

# Is the Therapeutic Community Evidence Based?

What the Evidence Says

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## The Universal Call for Evidenced-based Treatments

- ❖ Despite forty years of field research some critics have concluded that the TC is not an evidenced based treatment.
- ❖ This conclusion has serious implications for the future acceptance and development of the Addiction TC as bona fide treatment approach.
- ❖ The purpose of this paper is to foster consensus among researchers, policy makers, providers and the public as to the research evidence for the effectiveness of the TC.

# The Plan

In accordance with this objective:

The main conclusions are summarized from 4 areas of research; field effectiveness outcome studies, meta analytic surveys, cost benefit analyses and indirect evidence.

# The Research Evidence For TC Effectiveness

## Some Caveats and Limitations

- The research summarized is drawn only from published reports reflecting 4 sources of evidence a) Field effectiveness studies b) Controlled and Comparative Studies c) Cost benefit and d) studies outside of TCs which provide indirect evidence of effectiveness.
- Findings and conclusions are presented rather than results (numbers).
- Did not exclude negative findings.
- Some minimal overlap exists in the studies across these categories.
- Critiques of the studies themselves are avoided.
- No assessment, much less control for differences in program quality.
- Client profiles may vary across programs studied, a factor which could contribute to outcome effects.
- Not an exhaustive review of the literature: These are prominent studies which are illustrative of the evidence. Mainly, North American programs; confined to studies with intent-to-treat samples, dropouts and completers included; prospective longitudinal designs, at least 1 year post treatment followup.

## Evidence:

### Field Effectiveness Studies

#### Some Meta Estimates

- *Samples of all admissions to community based TCs world wide who entered into multimodality and single program followup studies. (1969-2000).*
- *Over 10,000 individuals followed 1-12 years post treatment.*

# Evidence: Field Effectiveness Studies

## Some Illustrative Sources

### 1. MULTI PROGRAM

*DARP, TOPS, NTIES, DATOS*

### 2. SINGLE PROGRAM:

- *NORTH AMERICAN: PHOENIX HOUSE, GATEWAY, EAGLEVILLE, WALDEN HOUSE:*
- *WORLD WIDE: HOLLAND (EMILIEHOEVE), AUSTRALIA (ODYSSEY), GREECE (KETHEA).*

## Evidence: Field Effectiveness Studies

- *Studies conducted by different research teams, across different eras, and different cultures.*
- *Studies assessed multiple outcome variables with similar instruments, follow up and statistical methodology.*
- *Results are strikingly similar yielding “lawful” findings with respect to profiles, outcomes and retention.*

