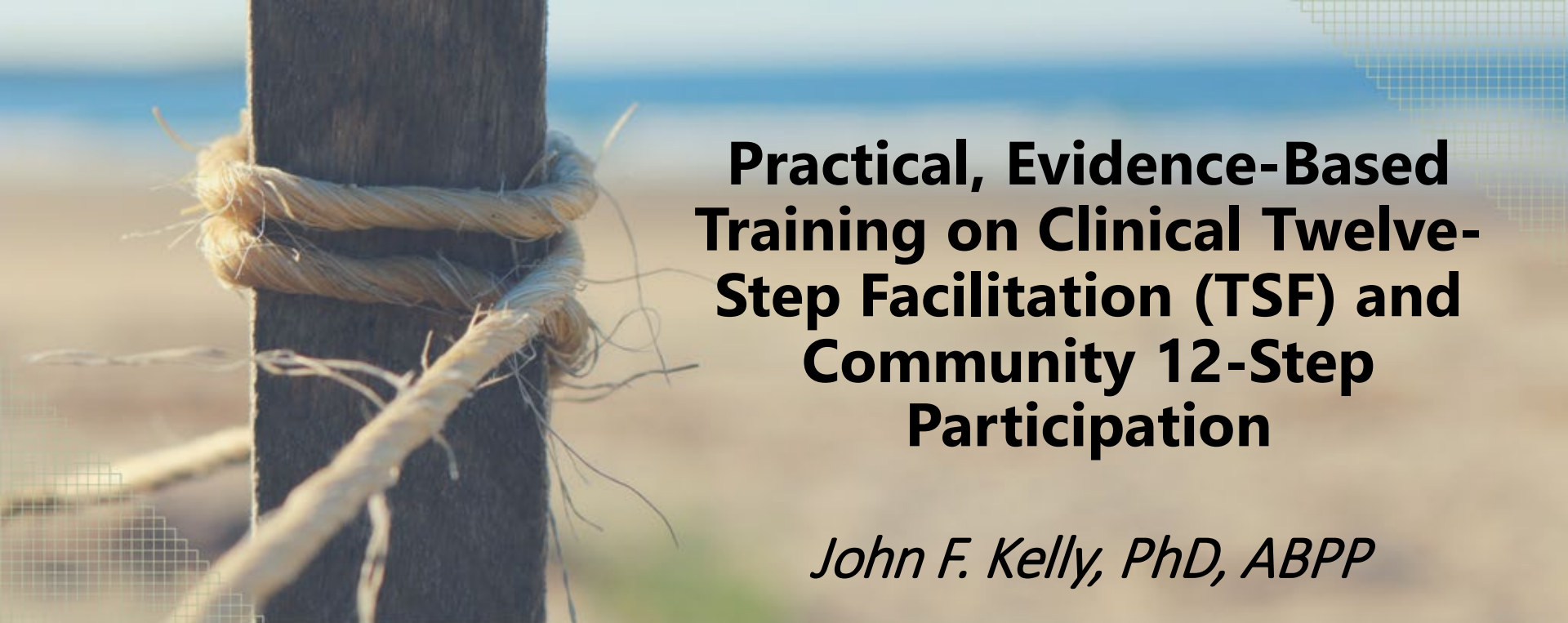




Practical, Evidence-Based Training on Clinical Twelve- Step Facilitation (TSF) and Community 12-Step Participation

John F. Kelly, PhD, ABPP

**Dilworth Center, Charlotte, NC
October 2025**



RECOVERY
RESEARCH
INSTITUTE



MASSACHUSETTS
GENERAL HOSPITAL



HARVARD MEDICAL SCHOOL
TEACHING HOSPITAL



A brief word on Terminology...

Twelve-Step Facilitation (TSF) – are typically outpatient delivered interventions the central goal of which is to link and engage patients with community-based 12-step groups (e.g., AA)

Twelve-Step Treatment – typically refers to residential treatment which is often referred to as “Minnesota Model” type care...

The Minnesota Model is an inpatient/residential model that is a combination of the medical and social recovery models (multidisciplinary), but is essentially as “self-help model” (McElrath, 1997)

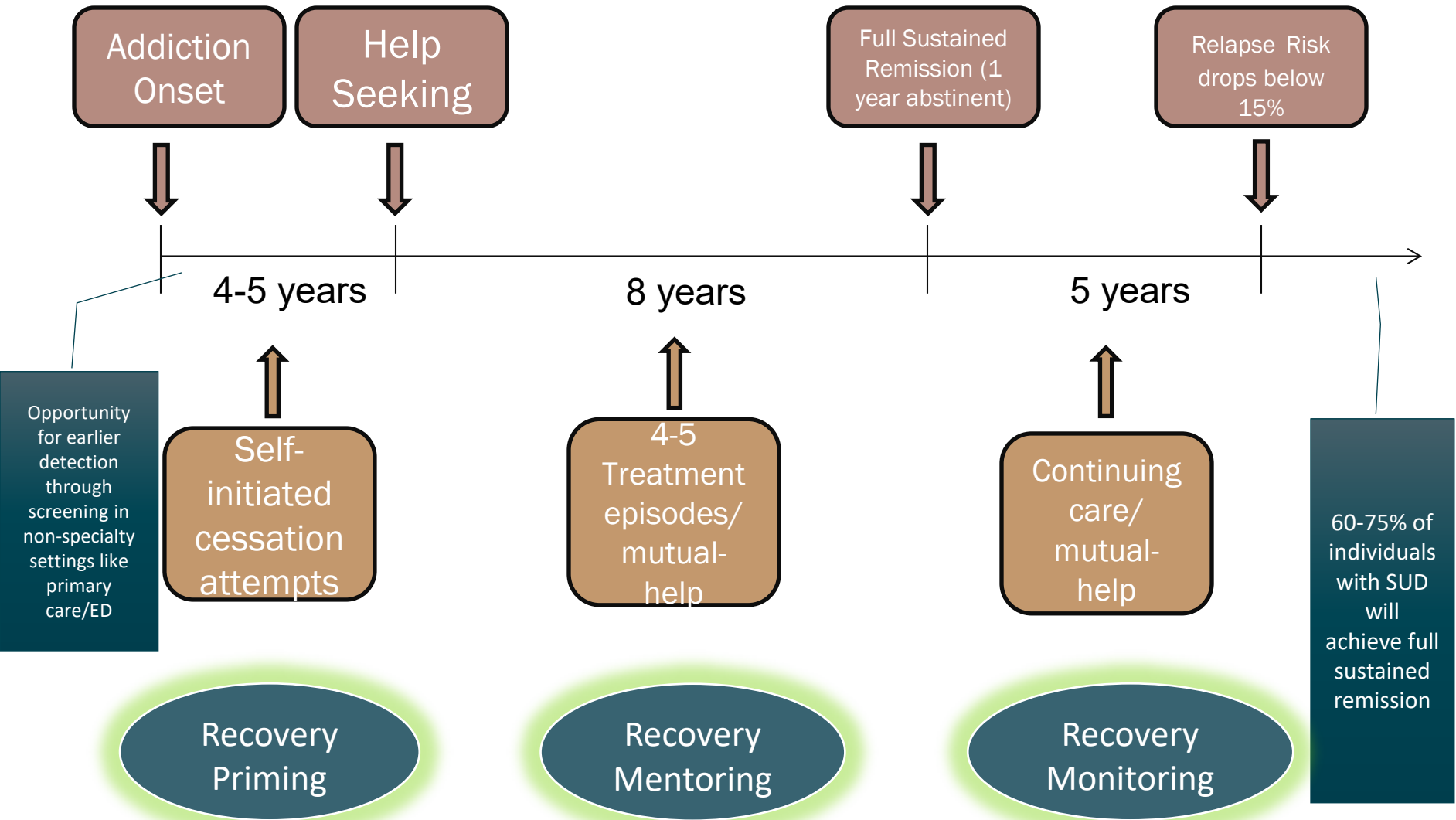
Twelve-Step Groups/Mutual-help organizations are entities like Alcoholics Anonymous (AA)/Narcotics Anonymous (NA), Cocaine Anonymous (CA) etc that are community based freely available recovery support resources



Clinical and Public Health Significance of TSF/AA Research

- Alcohol – global problem; especially in middle-high income countries
 - 3.3M deaths annually (10x > than all illicit drugs combined)
 - The top risk factor for premature mortality among men of working age worldwide
 - Major contributor to DALYs (particularly developed world)
 - AA is a **freely available, ubiquitous, indigenous, flexible, recovery support** service operating in 120,000 groups each week, with more than 2M members worldwide - a de facto part of system of care for AUD/other SUD
 - Treatments that link patients to these free ubiquitous indigenous recovery support resources tend to produce cost-effective models of care...

The clinical course of addiction and achievement of stable recovery can take a long time ...



Advantages of
recovery support
services in
disease/recovery
management....

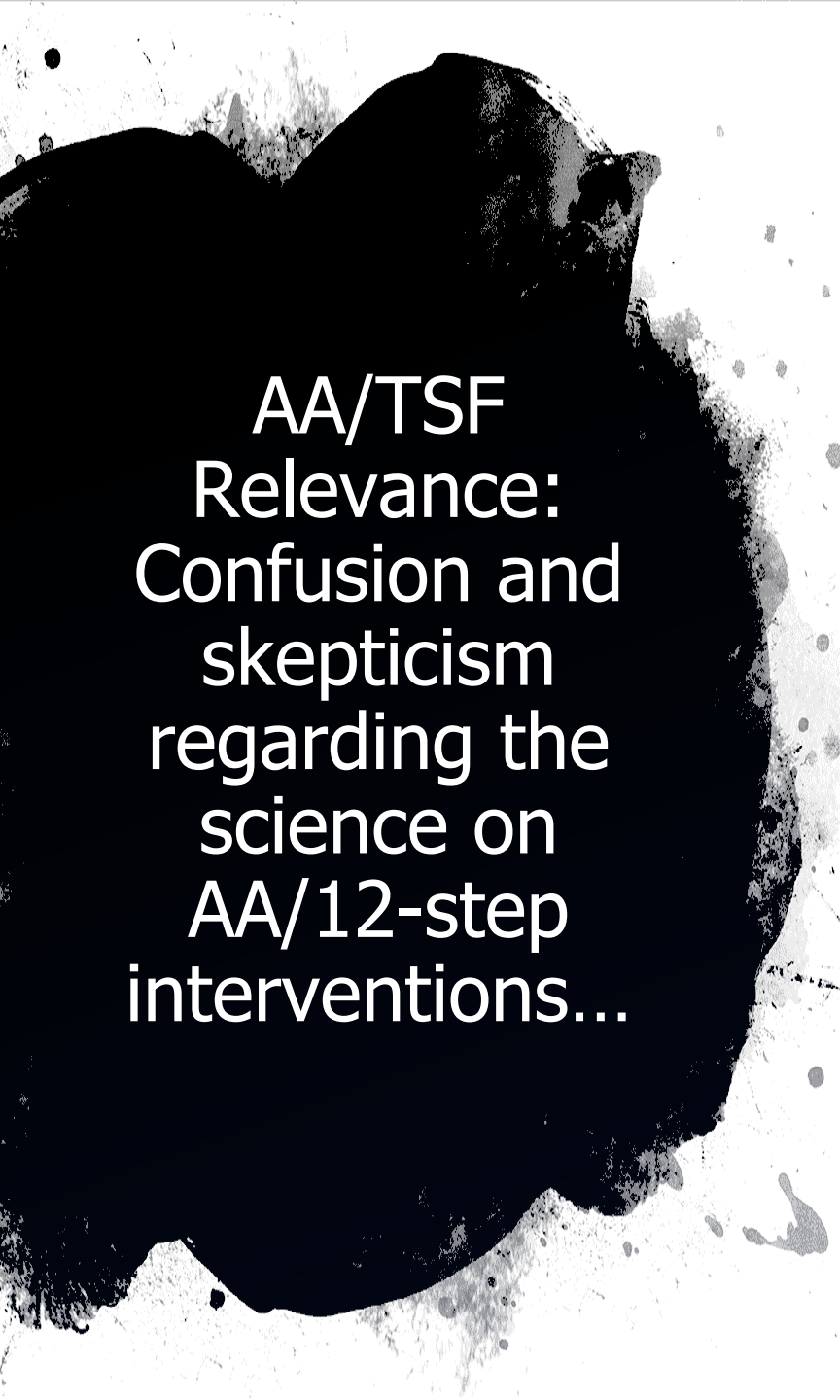
Available

Accessible

Flexible

Enduring

Low/no cost



AA/TSF Relevance: Confusion and skepticism regarding the science on AA/12-step interventions...

- Public and public health confusion about efficacy of AA/TSF
- Negative media portrayals of AA's effectiveness
- Not new: "When my head doctor, Silkworth, began to tell me of the idea of helping drunks by spirituality, I thought it was crackpot stuff, but I've changed my mind. One day this bunch of ex-dunks of yours is going to fill Madison Square Garden"

-AA, 1947

Broadening the Base of Treatment for Alcohol Problems

INSTITUTE OF MEDICINE



Research on Alcoholics Anonymous

OPPORTUNITIES AND ALTERNATIVES

Edited by
Barbara S. McCrady and
William R. Miller

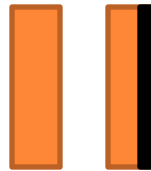
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TSF DELIVERY MODES

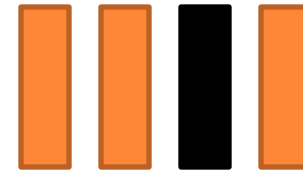
Stand alone
Independent therapy



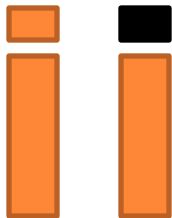
Integrated into an existing
therapy



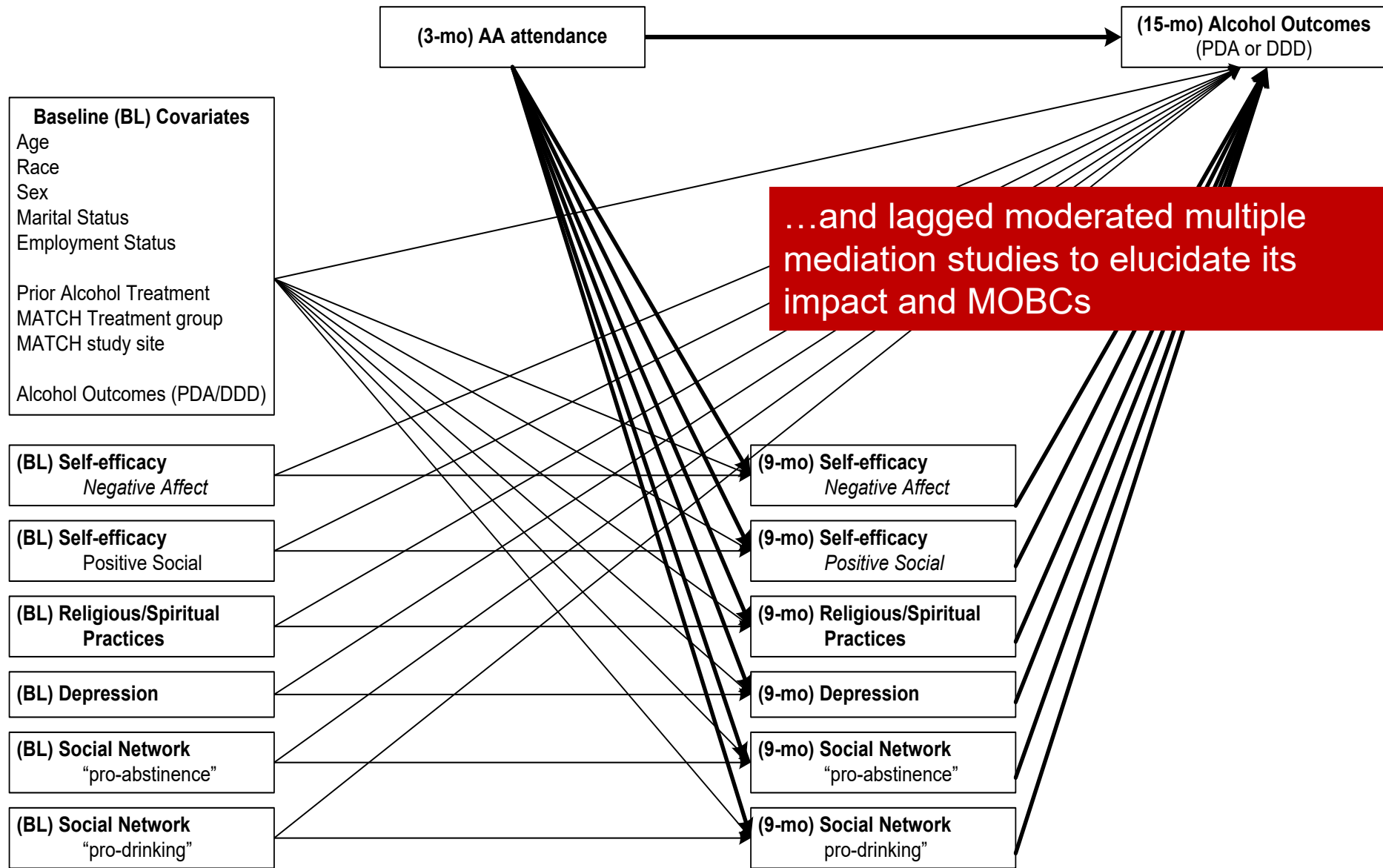
Component of a treatment
package (e.g., an
additional group)



As Modular appendage
linkage component



In past 30 years, AA research has gone from contemporaneous correlational research to rigorous RCTs, quasi-experiments, cost utility, and MOBC research ...



