The Role of Sponsorship in Recovery

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Abstract

Background and Aims: The aim of this research was to assess whether clients receiving treatment for substance abuse in a residential treatment facility will achieve lower rates of relapse with treatment in combination with active sponsorship. Prior studies suggest sponsorship may equally be impactful as attending 12-step meetings. **Design:** The primary hypothesis was that active participation as defined by contact with a sponsor of an hour or more per week, as measured by the impact on affective characteristics correlated with increased levels of sobriety, when measured by the AWARE questionnaire (Advance Warning of Relapse) within 7 days of entry and prior to discharge (within 30 days). **Setting:** The project took place in a residential treatment facility in Phoenix, Arizona. **Participants:** There were 12 clients from a men's house and 12 clients from a woman's house, all of which were going through recovery. **Intervention**: The educational session explained what a sponsor is and the importance of finding one early as a key role in relapse prevention. **Measurements:** Pre and post-test results were compared to see if there was an impact on the predictability of relapse and sponsorship. The paired *t*-test was performed to compare the two means of AWARE scores. A lower score on the AWARE questionnaire indicates a person is more likely to succeed in sobriety. **Findings:** Based on 24 samples collected, the mean scores within the first seven days were 91.17 with a standard deviation of 18.59 and the mean score prior to discharge were 72.78 with a standard deviation (SD) of 20.02. The mean difference between the two scores was 18.39 (SD=2.84). There was a significant effect of the relapse prevention program which included sponsorship, $t\ (22) = 4.79$, $p < 0.001$. **Conclusion:** Implications for practice include increased time with sponsors to reduce rates of relapse. Future concerns include good fit matching which may reduce rates of relapse even further.

Keywords: Sponsor, Sponsorship. Recovery, Addiction, Residential Treatment, Relapse

Background and Significance

Substance abuse is derived from excessive and dysfunctional use of substances causing dangerous and maladaptive patterns leading to physiological harm and psychological impairment (Sadock, Sadock, & Ruiz, 2015). Substance abuse results in mortality, decreased quality of life, and heavy costs to society, both monetary and in terms of lost human potential. Global substance abuse estimates that 246 million people are utilizing illicit drugs, led by cannabis as the frontrunner followed by opioids, cocaine, and amphetamine type stimulants (United Nations Office on Drugs and Crime [UNODC], 2015). Approximately 12.19 million drug users inject drugs and approximately 1.65 million of them had HIV in 2013 (UNODC, 2015). In the United States in 2013, there were 24.6 million individuals who were using illicit drugs (Lipari, et. al., 2014). Gila County reports the highest rate of fatalities at 48.8 deaths per 100,000 residents (Arizona Department of Health Services [ADHS], 2015).

Abstinence-contingent recovery housing such as residential treatment facilities improves abstinence following detoxification (Tuten, DeFulio, Jones, & Stitzer, 2011). Important factors in maintaining abstinence in treatment programs include finding a sponsor, meeting attendance, finding a home group, and incorporating sponsors into the client's social networks (Zemore, Subbaraman, & Tonnigan, 2013). The sponsor is a person to whom the person in recovery can turn to for support, advice, and guidance. Sponsorship is associated significantly with abstinence from drugs and alcohol (Greenfield & Tonigan, 2013). There is an effect on sobriety when a person sustains a relationship with a sponsor earlier in recovery because it extends the time allowing for more interaction with the sponsor. According to Witbrodt, Kaskutas, Bond, & Delucchi, (2012) early sponsorship in addition to peer meeting involvement increases abstinence

and prevents relapse over time. Active participation and sponsorship in AA and NA is associated with positive recovery outcomes (Zemore, Subbaraman & Tonigan, 2013). Sponsor-client involvement increases the effectiveness of the program (Zemore et. al., 2013). Sponsors provide social and emotional support while maintaining a client's accountability to remain sober.

Sponsors interact as a therapeutic alliance amongst clients promoting accountability and responsibility for their actions (Kelly, Greene, Bergman, Hoeppner & Slaymaker, 2016). These mutual aid alliances are sponsors and role models mentoring like-minded persons who provide social support through recovery networks (Witbrodt et al., 2012). Stevens and Jason (2015) found that improved sponsor relationships might have a multiplicative effect upon patients recovering from substance abuse. It is imperative that the sponsor be trustworthy, empathetic, and supportive of recovery goals (Kelly et al., 2016). Stevens and Jason (2015) noted that confidentiality and availability were also critical components.

Sponsors are a critical component in the recovery process and play a key role in mentoring peers while providing mutual support. A sponsor is an empathetic friend/peer that facilitates education and information expanding on AA and social networks (Stevens & Jason, 2015). They have experienced recovery and addiction, and actively communicate with the client regarding progress or feelings about recovery (Kelly, Greene, & Bergman, 2016). According to Rynes and Tonigan (2012), sustaining a sponsor early in recovery programs predicted later increases in the number of days participants abstained from alcohol.

Internal evidence from the clinical site suggested that it is critical to help clients obtain a sponsor so that they can progress through recovery. Issues arising from internal evidence on sponsors include several barriers. Clients may not feel confident about getting a sponsor or asking someone to fill the role. Sponsors have employment, family, and other relationships

which may conflict with having enough time to be a sponsor throughout the entire day and have requirements about calling daily. Certain sponsors may have limitations in terms of who they will work with, while others have had very little sober time. Similarly, clients may not wish to be scrutinized and disconnect from the sponsor if there are too many limitations. There is limited evidence suggesting that a specific number of days leading up to the acquisition of a sponsor has a particular impact, however there is consistent evidence leading to the understanding that sponsorship plays a key role in the prevention of relapse over intervals of three months, up to a year, and for multiple years.

Problem Statement

Substance abuse results in decreased quality of life and other physiological harm and psychological impairments. Active participation and sponsorship in AA and NA is associated with positive recovery outcomes (Zemore, Subbaraman & Tonigan, 2013). Sponsor-client involvement increases the effectiveness of the program as a whole (Zemore et. al., 2013). Sponsors provide social and emotional support while maintaining a client's accountability to remain sober. Internal evidence from the clinical site suggests that it is critical to help clients obtain a sponsor so that they can progress through recovery, but also shows that there are barriers to effective sponsorship which may be explored. There is a connection demonstrated throughout the literature that sponsorship has an impact on rates of recovery.

The primary hypothesis is that active participation, as defined by contact with a sponsor of an hour or more per week, has an impact on the recovery process. The secondary hypothesis is that the first seven days in which one acquires a sponsor (e.g. how long they wait before they have a sponsor) has an impact on recovery and relapse.

Previous work in the area includes a focus on sponsorship and its effects on abstinence, versus Alcoholics Anonymous attendance (Zemore et. al. 2013; Witbrodt, et. al., 2012; Greenfield & Tonigan, 2012). Sponsorship attributes were also assessed for their impact on outcomes and sponsee perspectives (Young, 2013; Young 2012; Stevens & Jason, 2015). It can pose a problem for individuals recovering from substance abuse who do not have a sponsor because they often do not have enough support in their social and familial networks, which makes it difficult to maintain sobriety.

PICOT Question

(P) In a residential treatment center substance abuse patients (I) how does active sponsorship within 7 days upon admission as (C) compared to non-active sponsorship within 7 days (O) affect relapse prevention.

Search Strategy

An exhaustive search was performed utilizing three databases – CINAHL, PsychINFO, and PubMed. A total of 10 articles were chosen and critically examined according to the relevance and level of evidence.

The combined search used key terms including active *sponsorship*, *addiction treatment*, *relapse*, *recovery, 12 steps, and alcoholics anonymous*. Studies considered for inclusion were required to address recovery from addiction. Additionally, studies were selected that addressed the role of sponsorship in recovery and prevention of relapse, characteristics of sponsors, and the role of inpatient treatment facilities on recovery. Exclusion criteria involved peer-reviewed journals written in English and published from 2012-2017. Once the initial yields were produced, the papers were examined to determine relevance to the clinical question. Only adult subjects were included.