# Evidence: Field Effectiveness Studies

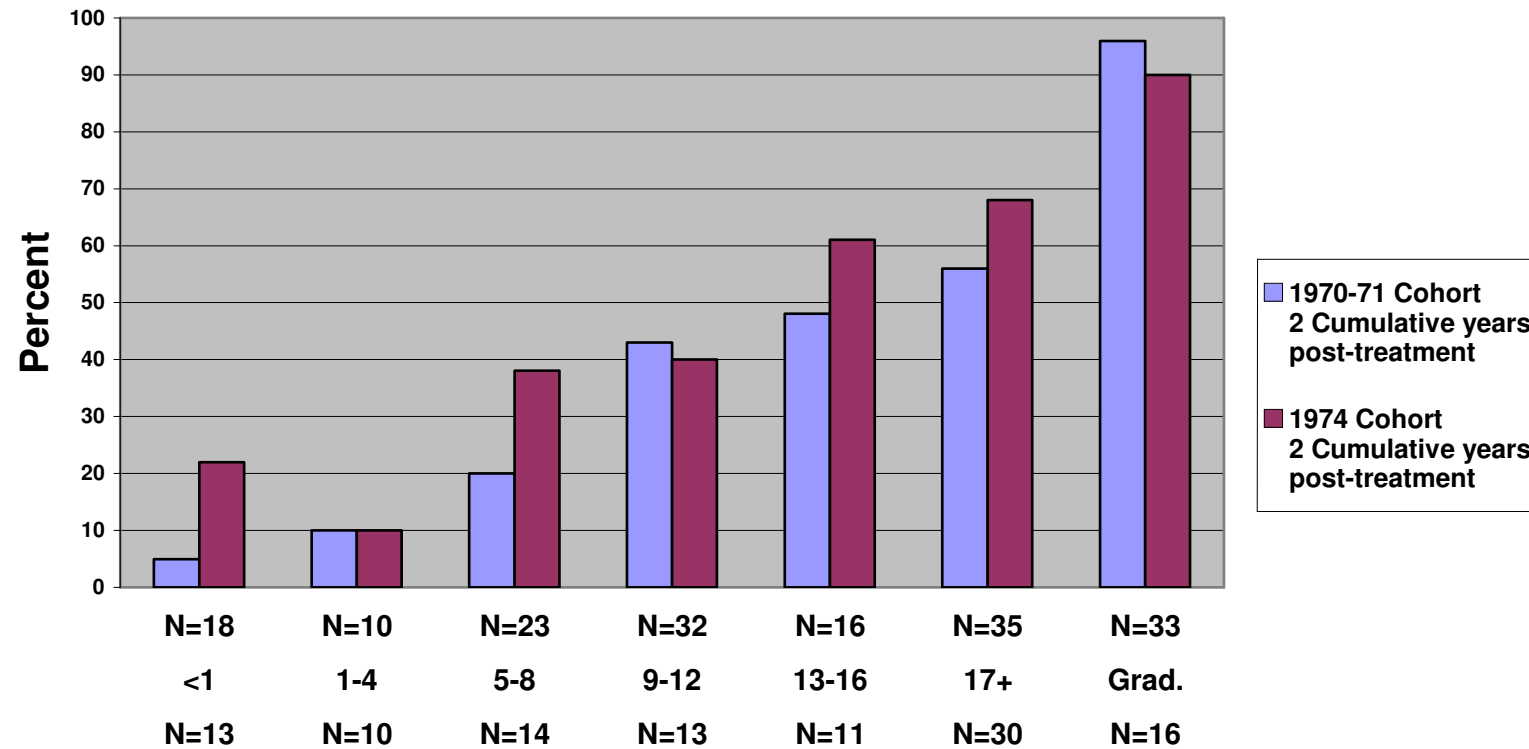
## Main Conclusions

- Who comes for treatment? *Profiles of Admissions are the most severe.*
- What are the success rates? *Individuals change during and following treatment.*
- Does Treatment “Dosage” relate to Outcomes? *Retention consistently predicts outcomes.*