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TSF Delivery Modes

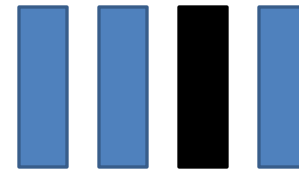
Stand alone
Independent therapy



Integrated into an existing
therapy



Component of a treatment
package (e.g., an
additional group)



As Modular add-on
linkage component



Project MATCH

» Multisite randomized clinical trial of alcohol dependent individuals

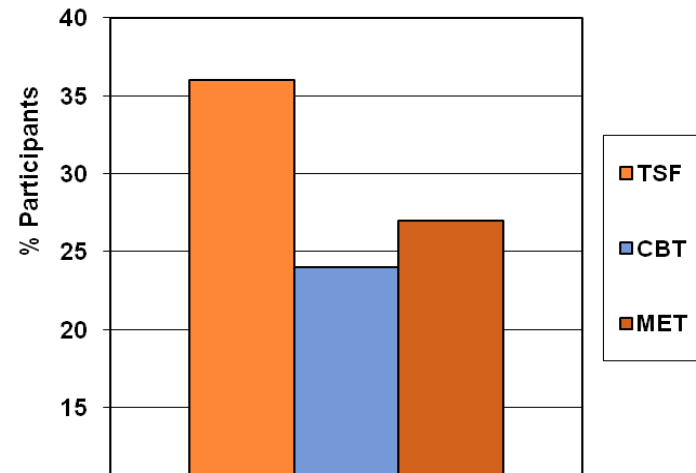
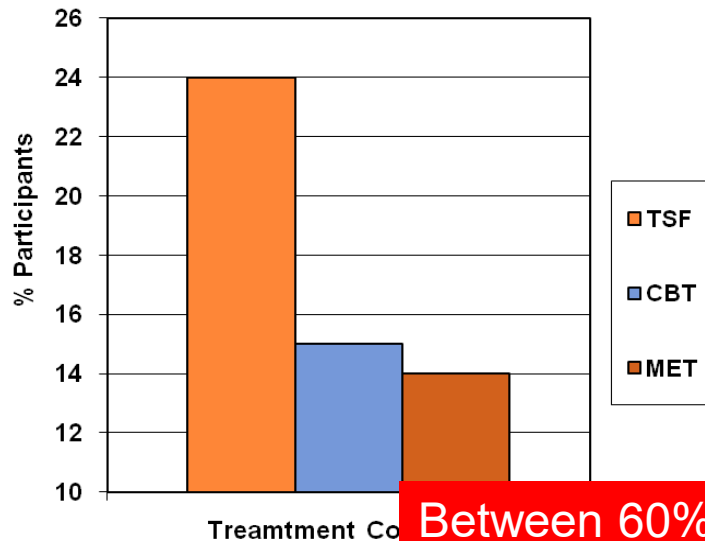
- 2 arms
 - Aftercare (n=774)- recently finished inpatient treatment
 - Outpatient (n=952)
- 3 conditions, all with ultimate goal of abstinence
 - **Twelve Step Facilitation**
 - Assisted in engagement with AA; abstinence oriented/disease model
 - **Cognitive Behavioral Therapy**
 - Therapist assisted in building skill set to maintain abstinence
 - **Motivational Enhancement Therapy**
 - Therapist aimed to build motivation to accept abstinence

Project MATCH- Results

- All treatments did **equally well on main outcomes** (PDA; DDD)
- Across txs, pts attending AA better outcomes (Tonigan et al, 2002)
- Substantially higher proportion of patients **continuously abstinent/in remission** at 1- and 3-yr follow-up

These are conservative estimates of TSF efficacy because many patients assigned to CBT and MET attended AA frequently post-treatment

Continuous Abstinence Rates- 15 Months



Between 60%-71% more patients in remission and completely abstinent in TSF compared to CBT and MET respectively

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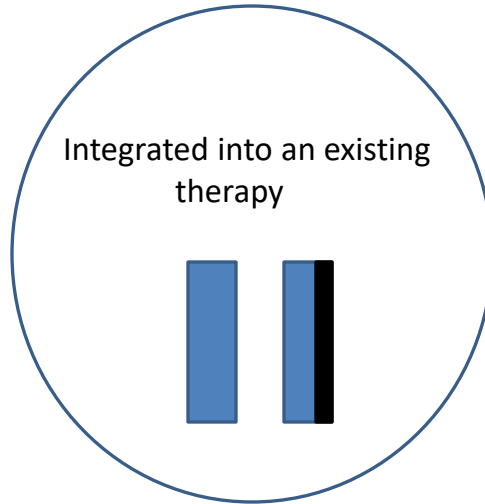
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TSF Delivery Modes

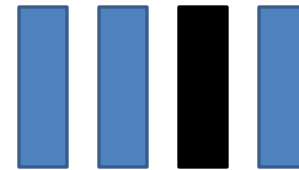
Stand alone
Independent therapy



Integrated into an existing
therapy



Component of a treatment
package (e.g., an
additional group)



As Modular add-on
linkage component



Strategies for Facilitating Outpatient Attendance of AA (Wallitzer et al, 2008)

- » Approaches to assist in involvement in AA
- » 169 adult alcoholic outpatients randomly assigned to one of three treatment conditions
- » All clients received treatment that included:
 - > 12 sessions
 - > Focus on problem-solving, drink refusal, relaxation
 - > Recommendation to attend AA meetings

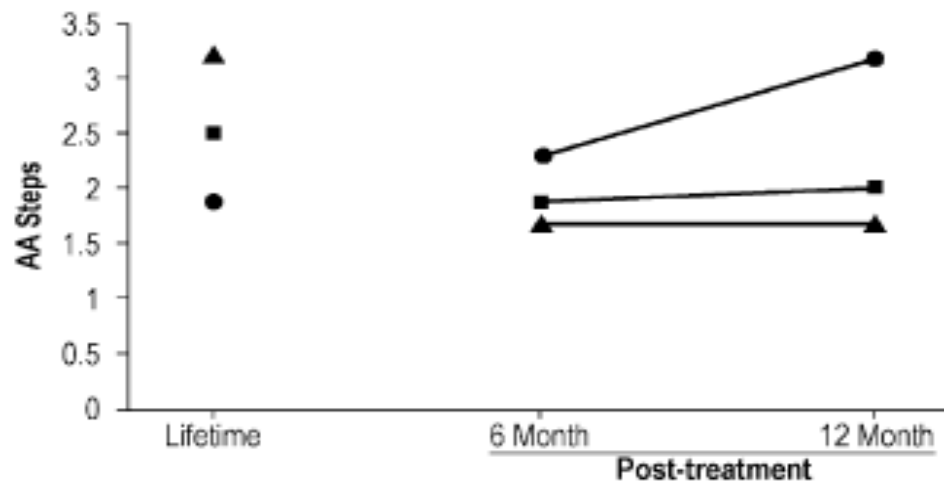
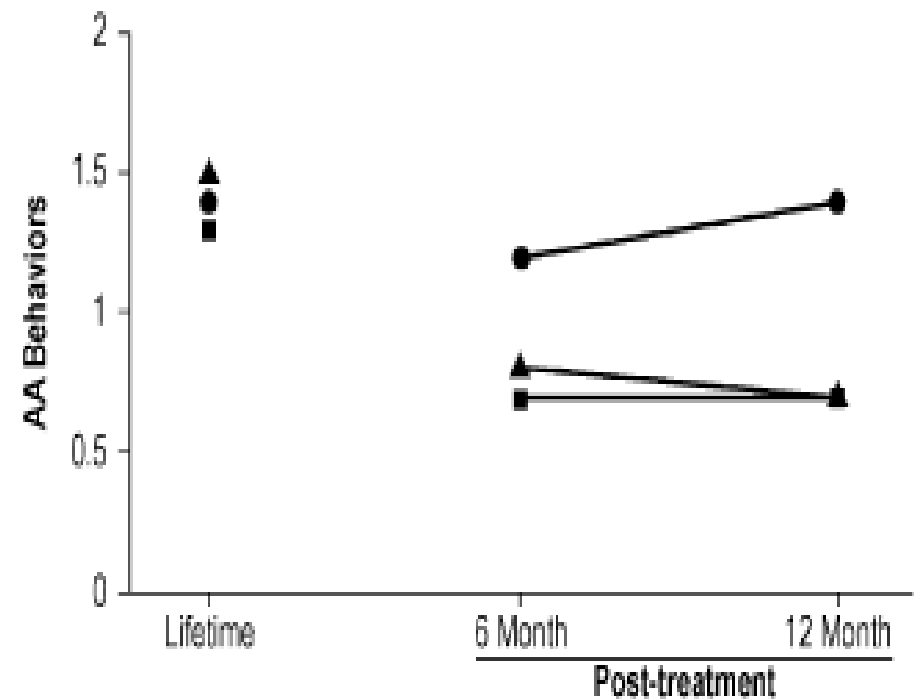
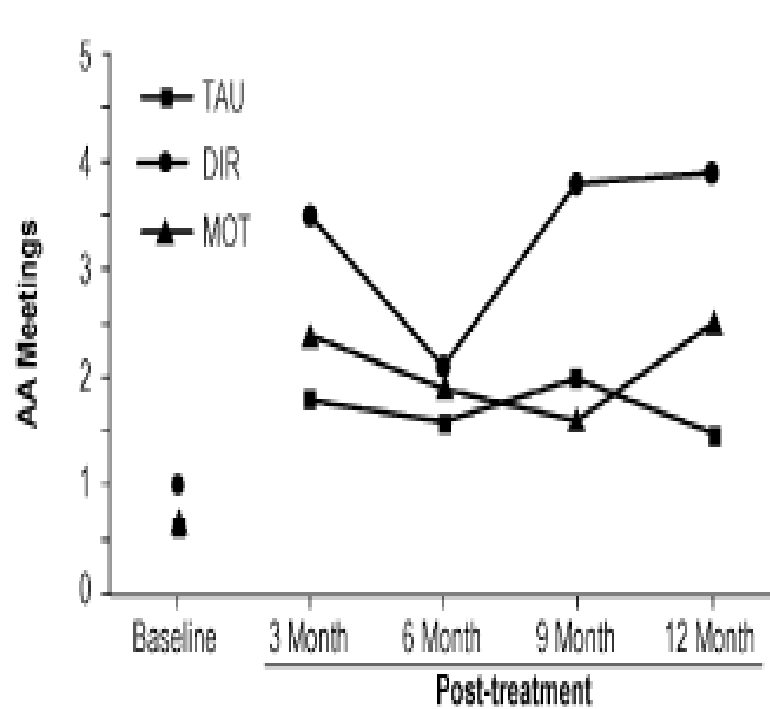
Strategies for Facilitating Outpatient Attendance of AA

- » Treatment varied between 3 conditions in terms of how the therapist discussed AA and how much information about AA was shared
 - > **Condition 1: Directive approach**
 - Therapist directed
 - Client signed contract describing goals to attend AA meetings
 - Therapist encouraged client to keep a journal about meetings
 - Reading material about AA provided to client
 - Therapist informs client about skills to use during meetings and about using a sponsor
 - 38% total material covered in sessions was about AA
 - > **Condition 2: motivational enhancement approach (more client centered)**
 - Therapist obtains clients feelings and attitudes about AA
 - Therapist describes positive aspects of AA, but states that it is up to the client how much they will be involved
 - Therapist intends to assist the client in making a decision in favor of AA
 - 20% total material covered in sessions about AA
 - > **Condition 3: CBT treatment as usual, no special emphasis on AA**
 - Throughout treatment, therapist briefly inquires about AA and encourages client to attend AA
 - 8% total material covered in sessions about AA

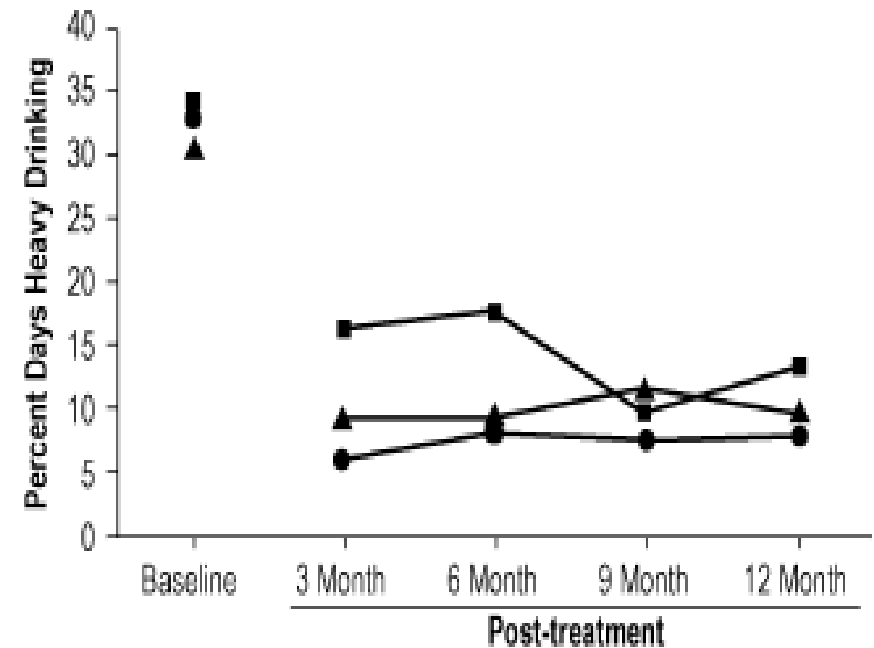
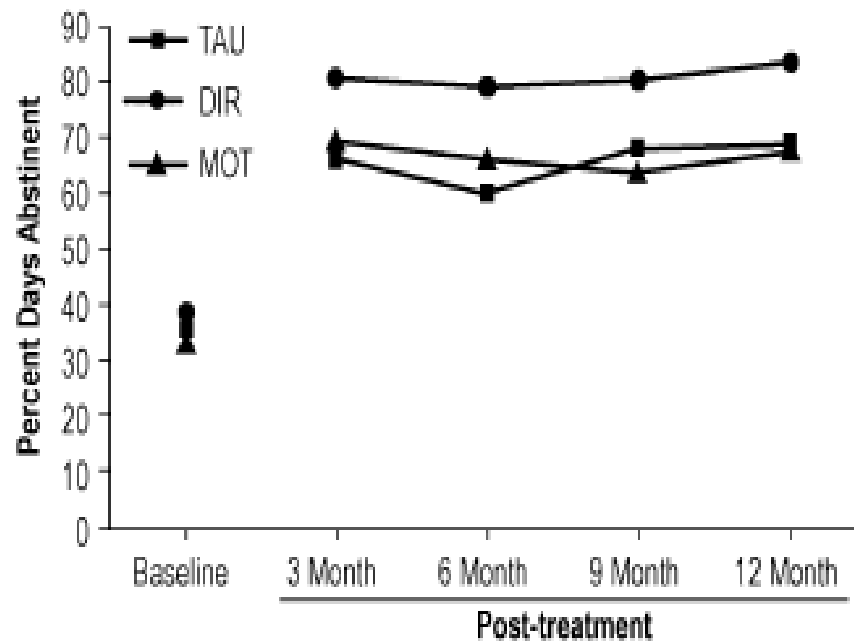
Strategies for Facilitating Outpatient Attendance of AA-Findings

- » Participants exposed to the Directive TSF approach reported significantly more:
 - > attendance of AA meetings
 - > more active involvement in AA
 - > higher percent days abstinent in comparison to the motivational and treatment as usual groups
- » Evidence suggests AA involvement partially mediated the effects of the directive approach

Strategies for Facilitating AA Attendance during Outpatient Treatment



Strategies for Facilitating AA Attendance during Outpatient Treatment



Changing Network Support for Drinking (Litt et al., 2009)

- » Network Support Project -to determine if tx can change social networks to be supportive of sobriety
- » Alcohol dependent individuals (N=210) randomly assigned to 1 of 3 txs:
 - > Network Support (NS)
 - + Meant to help patients change social network to include people in support of abstinence; based on TSF treatment created for Project MATCH; 6 core sessions+ 6 elective sessions
 - > Network Support +Contingency Management (NS+CM)
 - + Same network support as described above, plus drawings from a “fishbowl” if soc. network enhancing tasks completed (eg. AA meeting, having coffee with a sober friend)
 - > Case Management (CaseM, control condition)
 - + Based on intervention used in Marijuana Treatment Project; therapist and participant worked together to identify barriers to abstinence and develop goals and identify resources to be used to aid in achieving abstinence

Changing Network Support for Drinking Findings

- » Results indicated NS did best; NS+CM did worse than NS alone, but better than CaseM
- » Participants in NS condition:
 - > 20% more days abstinent than those in other conditions at 2 year follow-up
 - + NS: 80%, NS+CM: 60%, CaseM: 60%
 - > greater increases in social network support for abstinence, AA attendance and AA involvement than those in other conditions at 15 month follow-up

Changing Network Support for Drinking- Findings

NETWORK SUPPORT PROJECT 2-YEAR FOLLOW-UP

235

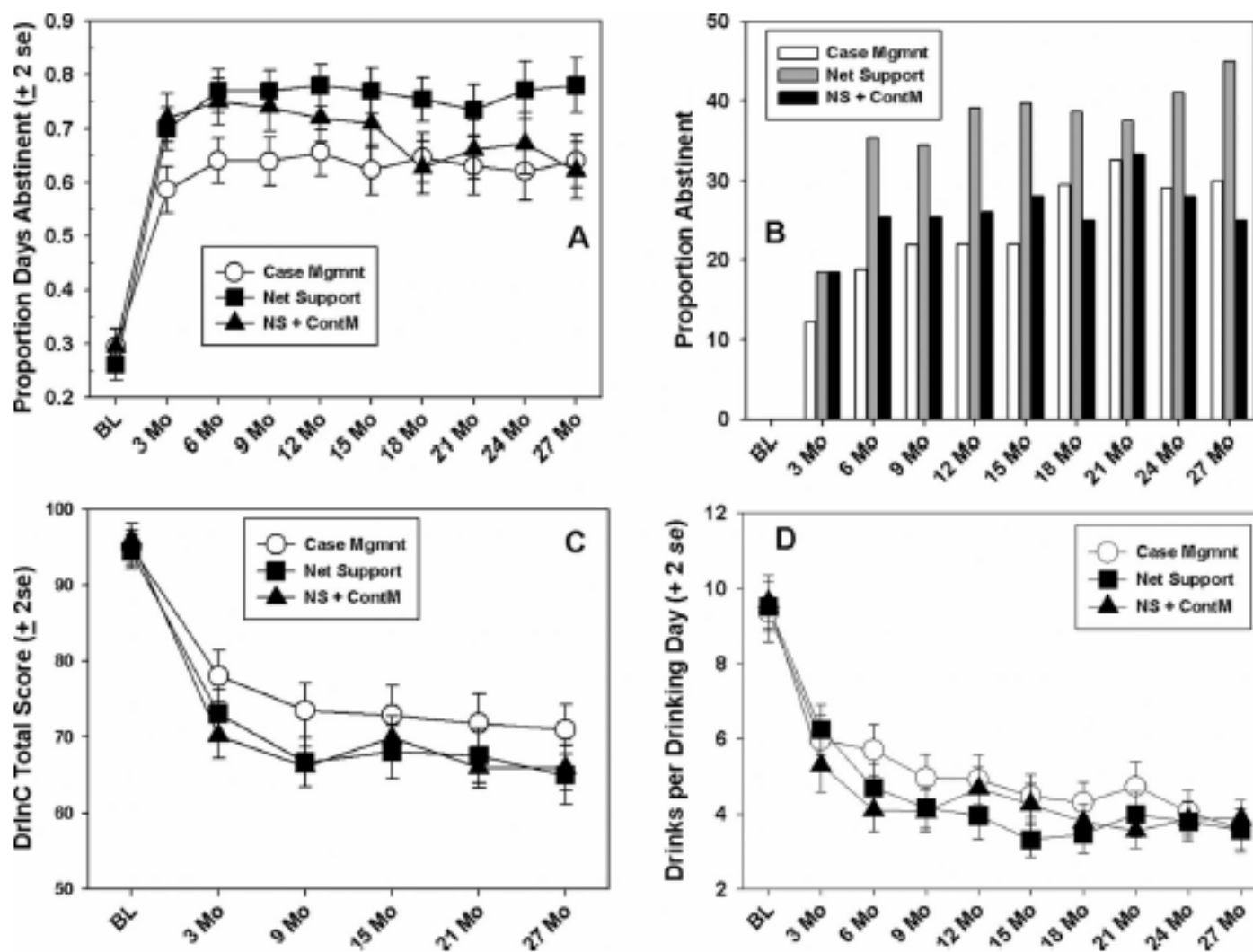


Figure 2. Effects of treatment on drinking outcomes and on drinking consequences: proportion of days abstinent (Panel A), proportion of group participants abstinent (Panel B), Drinker Inventory of Consequences (DrInC) total score (Panel C), and drinks per drinking day (Panel D). BL = baseline; Case Mgmt = case management; NS + ContM = network support + contingency management; se = standard error (of measurement).