PubMed (Appendix A) was searched using keywords *sponsorship AND alcoholics anonymous and* yielded 12 results with no limitations. When the exclusion criterion was applied to the search, 6 results were found. PubMed was searched again using keywords *sponsorship AND recovery* and yielded 22 results with filter. PubMed was then searched using keyword *sponsorship AND recovery, AND addiction*, and yielded 9 results and 4 articles with exclusion criteria were selected.

PsychINFO (Appendix C) was searched with keywords *sponsorship AND alcoholics anonymous* which yielded 41 results with the exclusion criteria and 14 without. PsychINFO (Appendix C) was searched again using keywords *12 step program AND addiction treatment* which yielded 130 results with exclusion criteria. PsychINFO (Appendix C) using keyword *Sponsors AND Alcoholics Anonymous* yielded 13 results with exclusion criteria and 2 articles were selected.

From the database CINAHL (Appendix B), using keywords *sponsorship AND alcoholics anonymous,* yielded 10 results without filters and 6 results with filters on. When keywords and *sponsor AND recovery* were used, 17 results were displayed with filters on yielding 4 articles.

Evidence Synthesis

Ten articles were selected for the review from randomized control trials; six articles were level II evidence using randomized control trials. Four articles were ranked level III evidence and they are cohort studies. The experiments were well-designed controlled trials. The designed experiments were performed in United States. Most of the samples consisted of white males with slight heterogeneity with minority status. (Appendix I,J). Most of the studies exhibit a large sample size with clear definition of independent and dependent variables. The most common bias demonstrated within the articles involved selection bias and recall bias.

The common independent variables demonstrated how often sponsors met with clients and the common dependent variable was the success rate and the completion of the program in preventing relapse. The common independent variables included experience level, spiritual beliefs, and participation rankings. The outcomes indicated that these variables increased abstinence and relapse prevention. This was supported by the statistical data of p values less than 0.001 in most cases indicating that sponsorship made an impact and demonstrated an increase in abstinence. The studies demonstrated how sponsorship influenced the common dependent variable which was client participation level in the residential and recovery treatment center. Commonalities of sponsorship demonstrated that higher levels of experience, education levels, and spiritual beliefs, resulted in a higher percentage of participation and interaction in recovery programs. All the articles reviewed were recent, ranging from 2012 to 2016. The articles pertained to positive outcomes which showed a higher percentage of clients following the recovery protocol representing the PICOT. All the articles demonstrated a relationship between sponsorship and effective treatment in AA participants and prevention of relapse (Appendix I,J).

The heterogeneous variables included recovery motivation and physical consequences. Both variables contributed to abstinence and relapse prevention in recovery.

There were a wide variety of measurements between the articles. Three articles utilized survey methods, while others used various clinical measuring techniques such as GAATOR, SCID, and SAI. The most popular data analysis technique was the student t-test and regression tests. Three articles performed the t-test to find the significance between sponsorship and AA participation. Two articles performed chi square tests to find the correlation between sponsorship and the number of clients completing the 12-step process (Appendix I,J). Most of the studies involved one day experimental interventions except for two of the studies. The findings from the

studies were consistent with each other and supported the PICOT. Many of the tests showed a significant improvement in prevention of relapse with active sponsorship in relation to AA meetings and attendance. Two of the articles discussed the importance in the number of AA meetings attended in addition to the amount of time the sponsors spent with the sponsees. Two of the articles discussed the importance of the characteristics and faithfulness of the sponsors. Overall, the studies supported the PICOT question and sustaining a sponsor within the first seven days of admission that was raised in regard to the effectiveness of sponsorship and prevention of relapse in those who have received treatment.

Evidence showed significant results in the effectiveness of utilizing sponsors that help patients recovering from substance abuse in completing treatment with a higher probability in prevention of relapse. Evidence suggested that early acquisition of a sponsor had a beneficial effect and could benefit from furthering research. A practice change might result from an increased emphasis on sponsorship and finding sponsors for patients early on in recovery may become an incorporated practice.

Purpose Statement

The purpose of this research was to demonstrate that active sponsorship has an effect on rates of relapse. Encouraging sponsorship in residential facilities may have beneficial effects for patients' maintenance of sobriety after discharge.

Evidence Based Practice Model and Conceptual/Theoretical Model

Bandura (1971) described the role of learning through modeling in the Social Learning Theory (Appendix D), also known as Cognitive Social Theory. Bandura posits that most of the behaviors that people show are learned through the influence of example (Bandura, 1971). Modeling influenced behavior that lead to self-efficacy and increased response efficacy.

According to Butts and Rich (2015), social learning theory suggests that learning is based on observing others and the role model was rewarded for their behavior, those who are attached to the role model, experienced vicarious reinforcement (Butts and Rich, 2015).

According to Latkin and Knowlton (2015), social networks and interventions were developed to help promote social norms, which were highly effective forces demonstrated in health behavior and change. Factors at work included social rewards and factors of social identity and the practice of sponsorship in residential treatment was an intervention under the social learning theory which incorporated all categories (norms, rewards, identity).

The Model for Change to Evidence-Based Practice (EBP) (Appendix D (i) was a systematic approach designed by Rosswurm and Larrabee (1999) for guiding healthcare professionals and practitioners based on research and theoretical literature. The need for a potential change in practice was assessed and inspired by the importance of sponsorship in relation to predictability of relapse while in substance abuse treatment and quality improvement of data suggesting further research was needed for a change to occur. Internal data was compared with external data and the problem was identified and addressed within the practice by an assembly of administrators and health care professionals identifying the specific issue at hand. As a result, research was incorporated into improving strategical ways to educate staff and clients into making changes within the sponsorship policy within the organization. Best evidence was synthesized from the literature and researchers address clinical feasibility of research findings (Rosswurm & Larrabee, 1999).

A practice change involved the development of sequential standardized procedures designed to form the protocol. Practitioners and clinical support staff identified inter-professional outcomes and the effects of practice changes on patient outcomes.

Quality improvement included an evaluation plan that processes the indicators and outcomes of satisfaction and change of practice responses from the staff. Feedback from staff, coordinators, and supervisors impacted the decision to receive, reject, adapt or adopt changes. In the phase of integration and maintenance of a change in practice, recommended alterations to procedures and modifications of practices were presented to the stakeholders and staff.

Project Methods

This evidence-based project was approved by the IRB board affiliated with Arizona State University (ASU) (appendix H (i). Protection of human subjects and recruitment included participants who created a unique identification code for the questionnaires. To create the unique identification code, the participants were directed to pick the first letter of the city they were born in, favorite color, and favorite number. This ID linked the pre and post AWARE questionnaire scores. The graduate student kept the information confidential on a lap top with a locked password. Clinical coordinators for the residential treatment center notified all newly admitted clients an opportunity to participate in an evidenced-based project. They were educated about the definition of sponsorship and the importance of obtaining a sponsor early in treatment allowing time to answer questions during a private session held in a private office in the residential treatment center (Appendix G). The importance of active sponsorship (over one hour per week) was stressed as an important factor in reducing the predictability of relapse the clients understood that receiving treatment was not dependent on their participation in the evidence-based project. Treatment was provided to all people regardless of the evidence-based project participation, meaning their ability to receive full treatment services including sponsorship is not dependent on whether they agreed to consent and participate in the evidence-based project or not. (Appendix H). The organizational culture was positive regarding sponsorship and staff members were

supportive in developing a policy for implementing time spent with a sponsor with a goal of one hour or more per week and documenting hours in addition to mandated daily recovery meetings.

This evidence based-project was an intervention practice outcome using a PICOT question. The quality improvement project was designed to measure the outcomes of relapse based on the status of active versus inactive sponsorship. The AWARE questionnaire scores were collected pre and post time spent with the sponsor and measured within the first 7 days of admission and near the time of discharge on week four. The demographic survey was collected at the first meeting with clients which included gender, age and race, last time of substance use, and preferred substance use.

