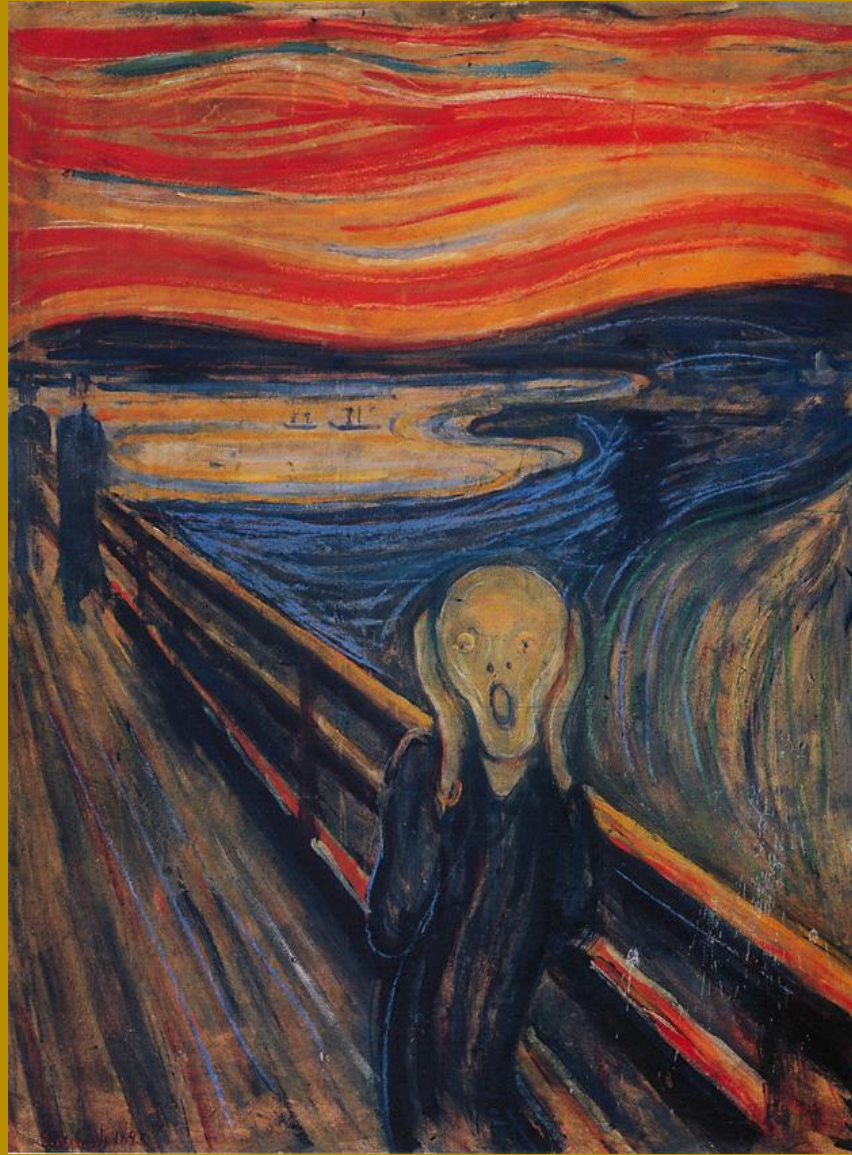
Co-occurring Disorders Are Common

**50% or more of people with severe
mental illnesses**





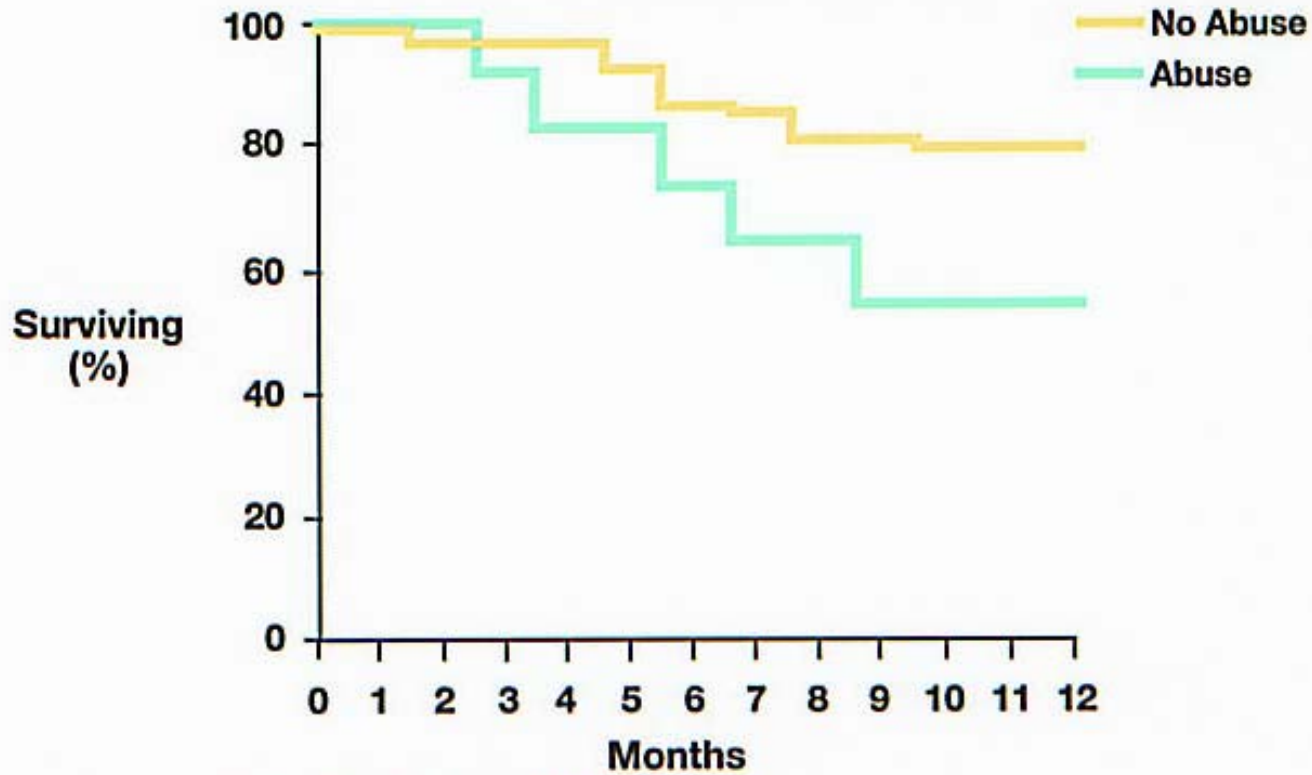
Willem deKooning Dutch-American 1904-1997 "Self Portrait"
coloured ink, wash 13.0 x 19.0 cm c.1950 dedicated "To Harold"