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TSF Delivery Modes

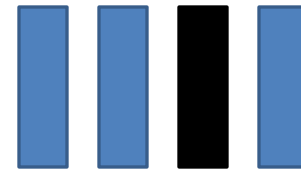
Stand alone
Independent therapy



Integrated into an existing
therapy



Component of a treatment
package (e.g., an
additional group)



As Modular add-on
linkage component



MAAEZ Intervention (Kaskutas et al, 2009)

- » Making AA Easier- manual guided - designed to help clients prepare for AA
- » Goal: to prepare for AA (encourage participation in AA, minimize resistance to AA, and educate about AA)
 - > MAAEZ intervention is conducted in a group format to help prepare for group dynamic of AA
- » Facilitator goal: to inform clients about AA and facilitate group interaction
 - > Facilitator recommended to be an active member of AA, NA, or CA
- » Discussion format: MAAEZ allows and encourages feedback (referred to as “cross-talk” in MAAEZ), unlike AA which does not allow feedback

MAAEZ Intervention- Design

- » Structure of Program:
- » Six, weekly, 90-minute sessions
 - > Homework assigned at the end of each session
 - List of texts for reading assignments provided in manual
 - List of articles that discuss effectiveness of AA provided in manual
 - Each homework assignment includes going to at least one AA meeting in the 7 days following that session, making connections with other people in AA, and completing reading assignments

MAAEZ Intervention- Results

» Abstinence:

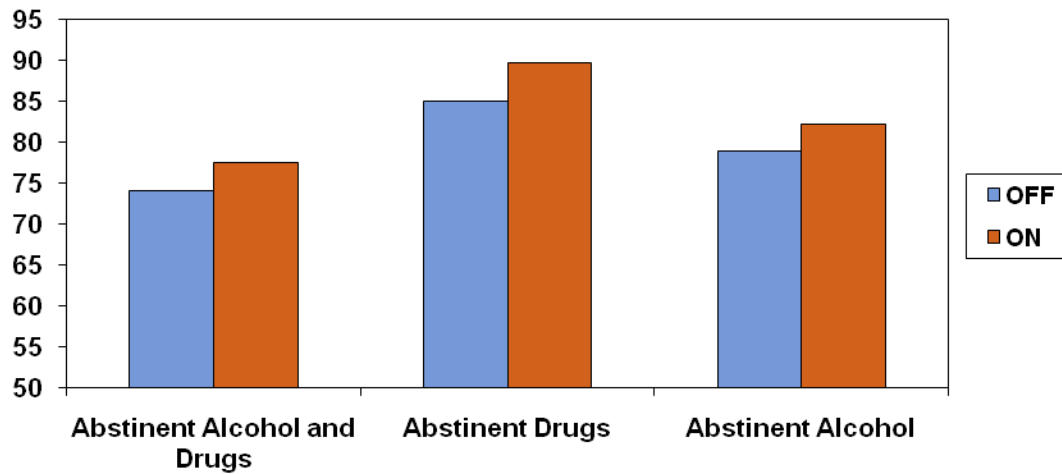
- > TSF participants significantly more past 30 day alcohol abstinence, drug abstinence, and both alcohol and drug abstinence at 12 month time period
- > Increased odds of continuous abstinence in general and for each additional MAAEZ session attended

» Prior AA Exposure:

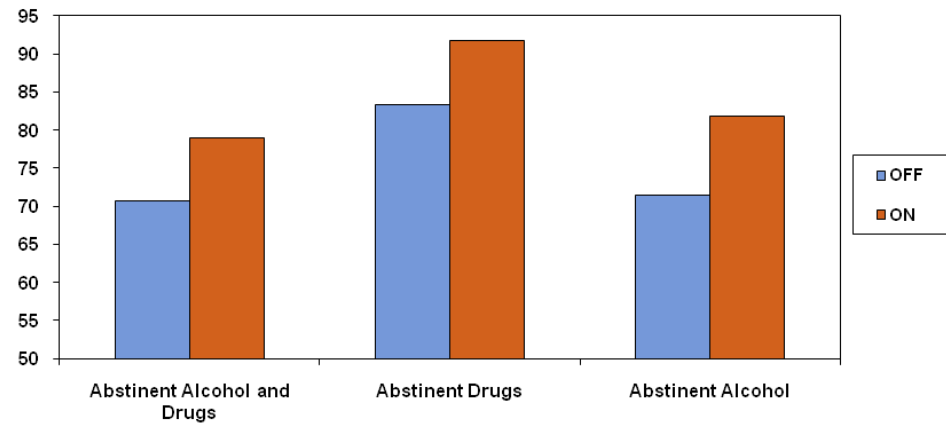
- > MAAEZ found to be more effective in participants with AA previous experience (differs from outcomes found in Project MATCH), possibly because MAAEZ gives clients new perspective of AA

MAAEZ Intervention- Results

6 Months



12 Months



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TSF Delivery Modes

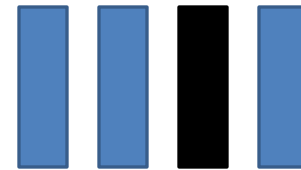
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Precursor to current TSF research (Sisson and Mallams, 1981)

- » 20 patients randomly selected from outpatient tx program for alcohol use disorder
- » Randomly assigned to:
 - > 1: Standard referral
 - given information about AA including time, date, location of meetings, encouraged to attend meetings
 - > 2: Systematic encouragement and community access
 - In addition to standard procedure, clients had phone conversation with AA member during a session - client and AA member met before first meeting, member provided client with ride; client also received a reminder phone call from the member

Precursor to current 12-Step facilitation research

» Results:

- > 0% clients in standard referral attended a meeting during the target week
- > 100% clients in systematic encouragement and community access group attended meeting during target week
- > Mean AA meeting attendance rate for 4 week period:
 - + 0 for standard referral group vs 2.3 for systematic encouragement group

Effectiveness of Clinician Referrals to AA (Timko et al 2006; 2007)

- Evaluation of procedures to effectively refer patients to 12-step meetings
- Individuals with SUDs entering a new outpatient treatment program randomly assigned to a treatment condition and provided self reports on meeting attendance and substance use
 - **Condition 1: standard referral**
 - Patients given locations and schedules of meetings and encouraged to attend
 - **Condition 2: intensive referral**
 - Patients give locations and schedules of meetings, with the meetings preferred by previous clients indicated
 - Therapist reviews a handout about program including introduction to 12-step philosophy and common concerns
 - **Therapist arranged a meeting with a current member and client had a phone conversation with this member during a session**
 - Therapist and client agreed on which meetings client will attend and client kept a journal of meetings attended and experiences

Effectiveness of Clinician Referrals to AA-Results

- » At 6m, patients in intensive referral who had relatively less previous 12-Step experience had:
 - > higher meeting attendance
 - > better substance use outcomes

- » At both the 6 and 12 month follow up, patients in intensive referral:
 - > more likely to attend at least one meeting per week
 - > had higher rates of attendance and had higher rates of abstinence

TSF EXPERIMENTAL STUDIES (RCTs) ALL OUTPATIENT. WHAT ABOUT RESIDENTIAL STUDIES?

The Minnesota Model is an inpatient/residential model that is a combination of the medical and social recovery models but is essentially as “self-help model (McElrath, 1997)

Multidisciplinary and multi-modal

No RCTs on residential TSF/MN model treatments but some high quality quasi-experimental studies...

Regular article

Dropout from 12-step self-help groups: Prevalence, predictors, and counteracting treatment influences

John F. Kelly, Ph.D.^{*}, Rudolf Moos, Ph.D.

*Center for Healthcare Evaluation, Veterans Affairs Palo Alto Healthcare System (MPD-152) and Stanford University School of Medicine,
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Received 6 November 2002; received in revised form 19 February 2003; accepted 19 February 2003

Abstract

Attendance at 12-step self-help groups is frequently recommended as an adjunct to professional substance use disorder (SUD) treatment, yet patient dropout from these groups is common. This study assessed the prevalence, predictors, and treatment-related factors affecting dropout in the first year following treatment for 2,778 male patients. Of these, 91% (2,518) were identified as having attended 12-step groups either in the 90 days prior to, or during, treatment. At 1-year followup 40% had dropped out. A number of baseline factors predicted dropout. Importantly, patients who initiated 12-step behaviors during treatment were less likely to drop out. Further findings suggest patients at highest risk for dropout may be at lower risk if treated in a more supportive environment. Clinicians may decrease the likelihood of dropout directly, by screening for risk factors and focusing facilitation efforts accordingly, and indirectly, by increasing the supportiveness of the treatment environment, and facilitating 12-step involvement during treatment. © 2003 Elsevier Inc. All rights reserved.

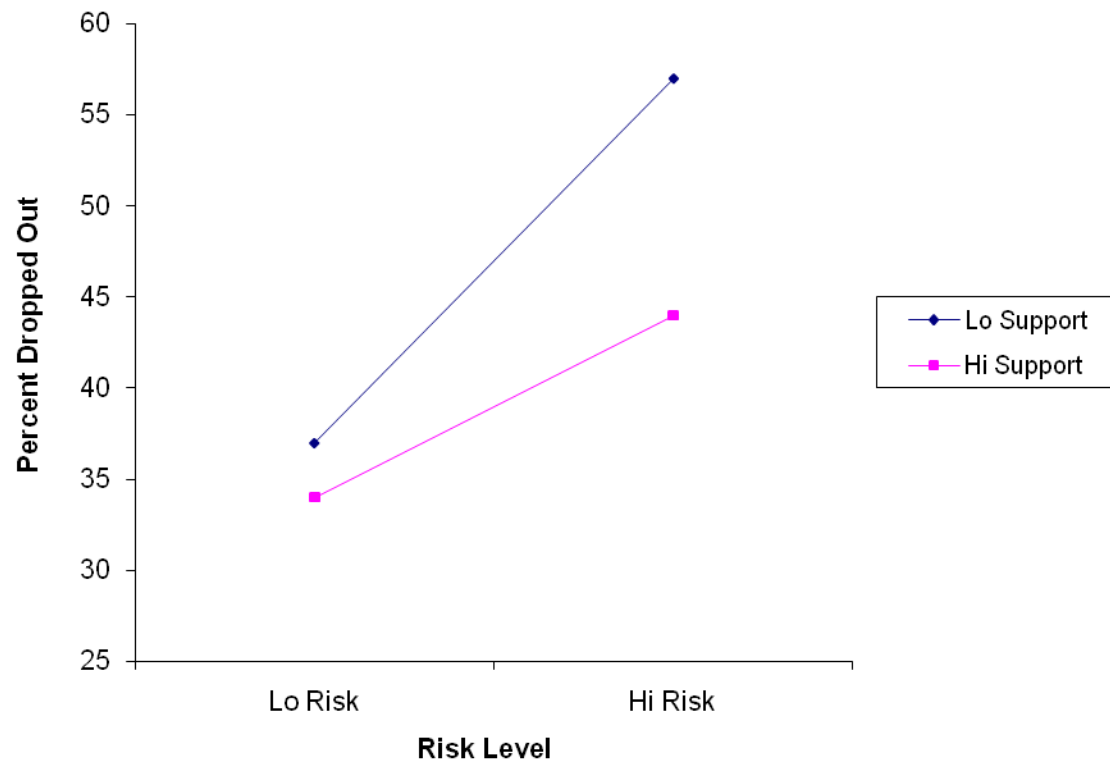
Keywords: Substance abuse; Self-help; 12-step; Alcoholics Anonymous; Drop out

Does Facilitation During Tx Affect Risk for Dropout?

Risk Factors	Treatment Settings Combined		High Supportive Treatment milieu		Low supportive Treatment milieu	
	n	Dropout Rate	n	Dropout Rate	n	Dropout Rate
0	261	30 % (77)	151	30 % (45)	110	29 % (32)
1	548	30 % (163)	274	29 % (79)	274	31% (84)
2	582	38 % (221)	269	38 % (103)	313	38 % (118)
3	512	43 % (218)	176	40 % (70)	336	44% (148)
4	381	51 % (193)	119	42 % (50)	262	55% (143)
5	150	54 % (81)	36	47 % (17)	114	56% (64)
6-7	78	65 % (51)	16	50 % (8)	62	70% (43)

- Dropout rate from AA/NA at 1-year follow-up post-residential treatment = 40%
- AA/NA dropouts had 3x higher odds of relapse to alcohol/drug use

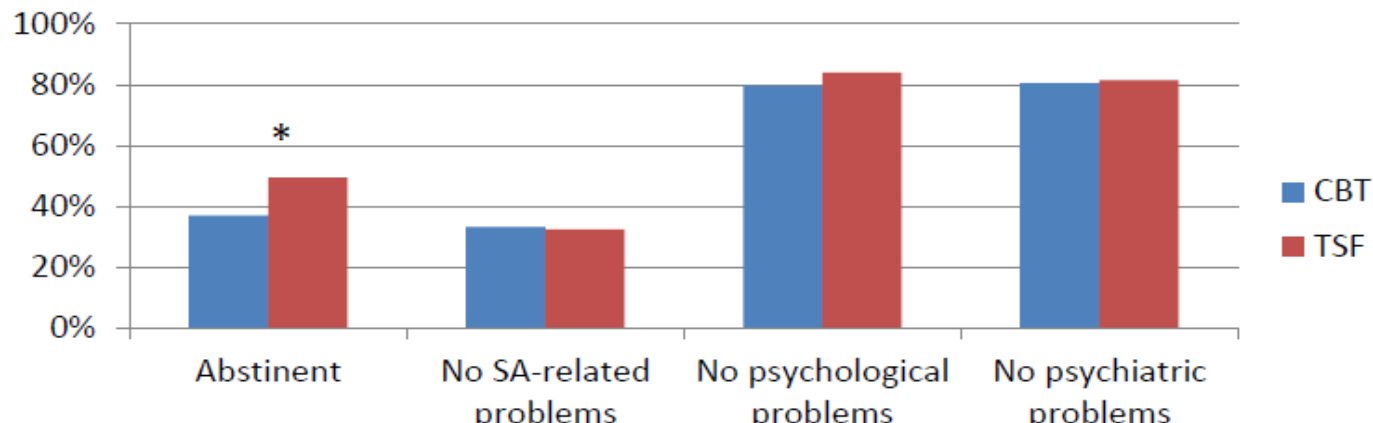
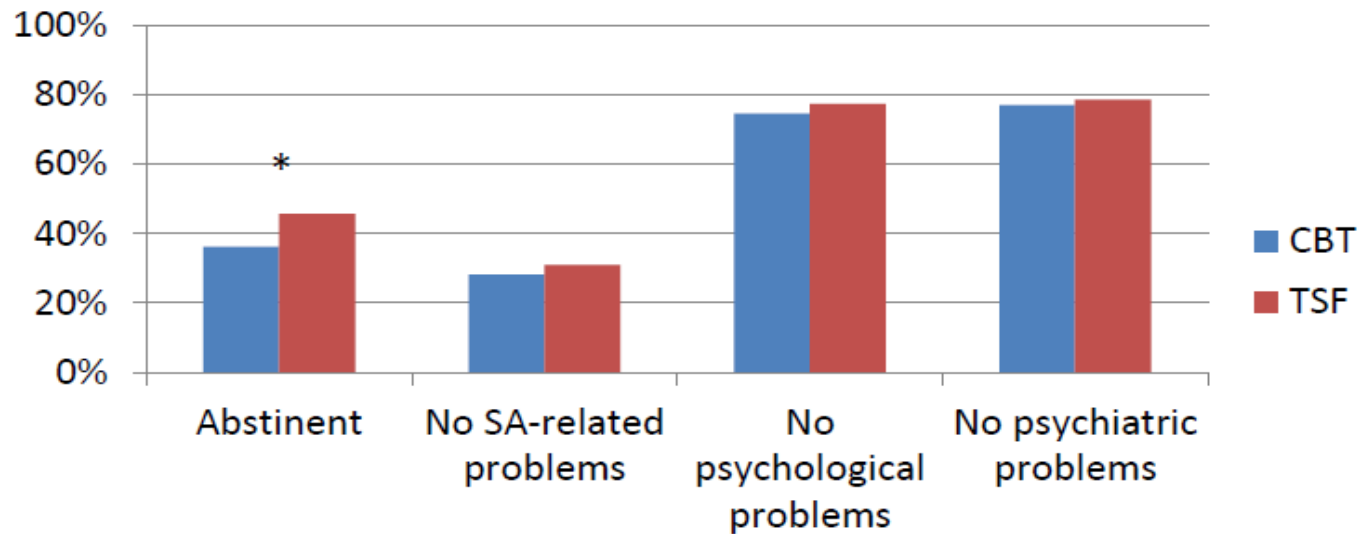
Facilitation by Dropout-Risk Interaction



Source: Kelly & Moos (2003) Dropout from 12-Step Groups: Prevalence, Predictors and Counteracting Treatment Influences, *Journal of Substance Abuse Treatment*, 24, 241-250

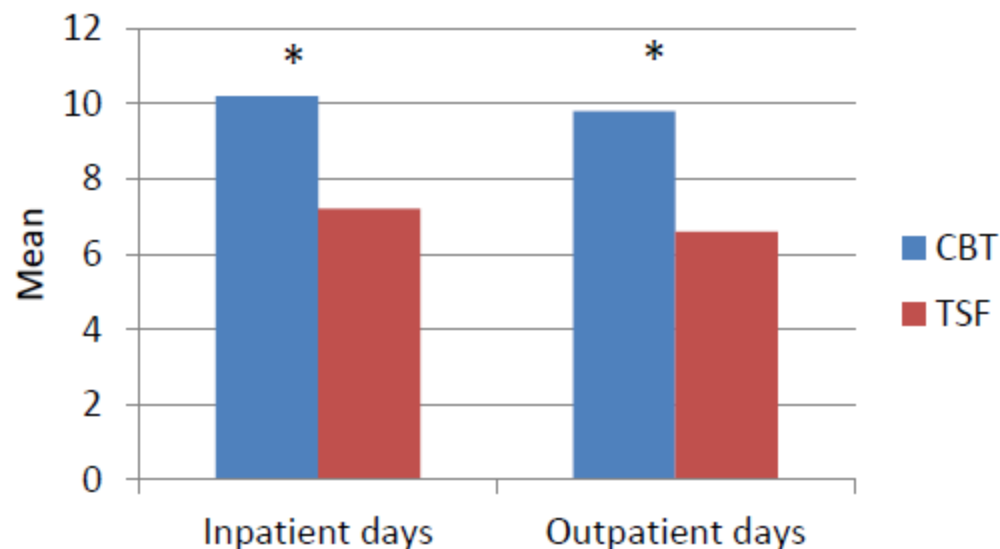
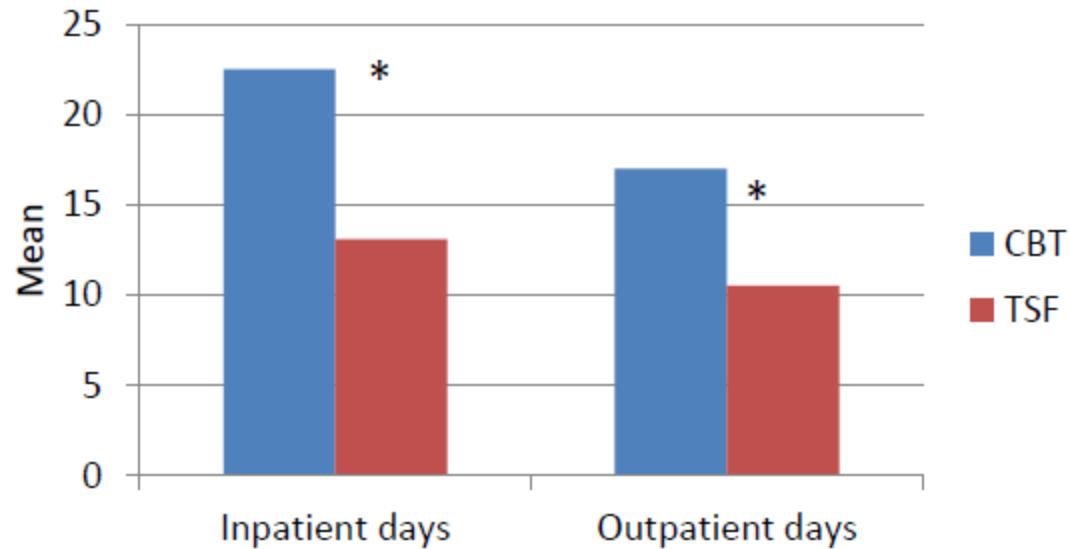
Effectiveness/Cost-Effectiveness Model of Recovery Support through facilitating 12-step involvement?