The intervention measured self-reported time spent with a sponsor as active (over one hour) versus inactive (less than one hour) per week in correlation with AWARE scores.
The AWARE questionnaire was designed to evaluate the predictability of relapse and utilized a twenty-eight-item scale that measured warning signs of relapse according to Miller and Harris (2000) (Attachment F). Components of the AWARE tool were indicators of the potential for maintaining sobriety and were broken into three categories, from which research questions arise. They include, physical symptoms of depression, anxiety, and recurrent thoughts of substance use. Reponses were given on a Likert scale integrating a 7-point system ranging from “always” to “never.” The AWARE questionnaire survey was collected after the clients filled out every question and measured within the first 7 days of admission and at the time of discharge at 28-30 days.

The educational session was completed at the first meeting. This included an introductory meeting which explained the definition of what a sponsor is and the importance of finding one

early in recovery and the idea that it can play a key role in relapse prevention. An overview of the AWARE questionnaire and its significance in the predictability of relapse was discussed.

Outcome Measures

Instruments/Validity/Reliability

The Advance Warning of Relapse (AWARE) questionnaire was used as a tool in directly measuring relapse rates while assessing the predictability of relapse upon admission in comparison to discharge on week four of treatment. According to Kelly, Hoeppner, Urbanoski, & Slaymaker (2011), strategic approaches have prompted more efficient designs to evaluate psychometric properties by measuring the risks and predictability of relapse when examining the warning signs in the Advance Warning of Relapse scale (AWARE) questionnaire tool. The outcomes measured pre and post results of the AWARE questionnaire upon entering the residential facility within seven days and prior to discharge. This questionnaire was designed to evaluate the predictability of relapse in a twenty-eight item scale that measures advance warning signs of relapse according to Miller and Harris (2000). Reponses were given on a Likert scale integrating a 7 point system ranging from “always” to “never.” Patients self -reported their feelings, thoughts and experiences, which showed warning signs and predicting factors impacting relapse. Components of the AWARE tool were indicators of the potential for maintaining sobriety and were broken into three categories, from which research questions arise. They included, negative self-perceptions, physical symptoms of depression, anxiety, somatization, and recurrent thoughts of drinking or substance use.

According to Kelly et al. (2011), AWARE scores predicted relapse at the one month and six-month assessments and neared statistically significant predictability at three months. The use of other factors can help to make the tool more effective in its predictive validity, though

demographic factors and others are not being studied here. Kelly addressed biases with regards to retention, including demographic factors. Covariates also included education, drug of choice, and percent of days abstinent, prior substance abuse related hospitalization. All these covariates were factors that could have affected the data in this project in addition to the small sample size.

To address internal reliability, the authors calculated the ordinal version of the coefficient alpha and addressed the convergent validity the authors calculated bivariate correlations between AWARE and the Brief Symptom Inventory-18 tools. The BSI-18 is a similar tool in that is looks at depression, anxiety, and somatization symptoms (Kelly et al., 2011).

The AWARE tool was applied to the project by using a paired *t*-test to compare between groups of people who have used a sponsor actively versus those who have not. AWARE scores were measured pre- and post-treatment (between the first seven days of admission and prior to discharge).

The AWARE tool is an evidence-based strategy for measuring rates of relapse by proxy. While it predictive validity may not be perfect, in combination with other indicators it was very effective. Furthermore, it is imperative for researchers to find scales such as AWARE to ensure the ethical nature of measuring results related to relapse, which cannot in this study be measured directly.

Data Collection and Analysis

Data regarding time spent with sponsors, demographics, and AWARE scores were stored indefinitely and managed and updated with clinical staff. The data was collected from participants and stored in an Excel/SPSS file on a laptop with a security password. The information and data collected was destroyed if the client decided to withdraw and all data was excluded from any analysis. Every member of the research team received CITI training and

possesses a current certification with CITI training approved by ASU faculty. Data was shared with stakeholders, clinical support, administration, and specified team members with CITI training authorized for this project.

Paired *t*-tests were used to analyze and compare pre and post AWARE scores, differences between groups with active vs. inactive sponsors, and differences between genders.

The proposed budget was $0 as the clinical coordinators, staff, and interprofessional team members developed a team plan with clinical support members and volunteers to recruit the clients randomly upon admission on a volunteer basis and assist by locating clients and providing privacy in an office to complete the educational portion of the intervention in addition to filling out the surveys. Privacy was allowed and time for questions was respected throughout the evidence-based project. Participants included twelve male and twelve female residents in substance abuse treatment over the age of 18 years old.

Outcomes/Results

The demographics showed the average age of the participants were 35 years old. 50% of the participants were single, 25% were married and 25% were divorced. Clients were voluntary admission and agreed to participate in the evidence-based project during their stay at Crossroads. Pregnant women, involuntary admission, undocumented individuals, pretrial adults, and/or Native American, and special populations were included in the study sample; however, these special populations were not the target of the study. Exclusion criteria involved minors who were under the age of 18, adults who were unable to consent and clients who did not speak English.

Paired Samples *t*-test

			Paired Differences					t	df	Sig. (2-tailed)
			Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
						Lower	Upper			
yes	Pair 1	TotalScorePre - TotalScorePost	34.40000	18.86908	4.21925	25.56900	43.23100	8.153	19	.000
no	Pair 1	TotalScorePre - TotalScorePost	28.50000	4.43471	2.21736	21.44338	35.55662	12.853	3	.001

Table 1. Results of paired *t*-test of pre- and post -AWARE scores

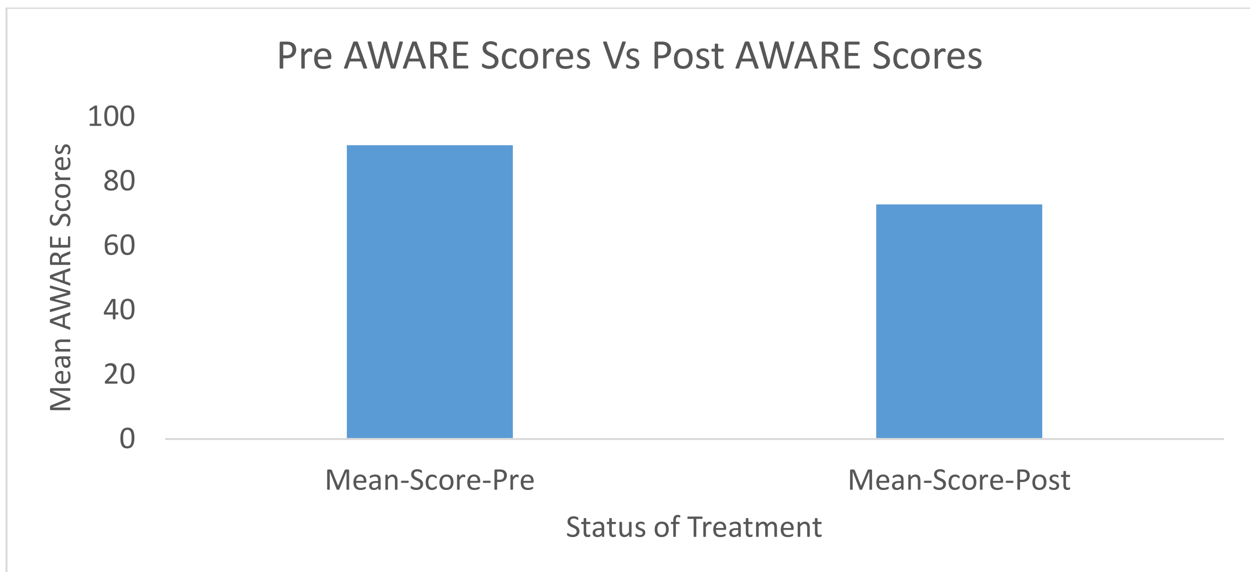

Figure 1. Pre-AWARE mean scores versus Post-AWARE mean scores

Based on the 24 samples collected, the mean pre-score during the first week of treatment was 91.17 with standard deviation of 18.59 and the mean post-score during week 4 was 72.78 with standard deviation of 20.02 (Table 1 & Figure 1). The mean difference between the two scores was 18.39 (SD=2.84). There was a significant effect on relapse prevention and active sponsorship, t (22) = 4.79, $p < 0.001$. The results indicated that there was a statistically significant difference between the two scores, indicating improvement in relapse prevention.