Co-occurring Disorders Have Severe Adverse Consequences

**Clinical, psychosocial,
familial, legal, health,
housing**

SURVIVAL CURVES OF TIME UNTIL PSYCHOTIC RELAPSE BY NO ABUSE AND ABUSE OF CANNABIS



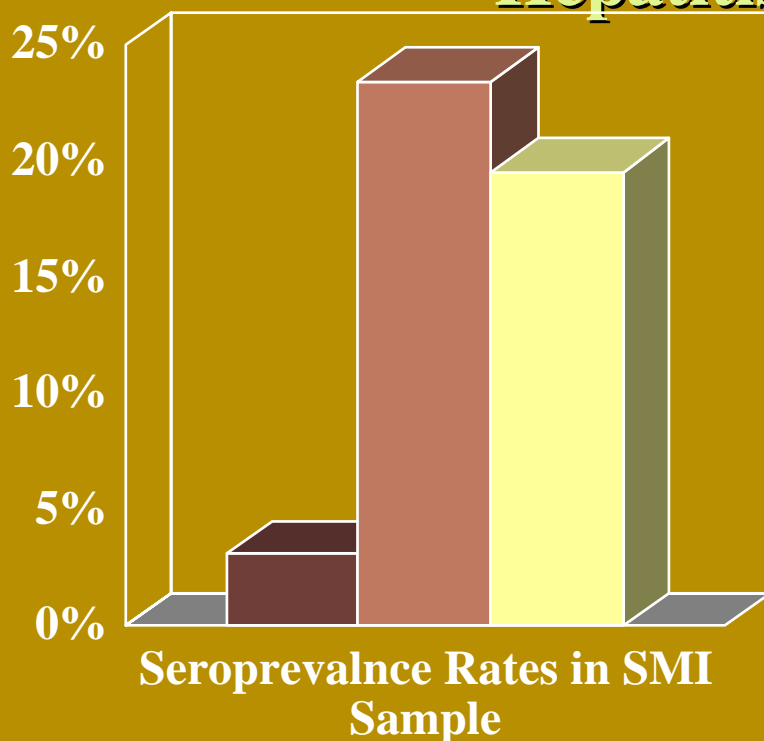
Linszen et al. *Arch Gen Psychiatry*, 1994.

Correlates of Medication Noncompliance

<u>Characteristics</u>	<u>Odds Ratio</u>	<u>95% CI</u>
Substance Abuse (0=none, 1=current)	8.1	2.5-26
Observed Side Effects (0=none, 1=any SE)	0.13	0.01-1.2
Outpatient Contacts (0=none, 1=1-6, 3=>6)	0.53	0.25-1.1

Owen et al, Psychiatric Services 1996

Medical Complications of Co-Occurring Substance Use: HIV and Hepatitis B and C



■ HIV (N=931) ■ HBV (N=751)
■ HCV(N=751)

Persons with Substance Use Disorders had

- **2.95 (1.25-6.86) increased risk of HIV**
- **1.74 (1.20-2.51) increased risk of HBV**
- **2.42 (1.62-3.63) risk of HCV**

Monthly Income and Expenditures for Illegal Drugs and Alcohol Among Schizophrenic Patients

- **Monthly income** **\$650**
- **Disability income** **\$645**
- **Expenditures for illegal drugs** **\$250**
- **Expenditures for alcohol** **\$10**

– Median values

Costs of Treatment: Massachusetts Medicaid

Treated for Substance Use (N=1,493)	Not treated for Substance Use (N=4,394)	No substance use (N=10,509)
\$22,917	\$20,049	\$13,930