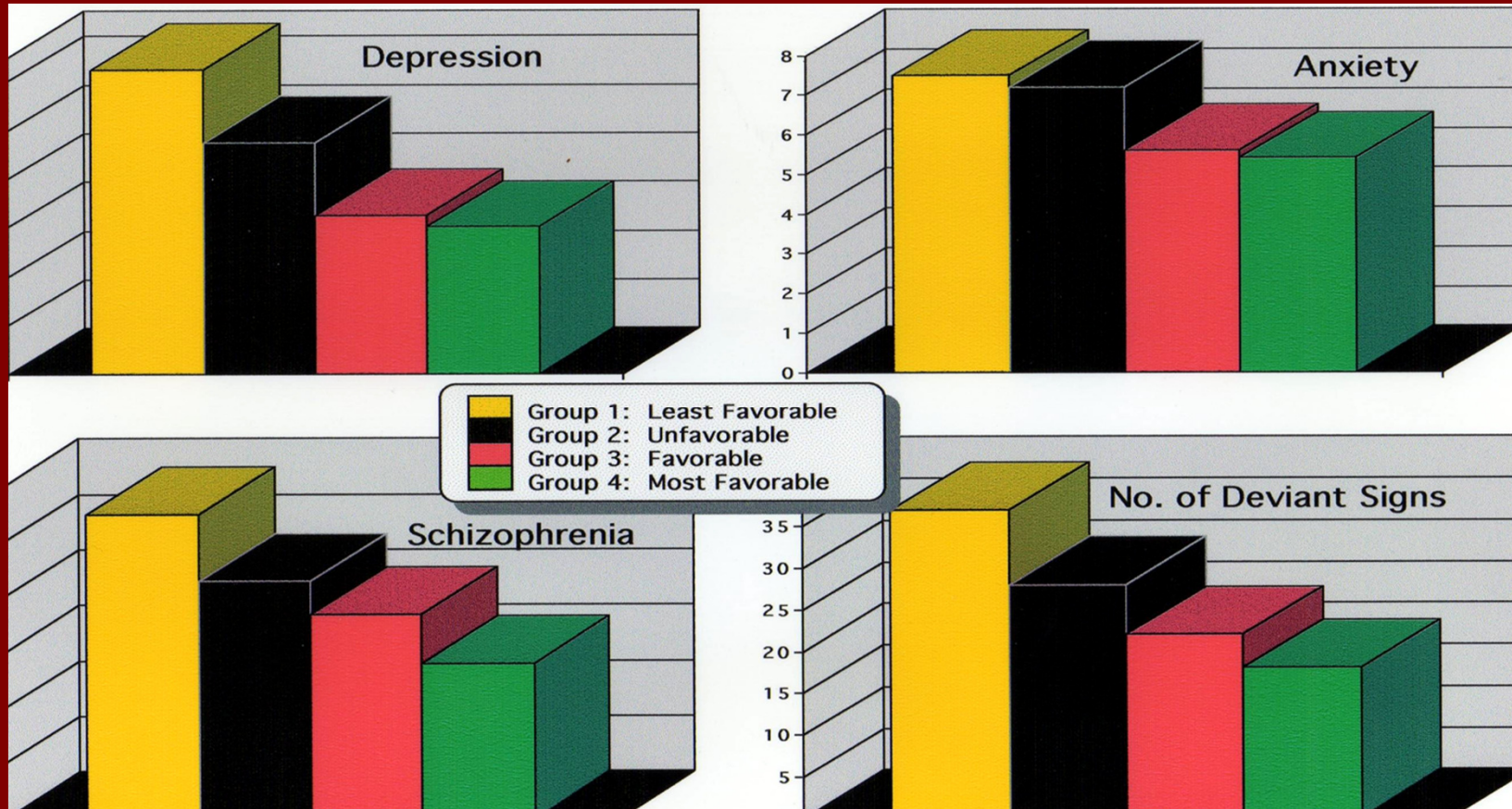
# Retention and Outcomes

Success rates in a therapeutic community by months in treatment



# BEHAVIORAL AND PSYCHOLOGICAL OUTCOMES: 5 YEARS AFTER TC TREATMENT

## MALE OPIATE ADDICTS: DROPOUTS (N=110)



## Evidence from Comparative/Control Studies

- A number of Comparative studies support TC effectiveness.
- Several of these are RCTs. Others are Minimum Bias Trials MBTs (eg. sequential assignment).
- Several studies are of Modified TCs for special populations in special settings ( e.g.,Co-occurring disorders; prison based TCs).

## Evidence from Comparative/□Control Studies (Some Illustrative Sources and Findings)

- ❖ Wexler, Melnick, Lowe & Peters (1999) found that: *significantly fewer prisoners who had gone through a TC followed by an aftercare program had recidivated, versus the comparison condition. (RCT)*
- ❖ Inciardi, Martin, Butzin, Hooper & Harrison (1997) found that: *a multi-stage therapeutic community approach was effective in reducing drug relapse and criminal recidivism. (RCT)*
- ❖ Sacks, Sacks, McKendrick, Banks & Stommel (2004) found that: *inmates with co-occurring mental illness and substance abuse were less likely to be reincarcerated when randomly assigned to a modified TC than when assigned to mental health treatment.(RCT)*

## Evidence from Comparative control Studies (con't)

### Some illustrative sources and Findings

- ❖ De Leon, Sacks,, Staines, & McKendrick,(2000). Modified therapeutic community for homeless mentally ill chemical abusers: *Treatment outcomes; (drug use, criminality, employment and psychological status) significantly better than comparison group receiving treatment as usual (TAU). Best outcomes were those who completed the 12 month TC plus entered supported Housing.(MBT)*
- ❖ McCusker,J., et.al.(1995) The effectiveness of alternate planned durations of residential drug abuse treatment. *American Journal of Public Health,85,1426-429. Completers in Long term TC showed best employment outcomes compared to completers of short term TC.(RCT)*
- ❖ Guydish, Sorensen, Chan, Werdeger, Bostrom & Acampora (1999):*Clients who were randomly assigned to residential or outpatient TC treatment improved at roughly the same rate, suggesting that it may be possible to extend TC principles to outpatient settings.(RCT)*

# Evidence: Statistical Meta Analyses

## Sources:

- ❖ Four published studies utilized meta analytic techniques to assess the effectiveness of TC treatment relative to a comparison condition.  
( Lees, Manning, Rawlings, 2002; Smith, Gates and Foxcroft, 2006; Lipton, Pearson, Cleland and Yee (2004). ( Mitchell, Wilson & MacKenzie (2006).
- ❖ These examined collections of studies that involved individual TC programs which met certain selection criteria, mainly inclusion of a comparison or control condition.
- ❖ Several of the studies utilized randomized control designs. Thus, these meta analytic surveys **exclude** all of the field effectiveness studies reviewed earlier since these fail to meet the selection criterion of a comparison condition.

# Evidence: Statistical Meta Analyses

## Summarizing the Meta Analytic Findings

- ❖ One analysis (Smith, Gates and Foxcroft, 2006) contained mixed findings. Depending upon the outcome variables it assessed TCs were either better, not significantly different, or in one case worse, than the comparison condition. *The authors assert that the 7 studies surveyed contained flaws rendering the conclusions as tentative.*
- ❖ In all of the remaining surveys *the authors conclude that the Addiction TCs yield significantly better outcomes than the comparison condition.*
- ❖ Lipton, Pearson, Cleland and Yee (2004). *The efficacy of standard, modified and correctional TC treatment is consistent and sizeable.*