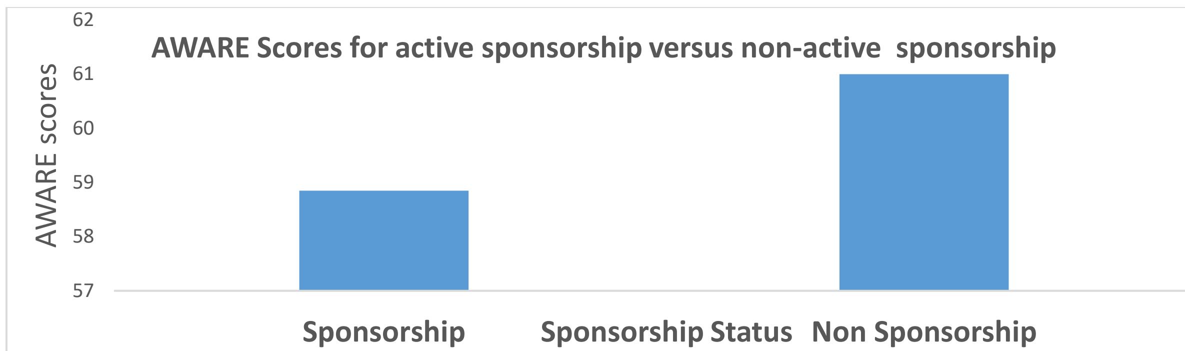

Figure 2. Average AWARE scores for Active sponsorship vs. Non-active sponsorship.

When comparing the AWARE scores for participants who had sponsors at the end of week 4 to those who did not, the scores for the participants with sponsors were slightly less (M = 58.85, S.D = 19.37) than those who did not have sponsors (M = 61, S.D = 12.19) (Figure 2.)

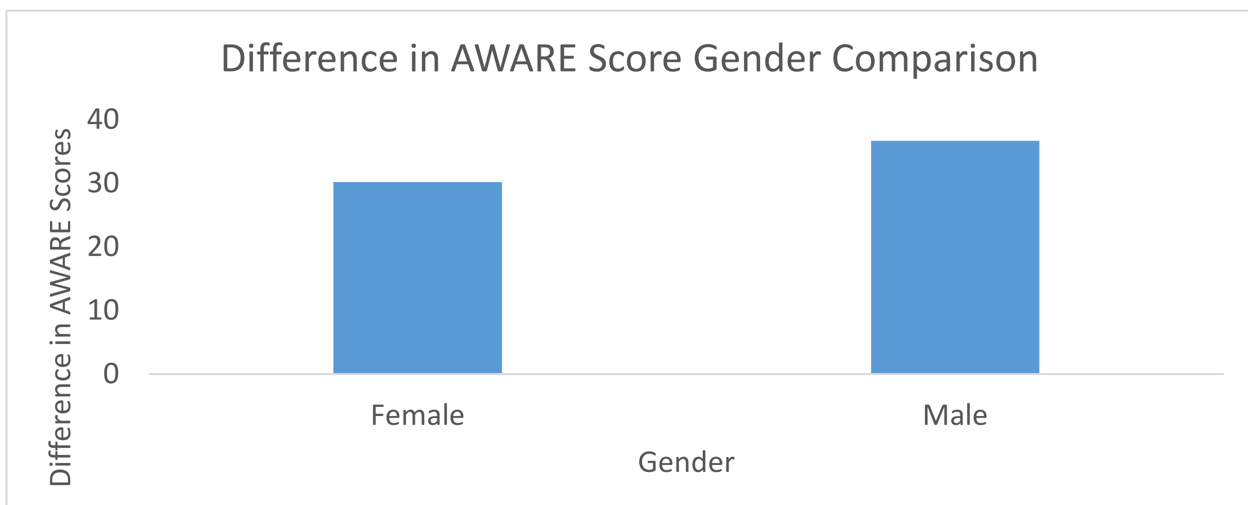

Figure 3. The obtained average AWARE scores for Male vs. Female.

The effects of sponsorship in substance abuse treatment included comparing of genders by performing paired *t*-tests in males and females (Figure 3). The results demonstrated that the mean differences between AWARE scores for the participants during week 1 and week 4 were larger for males (M = 36.67, S.D. = 21.15) when compared to females (M=30.17, S.D. = 12.66). This had a p-value < 0.001. Results showed that the sponsorship program positively influenced relapse prevention by decreasing the predictability of relapse upon discharge.

The benefits demonstrate that there is a lower predictability of relapse in clients receiving treatment for substance abuse in combination with the assistance of an active sponsor. Early sponsorship and prevention of relapse is strongly correlated with higher rates of abstinence and remission of substance abuse.

Discussion

The impact of the project is reduced rates of relapse for the patient, in which social networks evolve with peer engagement and expertise. For the service provider, increased success rates with sponsors decreased the predictability of relapse. This project has a high level of sustainability because it requires very little fiscal input. In settings where sponsors are common it would be simple to encourage more interaction with them. In terms of policy, education and training in residential treatment centers should be encouraged. It would lower systematic monetary costs of addiction.

Strengths of the project demonstrate strong leadership and team collaboration with an interprofessional team, clinical supervisors, volunteers, clinical staff members, and administration. The men’s treatment facility is currently documenting weekly time spent with a sponsor and noting it as active or inactive with the intention to intervene and ensure the client’s needs are being met in terms of sponsorship and the compatibility of a mentor. Limitations impacting the project are a result of a small sample size in addition to interrupting clients during residential treatment for 30 – 60 minutes during right track classes and group meetings throughout their first thirty days of rehabilitation. More research is needed to evaluate the outcomes of early sponsorship in residential treatment and the impact on the predictability of relapse and active versus inactive sponsorship. Barriers are related to unknown length of stay upon admission secondary to insurance purposes or criminal justice penalties related to pretrial

clients and the potential for sentencing during treatment services and lack of time in developing a larger sample size.

The study successfully demonstrated the effectiveness of sponsorship in helping patients recovering from substance abuse and preventing relapse in residential treatment. Studies showed various ways to improve the relationship between sponsors and sponsees to provide a better chance for the patient to complete the program. Evidence was consistent with current literature which demonstrated strong support when securing a sponsor makes a difference on increasing abstinence in recovery and preventing relapse. Consistent meetings between sponsors and sponsees exhibit dramatic improvement in participation of the program.

The female participants were limited in their access to sponsors during the first week of treatment, therefore five residents were paired up with one sponsor at times who attended weekly AA meetings. This allowed them more time to search for a compatible sponsor. Due to this limitation the women often appeased clinicians by verbalizing interest in searching for a new sponsor to appear more compliant with their role in treatment. Education was reinforced to ensure an assertive method was applied to securing a sponsor since self-esteem and insecurities were key factors inhibiting their ability to approach one during meetings. Clients verbalized feelings of anxiety when attempting to introduce themselves, and did not feel confident in asking a particular sponsor of interest due to fear of rejection. This evidence-based project was beneficial in helping clients assess for intended sponsor characteristics. Staff-members were open to collaborating with clients about compatibility traits that would promote a more successful relationship with a sponsor.