Dickey and Azeni, Am J Public Health, 1996

Parallel Treatment Is Ineffective

High dropout

Less than 10% get both services

Poor communication

Interventions not modified

Poor outcomes

Integrated Treatment is More Effective

**Over 50 controlled studies
Different advantages**

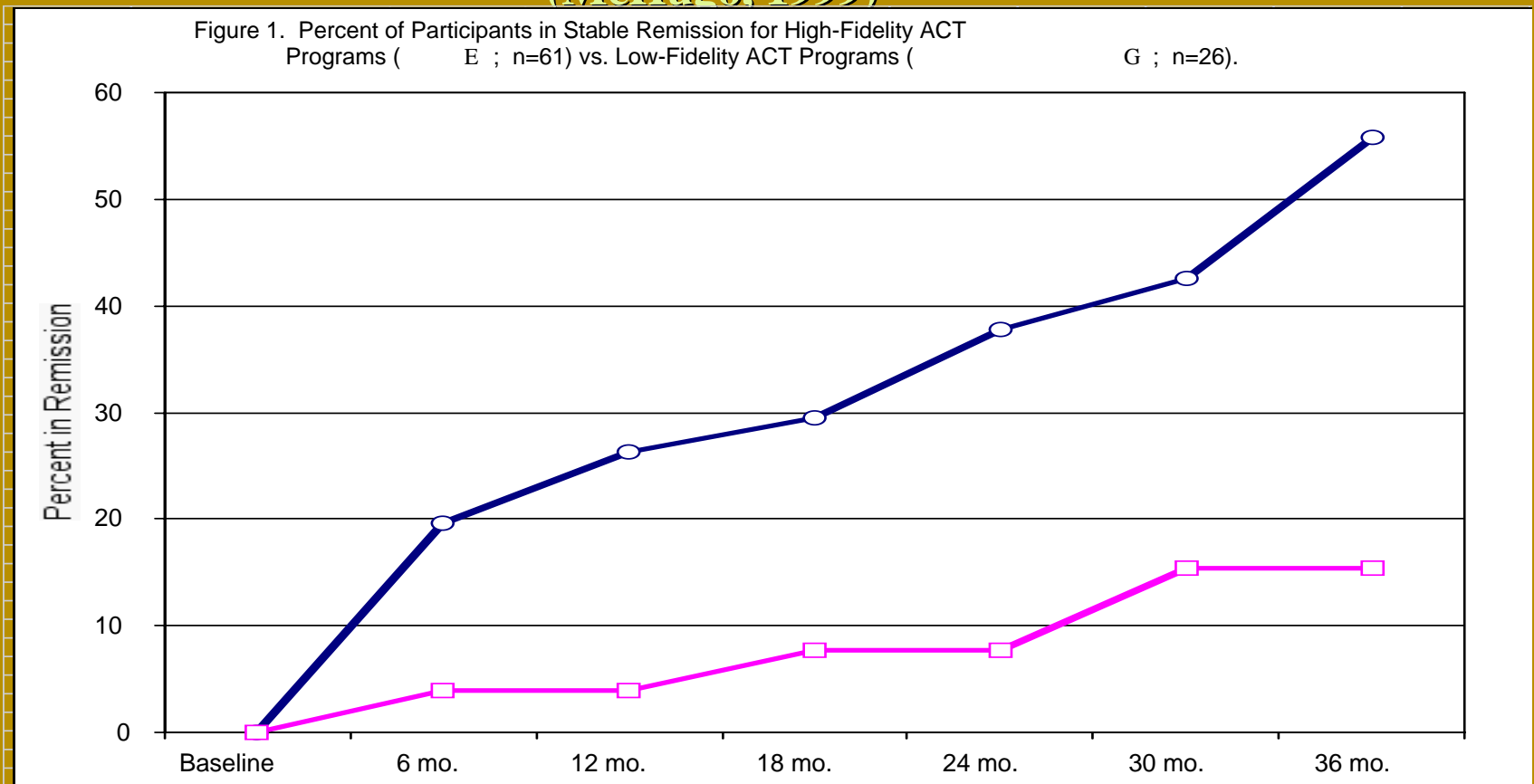
Drake et al., in press

Specific Interventions

- Individual counseling: 7 studies
- Group counseling: 8 studies*
- Family psychoeducation: 1 study
- Intensive outpatient program: 2 studies
- Residential treatment: 12 studies *
- Care coordination: 11 studies
- Contingency management: 6 studies *
- Legal interventions: 5 studies
- Other interventions

Integrated vs. Non-integrated Treatments

(McHugo, 1999)



Principles of Integrated Treatment

- **Integration**
- **Assertiveness**
- **Stage-wise treatments**
- **Comprehensiveness**
- **Long-term perspective**
- **Algorithms**

Integration

- Clinical integration, not collaboration
- Clinicians working together
- One coherent message
- Interventions modified for co-occurring disorder

» Drake et al., 2004

Assertiveness

- Outreach
- Services delivered in community, jail, hospital, homeless shelter
- No terminations: algorithms instead

» Drake et al., 2006

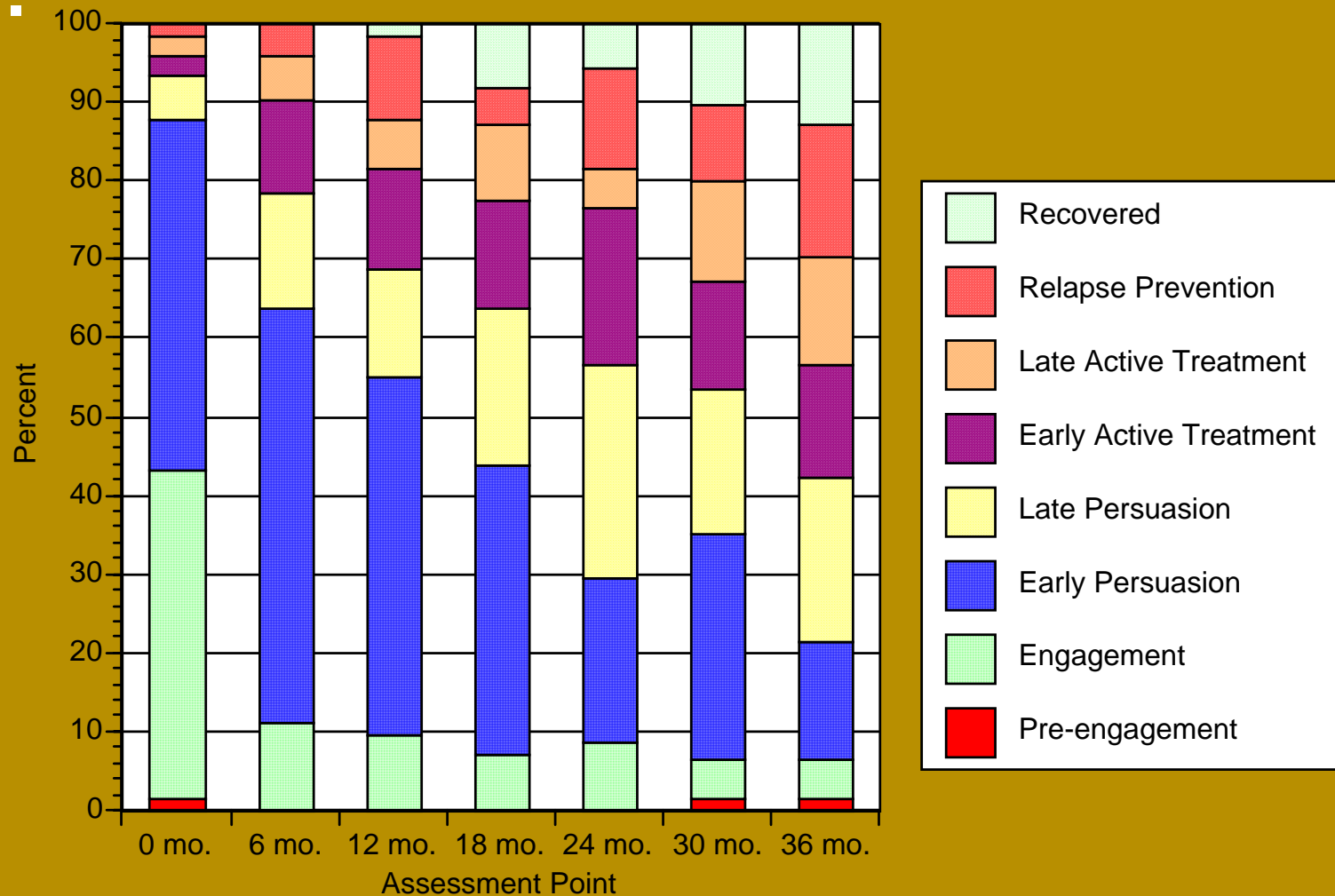
Stages of Treatment

- Engagement
- Motivation
- Active Treatment
- Relapse Prevention

» Drake et al., 2004

Stages of Recovery

(McHugo et al., 1995)