Health care cost offset (I) 1yr (above) & 2yr (below)
Clinical outcomes



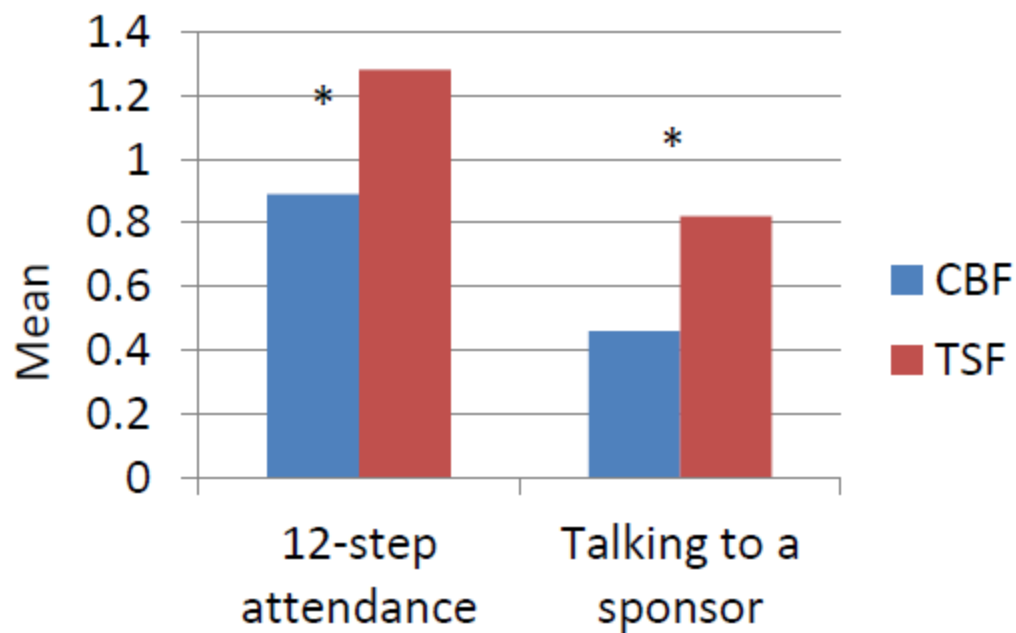
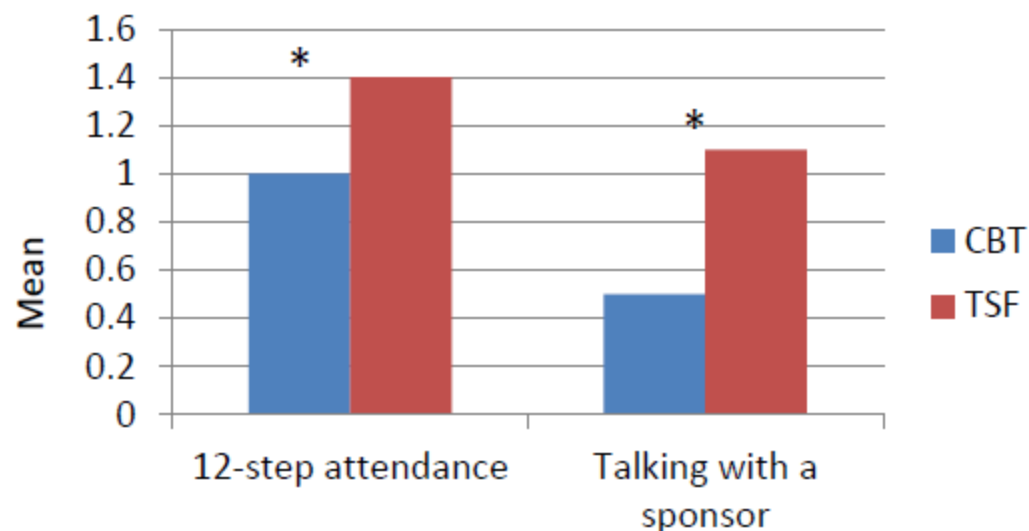
Cost-effectiveness (I) 1YR (above) and 2YR Follow-Up

Mental health care utilization



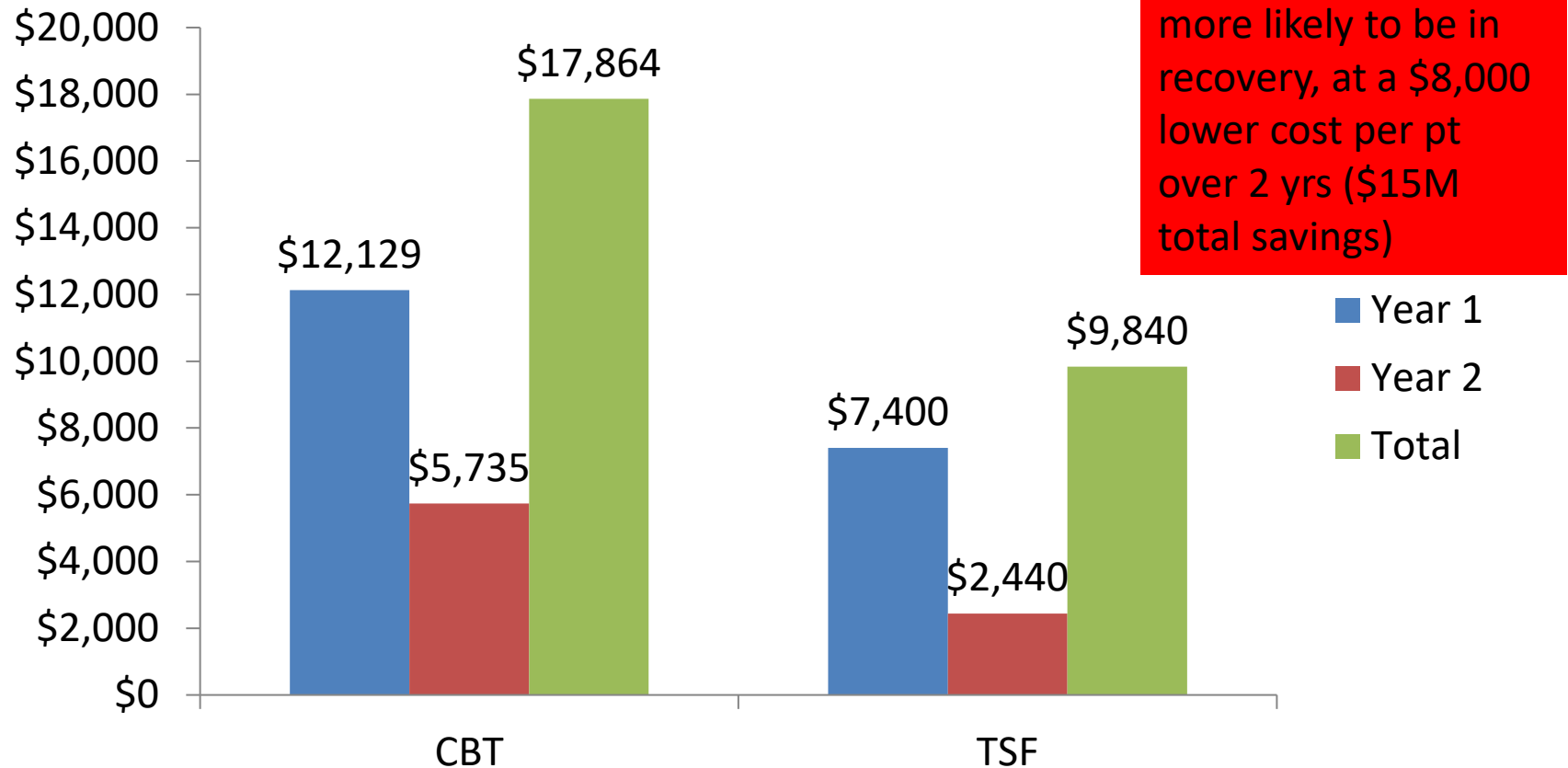
Cost-effectiveness (I) 1YR Follow-Up

3. Self-help group involvement



HEALTH CARE COST OFFSET

CBT VS 12-STEP RESIDENTIAL TREATMENT



Social Recovery Model: An 8-Year Investigation of Adolescent 12-Step Group Involvement Following Inpatient Treatment

John F. Kelly, Sandra A. Brown, Ana Abrantes, Christopher W. Kahler, and Mark Myers

Background: Despite widespread use of 12-step treatment approaches and referrals to Alcoholics Anonymous (AA) and Narcotics Anonymous (NA) by youth providers, little is known about the significance of these organizations in youth addiction recovery. Furthermore, existing evidence is based mostly on short-term follow-up and is limited methodologically.

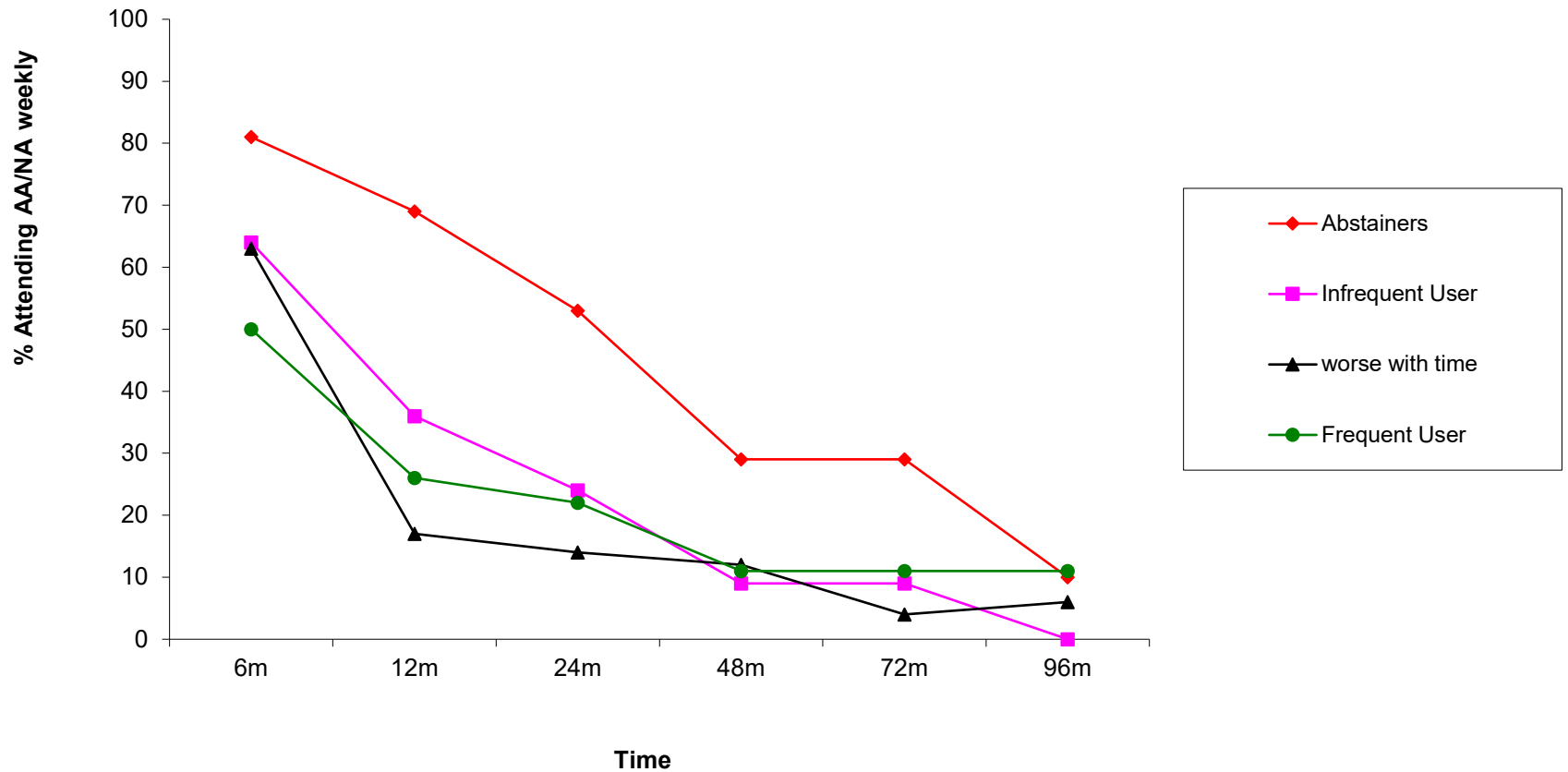
Methods: Adolescent inpatients ($n = 160$; mean age = 16, 40% female) were followed at 6-months, and at 1, 2, 4, 6, and 8 years posttreatment. Time-lagged, generalized estimating equations modeled treatment outcome in relation to AA/NA attendance controlling for static and time-varying covariates. Robust regression (locally weighted scatterplot smoothing) explored dose-response thresholds of AA/NA attendance on outcome.

Results: The AA/NA attendance was common and intensive early posttreatment, but declined sharply and steadily over the 8-year period. Patients with greater addiction severity and those who believed that they could not use substances in moderation were more likely to attend. Despite declining attendance, the effects related to AA/NA remained significant and consistent. Greater early participation was associated with better long-term outcomes.

Conclusions: Even though many youth discontinue AA/NA over time, attendees appear to benefit, and more severely substance-involved youth attend most. Successful early posttreatment engagement of youth in abstinence-supportive social contexts, such as AA/NA, may have long-term implications for alcohol and drug involvement into young adulthood.

Key Words: Mutual-Help Groups, Self-Help, Alcoholics Anonymous, Narcotics Anonymous, Adolescents.

Percent of Youth in Each Trajectory Outcome Group attending AA/NA at least Weekly across 8 Years

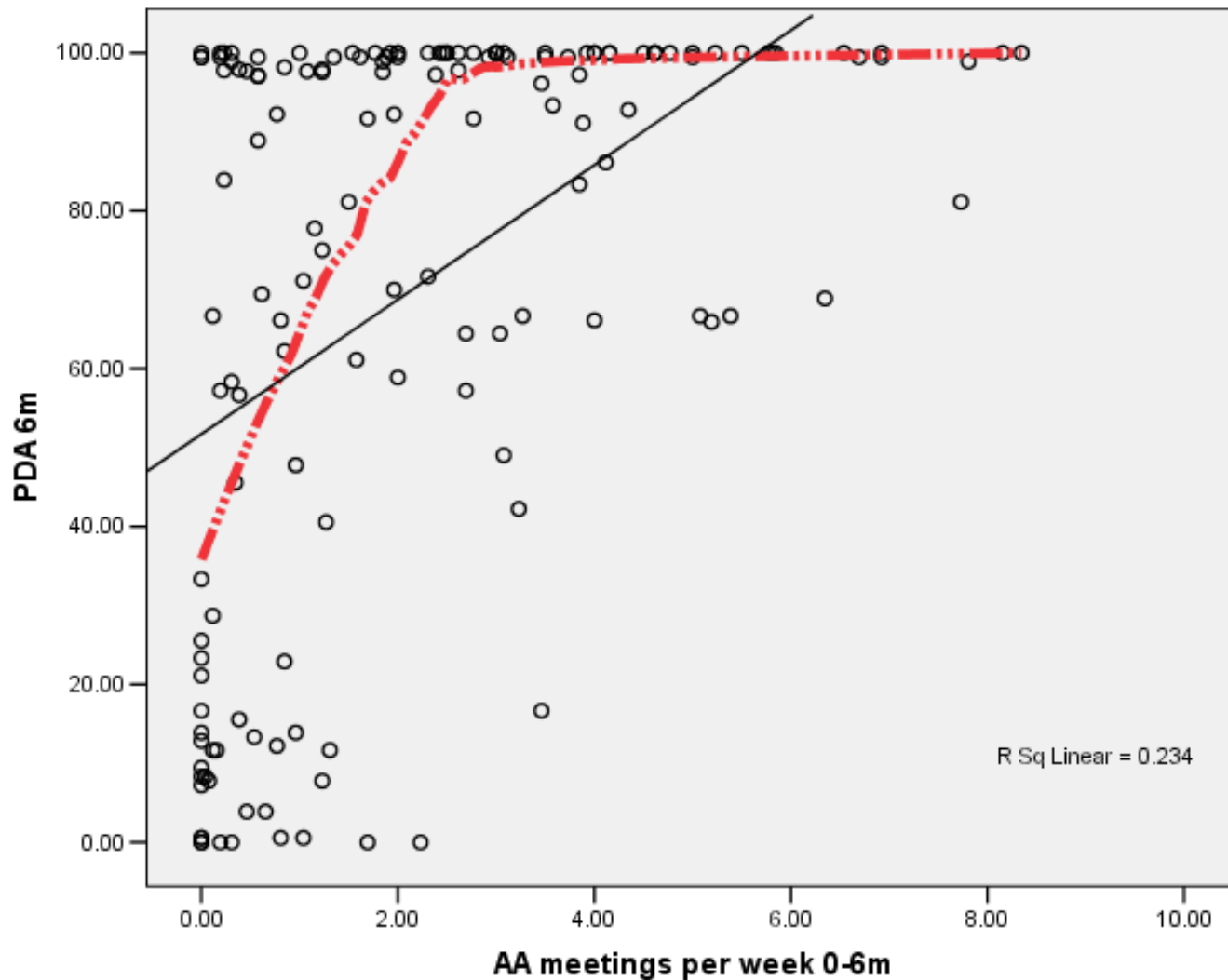


Lagged GEE Model of Youth Treatment Outcome in relation to AA/NA attendance over 8 Years

Parameter	Estimate	Standard Error	95% Confidence Limits		Z	P
Intercept	37.3071	6.9601	23.6656	50.9486	5.36	<.0001
Time	1.4424	0.8693	-0.2614	3.1462	1.66	0.0971
Gender	-9.3380	2.6605	-14.5526	-4.1234	-3.51	0.0004
Pre-treatment PDA	-0.0811	0.0490	-0.1772	0.0150	-1.65	0.0980
Moderate use	-1.8816	0.9646	-3.7722	0.0090	-1.95	0.0511
Aftercare ¹ 6m	0.4349	0.5158	-0.5761	1.4460	0.84	0.3991
Formal Treatment ²	5.5669	3.2856	-0.8727	12.0065	1.69	0.0902
 AA/NA²	1.9517	0.4512	1.0674	2.8360	4.33	<.0001
PDA²	0.5030	0.0371	0.4304	0.5757	13.56	<.0001

1= Sq root transformed; 2= Time varying covariate

Kelly JF, Brown SA, Abrantes, A. et al. Social Recovery Model: An 8-Year Investigation of Youth Treatment Outcome in Relation to 12-step Group Involvement. *Alcoholism: Clinical and Experimental Research*, 2008, 32, 8 1468-1478.



Kelly JF, Brown SA, Abrantes, A. et al. Social Recovery Model: An 8-Year Investigation of Youth Treatment Outcome in Relation to 12-step Group Involvement. *Alcoholism: Clinical and Experimental Research*, 2008, 32, 8 1468-1478.



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Emerging adults' treatment outcomes in relation to 12-step mutual-help attendance and active involvement

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ABSTRACT

Background: Participation in Alcoholics Anonymous (AA) and Narcotics Anonymous (NA) during and following treatment has been found to confer recovery-related benefit among adults and adolescents, but little is known about emerging adults (18–24 years). This transitional life-stage is distinctive for greater distress, higher density of psychopathology, and poorer treatment and continuing care compliance. Greater knowledge would inform the utility of treatment referrals to 12-step organizations for this age-group.

Methods: Emerging adults ($N = 303$; 18–24 years; 26% female; 95% White; 51% comorbid [SCID-derived] axis I disorders) enrolled in a naturalistic study of residential treatment effectiveness assessed at intake, 3, 6, and 12 months on 12-step attendance and involvement and treatment outcomes (percent days abstinent [PDA]; percent days heavy drinking [PDHD]). Lagged hierarchical linear models (HLMs) tested whether attendance and involvement conferred recovery benefits, controlling for a variety of confounds. **Results:** The percentage attending 12-step meetings prior to treatment (36%) rose sharply at 3 months (89%), was maintained at 6 months (82%), but declined at 12 months (76%). Average attendance peaked at about 3 times per week at 3 months dropping to just over once per week at 12 months. Initially high, but similarly diminishing, levels of active 12-step involvement were also observed. Lagged HLMs found beneficial effects for attendance, but stronger effects, which increased over time, for active involvement. Several active 12-step involvement indices were associated individually with outcome benefits.

Conclusions: Ubiquitous 12-step organizations may provide a supportive recovery context for this high-risk population at a developmental stage where non-using/sober peers are at a premium.

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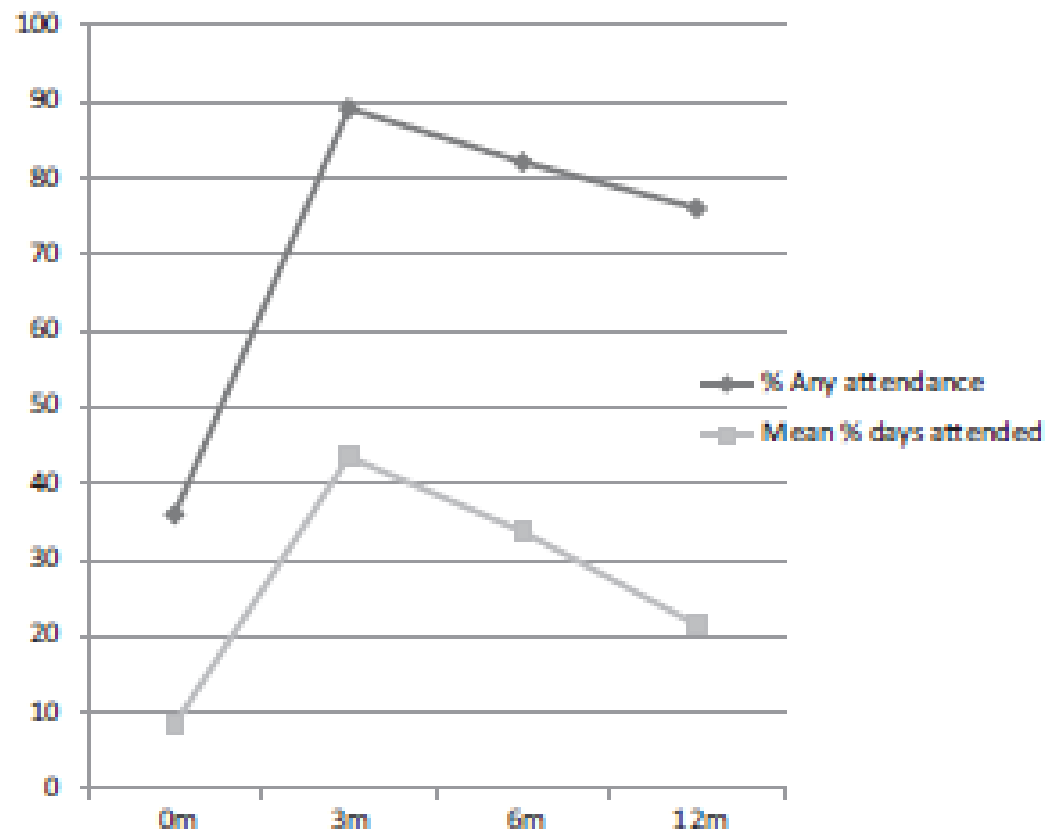


Fig. 1. Proportion of sample attending any 12-step meetings and mean% days attended across time.