Conclusion

Active sponsorship was encouraged for recently sober individuals resulting in fewer relapses and higher rates of abstinence in patients recovering from substance abuse, as measured by the AWARE tool. The project demonstrated a significant correlation between interaction with a sponsor and decreased predictability of relapse. More efficient correspondence and matching of sponsors will improve with monitoring patient feedback ensuring a more effective recovery rate overall in preventing relapse. This practice may help reduce mortality and morbidity and increase overall quality of life.

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Appendix A

PubMed search result

NCBI Resources How To Sign in to NCBI

PubMed Home More Resources Help

PubMed Advanced Search Builder

YouTube Tutorial

Filters activated: published in the last 5 years. Clear all

Use the builder below to create your search

Edit Clear

Builder

All Fields Show index list

AND All Fields Show index list

Search or Add to history

History

Download history Clear history

Search	Add to builder	Query	Items found	Time
#6	Add	Search (12 step programs) AND sponsorship Filters: published in the last 5 years	2	04:22:56
#5	Add	Search (Sponsorship) AND Relapse Filters: published in the last 5 years	7	04:19:21
#4	Add	Search ((Sponsor) AND Addiction) AND Recovery Filters: published in the last 5 years	9	04:13:16
#3	Add	Search (Sponsor) AND Recovery Filters: published in the last 5 years	22	04:11:11
#2	Add	Search (Sponsorship) AND alcoholics anonymous Filters: published in the last 5 years	6	04:09:19
#1	Add	Search (Sponsorship) AND alcoholics anonymous	12	04:08:09

Appendix B

CINAHL search results

EBSCOhost

Select a Field (option.. | Search | Clear

AND | Select a Field (option..

AND | Select a Field (option..

Basic Search | Advanced Search | Search History

Search History/Alerts

Print Search History | Retrieve Searches | Retrieve Alerts | Save Searches / Alerts

Select / deselect all | Search with AND | Search with OR | Delete Searches | Refresh Search Results

Search ID#	Search Terms	Search Options	Actions
S6	12 step programs AND sponsorship	Limiters - Published Date: 20120101-20151231 Search modes - Boolean/Phrase	View Results (1) | View Details | Edit
S5	Sponsorship AND Relapse	Limiters - Published Date: 20120101-20151231 Search modes - Boolean/Phrase	View Results (0) | View Details | Edit
S4	Sponsorship AND addiction AND Recovery	Limiters - Published Date: 20120101-20151231 Search modes - Boolean/Phrase	View Results (0) | View Details | Edit
S3	Sponsor AND Recovery	Limiters - Published Date: 20120101-20151231 Search modes - Boolean/Phrase	View Results (17) | View Details | Edit
S2	Sponsorship AND Alcoholics Anonymous	Limiters - Published Date: 20120101-20151231 Search modes - Boolean/Phrase	View Results (6) | View Details | Edit
S1	Sponsorship AND Alcoholics Anonymous	Search modes - Boolean/Phrase	View Results (10) | View Details | Edit

Appendix C

PsychINFO search results

ProQuest

All databases › Social Sciences databases › | Change databases

Basic Search Advanced Search About

American Psychological Association

Recent Searches

To save a search, select **Save search** from the **Actions** menu. Learn more

Combine searches: Search Search tips

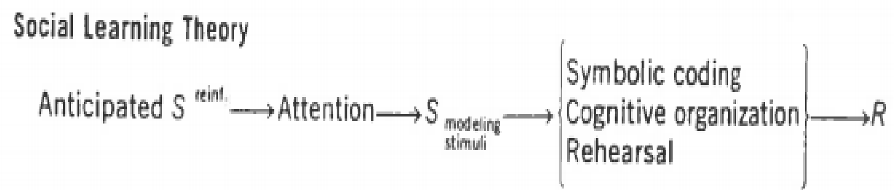
Examples: 1 AND 3 or "6"
(1 AND 3) OR (1 AND 2)
3 NOT treatment

Items selected: 0 Delete Save | Show all details | Export all searches ▾

	Set ▾	Search	Databases	Results	Actions
	S8	⊞ Sponsors AND (members of alcoholics anonymous) ✓ Limits applied	PsycINFO	13*	Actions ▾
	S7	⊞ (12 step programs) AND (addiction treatment) ✓ Limits applied	PsycINFO	130*	Actions ▾
	S6	⊞ (12 step programs) AND sponsorship ✓ Limits applied	PsycINFO	5*	Actions ▾
	S5	⊞ Sponsorship AND Relapse ✓ Limits applied	PsycINFO	1*	Actions ▾
	S4	⊞ Sponsorship AND addiction AND Recovery ✓ Limits applied	PsycINFO	5*	Actions ▾
	S3	⊞ Sponsorship AND Recovery ✓ Limits applied	PsycINFO	9*	Actions ▾
	S2	⊞ Sponsorship AND (Alcoholics Anonymous) ✓ Limits applied	PsycINFO	14*	Actions ▾
	S1	⊞ Sponsorship AND (Alcoholics Anonymous)	PsycINFO	41*	Actions ▾

Appendix D

Social Learning Theory



Appendix D (i)

Rosswurm and Larabee

A Model for Change to Evidence – Based Practice

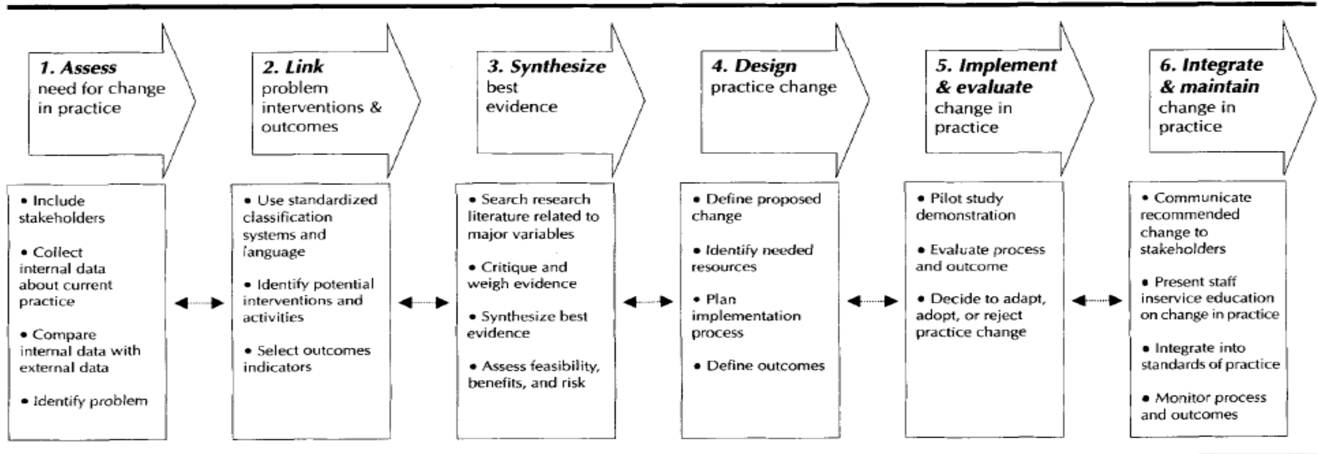


Figure 1. A model for evidence-based practice.

Appendix E
Demographic Questionnaire

Please fill in the blanks or place an X or check mark next to the word or phrase that best matches your response.

Date:

Date of Admission:

Male ______ Female ______ Other __________

Date of last drug/alcohol use:

Are you 18 years of age Yes ___ No _____

What is your age? _____

Do you have a sponsor: Yes ____ No ______

What is your marital status?