Comprehensiveness

- Recovery as meaningful life
- Different interventions for:
- Specific outcomes
- Specific stages
- Specific subgroups

» Mueser et al., 2005

Recovery Index

- Living independently
- Controlling symptoms
- Active remission of substance abuse
- Competitive employment
- Socializing with non-substance users
- Expresses life satisfaction

» Drake et al., 2006

Recovery Score by Year

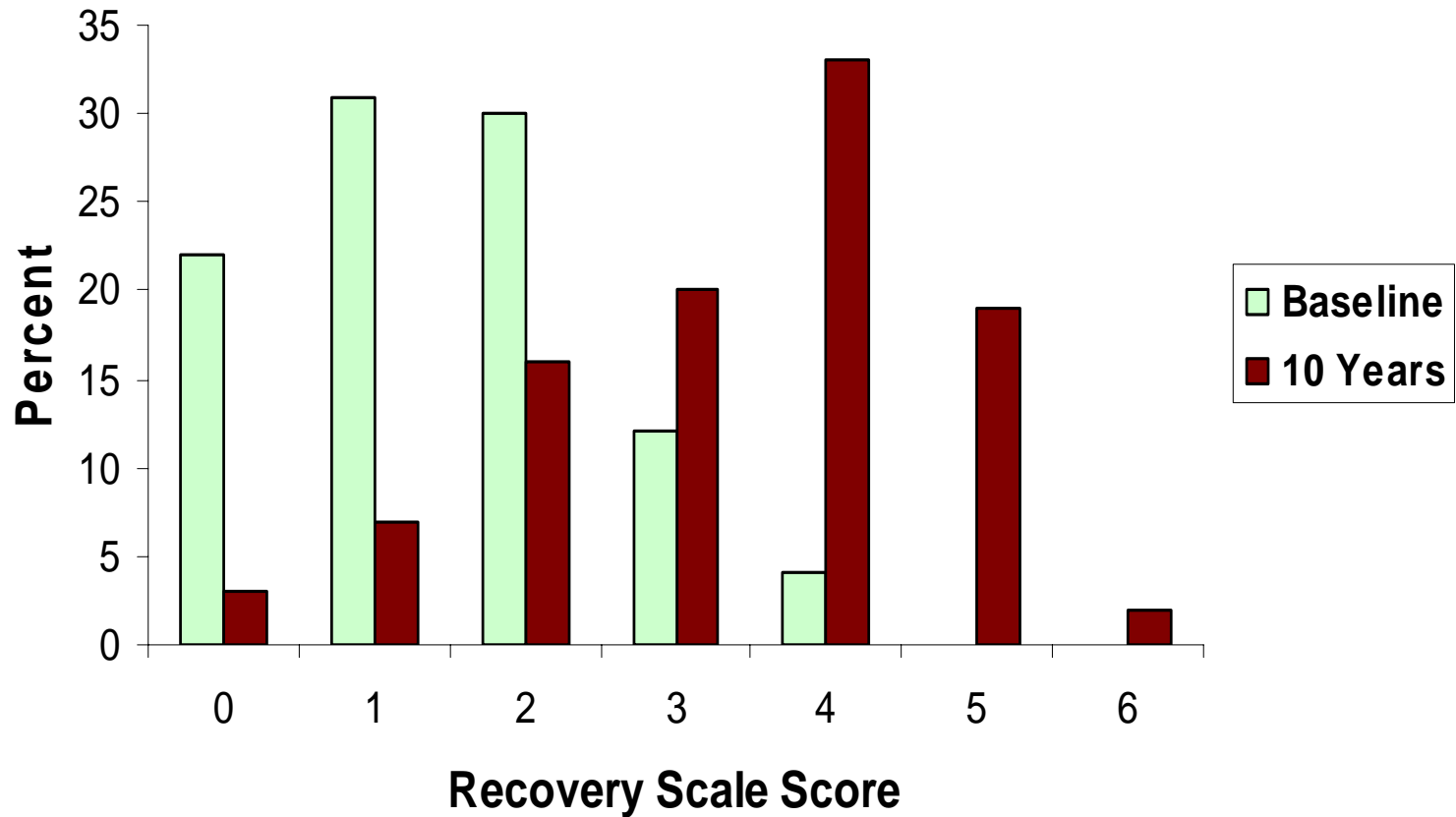
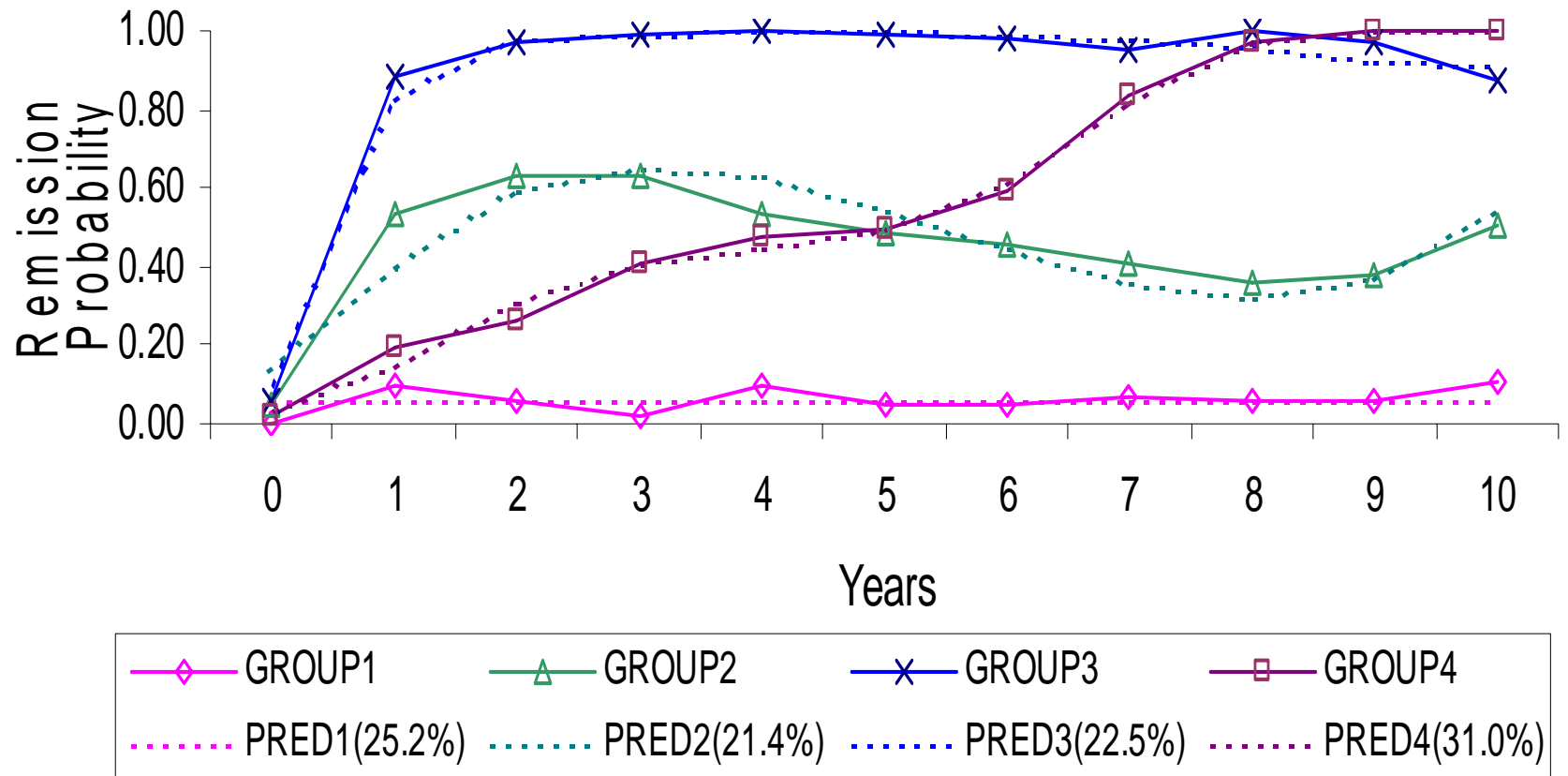