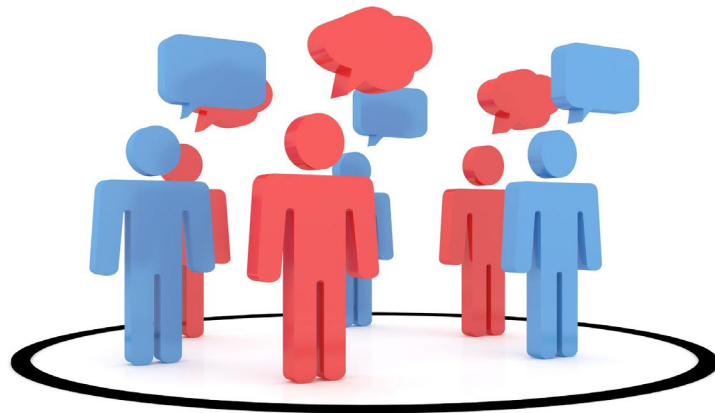
Results: Significant independent effects for attendance on abstinence from all drugs and reduced heavy alcohol use, and stronger effects for 12-step involvement (lagged, controlled, prospective models)

Table 2
HLM models of the lagged effects of (a) 12-step attendance, (b) 12-step involvement, and (c) both, at 3 m and 6 m follow-ups on subsequent PDA and PDHD at 6 m and 12 m outcomes.

	PDA				PDHD					
(a)										
PDA/HDD 0 m										
Commitment to sobriety 0 m										
Gender										
Education										
Prior SUD treatment 0 m										
12-Step social 0 m										
SOCRATES ambivalence										
SOCRATES taking steps										
Time										
12-Step attendance										
12-Step attendance $\times$ time										
(b)										
PDA/HDD 0 m										
Commitment to sobriety 0 m										
Gender										
Education										
Prior SUD treatment 0 m										
12-Step social 0 m										
SOCRATES ambivalence										
SOCRATES taking steps										
Time										
12-Step involvement	0.151	0.219	0.042	31.27	0.000	-0.034	-0.219	0.010	18.81	0.000
12-Step involvement $\times$ time	0.076	0.128	0.049	2.46	0.118	-0.001	-0.008	0.012	0.01	0.931
(c)										
PDA/HDD 0 m	0.008	0.004	0.122	0.00	0.945	0.171	0.177	0.052	10.94	0.001
Commitment to sobriety 0 m	0.384	0.242	0.098	15.30	0.000	-0.046	-0.130	0.021	4.61	0.033
Gender	-0.205	-0.055	0.204	1.01	0.315	0.031	0.037	0.044	0.49	0.483
Education	0.064	0.120	0.029	4.77	0.030	-0.013	-0.107	0.006	4.09	0.045
Prior SUD treatment 0 m	-0.367	-0.099	0.218	2.83	0.094	0.137	0.166	0.047	8.40	0.004
12-Step social 0 m	-0.030	-0.159	0.011	6.74	0.010	0.004	0.092	0.002	2.42	0.121
SOCRATES ambivalence	0.001	0.003	0.022	0.00	0.964	0.003	0.042	0.005	0.47	0.496
SOCRATES taking steps	0.001	0.004	0.014	0.00	0.954	0.002	0.046	0.003	0.48	0.488
Time	0.117	0.035	0.258	0.20	0.651	-0.075	-0.102	0.064	1.38	0.242
12-Step attendance	0.009	0.171	0.004	0.91	0.342	-0.001	-0.105	0.001	0.17	0.681
12-Step attendance $\times$ time	-0.014	-0.258	0.005	7.23	0.008	0.002	0.175	0.001	2.83	0.094
12-Step involvement	0.101	0.146	0.046	24.56	0.000	-0.026	-0.171	0.011	15.19	0.000
12-Step involvement $\times$ time	0.176	0.293	0.060	8.65	0.004	-0.016	-0.122	0.015	1.22	0.270

Significant independent effects for attendance on abstinence from all drugs and reduced heavy alcohol use, and stronger effects for 12-step involvement (lagged, controlled, prospective models)

INDEPENDENT ADDITIVE 12-STEP PARTICIPATION EFFECTS



- 3+ meetings/wk
- Having/using a Sponsor
- Verbal participation in meetings

DOES AGE MATTER?

- Given AA/NA is mostly comprised of older adults, do youth benefit from young people's meetings more?

Relation between Age Composition of Attended Meetings and Percent Days Abstinent for Adolescents

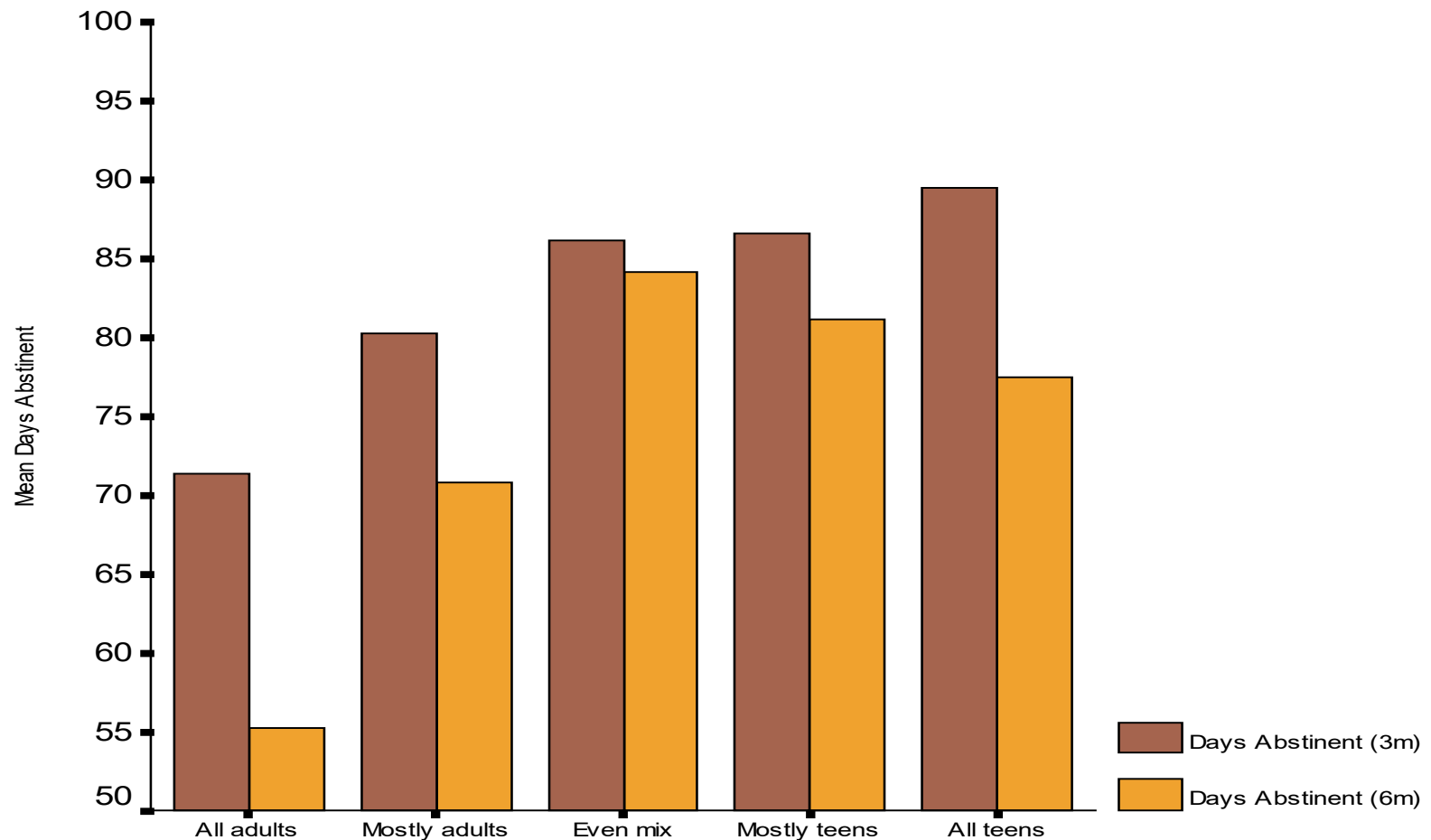
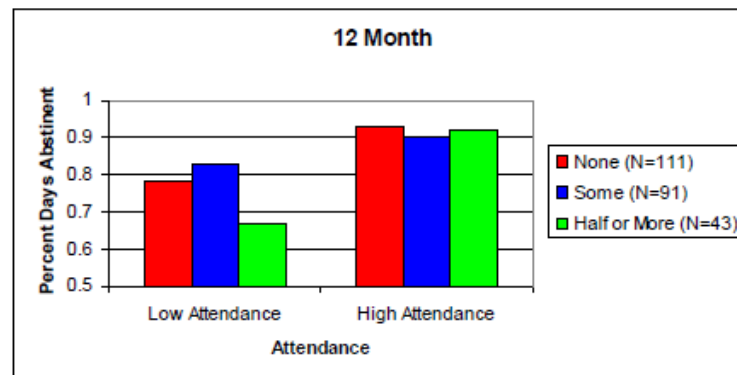
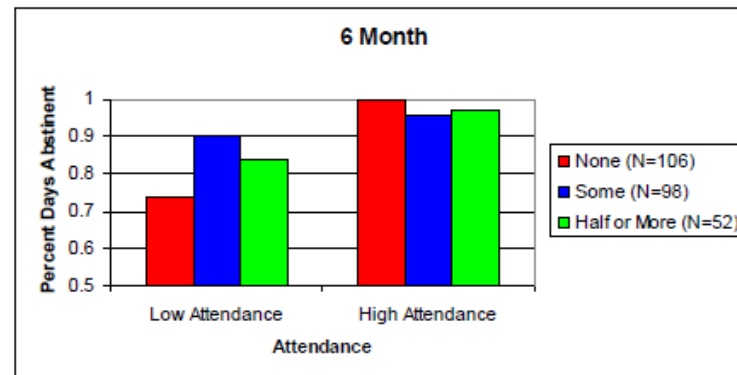
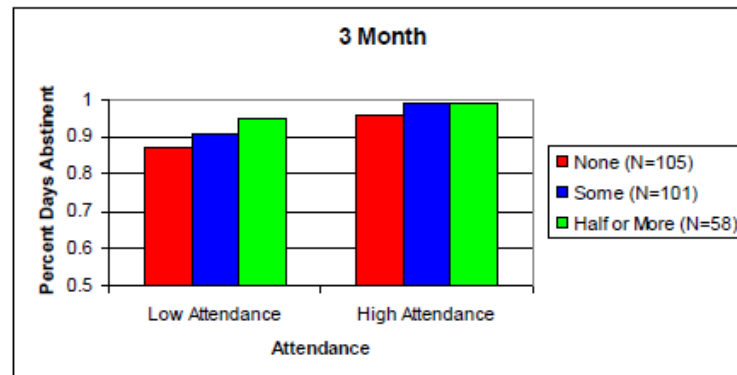


Figure 1. Effect of age composition of preferred 12-step group on PDA across time.



Adolescent Health Care Utilization and Cost Offset across 7-yrs

- » The first study to examine how 12-Step participation affects medical costs in adolescents with SUD
- » 4 intensive outpatient programs
- » N = 403 adolescents, age 13-18
 - 66% male; mean age 16.1; 49% White
 - Comorbid ADHD: 17%, depression: 36%
- » Follow-up: 6 months, 1, 3, 5, and 7 years
- » Difference-in-difference model was used

Adolescent Health Care Cost Offset 7-yr Study

» Avg annual medical costs for all participants over 7 years: \$3085 per person per year

» 12-step participants has 3x lower odds of relapse

» 4.7% decrease in medical costs with each additional 12-step meeting attended = **\$145 annual savings per 12-step meetings attended**



Cochrane Database of Systematic Reviews

Alcoholics Anonymous and other 12-step programs for alcohol use disorder (Review)

Kelly JF, Humphreys K, Ferri M

Kelly JF, Humphreys K, Ferri M.
Alcoholics Anonymous and other 12-step programs for alcohol use disorder.
Cochrane Database of Systematic Reviews 2020, Issue 3. Art. No.: CD012880.
DOI: [10.1002/14651858.CD012880.pub2](https://doi.org/10.1002/14651858.CD012880.pub2).

www.cochranelibrary.com

Alcoholics Anonymous and other 12-step programs for alcohol use disorder (Review)
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WILEY

Cochrane Systematic Review on AA/TSF (2020)

- Kelly, JF
- Humphreys, K
- Ferri, M



What is the Cochrane System?

The Cochrane Library (named after Archie Cochrane) is a collection of databases in medicine and other healthcare specialties provided by Cochrane and other organizations.

At its core is the collection of Cochrane Reviews, a database of systematic reviews and meta-analyses which summarize and interpret the results of medical research.

The Cochrane Library aims to make the results of well-conducted controlled trials readily available and is a key resource in evidence-based medicine.

One must apply first, have the topic and title approved, and then submit a protocol which is peer reviewed...

Cochrane Reviews Contain very specific procedures and format...

- Abstract and Plain Language Abstract
- Background and Rationale
- Comprehensive, systematic, searches
- Methods
 - Inclusion Criteria
 - Specified relevant Outcomes
 - Summary of Findings Tables
 - **Meta-analyses (use their own software for greater transparency)**
 - **Gradings of the quality of the evidence (GRADE system: directness, consistency, imprecision, publication bias)**
 - **Ratings of actual or potential biases (8 types)**
 - **Separate gradings of quality for economic studies (EVERS checklist)**
 - **Very rigorous methods editorial review**
 - **External Peer review**
- **Discussion (includes formal subheadings including Implications for Practice and Research etc)**



Selection Criteria

- We included randomized controlled trials (RCTs), quasi-RCTs, and non-randomized studies that compared AA/TSF with other interventions such as motivational enhancement therapy (MET) or cognitive-behavioral therapy (CBT), TSF treatment variants, or no treatment.
- Health care cost-offset (economic) studies were also included.
- Participants were non-coerced male and female adults with AUD.

Reported
Outcomes
(any outcome
was eligible
for inclusion;
e.g., quality of
life/function etc

Abstinence

- **Proportion of Patients Completely Abstinent:** 16 studies (n participants = 8,153)
- **Percent Days Abstinent (PDA):** 16 studies (n participants = 4,244)
- **Longest Period of Abstinence:** 2 studies (n participants = 148)

Drinking Intensity

- **Drinks per drinking day (DDD):** 8 studies (n participants = 2,650).
- **Percent Days Heavy Drinking (PDHD):** 3 studies (n participants = 648).

Alcohol-Related Consequences

- 8 studies (n participants = 3,281)

Alcohol Addiction Severity

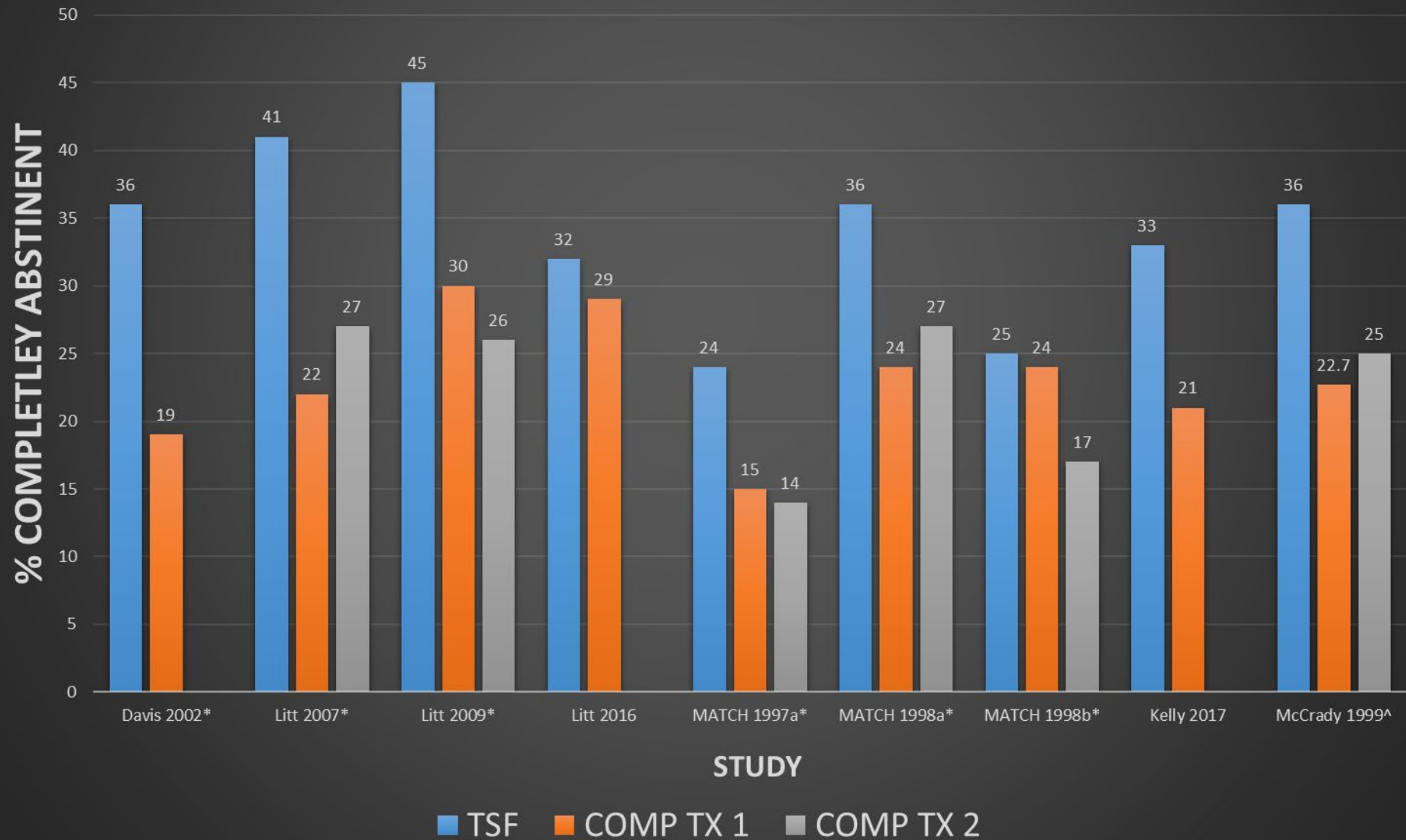
- 7 studies (n participants = 1,616)