- [ ] Single
- [ ] Married
- [ ] Divorced
- [ ] Prefer not to say

How would you describe your race or ethnicity

- [ ] Native American
- [ ] Asian
- [ ] African American / Black
- [ ] Caucasian / White
- [ ] Hispanic / Latino
- [ ] Pacific Islander
- [ ] Bi/Multiracial

Substance Use: Check all that apply

- [ ] Alcohol
- [ ] Marijuana
- [ ] Heroin
- [ ] Cocaine
- [ ] Methamphetamines
- [ ] Other
- [ ]

Appendix F
The AWARE Questionnaire (Revised Form)

The AWARE Questionnaire (Advance WArning of RElapse) was designed as a measure of the warning signs of relapse, as described by Gorski (Gorski & Miller, 1982). In a prospective study of relapse following outpatient treatment for alcohol abuse or dependence (Miller et al., 1996) we found the AWARE score to be a good predictor of the occurrence of relapse ($r = .42$, $p < .001$). With subsequent analyses, we refined the scale from its 37-item original version to the current 28-item scale (version 3.0) (Miller & Harris, 2000).

The items are arranged in the order of occurrence of warning signs, as hypothesized by Gorski. In our prospective study, however, we found no evidence that the warning signs actually occur in this order in real time (Miller & Harris, 2000). Rather, the total score was the best predictor of impending relapse.

ADMINISTRATION: This is a self-report questionnaire that can be filled out by the client. Be sure that the client understands the 1-7 rating scale. When the client has finished, make sure that all items have been answered and none omitted.

SCORING: Total the numbers circled for all items, but *reverse the scoring* for the following five items: 8, 14, 20, 24, 26. For these five items only:

If the client circles this number:	1	2	3	4	5	6	7
Add this number to the total score:	7	6	5	4	3	2	1

INTERPRETATION: The higher the score, the more warning signs of relapse are being reported by the client. The range of scores is from 28 (lowest possible score) to 196 (highest possible score). The following table shows the probability of heavy drinking/drug use (not just a slip) during the *next two months*, based on our prospective study of relapse in the first year after treatment (Miller & Harris, 2000).

Probability of Heavy Drinking/Drug Use During the Next Two Months

AWARE Score	If *already* drinking/drug use in prior 2 months	If *abstinent* during the prior 2 months
28-55	37%	11%
56-69	62%	21%
70-83	72%	24%
84-97	82%	25%
98-111	86%	28%
112-125	77%	37%
126-168	90%	43%
169-196	>95%	53%

This instrument was developed through research funded by the National Institute on Alcohol Abuse and Alcoholism (NIAAA, contract ADM 281-91-0006). It is in the public domain, and may be used without specific permission provided that proper acknowledgment is given to its source. The appropriate citation is Miller & Harris (2000).

References

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AWARE Questionnaire 3.0

Please read the following statements and for each one circle a number, from 1 to 7, to indicate *how much this has been true for you recently*. Please circle one and only one number for every statement.

Date of last alcoholic drink/drug use:_______

	Never	Rarely	Some-times	Fairly often	Often	Almost always	Always
1. I feel nervous or unsure of my ability to stay sober.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
2. I have many problems in my life.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
3. I tend to overreact or act impulsively.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
4. I keep to myself and feel lonely.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
5. I get too focused on one area of my life.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
6. I feel blue, down, listless, or depressed.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
7. I engage in wishful thinking.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
8. The plans that I make succeed.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
9. I have trouble concentrating and prefer to dream about how things could be.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
10. Things don’t work out well for me.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
11. I feel confused.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
12. I get irritated or annoyed with my friends.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
13. I feel angry or frustrated.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
14. I have good eating habits.	**1**	**2**	**3**	**4**	**5**	**6**	**7**
	Never	**Rarely**	**Some-times**	**Fairly often**	**Often**	**Almost always**	**Always**

	Never	**Rarely**	**Some-times**	**Fairly often**	**Often**	**Almost always**	**Always**
15. I feel trapped and stuck, like there is no way out.	1	2	3	4	5	6	7
16. I have trouble sleeping.	1	2	3	4	5	6	7
17. I have long periods of serious depression.	1	2	3	4	5	6	7
18. I don't really care what happens.	1	2	3	4	5	6	7
19. I feel like things are so bad that I might as well drink/use drugs.	1	2	3	4	5	6	7
20. I am able to think clearly.	1	2	3	4	5	6	7
21. I feel sorry for myself.	1	2	3	4	5	6	7
22. I think about drinking/drug use.	1	2	3	4	5	6	7
23. I lie to other people.	1	2	3	4	5	6	7
24. I feel hopeful and confident.	1	2	3	4	5	6	7
25. I feel angry at the world in general.	1	2	3	4	5	6	7
26. I am doing things to stay sober.	1	2	3	4	5	6	7
27. I am afraid that I am losing my mind.	1	2	3	4	5	6	7
28. I am drinking/use drugs out of control.	1	2	3	4	5	6	7
Did you spend more than one hour per week with your sponsor? Yes (Y) or No (N)	Week 1 Y N	Week 4 Y N					

Scoring sheet for AWARE Questionnaire 3.0

For these items, record the number circled

1. ______
2. ______
3. ______
4. ______
5. ______
6. ______
7. ______

9. ______
10. ______
11. ______
12. ______
13. ______

15. ______
16. ______
17. ______
18. ______
19. ______

21. ______
22. ______
23. ______
25. ______

27. ______
28.

Total: Subtotal+Subtotal
= AWARE Score

For these 5 items, reverse the scale (* see below)

*For reverse-scaled items: 1 = 7

2 = 6

3 = 5

4 = 4

5 = 3

6 = 2

7 = 1

8. ________

14. ________

20. ________

24. ________

26. ________

Appendix G
Educational Session

Introduction:

- Introductory period and explanation about my role as a Psychiatric Mental Health Nurse Practitioner (PMHNP) student. A brief definition of what a sponsor is and their role in alcohol and drug addiction while in residential treatment and recovery.

Orientation:

- Explain the importance of finding a sponsor within the first seven days
- Educate about the findings from research and the impact of sponsorship and sobriety in prevention of relapse
- Educate about the importance of obtaining early sponsorship and being matched up with a compatible sponsor.
- Discuss the importance of spending a minimum of one hour per week with a sponsor in person, with access to texting, emails, and phone calls.
- Brief overview of the Advance Warning of relapse (AWARE) questionnaire tool with a description of scoring results, including the times it will be administered within the first seven days of admission and prior to discharge.
- Review how early sponsorship with increased time spent with a sponsor has been known to prevent relapse and sustain sobriety.

Conclusion

- Brief overview of discussion
- Questions and Answers

Appendix H
Consent/Recruitment Form
Sponsorship and Prevention of Relapse

April 01, 2018

Dear Participant,

I am a graduate student under the direction of Dr. Ann Guthery PhD, RN, PMHNP-BC Clincial Assistant Professor and Specialty Coordinator for Graduate Psychiatric Program Education in the College of Nursing and Health Innovation at Arizona State University.

I am inviting you to participate in an evidence-based education and intervention program to see if sponsorship has an effect on the relapse outcomes of people in recovery from drug and alcohol addiction who are receiving treatment in a residential treatment facility. In order for the intervention to be effective, I will ensure that every client has access to a sponsor and educate about the benefits of obtaining a sponsor and its effect on preventing relapse. Staff will be informed about the goal to increase use of sponsors and assist in collecting the time spent with the sponsor.

I will administer the pre and post measurement Advanced Warning Signs of Relapse (AWARE) questionnaire which is designed to measure the warning signs of relapse during the first 7 days of admission and before discharge within 30 days. Prior to discharge there is a self-report question at the bottom of the AWARE questionnaire asking you to answer if you spent more than one hour or less than one hour per week with a sponsor while in treatment. The total time required to complete the questionnaire will be approximately 15 minutes and the education time will be 15 minutes.

Your participation in the evidenced-based education and intervention program is voluntary and you are encouraged to ask questions at any time. Please complete questions in the survey and if you choose not to participate or to withdraw from the program, there will be no penalty. The information and data collected will be destroyed if you decide to withdraw and all data will be excluded from any analysis. It will not affect the care you receive prior to, during, or after your participation in the program. You must be 18 years of age or older to participate in this program.

Responses to the questionnaires and time spent with sponsors will be used to assess the effectiveness of the patient and organizational support in addition to the education you receive. The results of this evidenced based project may be used in reports, presentations, or publications, but your name will not be known or used.