Figure 3. Distribution of Composite Recovery Scores at Baseline and 10 Years

Group Trajectories

(Xie et al., 2006)

Figure 2. Group Trajectories for Substance Abuse Remissions



3 Trajectory Groups

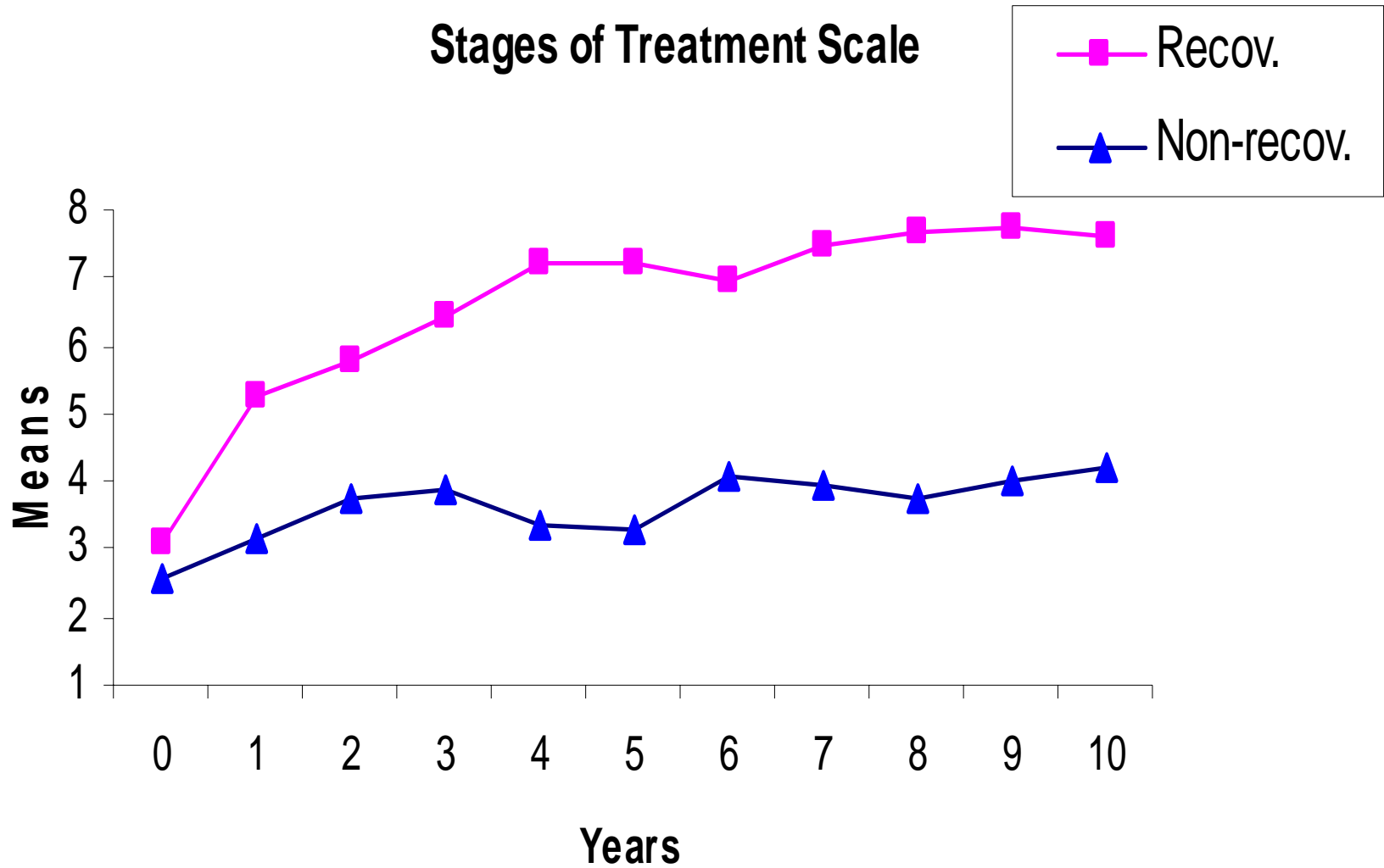
- Early abstinence (17%)
 - Low levels of substance dependence
 - Clozapine
 - Group counseling
- Late abstinence (30%)
 - Steady treatment involvement: group, etc.
 - Residential treatment
- No abstinence (46%)
 - Inconsistent treatment

Long-term Perspective

- Sustained abstinence is goal
- Occurs over years for most
- Relapse vulnerability