Economic Analyses

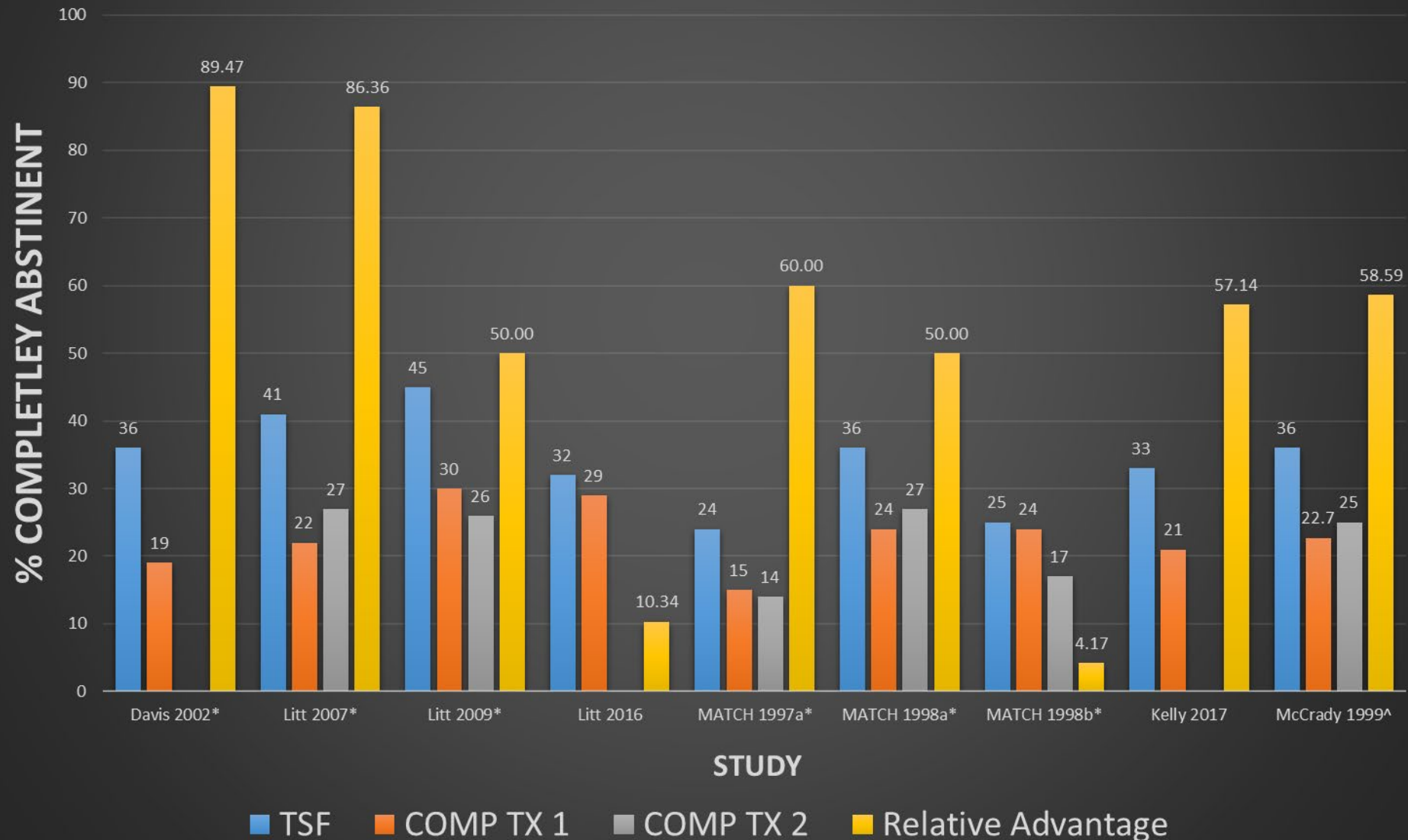
- 4 studies (n participants = 2,657)

Results

TSF Compared to Different Theoretical Orientation Treatments (RCTs all Manualized)



TSF Compared to Different Theoretical Orientation Treatments (RCTs all Manualized)



Economic Studies

Healthcare Cost Savings

- 3/4 included studies in this category (n reports = 4/5; found sig. health care cost saving in favor of the AA/TSF condition.
- Economic analyses found benefits in favor of AA/TSF relative to outpatient treatment, and CBT interventions.
- Magnitude quite large. In addition to sig. increased abstinence, compared to CBT interventions delivered in



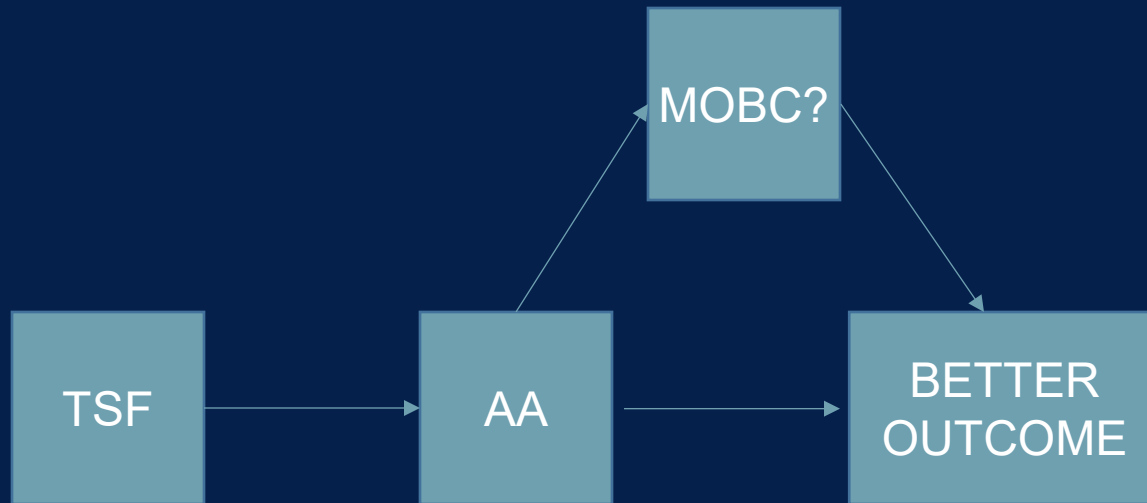
In short: AA may be the closest thing public health has to “a free lunch”

...in the short-term, as well as improving clinical outcomes.

In Studies the conducted and reported
mediational analyses...AA/TSF Causal
chain supported...

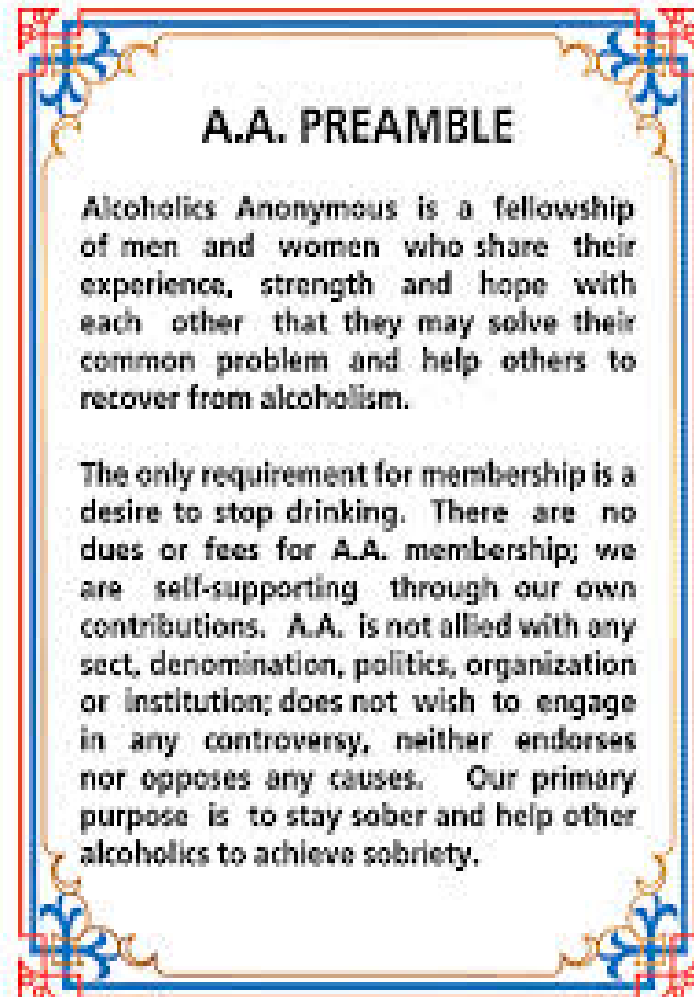


What about support for causal chain of purported mobc of AA on outcomes?



12-STEP SPECIFIC THEORETICAL MECHANISMS: PROGRAM AND FELLOWSHIP

- Recovery achieved via a **“spiritual awakening”** achieved through working through the 12-step program
- Although sometimes manifesting as a quantum change (e.g., Bill W.) it is described broadly as most often of the “educational variety” (Appendix II AA, 2001) emerging gradually leading to “psychic change” that alters view of self, others, and world



HOW DOES AA ENHANCE OUTCOMES? POSSIBLE MECHANISMS

Addiction Research and Theory
June 2009; 17(3): 236–259



How do people recover from alcohol dependence? A systematic review of the research on mechanisms of behavior change in Alcoholics Anonymous

**JOHN FRANCIS KELLY¹, MOLLY MAGILL²,
& ROBERT LAUREN STOUT³**

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(Received 9 January 2009; accepted 18 January 2009)

REVIEW FOUND N=13 FULL MEDIATIONAL STUDIES ON MOBC AND N=6 PARTIAL TESTS

Up until 2009, AA/TSF MOBC fell into three main categories, with most research conducted on/supporting (in descending order):

- **Common factors** (e.g., self-efficacy, motivation for abstinence; coping skills; social network changes)
- **Specific AA practices** (AA behaviors/activities, AA beliefs/cognitions)
- **AA specific processes** (e.g., spirituality)

BUT, since then, more studies conducted supporting AA's own principal MOBC –spirituality...

Spirituality in Recovery: A Lagged Mediation Analysis of Alcoholics Anonymous' Principal Theoretical Mechanism of Behavior Change

John F. Kelly, Robert L. Stout, Molly Magill, J. Scott Tonigan, and Maria E. Pagano

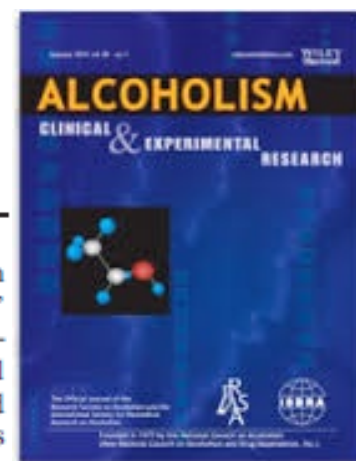
Background: Evidence indicates Alcoholics Anonymous (AA) can play a valuable role in recovery from alcohol use disorder. While AA itself purports it aids recovery through "spiritual" practices and beliefs, this claim remains contentious and has been only rarely formally investigated. Using a lagged, mediational analysis, with a large, clinical sample of adults with alcohol use disorder, this study examined the relationships among AA, spirituality/religiousness, and alcohol use, and tested whether the observed relation between AA and better alcohol outcomes can be explained by spiritual changes.

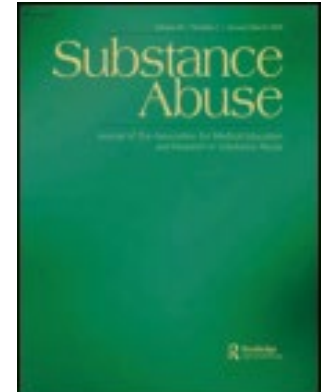
Method: Adults ($N = 1,726$) participating in a randomized controlled trial of psychosocial treatments for alcohol use disorder (Project MATCH) were assessed at treatment intake, and 3, 6, 9, 12, and 15 months on their AA attendance, spiritual/religious practices, and alcohol use outcomes using validated measures. General linear modeling (GLM) and controlled lagged mediational analyses were utilized to test for mediational effects.

Results: Controlling for a variety of confounding variables, attending AA was associated with increases in spiritual practices, especially for those initially low on this measure at treatment intake. Results revealed AA was also consistently associated with better subsequent alcohol outcomes, which was partially mediated by increases in spirituality. This mediational effect was demonstrated across both outpatient and aftercare samples and both alcohol outcomes (proportion of abstinent days; drinks per drinking day).

Conclusions: Findings suggest that AA leads to better alcohol use outcomes, in part, by enhancing individuals' spiritual practices and provides support for AA's own emphasis on increasing spiritual practices to facilitate recovery from alcohol use disorder.

Key Words: Alcoholics Anonymous, Spirituality, Self-Help Groups, Alcoholism, Alcohol Dependence.





Multiple Dimensions of Spirituality in Recovery: A Lagged Mediation Analysis of Alcoholics Anonymous' Principal Theoretical Mechanism of Behavior Change

Amy R. Krentzman, PhD, James A. Cranford, PhD, and Elizabeth A. R. Robinson, PhD

University of Michigan Addiction Research Center, Ann Arbor, Michigan, USA

ABSTRACT. Alcoholics Anonymous (AA) states that recovery is possible through spiritual experiences and spiritual awakenings. Research examining spirituality as a mediator of AA's effect on drinking has been mixed. It is unknown whether such findings are due to variations in the operationalization of key constructs, such as AA and spirituality. To answer these questions, the authors used a longitudinal model to test 2 dimensions of AA as focal predictors and 6 dimensions of spirituality as possible mediators of AA's association with drinking. Data from the first 18 months of a 3-year longitudinal study of 364 alcohol-dependent individuals were analyzed. Structural equation modeling was used to replicate the analyses of Kelly et al. (*Alcohol Clin Exp Res.* 2011;35:454–463) and to compare AA attendance and AA involvement as focal predictors. Multiple regression analyses were used to determine which spirituality dimensions changed as the result of AA participation. A trimmed, data-driven model was employed to test multiple mediation paths simultaneously. The findings of the Kelly et al. study were replicated. AA involvement was a stronger predictor of drinking outcomes than AA attendance. AA involvement predicted increases in private religious practices, daily spiritual experiences, and forgiveness of others. However, only private religious practices mediated the relationship between AA and drinking.

Keywords: Alcohol use disorders, Alcoholics Anonymous, alcoholism, mechanisms of change, meditation, prayer, spirituality



ORIGINAL ARTICLE

Spirituality as a Change Mechanism in 12-Step Programs: A Replication, Extension, and Refinement

J. Scott Tonigan, Kristina N. Rynes and Barbara S. McCrady

Center on Alcoholism, Substance Abuse, and Addictions, University of New Mexico, Albuquerque, New Mexico, USA

This National Institutes of Health funded study investigated spiritual growth as a change mechanism in 12-step programs. A total of 130 people, early 12-step affiliates with limited Alcoholics Anonymous (AA) histories, were recruited from 2007 to 2008 from AA, treatment, and community centers in a Southwestern city in the United States. A majority of the sample was alcohol dependent. Participants were interviewed at baseline and at 3, 6, and 9 months. Lagged General Linear Modeling analyses indicated that spiritual change as measured by the Religious Background and Behavior (RBB) self-report questionnaire were predictive of increased abstinence and decreased drinking intensity, and that the magnitude of this effect varied across different RBB scoring algorithms. Future research should address study limitations by recruiting participants with more extensive AA histories and by including assessments of commitment to, and practice of, AA prescribed activities. The study's limitations are noted.

Keywords: spirituality, change mechanism, 12-step, Alcoholics Anonymous

INTRODUCTION

Many clinicians working in substance user treatment¹ programs in the United States encourage 12-step attendance (Kelly, Yeterian, & Myers, 2008), and sufficient evidence has now accumulated to assert that 12-step referral is an evidence-based practice that helps many, but not all, substance users. Several meta-analyses and numerous prospective studies have now shown that 12-step attendance alone, in combination with, and after treatment, is predictive of reductions in drinking (Emrick, Tonigan, Montgomery, & Little, 1993; Kaskutas, Bond, & Humphreys, 2002; Kelly, Stout, Magill, Tonigan, & Pagano, 2011; Tonigan & Rice, 2010; Tonigan, Toscova, & Miller, 1996) and illicit drug use (Gossop, Stewart, & Marsden, 2007; Timko, Billow, & DeBenedetti, 2006; Timko & Sempel, 2004; Weiss et al., 2005; Witbrodt & Kaskutas, 2005; Worley et al., 2008). It is important to note that long-term investigations into the benefits of 12-step programs are relatively rare, and a majority of studies are limited to 12-month follow-up. Recent work also suggests that sustained 12-step attendance may even serve to off-set relapse to illicit drug use once alcohol use has occurred (Tonigan & Beatty, 2011). Understandably, then, many studies have sought to identify the prescribed

¹Treatment can be usefully defined as a unique, planned, goal directed, temporally structured, multidimensional change process, which may be phase structured, of necessary quality, appropriateness and conditions (endogenous and exogenous), implemented under conditions of uncertainty, which is *bounded* (culture, place, time, etc.), which can be (un)successful (partially and/or totally), as well as being associated with iatrogenic harm and can be categorized into professional-based, tradition-based, mutual-help-based (AA, NA, etc.), and self-help ("natural recovery") models. Whether or not a treatment technique is indicated or contraindicated, its selection underpinnings (theory-based, empirically based, principle of faith-based, tradition-based, budget-based, etc.) continues to be a generic and key treatment issue. In the West, with the relatively new ideology of



The Twelve Promises of Alcoholics Anonymous: Psychometric measure validation and mediational testing as a 12-step specific mechanism of behavior change

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ABSTRACT

Background: Empirical support for the Twelve Promises of Alcoholics Anonymous (AA) has led to increased investigation of the mechanisms of AA. AA features a few documented explications of the mechanisms of change that accrue. This study investigated the potential of the Twelve Promises as a mechanism of change. We examined whether it mediated the effect of AA on recovery. **Method:** Young adults ($N = 302$, M age = 21.5) completed a 12-step addiction treatment effectiveness study. Post-treatment including a 26-item psychometrics and lagged mediation analysis. **Results:** Robust principal axis factor analysis revealed three factors explaining 45–58% of the variance: “Freedom from Craving” (17–21%); “Increased Psychological Well-being” (17–21%); and “Reduced Craving” (17–21%). The “Freedom from Craving” factor was found to increase in relation to greater participation in AA, and only for the Freedom from Craving factor explaining 21–25% of the effect of 12-step participation on increasing abstinence. **Conclusions:** The TPS shows potential as a conceptually relevant, and psychometrically sound measure and may be useful in helping elucidate the extent to which the Twelve Promises emerge as an independent benefit of 12-step participation and/or explain SUD remission and recovery.

AA shown to increase psychological well-being and reduce craving associated with experiencing AA's 12 Promises, and confer benefit (i.e., increased PDA) by significantly reducing craving

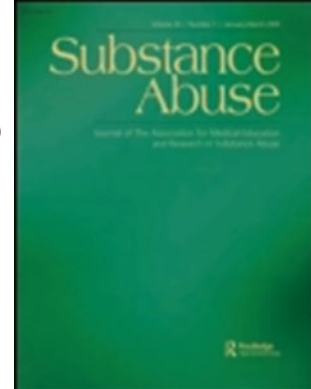
Negative Affect, Relapse, and Alcoholics Anonymous (AA): Does AA Work by Reducing Anger?*

JOHN F. KELLY, PH.D.,[†] ROBERT L. STOUT, PH.D.,[†] J. SCOTT TONIGAN, PH.D.,[†] MOLLY MAGILL, PH.D.,[†]
AND MARIA E. PAGANO, PH.D.[†]

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ABSTRACT. **Objective:** Anger and other indices of negative affect have been implicated in a stress-induced pathway to relapse. The Alcoholics Anonymous (AA) literature states that reduction of anger is critical to recovery, yet this proposed mechanism has rarely been investigated. Using lagged, controlled hierarchical linear modeling analyses, this study investigated whether AA attendance mobilized changes in anger and whether such changes explained AA-related benefit. **Method:** Alcohol-dependent adults ($N = 1,706$) receiving treatment as part of a clinical trial were assessed at intake and at 3, 6, 9, 12, and 15 months. **Results:** Findings revealed substantially elevated levels of anger compared with the general population (98th percentile) that decreased over 15-month

follow-up but remained high (89th percentile). AA attendance was associated with better drinking outcomes, and higher levels of anger were associated with heavier drinking. However, AA attendance was unrelated to changes in anger. **Conclusions:** Although support was not found for anger as a mediator, there was strong convergence between AA's explicit emphasis on anger and the present findings: Anger appears to be a serious, enduring problem related to relapse and heavy alcohol consumption. Methodological factors may have contributed to the lack of association between AA and anger, but results suggest that AA attendance alone may be insufficient to alleviate the suffering and alcohol-related risks specifically associated with anger. (*J. Stud. Alcohol Drugs*, 71, 434-444, 2010)



Do Changes in Selfishness Explain 12-Step Benefit? A Prospective Lagged Analysis

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Department of Psychology, University of New Mexico, Albuquerque, New Mexico, USA*

ABSTRACT. 12-Step attendance is associated with increased abstinence. A strong claim made in 12-step literature is that alcoholics are pathologically selfish and that working the 12 steps reduces this selfishness, which, in turn, leads to sustained alcohol abstinence. This study tested this assumption by investigating the linkages between 12-step attendance, pathological narcissism, and drinking. One hundred thirty early Alcohol Anonymous (AA) affiliates with limited AA and treatment histories were recruited from treatment and community-based AA. A majority of the sample was alcohol dependent and reported illicit drug use before recruitment. Participants were interviewed at intake and at 3, 6, and 9 months. A majority of participants attended AA meetings throughout follow-up and such attendance predicted increased abstinence and reduced drinking intensity. 12-Step affiliates were significantly higher on pathological narcissism (PN) relative to general population samples and their PN remained elevated. Contrary to predictions, PN was unrelated to 12-step meeting attendance and did not predict later abstinence or drinking intensity. The findings did not support the hypothesis that reductions in PN explain 12-step benefit. An alternative function for the emphasis placed on pathological selfishness in 12-step programs is discussed and a recommendation is made to use unobtrusive measures of selfishness in future research.

