Life Meaning as Mediator of 12-step Participation Benefits on Stable Recovery from Polysubstance Use

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BACKGROUND– THE RECOVERY PROCESS

- Twelve-step participation, both during and after formal treatment, is useful in sustaining recovery.
- A significant proportion of substance users choose not to affiliate with 12-step programs and many drop out, therefore it is critical to elucidate the processes underlying the therapeutic effects of 12-step as these processes themselves may be beneficial independently of 12-step participation.
- Several domains have been examined as mediating the therapeutic effects of 12-step participation – e.g., social support, motivation and coping. [1,2]
- 12-step meeting attendance and suggested activities (e.g., working the step, reading recovery literature) provide a context in which to reinterpret one's active addiction history and surrounding circumstances; further, the emphasis on doing service (e.g., sponsoring new members, becoming a role model) can help restore a positive sense of self as a useful and valued member of the community.
- LIFE MEANING or purpose is a critical element of psychological well-being.
- Meaning provides essential context to understand and successfully cope with life's difficulties.
- Life meaning/purpose is an inherent part of the spiritual pursuit.
- However, we have found in qualitative work that many individuals who have found purpose in life – a reason to 'get up in the morning,' a reason to sustain recovery in challenging times – do not necessarily consider themselves spiritual.
- In the words of one of our study participants:
- *"I need to have a reason to stay sober…. I asked myself the question, "Why am I here? Just to drink?" No, a sense of purpose gives me something to work with. Everybody don't go to meetings or to church or believe in a higher power. You've got to have a purpose, something that you believe in."*
- To date, life meaning has not been systemically examined in the 12-step context.

STUDY OBJECTIVES, DESIGN AND HYPOTHESES

Using a repeated measures design, we examine the association among 12-step participation, life meaning and recovery. We hypothesize that:

1. Twelve-step affiliation (meeting attendance and involvement– e.g., step work, service) enhances life meaning.
2. Twelve-step affiliation in the first year of the study predicts sustained recovery in the subsequent year, and that.
3. The association between 12-step affiliation and subsequent recovery is mediated by life meaning.

OVERVIEW OF METHOD AND PROCEDURES

- Pathways is a 5 year NIDA-funded study being conducted in New York City.
- A longitudinal investigation of factors associated with stable recovery over time.
- Voluntary participation based on informed consent.
- Semi-structured interviews lasting approximately 2 hours.
- Prospective cohort (n=354), re-interviewed one- and two-years later (F1 and F2)– 89% of surviving cohort.
- Individuals self-identified as "in recovery" from one month to 10+ years recruited through media advertisement in NYC.
- This study bears on the 275 individuals who provide data at all three assessment points (81% of surviving cohort).

MEASURES

- 12-step attendance: Number of AA/NA meetings attended in the past year at F1.
- 12-step affiliation: Sum of nine 12-step suggested activities in the past year at F1: Having a sponsor; sponsoring someone; considering oneself a member of AA or NA; having a home group; working the steps; doing service; having contact with 12-step fellowship members outside of meetings; reading 12-step or recovery literature outside of meetings; and socializing with 12-step members outside of meetings (possible range 0 – 9).
- Meaning: The *Existential* Subscale of the Spiritual Well-Being Scale; six items yielding a score representing one's perception of life's purpose, apart from any religious reference. 3 Alpha = .87 (score range 0–4). [3]
- Sustained remission: No use of alcohol or illicit drugs assessed in the ASI or ecstasy in the year prior to the F2 interview.[4]

ANALYSES

The role of 12-step attendance and involvement in the year up to F1 were examined in two separate logistic regressions, controlling for baseline length of recovery (the association of lifetime dependence severity on F2 sustained remission was minimal). Next, the mediating effect of Meaning on sustained remission was tested in a second set of regressions and the statistics were examined in terms of the conditions required for mediation as per Baron and Kenny (1986) and Kenny et al., (1998).[5–6]

BASELINE STUDY COHORT (N=275)

Male	53.6%
Age (median)	43 (7.8)
Race/ethny African American Caucasian Mixed/other	 64% 15.5% 21.5%
Hispanic origin	18%
Employed full/part-time	41.3%
Primary income Job on/off the books Govt. assistance Other legitimate income	 34.5% 60% 5.5%
HIV+ (of 96.7% tested)	24.3%
HEP C + (of 85% tested)	30.8%
Psychiatric disorder (ever)	40%