# Cost Benefit Evidence

## Illustrative Sources. Findings and Conclusions

- ❖ **McGeary, French, Sacks, McKendrick, De Leon: Service Use and Cost by Mentally Ill Chemical Abusers: Differences by Retention in a Therapeutic Community**

*The modified TC program could be an effective mechanism to reduce the costs of service utilization as well as improve clinical outcomes.*

- ❖ **Griffith J. D., Hiller, M. L., Knight, K., & Simpson, D. D. (1999). A cost-effectiveness analysis of in-prison therapeutic community treatment and risk classification. The Prison Journal, 79(3), 352-368.**

*Findings showed that intensive services were cost-effective only when the entire treatment continuum was completed, and that the largest economic impact was evident among high-risk cases.*



## Cost Benefit Evidence

- ❖ McCollister, French, Prendergast, et al., (2003). Is in-prison treatment enough? A cost-effectiveness analysis of prison-based treatment and aftercare services for substance abusing offenders. *Law and Policy*, 25, 62-83. *Consistent with previous findings our results indicate that aftercare is a critical component of the treatment process for criminal offenders*
- ❖ McCollister, French, Prendergast, Hall & Sacks (2004): Long-Term Cost Effectiveness Of Addiction Treatment For Criminal Offenders' *The results of the CEA suggest that in-prison treatment coupled with aftercare reduces reincarceration and, over time, costs less than incarceration.*
- ❖ Economic studies of community based TCs, by RAND, Harwood, Hubbard, Flynn: *all report positive cost benefit findings.*

# Cost Benefit Example

- ❖ French, M.T., Sacks, S., De Leon, G., Staines, G., and McKendrick, K. Modified therapeutic community for mentally ill chemical abusers: Outcomes and costs. *Evaluation & the Health Professions* 22(1):60–85, 1999.

- Incremental benefit of Modified TC Treatment  
\$273,115

- Cost Per client of modified TC Treatment  
\$20,361 (annual)

- Total net benefit per client  $\$273,115 - \$20,361 =$   
\$ 252,114

- Benefit Cost Ratio  $\$ 252,114 / \$20,361 =$  **\$5 benefit for every \$1 of cost**

(13:1 data windsorized 5:1)

## Indirect Evidence

### Evidence Based Practices and Elements Within TC programming

- *Evidence based learning principles in TCs e.g. social role training, vicarious learning, behavior modification, (reinforcement and the Privileges/Sanction system).*
- *These are naturalistically mediated: Embedded in Community as method.*

## Indirect Evidence (con't)

Examples: (TC practices and elements supported by research outside the TC)

- *Peer mentoring; Peer Role modeling, tutoring;*
- *CBT, RPT, TC concepts: Topics in Peer/staff Seminars;*
- *“Therapeutic Alliance”: Community vs. Individual Therapist:*
- *Motivational enhancement: Group process focus on problem identification and desire to change: Role Models who illustrate motivation in attitude and behaviors.*
- *Goal Attainment: Program Stages and Phases*

# Summary: The “Weight” Of The Research Evidence

## Six Formal Criteria establishing causation

{Kaskutas, L.A.(2009); Alcoholics Anonymous Effectiveness; Faith Meets Science. Journal of Addictive Diseases, 28:145-157.

Mausner, JS. and Kramer S. Epidemiology: An introductory text.2nd edition. W.B. Saunders Company,}

? **1. Strength of Association:**Size of the Effect: Cannot include a no treatment group. *Compared to a comparative treatment condition yields a moderate effect size in Meta-analyses. Compared to baseline, however, (Pre-Post change) 40-60% for intent-to-treat field samples Improve at followup. (Over 90% of TC completers improve over baseline).*

✓ **2. Dose Response Relationship:** *Longer stay in the TC is related to Outcomes? A Systematic effect under 1 month to over 12 months*

✓ **3. Consistency of Association:** Across eras, populations, substances,cultures; Striking uniformity of findings.

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- ✓ **4. Temporally Correct Association**: Proximity of effect to TC treatment: Changes consistently associated with status Pre- during-post treatment.
- ? **5. Specificity**: Experimental Evidence: RCTs/MBTS; Relatively fewer studies, but support the conclusion of effectiveness.
- ✓ **6. Coherence with Existing Knowledge**: TCs and behavioral Science. Indirect evidence supports the conclusion of effectiveness.

**Conclusion:**  
**TC is an Evidenced Based Treatment**

- ❖ **Weight of the direct research evidence from *all sources* supports the conclusion that the TC is an effective and cost effective treatment for certain subgroups of substance abusers, particularly those with severe drug use, social and psychological problems.**
- ❖ **Evidenced based social psychological principles and practices are embedded within Community as method. (Indirect Evidence)**
- ❖ **Community as Method is the Primary Treatment.**
- ❖ **Other Evidenced informed strategies can be incorporated to enhance, not substitute for, community as method.**