Keywords: AA, mediator, self-help

Adults with alcohol and illicit drug problems frequently seek help by attending community-based 12-step programs and a majority of treatment providers encourage 12-step meeting attendance both during and after treatment (1). Meta-

analyses that are *common* across different approaches for treating substance misuse. The direct effect of 12-step attendance on later increases in abstinence, for example, have been explained by increased abstinence self-efficacy (10) and social



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Full length article

The role of Alcoholics Anonymous in mobilizing adaptive social network changes: A prospective lagged mediational analysis

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ABSTRACT

Objective: Many individuals entering treatment are involved in social networks and activities that heighten relapse risk. Consequently, treatment programs facilitate engagement in social recovery resources, such as Alcoholics Anonymous (AA), to provide a low risk network. While it is assumed that AA works partially through this social mechanism, research has been limited in rigor and scope. This study used lagged mediational methods to examine changes in pro-abstinent and pro-drinking network ties and activities.

Method: Adults ($N = 1726$) participating in a randomized controlled trial of alcohol use disorder treatment were assessed at intake, and 3, 9, and 15 months. Generalized linear modeling (Generalized linear modeling) tested whether changes in pro-abstinent and pro-drinking network ties and drinking and abstinent activities helped to explain AA's effects.

Results: Greater AA attendance facilitated substantial decreases in pro-drinking social ties and significant, but less substantial increases in pro-abstinent ties. Also, AA attendance reduced engagement in drinking-related activities and increased engagement in abstinent activities. Lagged mediational analyses revealed that it was through reductions in pro-drinking network ties and, to a lesser degree, increases in pro-abstinent ties that AA exerted its salutary effect on abstinence, and to a lesser extent, on drinking intensity. **Conclusions:** AA appears to facilitate recovery by mobilizing adaptive changes in the social networks of individuals exhibiting a broad range of impairment. Specifically by reducing involvement with pro-drinking ties and increasing involvement with pro-abstinent ties. These changes may aid recovery by decreasing exposure to alcohol-related cues thereby reducing craving, while simultaneously increasing rewarding social relationships.

Figure 2a. AA attendance and the % change in both pro-abstinent and pro-drinking network ties from treatment intake to the 9-m (OP sample)

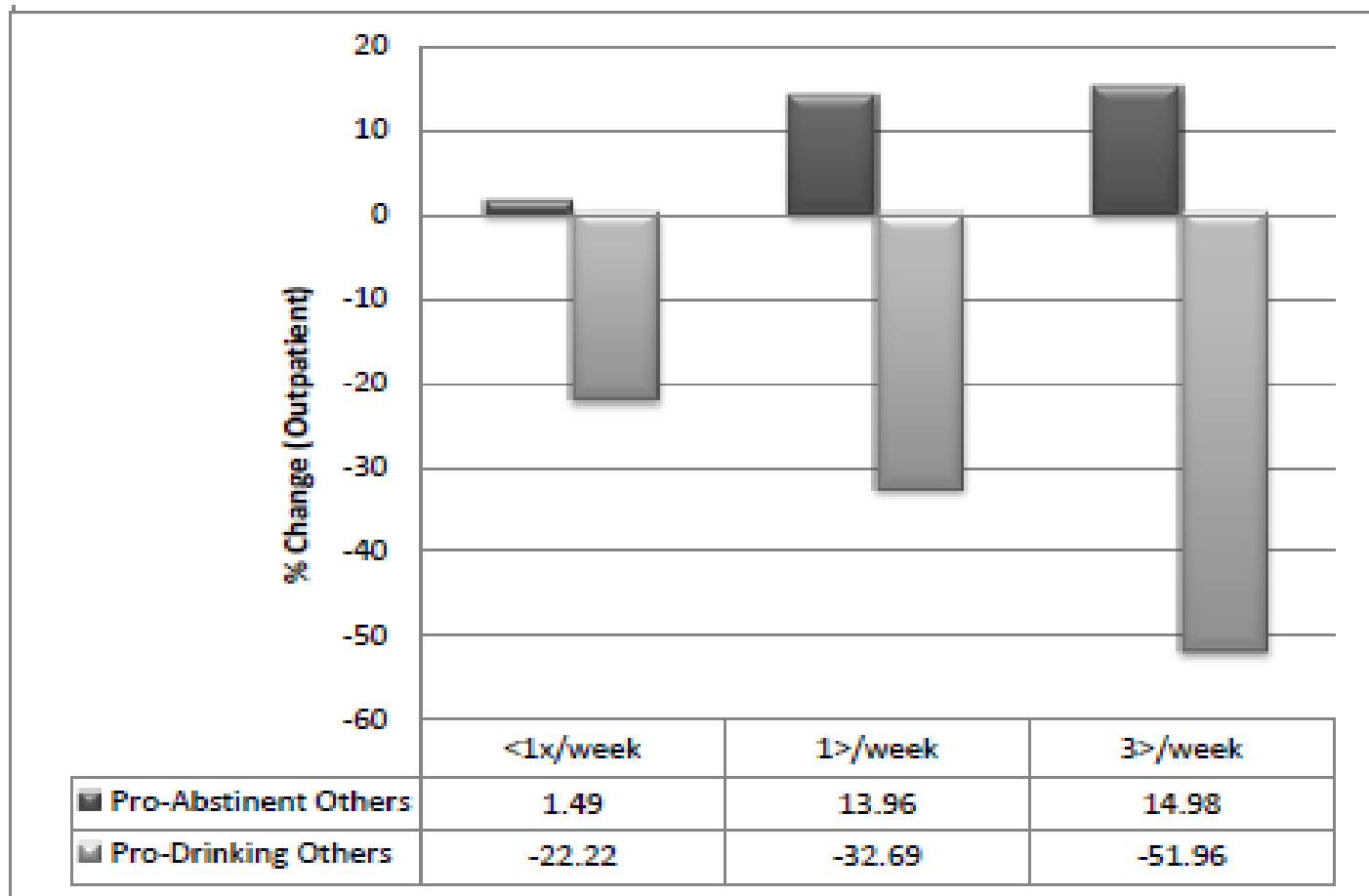
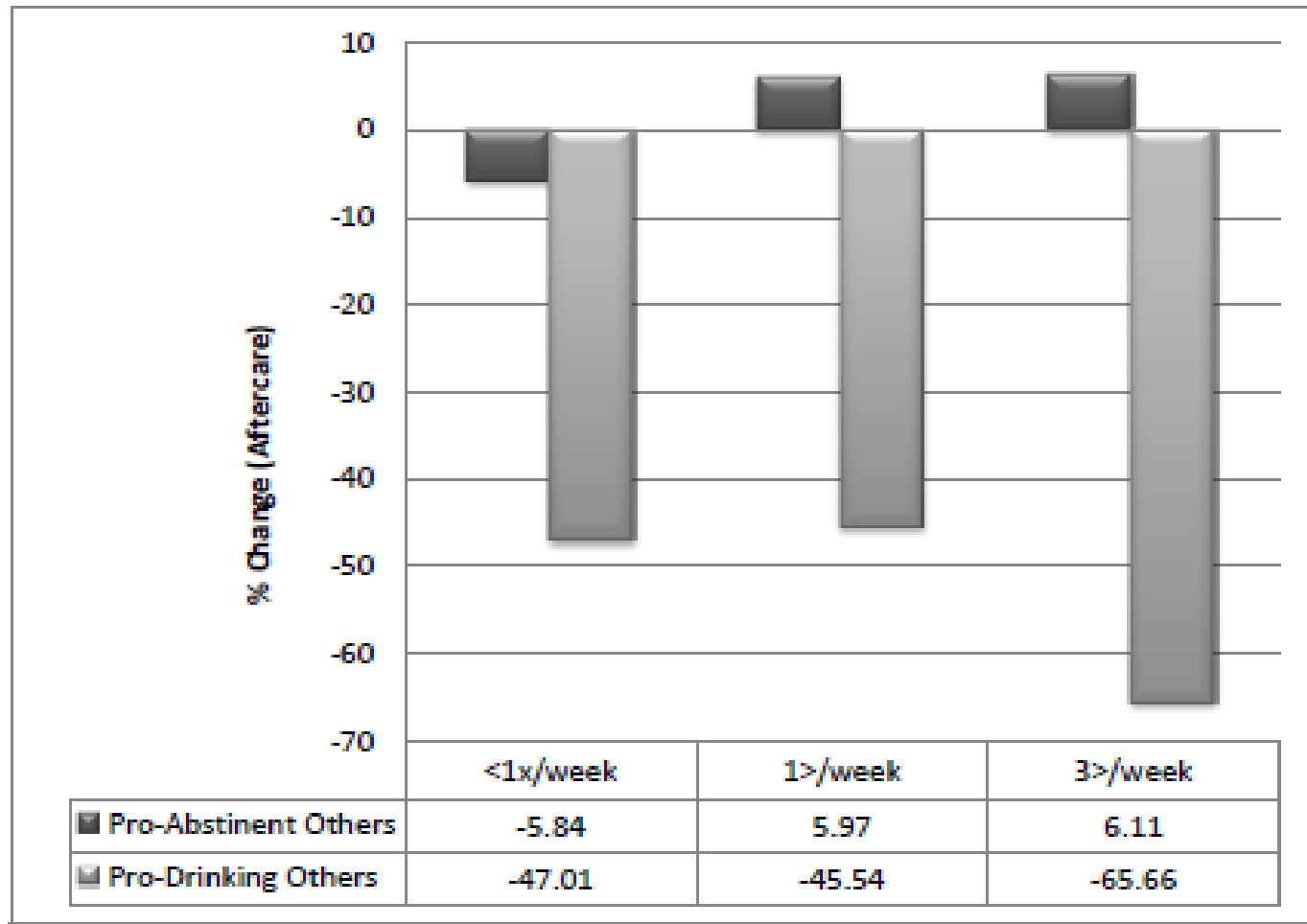


Figure 2b. AA attendance and the % change in both pro-abstinent and pro-drinking network ties from treatment intake to the 9-m (AC sample)



ARTICLES

Alcoholics Anonymous and Reduced Impulsivity: A Novel Mechanism of Change

Daniel M. Blonigen, PhD, Christine Timko, PhD, and Rudolf H. Moos, PhD

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ABSTRACT. Reduced impulsivity is a novel, yet plausible, mechanism of change associated with the salutary effects of Alcoholics Anonymous (AA). Here, the authors review their work on links between AA attendance and reduced impulsivity using a 16-year prospective study of men and women with alcohol use disorders (AUDs) who were initially untreated for their drinking problems. Across the study period, there were significant mean-level decreases in impulsivity, and longer AA duration was associated with reductions in impulsivity. In turn, decreases in impulsivity from baseline to Year 1 were associated with fewer legal problems and better drinking and psychosocial outcomes at Year 1, and better psychosocial functioning at Year 8. Decreases in impulsivity mediated associations between longer AA duration and improvements on several Year 1 outcomes, with the indirect effects conditional on participants' age. Findings are discussed in terms of their potential implications for research on AA and, more broadly, interventions for individuals with AUDs.

Keywords: Alcoholics Anonymous, impulsivity, mechanism of change

Among individuals with alcohol use disorders (AUDs), Alcoholics Anonymous (AA) is linked to improved functioning across a number of domains (1, 2). As the evidence for the effectiveness of AA has accumulated, so too have efforts to identify the mechanisms of change associated with participation in this mutual-help group (3). To our knowledge, however, there have been no efforts to examine links between AA and reductions in *impulsivity*—a dimension of personality marked by deficits in self-control and self-regulation, and

tendencies to take risks and respond to stimuli with minimal forethought.

In this article, we discuss the conceptual rationale for reduced impulsivity as a mechanism of change associated with AA, review our research on links between AA and reduced impulsivity, and discuss potential implications of the findings for future research on AA and, more broadly, interventions for individuals with AUD. To guide this work, we modified a conceptual framework (4), which delineates the content of drinking-related outcomes (Figure 1). This model

Determining the relative importance of the mechanisms of behavior change within Alcoholics Anonymous: a multiple mediator analysis

John F. Kelly¹, Bettina Hoepfner¹, Robert L. Stout² & Maria Pagano³

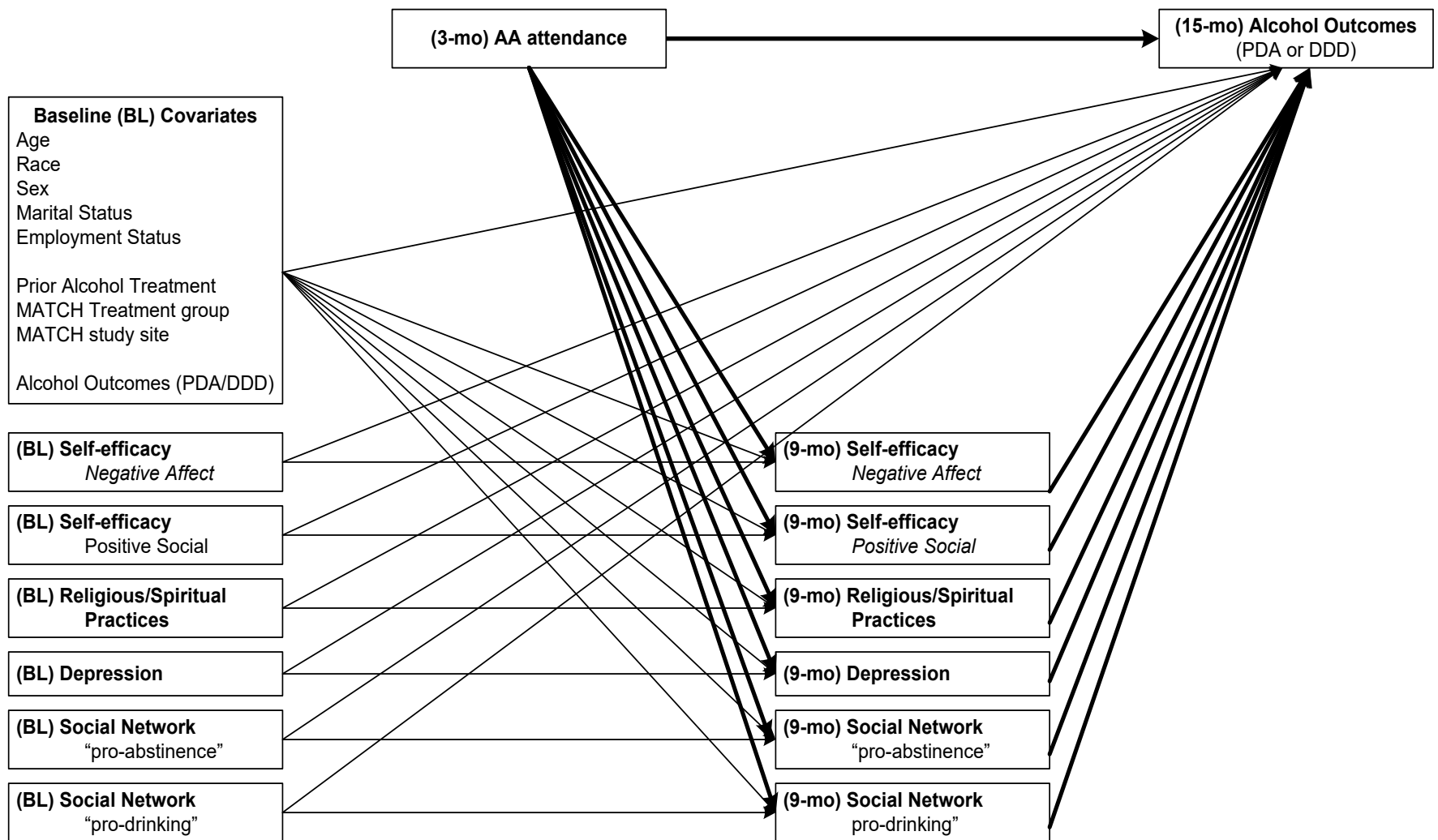
Center for Addiction Medicine, Department of Psychiatry, Massachusetts General Hospital, and Harvard Medical School, Boston, MA, USA,¹ Decision Sciences Institute/PIRE, Pawtucket, RI, USA² and Case Western Reserve University, Cleveland, OH, USA³

ABSTRACT

Aims Evidence indicates that Alcoholics Anonymous (AA) participation reduces relapse risk but less is known about the mechanisms through which AA confers this benefit. Initial studies indicate self-efficacy, negative affect, adaptive social networks and spiritual practices are mediators of this effect, but because these have been tested in isolation, their relative importance remains elusive. This study tested multiple mediators simultaneously to help determine the most influential pathways. **Design** Prospective, statistically controlled, naturalistic study of AA attendance and outcomes, which these previously identified mechanisms mediated AA attendance on outcomes, controlling for baseline outcome values, mediators, treatment, and other confounders. **Setting** Massachusetts General Hospital, Boston, MA, USA. **Participants** Adults ($n = 1726$) suffering from alcohol use disorder (AUD) were enrolled in a randomized controlled study with two arms: aftercare ($n = 774$); and out-patient ($n = 952$) compared to a control group (MATCH). **Measurements** AA attendance during treatment; mediators of days abstinent (PDA) and drinks per drinking day (DDD)] at 15 months. **Results** AA attendance on alcohol outcomes was explained primarily by adaptive social abstinence self-efficacy. Among more impaired aftercare patients, AA attendance led to better social network changes and increases in social self-efficacy, AA lead to better religiousity and by reducing negative affect. The degree to which mediators explained outcomes ranged from 43% to 67%. **Conclusion** While Alcoholics Anonymous (AA) attendance on outcomes is explained by several processes simultaneously, it is changes in social factors which appear to be most influential.

Keywords Addiction, alcohol dependence, alcoholics anonymous, alcohol use disorder, social network, spirituality.

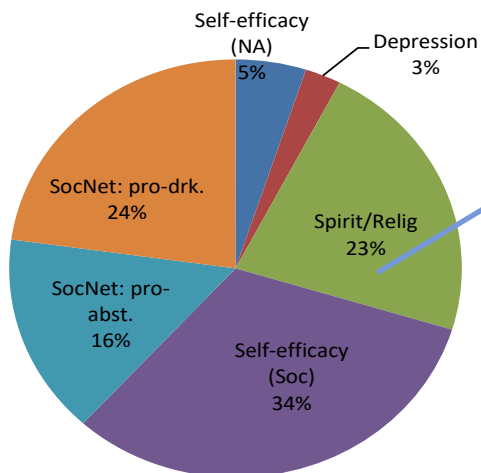
Based on prior mediators of AA on outcomes, several fully temporally lagged multiple mediator and moderated multiple mediator analyses have been conducted...



Source: Kelly, Hoepfner, Stout, Pagano (2012) , Determining the relative importance of the mechanisms of behavior change within Alcoholics Anonymous: A multiple mediator analysis. *Addiction* 107(2):289-99

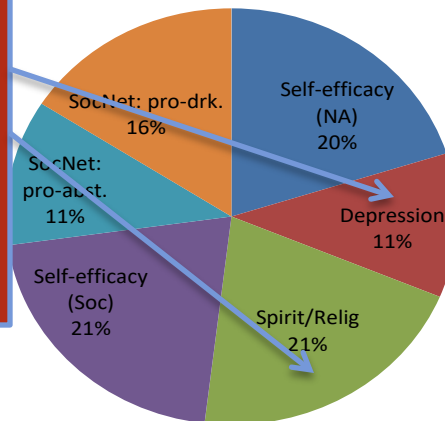
DO MORE AND LESS SEVERELY ALCOHOL DEPENDENT INDIVIDUALS BENEFIT FROM AA IN THE SAME OR DIFFERENT WAYS?