SUBSTANCES USED

	Ever %	Primary Problem %
Crack	87.3	59.4
Heroin	65.6	18.2
Cocaine	93.1	9.1
Alcohol	98.9	8.4
Others	96.5	4.8

GENERALLY LONG AND SEVERE HISTORY OF POLY SUBSTANCE USE

Years regular use of alcohol	Mean = 17.4	St. Dev = 10.6
Years regular use of drugs	Mean = 18.7	St. Dev = 12.0
Dependency Severity[7]	Mean= 11.6	St. Dev = 2.4
Time since last used (median)…..		
Alcohol (median)	14 months (range = .1 to 528)	
Illicit drugs (median)	14 months (range= 1 to 231)	

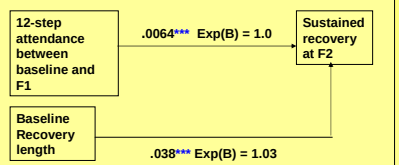
DESCRIPTIVES OF KEY DOMAINS

12-step attendance at F1 (yes)	58%
Number of meetings past year among attendees (mean, SD)	145 (141)
12-step involvement at F1 (yes)	55%
Level of involvement past year among attendees (mean, SD)	6.1 (3.6)
Meaning at F1 (mean, SD)	3.3 (.43)
Sustained recovery at F2	69%

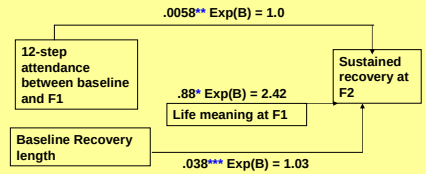
BIVARIATE ANALYSES (2-TAILED PARTIAL CORRELATIONS)

	1	2	3[a]	4[b]
1. 12-step attendance at F1	–	.63***	.21***[a]	.22**
2. 12-step involvement @ F1		–	.24***[a]	.24***
3. Meaning at F1			–	.20***
3. Sustained F2 recovery				–

12-STEP ATTENDANCE AS PREDICTOR OF SUBSEQUENT REMISSION

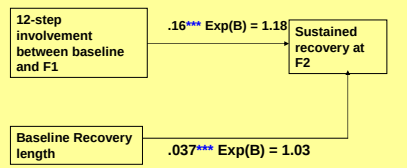


MEDIATION MODEL FOR 12-STEP ATTENDANCE

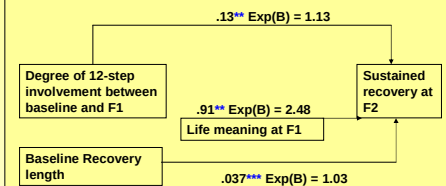


The association between 12-step attendance is weaker but remains significant, indicating that the effect of 12-step attendance on subsequent remission is *partially mediated* by Life meaning.

12-STEP INVOLVEMENT AS PREDICTOR OF SUBSEQUENT REMISSION



MEDIATION MODE FOR 12-STEP INVOLVEMENT



The association between 12-step involvement is weaker but remains significant, indicating that the effect of 12-step attendance on subsequent remission is *partially mediated* by Life meaning.

SUMMARY OF FINDINGS

- Greater 12-step attendance and involvement in the first year of the study…:
  - Were significantly associated with greater levels of life meaning at F1, consistent with the first hypothesis.
  - Predicted sustained recovery in the subsequent year, consistent with the second hypothesis.
- Higher levels of meaning at one-year follow-up was significantly associated with greater likelihood of sustained recovery a year later.
- The association between 12-step attendance/involvement and subsequent recovery is partially mediated by life meaning, lending some support to the third hypothesis.

IMPLICATIONS

- The demonstrated benefits of 12-step attendance and involvement extend to persons in long-term recovery, a population that remains under-investigated.
- Therefore clinicians should work in partnership with clients to foster stable 12-step affiliation during treatment and emphasize the need for sustained participation as recovery progresses.
- Our findings suggest that life meaning it is a significant predictor of recovery maintenance.
- Because Life meaning does not need to be tied to specific sets of religious or spiritual beliefs, the pursuit of meaning as defined by the individual should be encouraged and fostered as part of rehabilitative and recovery services.
- Society can also enhance the likelihood that persons in recovery find meaning and purpose in life by working toward minimizing stigma and discrimination toward formerly dependent individuals and by embracing their potential as valued role models and citizens.

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FOOTNOTES

[a] Controlling for baseline level of meaning
[b] Controlling for baseline remission duration