» Drake et al., 2005

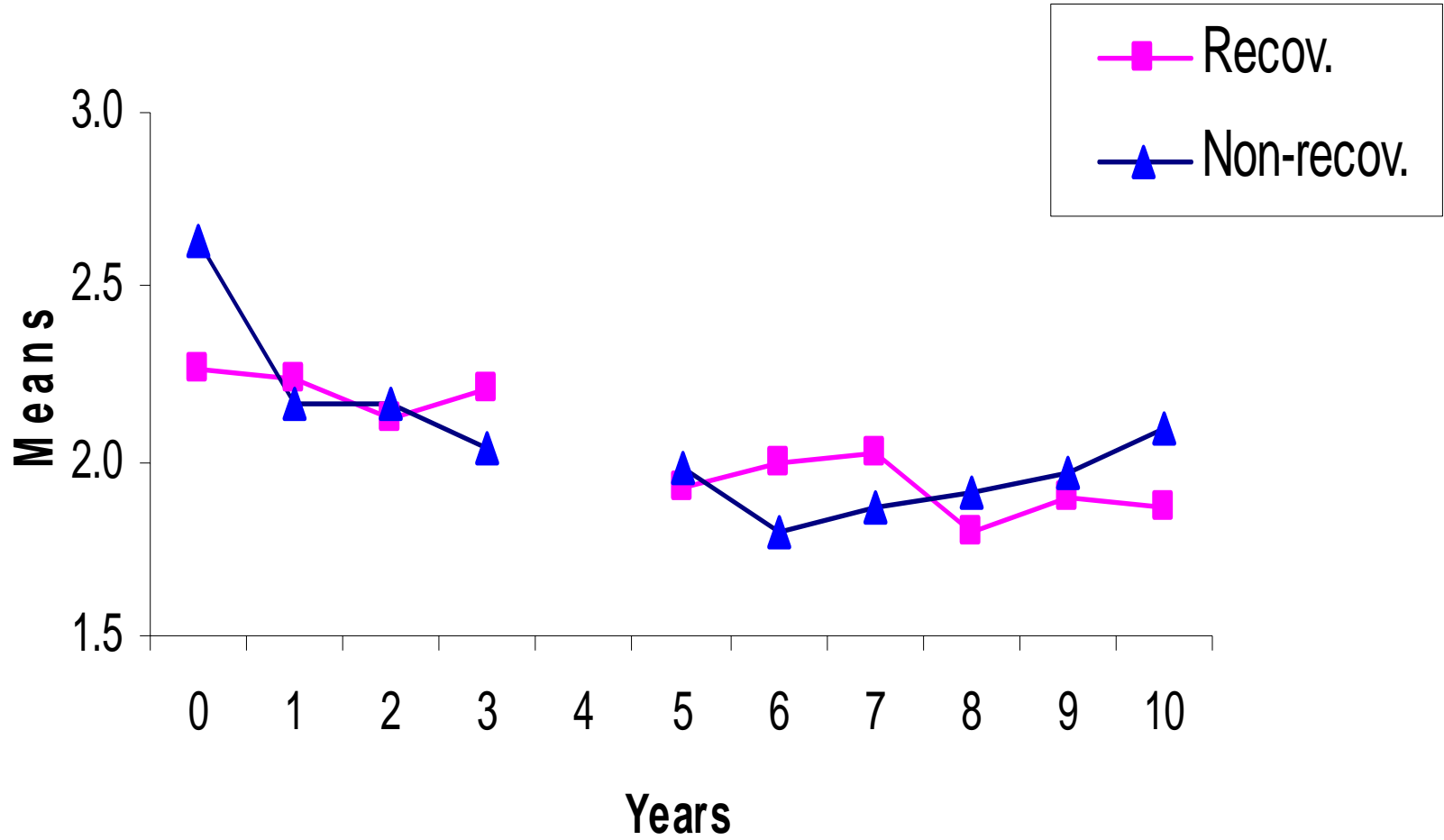
Stages of Treatment Scale



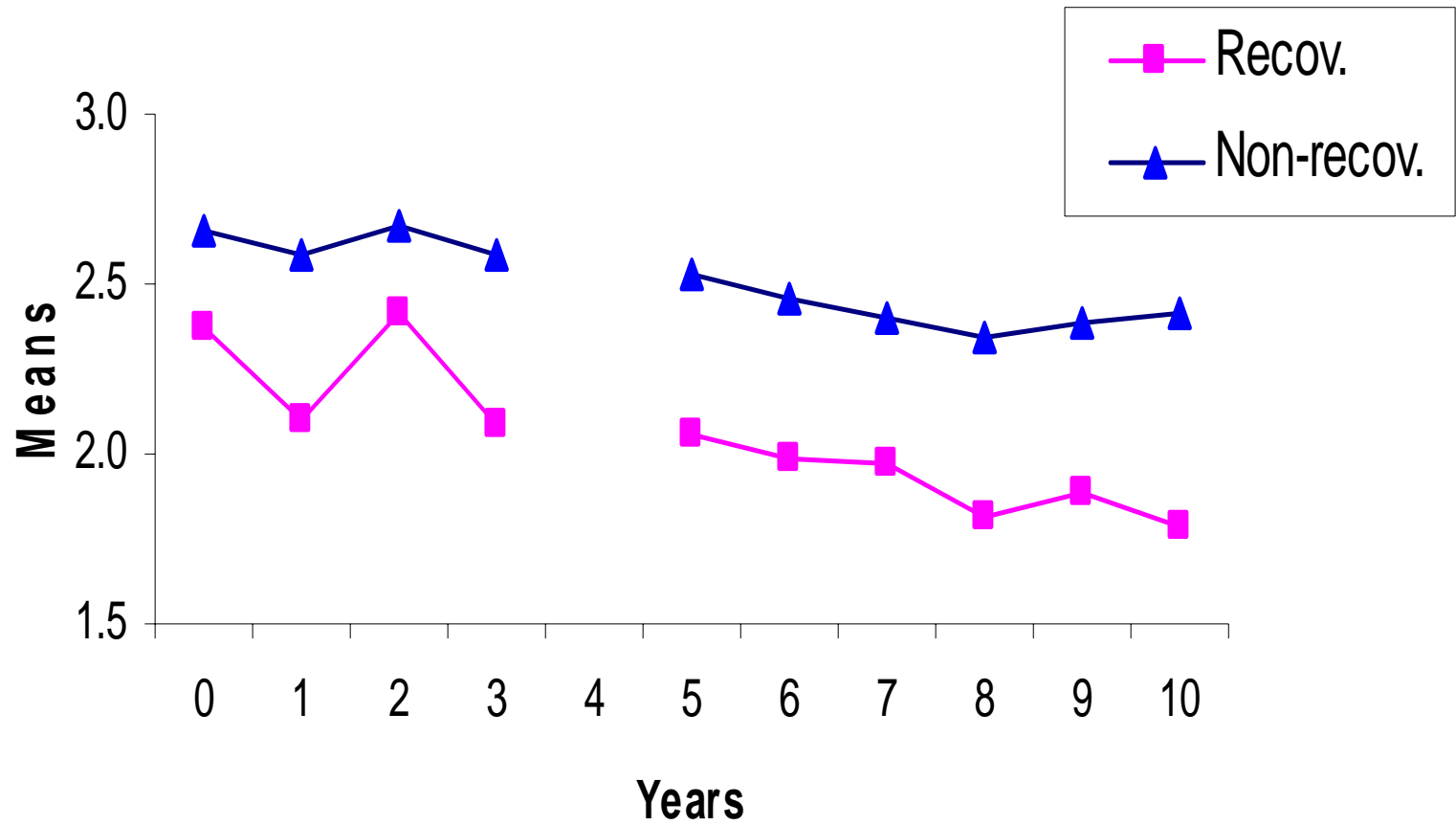
Abstinence Affects Other Outcomes

- **Affective symptoms more than psychotic symptoms**
- **Psychosocial stability more than symptoms of mental illness**
- **General quality of life**