Aftercare (PDA)

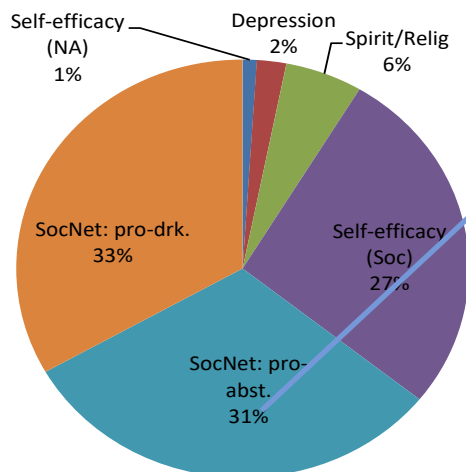


effect of AA on alcohol use for AC was explained by social factors but also by S/R and through boosting NA ASE (DDD only)

Aftercare (DDD)

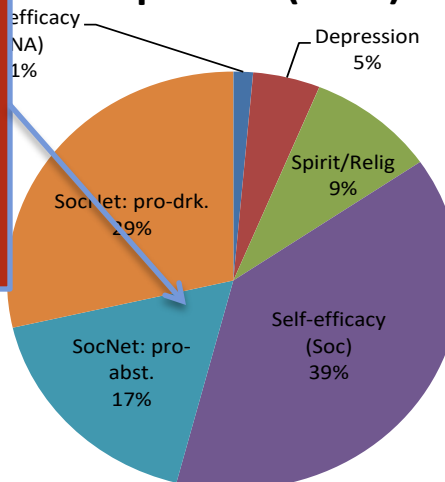


Outpatient (PDA)



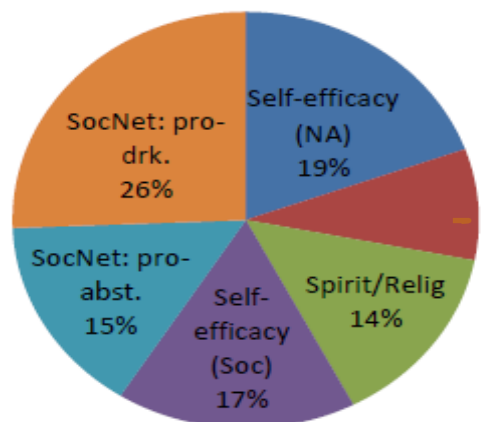
Majority of effect of AA on alcohol use for OP was explained by social factors

Outpatient (DDD)

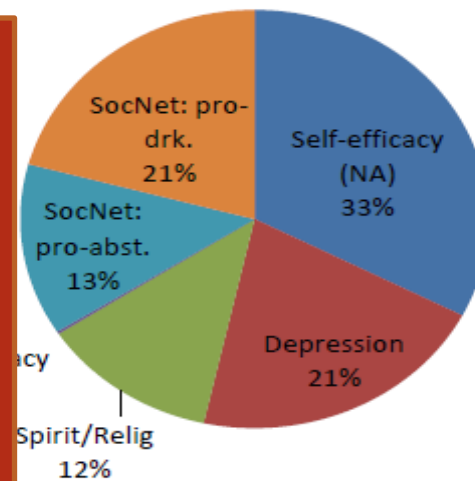


DO MEN AND WOMEN BENEFIT FROM AA IN THE SAME WAYS?

Women (PDA)

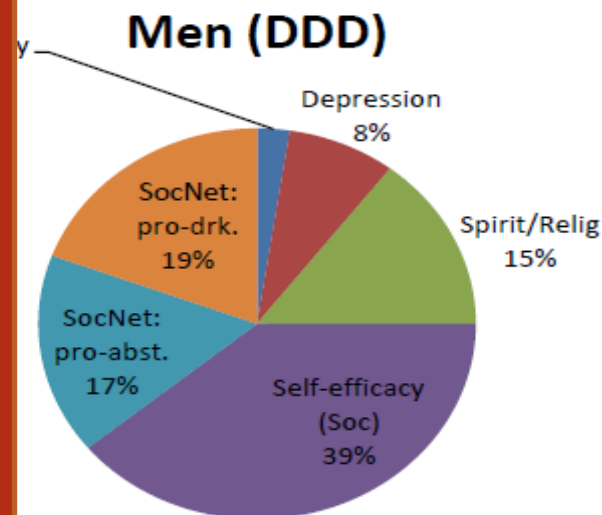
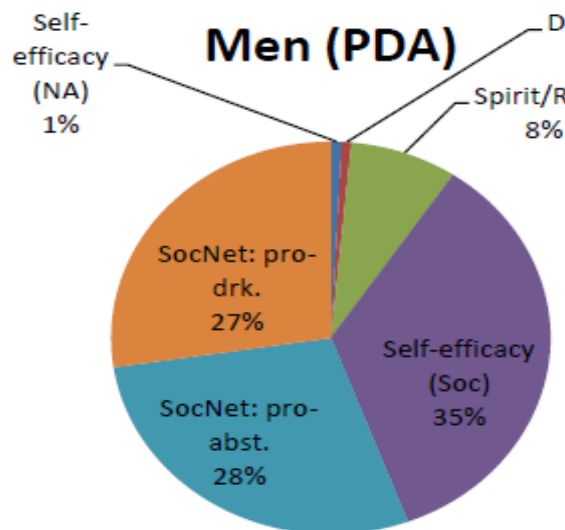


Women (DDD)



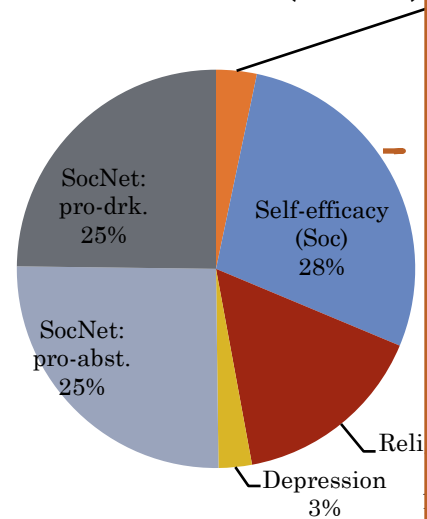
NA ASE was a MOBC for women but not men - suggests that boosts in NA ASE were available in AA but men didn't find this aspect relevant.

For men, AA was a way to help them find new sober friends and boost their social ASE much more than women

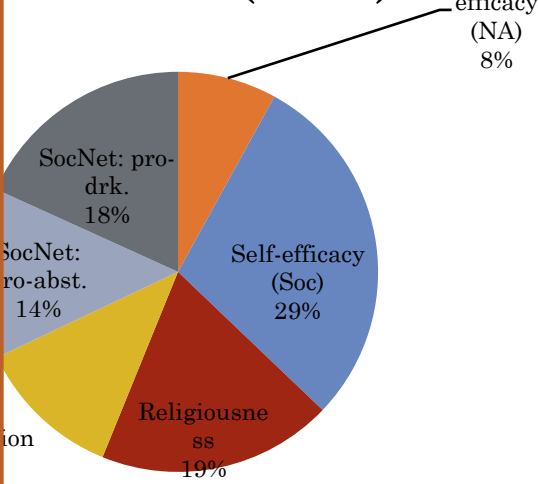


DO YOUNG ADULTS BENEFIT AS MUCH AND IN THE SAME WAYS AS OLDER ADULTS

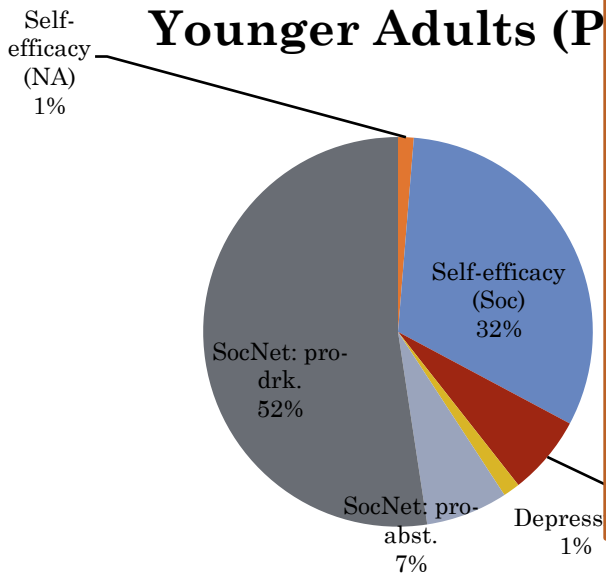
Adults 30+ (PDA)



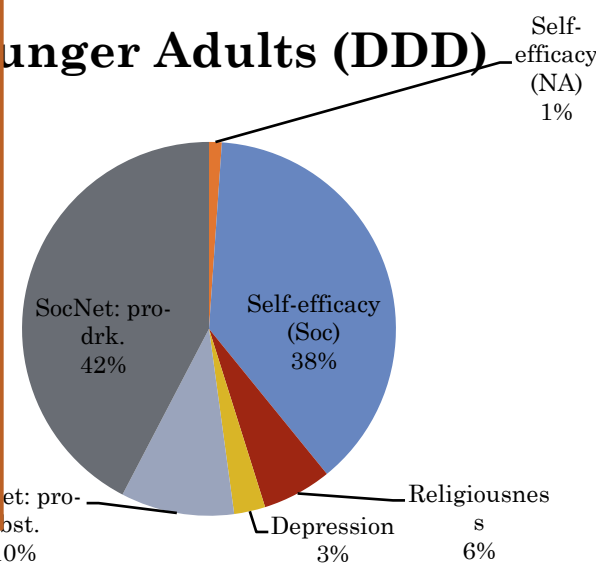
Adults 30+ (DDD)



Younger Adults (PDA)



Younger Adults (DDD)



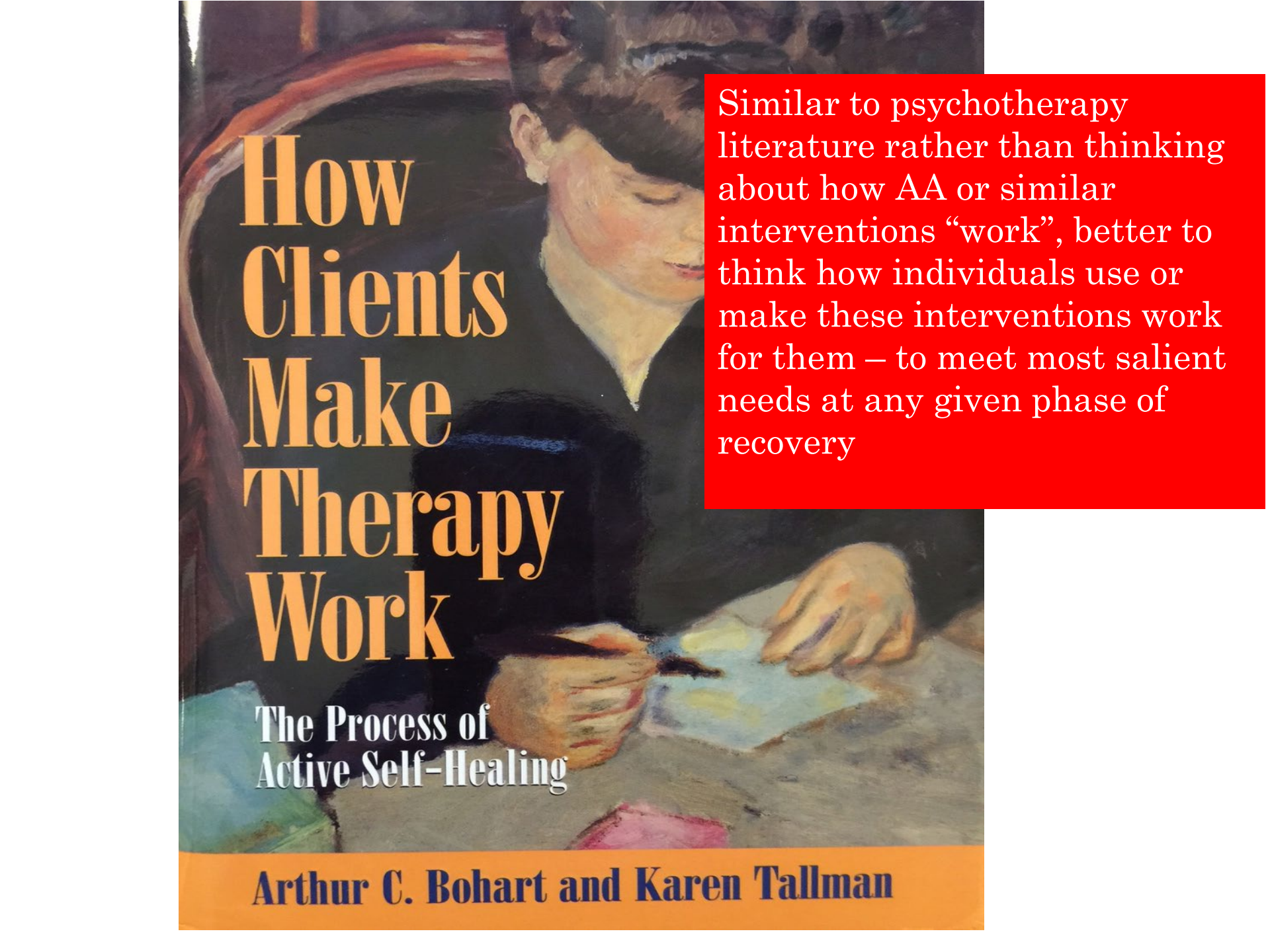
Young people (18-29yrs) benefitted as much as older adults, but these 6 MOBCs explained a much lower proportion of their benefit

The way AA helped young people differed also - mostly by helping them drop high risk social network members and boosting their social ASE; young people did not find new friends in AA (perhaps due to lack of sober same aged peers) and did not benefit via spirituality as much as older adults

MODERATED-MECHANISMS: AA EFFECTS MODERATED BY SEVERITY, GENDER, AGE...

CONCLUSIONS

- 6 mediators = about 50% of direct effect of AA on drinking (other 50%?)
- Proportion of direct effect explained even lower among young adults;
more research needed on how young people benefit
- Of note, this MOBC research finds that the same entity/intervention (i.e., AA) **produces benefits that differ** in nature and magnitude **between more severely alcohol involved/impaired and less severely alcohol involved/impaired; men and women; and, young adults and adults 30+**
- Differences may reflect differing needs based on recovery challenges **related to differing symptom profiles, degree of subjective suffering and perceived severity/threat, life-stage based recovery contexts, and gender-based social roles & drinking contexts**

The background of the slide is a painting of a person with dark hair, wearing a dark jacket, sitting at a desk and writing in a journal. The person's face is partially visible, looking down at the paper. The background of the painting is dark, with a rainbow visible in the upper left corner. The title 'How Clients Make Therapy Work' is written in large, bold, orange letters on the left side of the slide. The subtitle 'The Process of Active Self-Healing' is written in smaller, white letters below the title. The authors' names 'Arthur C. Bohart and Karen Tallman' are written in dark blue letters at the bottom of the slide.

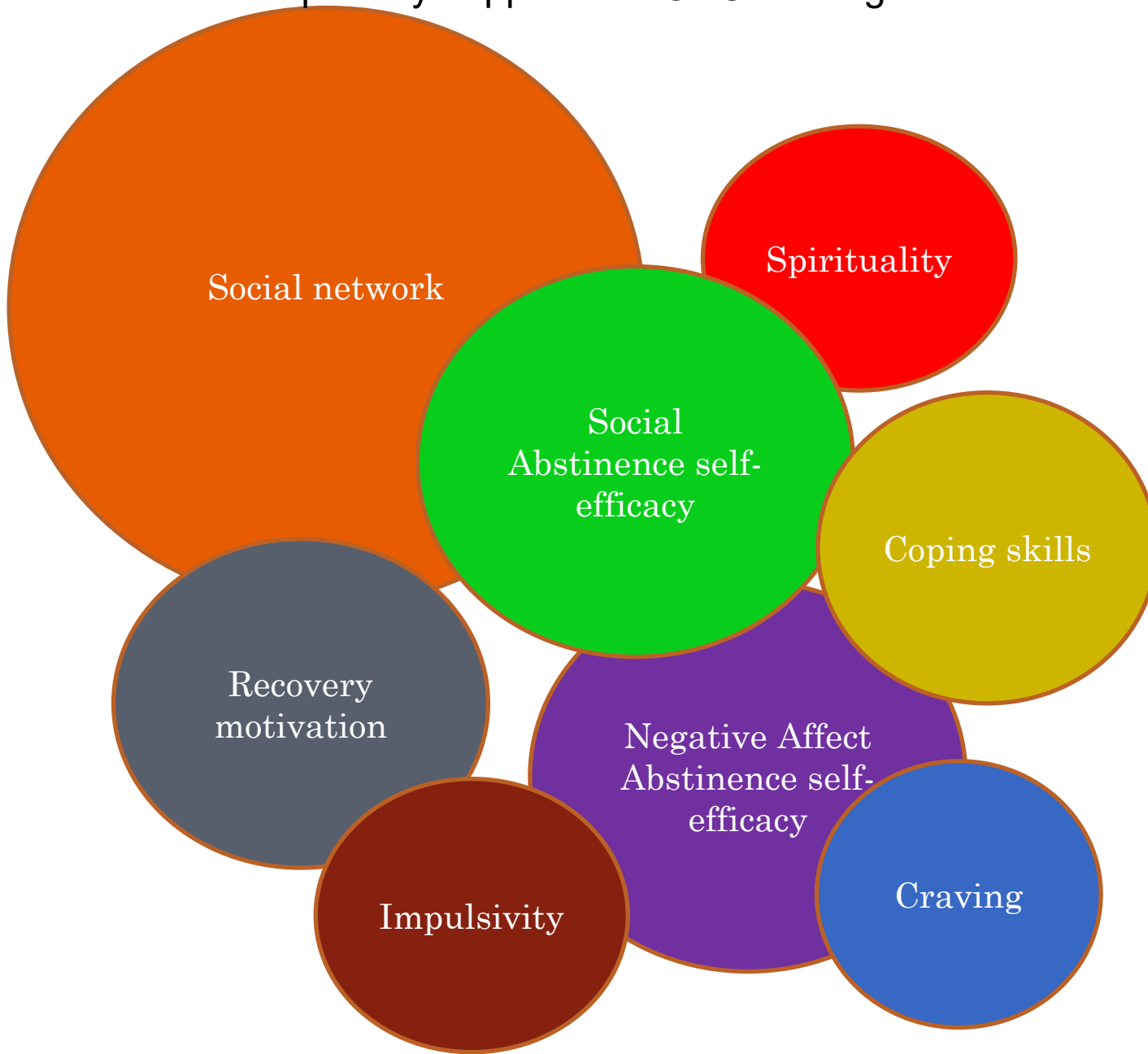
How Clients Make Therapy Work

The Process of
Active Self-Healing

Arthur C. Bohart and Karen Tallman

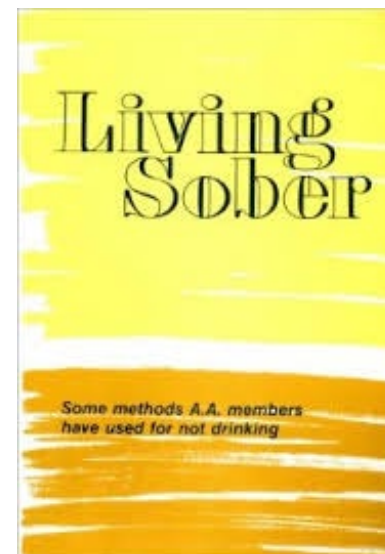
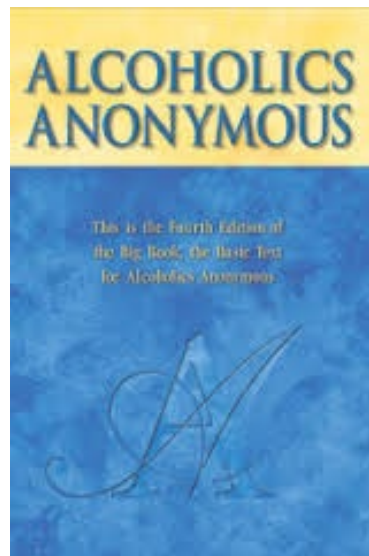
Similar to psychotherapy literature rather than thinking about how AA or similar interventions “work”, better to think how individuals use or make these interventions work for them – to meet most salient needs at any given phase of recovery

Empirically-supported MOBCs through which AA confers benefit



“LIVING SOBER” VS. “BIG BOOK”

- MOBC research results suggest the way AA works has a closer fit with the pragmatic social, cognitive, and behavioral experiences of how its members stay sober documented in its later publications (*Living Sober*, 1975) than with the *Big Book* (1935; 2001), which was written in 1935 and based on relatively little accumulation of sober experience (i.e., less than one hundred members, most with short lengths of sobriety)



AA/TSF Findings Summary



For alcohol-related outcomes other than complete abstinence, AA and professionally-delivered TSF interventions are at least as effective as other well-established treatments.



For abstinence outcomes, AA and TSF interventions are as effective or better than other well-established treatments.



Implementing AA and TSF also appear to produce substantial health care cost savings.



Mediational analyses demonstrate clinically delivered TSF produces benefits through fostering AA participation during/following end of formal treatment. MOBC research- AA mobilizes therapeutic mechanisms mobilized by formal treatment but does so over long-term, for free, in communities in which people live



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