There is no known risk greater than those that are associated with everyday types of activity. Your responses on the questionnaires will be confidential and will be identified by a unique identification code that will not be connected to your name or other personal identifying information. The unique identification code will be composed of the first letter of the city you are were born in, favorite color, and favorite number.

Your attendance at the session and completion of the AWARE questionnaire is an agreement for consent to participate in the project.

If you have any questions concerning this program, please contact the following team member.

Dr Ann Guthery, Ann.Guthery@asu.edu (602) 496-0794

The Office of Research Integrity and Assurance: research.integrity@asu.edu (1877-786-3385)

Sincerely,

Christa Moore, RN
ASU PMHNP student (HRP-503A)
cmmoor13@asu.edu
(602)-299-2650

Appendix H (i)

APPROVAL: EXPEDITED REVIEW

On 9/23/2017 the ASU IRB reviewed the following protocol:

On 9/23/2017 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Sponsorship and Relapse Prevention
Investigator:	Ann Guthery
IRB ID:	STUDY00006780
Category of review:	(7)(b) Social science methods, (7)(a) Behavioral research
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• HRP-503a_Social_Behavioral, Category: IRB Protocol; • Consent/Recruitment Form, Category: Consent Form; • Consent/Recruitment Form, Category: Recruitment Materials; • Crossroads LOS, Category: Off-site authorizations (school permission, other IRB approvals, Tribal permission etc); • Educational Form, Category: Other (to reflect anything not captured above); • Demographic form, Category: Other (to reflect anything not captured above); • SHOW_IRB_CONSENT, Category: Off-site authorizations (school permission, other IRB approvals, Tribal permission etc); • AWARE Questionnaire , Category: Measures (Survey questions/Interview questions /interview guides/focus group questions);

The IRB approved the protocol from 9/23/2017 to 9/22/2018 inclusive. Three weeks before 9/22/2018 you are to submit a completed Continuing Review application and required attachments to request continuing approval or closure.

Appendix I
Synthesis Table

Author	**Greenfield (2013)**	**Kelly (2016)**	**Kelly (2015)**	**Kelly (2013)**	**Stevens (2015)**	**Stevens (2015)**	**Witbrodt (2012)**	**Young (2012)**	**Young (2013)**	**Zemore (2013)**
Participants	N=129	N=302	N=302 N=157	N=607 EA	N=245 n=117F n=128 M	N=215	N=1598 n=926	N=254	N=264	N=508
Characteristics	(F= 46.5 %)	(M=73 %)	FAS	(M=73.9%)	SUDR	F=109 M=116 AFA=41	N=672 General population of ADP in AA	n=117 SP n=146 NSP		n=196 No MAAEZP n=312 MAAEZP
	Ages: (19-64 yo) MA =38.6 (20-64 yo) MA=38.76	Ages: (18-24 yo) MA=20.4 SD=1.6 C=95 % S=100%	MA=20.5 SD=1.56 C=96.8%	Ages: (18-24 yo) MA=20.4 SD=1.6		MA=40.9 SD=10.7	ADP public/private treatment programs		US=95.1% NE=22.3% SE=18.9% MW=19.3 % W=34.5% SD=11.5 MA=47.3 MR=32.7 %	

ADP- Alcohol dependent participant**, AFA-** African American**, C -**Caucasian**, CS -**Convenience Sample**, CP-** Community programs**, EDU=** education**, EA** – Emerging adults, **EL**-Experience level, **F**-Female**, FAS** -Final analytical sample, **GAATOR** -General alcoholics anonymous tools of recovery, **LOE**- Level of Evidence, **LOMA** -Level meeting attendance**, M** – male, **MA** – mean age, **MAAEZP**– Making Alcoholics Anonymous Easier Program, **MR**- married, **MW** - Midwest, **N**-number participants, **n**- subset participants, **NE** -Northeast, **NSP**- Not sponsoring, **PC**- Physical Consequence, **PR**- Participation Ranking, **R**-Race, **RTC**-Residential treatment center, **RM** -Recovery motivation, **S**- Single**. SD**- Standard deviation, **SE**- Southeast, **SP**- Sponsoring **SUDR** - Substance use disorder recovery, **US** -United States, **W-**West, yo-years old, ↑- increased; ↓- decreased, > = greater than; ++ high quality; --poor quality, **X –** Yes, − No

Interventions or Review criteria	Sponsor AA Attendance Encouragement Treatment Attendance Behavioral Step Work Spiritual Step Work	Sponsor Contact with Sponsor Degree of Sponsor Alliance	Sponsor 12-Step Attendance	Sponsor 12-Step Attendance "Active Involvement" in AA Engaging with other 12-step members outside of meetings	Experience Knowledge Availability Confidentiality Goal-Setting	Involvement in 12-Step Respects confidentiality Trustworthy Honest Feedback Integrity Availability	Age Sex Race Way of Being Introduced to AA Age First Attended Never Relapsed in AA	Age Sex Race Married Belong to a Home Group Have a Sponsor Ways of Being Introduced to AA Length of Sobriety	Sponsorship Meeting Attendance	Use of a Sponsor 30-day Meeting Attendance Social Interaction with Members
Generalizability	CP RTC X	CP RTC X	CP RTC X	CP RTC X	CP RTC X	CP RTC X	CP RTC X	CP RTC X	CP RTC X	CP RTC X
Validity/ Reliability	Indirect measures of GAATOR may overestimate step-work completion impact	++ Non-random samples, 95% C	-- response rate	++ response rate	CS	CS	Internet Survey Descriptive Only	Internet Survey Descriptive Only	++ Longitudinal design, Response Rate	++ Response Rate

ADP- Alcohol dependent participant**, AFA-** African American**, C -**Caucasian**, CP-** Community programs **CS -**Convenience Sample**, , EDU**= education**, EA** – Emerging adults, **EL**-Experience level, **F**-Female**, FAS** -Final analytical sample, **GAATOR** -General alcoholics anonymous tools of recovery, **LOE**- Level of Evidence, **LOMA** -Level meeting attendance**, M** – male, **MA** – mean age, **MAAEZP**– Making Alcoholics Anonymous Easier Program, **MR**- married, **MW** -Midwest, **N**-number participants, **n**- subset participants, **NE** -Northeast, **NSP**- Not sponsoring, **PC**- Physical Consequence, **PR**- Participation Ranking, **R**-Race, **RTC**-Residential treatment center, **RM** -Recovery motivation, **S**- Single**. SD**- Standard deviation, **SE**- Southeast, **SP**- Sponsoring **SUDR** - Substance use disorder recovery, **US** -United States, **W-**West, yo-years old, ↑- increased; ↓- decreased, > = greater than; ++ high quality; --poor quality, **X –** Yes, **−** No

Level of Evidence	II	II	III	II	III	II	II	III	III	III
Independent Variables (homogenous)										
PR	X	X	−	X	−	X	−	−	X	−
EL	X	−	−	−	−	−	X	−	X	X
EDU	−	−	−	−	X	−	−	X	−	X
LOMA	−	−	−	−	−	−	X	X	−	−
SP	X	−	−	−	−	−	−	X	X	−
Independent Variables (heterogenous)										
RM	−	X	−	−	−	−	−	−	−	−
PC	−	−	−	−	−	−	−	X	−	−
Dependent Variable										
Abstinence	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Relapse Prevention	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Outcome P-Value	<0.001	<0.001	>0.05	0.01	<0.001	<0.001	<0.001	<0.01	<0.001	<0.05
Analysis										
T-test		X						X		
Chi Square		X			X				X	
Regression				X			X			X
Factor	X									
Mann-Whitney			X			X				