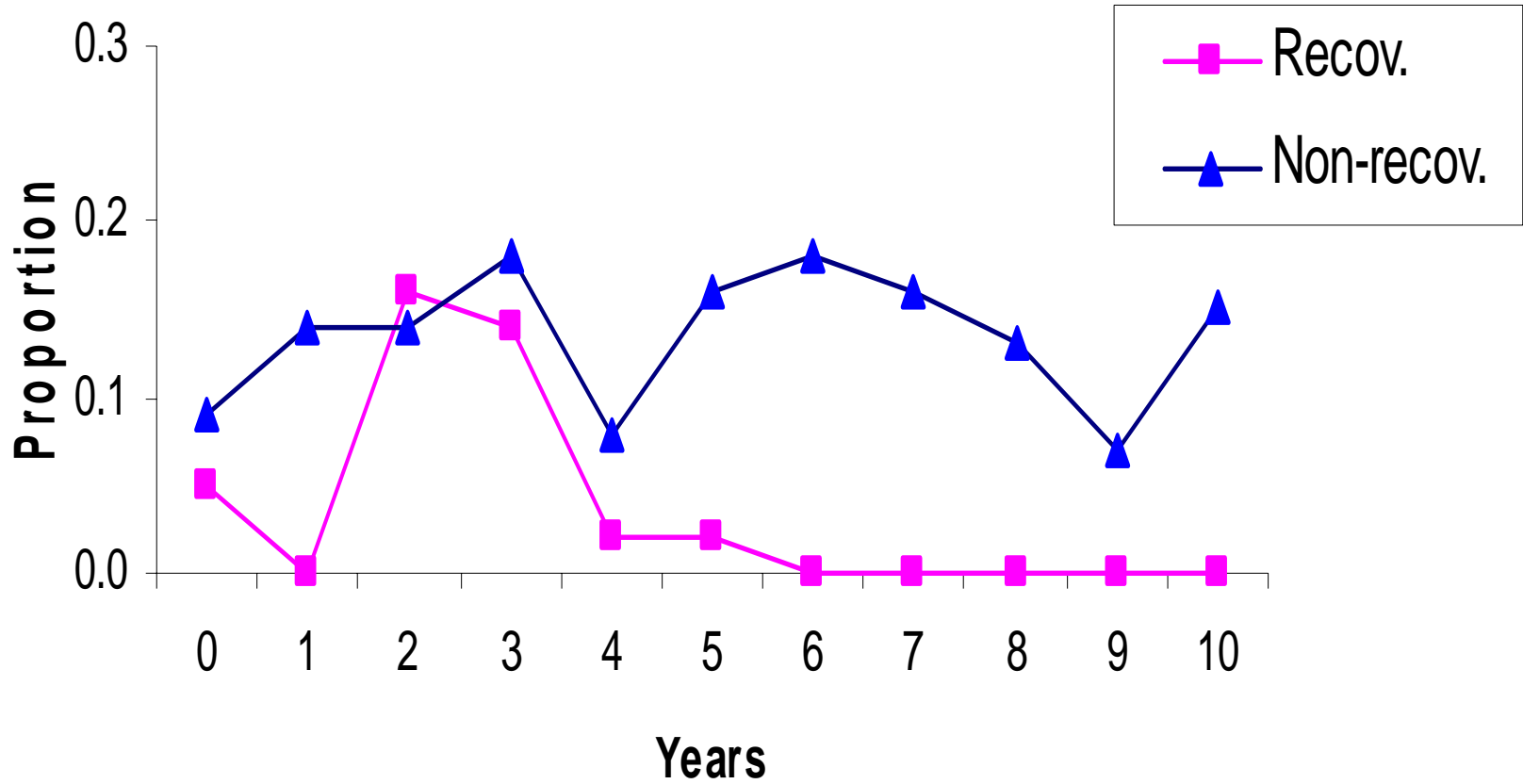
BPRS-Thought Disorder



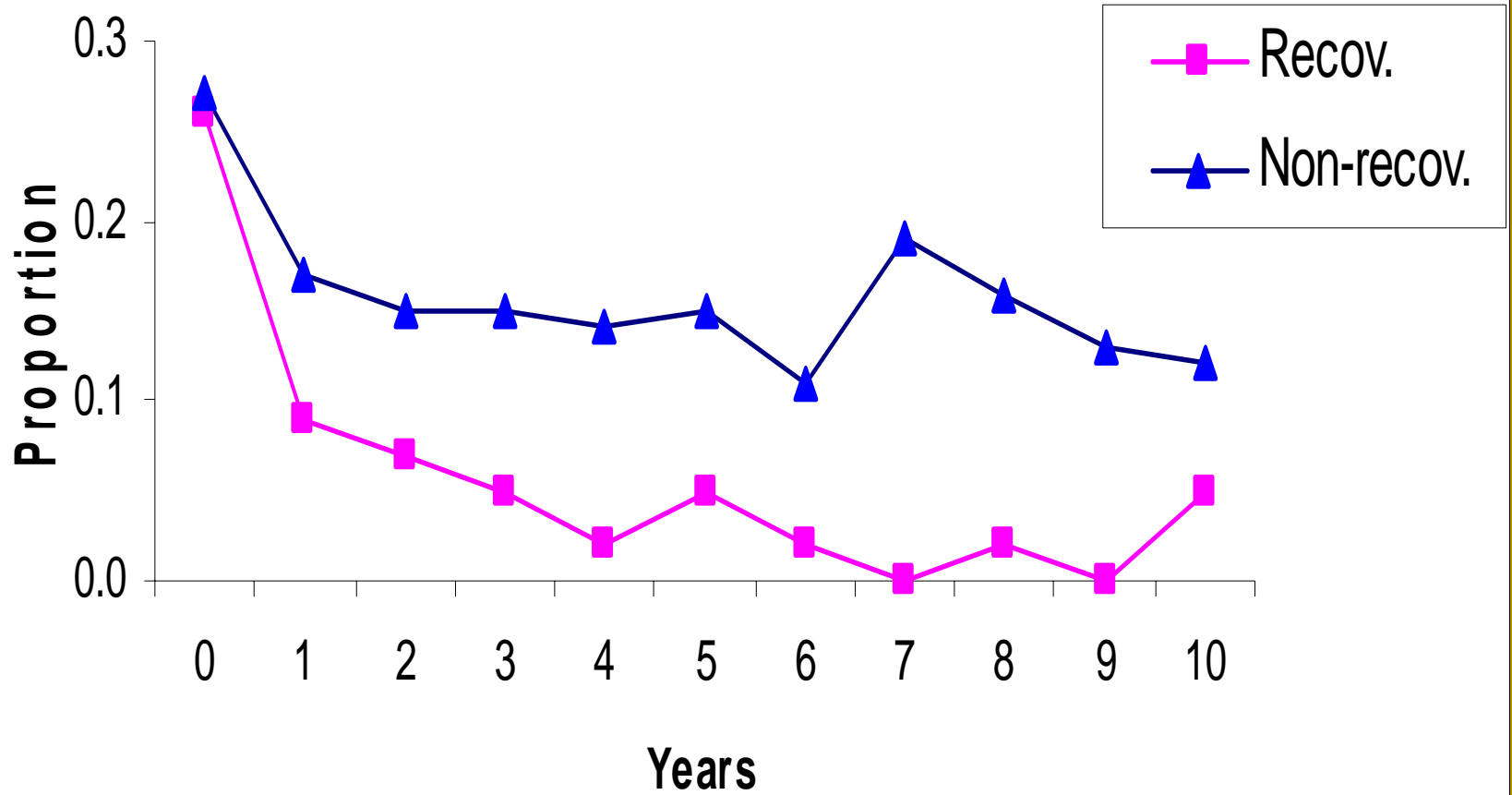
BPRS-Affect



Jail/Prison Past Year

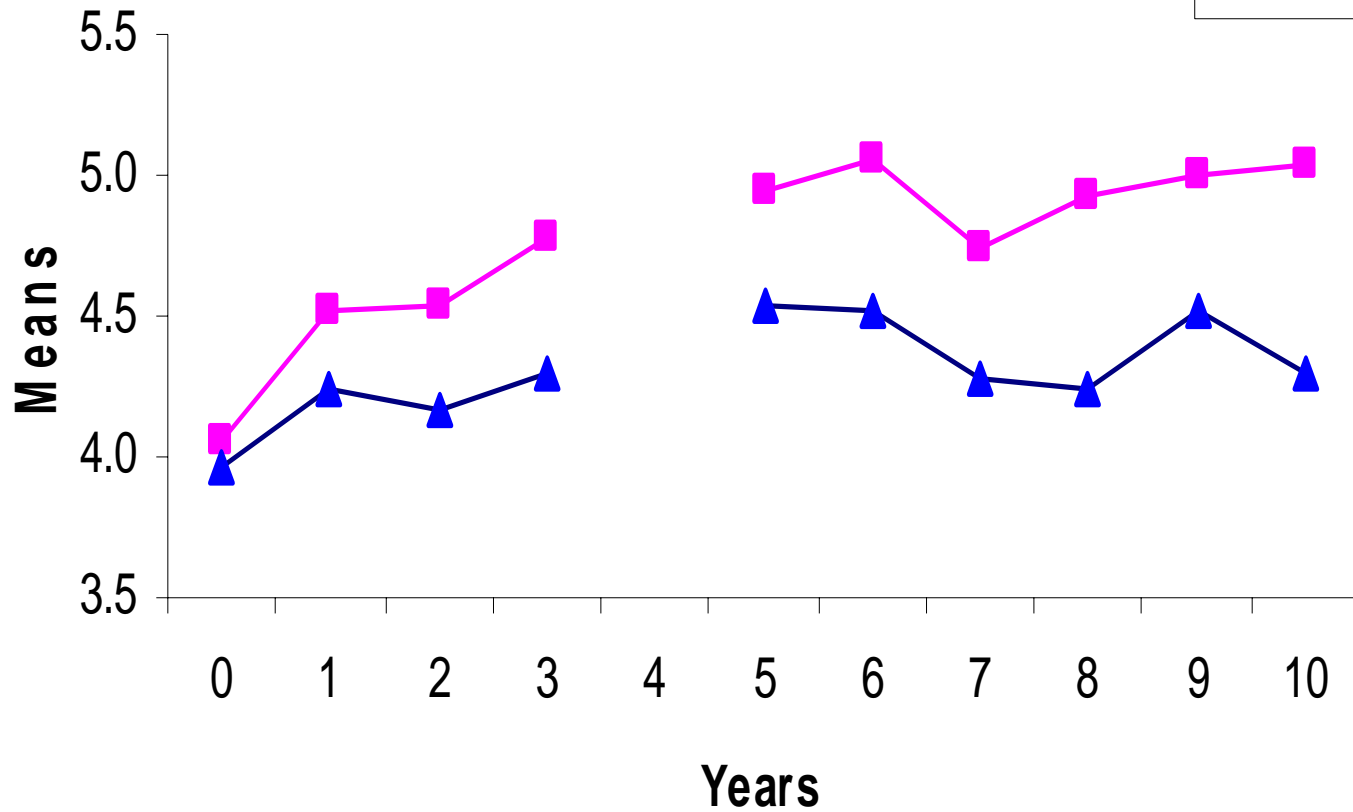


Homeless Past Year



QOLI-General Life Satisfaction

■ Recov.
▲ Non-recov.



Questions

- **Engaging homeless?**
- **Shared decision-making?**
- **Adding to housing first approach?**
- **Risk reduction?**
- **Neighborhoods?**
- **Stages of recovery?**