ADP- Alcohol dependent participant**, AFA-** African American**, C -**Caucasian**, CP-** Community programs **CS -**Convenience Sample**, , EDU**= education**, EA** – Emerging adults, **EL**-Experience level, **F**-Female**, FAS** -Final analytical sample, **GAATOR** -General alcoholics anonymous tools of recovery, **LOE**- Level of Evidence, **LOMA** -Level meeting attendance**, M** – male, **MA** – mean age, **MAAEZP**– Making Alcoholics Anonymous Easier Program, **MR**- married, **MW** -Midwest, **N**-number participants, **n**- subset participants, **NE** -Northeast, **NSP**- Not sponsoring, **PC**- Physical Consequence, **PR**- Participation Ranking, **R**-Race, **RTC**-Residential treatment center, **RM** -Recovery motivation, **S**- Single**. SD**- Standard deviation, **SE**- Southeast, **SP**- Sponsoring **SUDR** - Substance use disorder recovery, **US** -United States, **W-**West, yo-years old, ↑- increased; ↓- decreased, > = greater than; ++ high quality; --poor quality, **X –** Yes, − No

Conjoint										

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Appendix F

Citation	Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables & Definitions	Measurement/	Data Analysis	Findings/ Results	Decision for practice
Greenfield & Tonigan (2013). The general Alcoholics Anonymous tools of recovery: The adoption of 12-step practices and beliefs.	Cognitive Social Learning Theory, Sociobiology	**Design:** LLA, SG, Naturalistic **Purpose:** To illustrate how the endorsement and practice of the 12 steps changed over a 9-month	N=129 (46.5% F) 19 to 64 years, with a (M) age of 38.76 non-Hispanic W (n = 47) New Mexican/Spanish American (n = 43) American Indian/Alaska Native (n = 20)	IV1: INT IV2: T IV3: AAA IV4: SP IV5: ENC IV6: TRA IV7: PDSA IV8: BS IV9: SSW DV1: BE DV2: SE DV3: ALA	GAATOR AAI	Factor Analysis	DV1: Mean = 6.67 SE = 0.43 P<0.001 DV2: Mean = 12.23 SE = 0.45 P<0.001	Level II Strength: fairly large sample size N. Weakness: Indirect measures of GAATOR may overestimate step-work competing process to certain

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Funded by NIAAA Bias: Selection bias, Recall bias USA		period among early AA affiliates	Mexican American (n = 14) **Inclusion Criteria**: New AA affiliates **Exclusion Criteria:** Non-AA affiliates, not new affiliates	DV4: ID DV5: PDAA DV6: DDD				extent due to wider arrangement including general beliefs and practices. Conclusion: Behavioral step work and spiritual step work influence the patients independently to predict the substance use. As a result, two distinct tools of

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								recovery have unique impacts on outcomes.

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Kelly et al., (2016). Recovery benefits of the "therapeutic alliance" among 12-step mutual-help organization attendees and their sponsors. Funded by U.S. National	Therapeutic Alliance; Psychoanalytic theory	**Design:** Longitudinal LA, CS **Purpose**: To assess the strength of the impact of varying strengths of sponsor alliance with persons in recovery.	N=302 (age 18-24) Mean age = 20.4 years old SD = 1.6 Caucasian = 95% Male = 73% Single = 100% HS diploma = 83% **Inclusion Criteria:** Young adults in residential	IV1: DI IV2: PS IV3: RM IV4: AS IV5: FQSU IV6: SRC IV7: MHP IV8: S IV9: SC IV10: SA IV11: BA. DV1: TSP DV2: AB.	Psychiatric symptoms index of severity. Commitment to Sobriety Leeds Dependence Questionnaire The Form-90	sample t-tests and chi-squared analyses. hierarchical multivariate linear models	3months: r=0.28 P<0.001 6months r=0.27 p<0.05 12months r=0.39 p<0.01	Level II Strength: large sample size The results clearly showing the relationship between the sponsorship and abstinence. Weakness: Non random samples mainly consisting of males. Also the

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Institute of Alcohol Abuse and Alcoholism Bias: Selection bias, Recall bias USA			treatment **Exclusion Criteria**: Adults, not in residential treatment.					sponsor alliance inventory was adapted close to the existing measure which intended to find the relationship between the sponsor and the patients. Conclusion: 12-step sponsor are found to be helping the young adults recovering from the substance

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Kelly et al., (2015). The Sponsor Alliance Inventory: Assessing the Therapeutic Bond Between 12-Step Attendees and Their Sponsors.	Cognitive Social Learning Theory .	**Design:** (SCID) Form-90 (SAI), Twelve-Step Affiliation Saliva tests **Purpose:** To determine	N=302 N=157 Final analytical sample Mean age = 20.5 years old SD = 1.56 Caucasian = 96.8% M= 70.7% AL = 31.0%	IV1: DOC IV2:G DV1:SAI DV2:PDATSM DV3:INV DV4:PDA	SCID, Form-90,SAI	Non-parametric Mann-Whitney, Kruskal Wallis, Spearman Rank order correlations	DV1: Mean = 56.10 SD=57.14 P>0.05 DV2: Mean = 61.91 SD=13.84 P>0.05 DV3:	Level III Strength: The Spearman rank order correlations show that SAI scores were significantly correlated with each other across time. The result

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Funded by MGH Psychiatry, Center for Addiction Medicine, Recovery Research Institute NIAAA and by an anonymous donation to the Hazelden Betty Ford Foundation in Minnesota,		the role of sponsorship in the road to recovery from substance abuse	MA = 23.2% OO=21.3 ST = 19.4% OD=5.2% **Inclusion Criteria:** Young adults who reported having a 12-step sponsor and are in residential treatment **Exclusion Criteria:** Adults, people who do not				Mean = 6.94 SD=1.27 P>0.05 DV4: Mean = 96.78 SD=11.49 P>0.023	showed 10-item measure with internal consistency coefficients above 0.95. Weakness: Bias due to attrition and SIA non-completion Conclusion: Important part of 12-step MHOs is the sponsorship. There is an association between the

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Citation	Theory/ Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables & Definitions	Measurement/ Instrumentation	Data Analysis (stats used)	Findings/ Results	Level/Quality of Evidence; Decision for practice/ application to practice
Kelly et al., (2013). Emerging adults' treatment outcomes in relation to 12-step mutual-help attendance and active involvement.	Cognitive Social Learning Theory	**Design:** LHLM, CS **Purpose:** To illustrate the e effects of 12-step attendance and active 12-step involvement on substance	N= 607 emerging adults (18-24 years) enrolled at intake in RTC, n=303 completed the survey (M) age = 20.4 years SD = 1.6 Male = 73.9% Caucasian =	IV-1: R IV-2: COM IV-3: TSA IV4: ATSI IV4: COSM IV5:VPM IV6: MOOM IV7: WTTS IV8: OS IV9: MSOM IV10: ATS	Multidimensional Mutual-help Meeting Activity Scale, Global Severity Index, Stages of Change and Readiness and Treatment Eagerness	Multivariate regression	DV : PDA= −2.26; PDHD = 4.89 PDHD vs. 12-step attendance (p = .06)	Level II Strength: Good control and baseline to show the effect of the sponsors on the 12 step treatment. Weakness: The non-experimental

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Funded by NIAAA Bias: Selection bias, Recall bias USA		use outcomes following RT among EA's	94.7% 1.7% identified as AI, 1.3% identified as African American, and 1.0% as Asian **Inclusion Criteria:** Adults in residential treatment **Exclusion Criteria**: Not adult, not in residential treatment	IV11: RTSL IV12:HSM DV-1 PDA DV-2 PDHD	Scale, InDUC-2R, Alcohol/Drug Self-Efficacy Scale		Main effect vs. 12-step attendance (p=0.09) DV1: (F = 9.17, p = .002 DV2: (F = 6.58, p = .01)	manipulation of the independent variable could result in various factors other than 12-step participation to be responsible for outcome variability. Conclusion: The emerging adults who were aided by the sponsors increased their levels of 12-step

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								completion and active involvement in the following year treatment.
Citation	**Theory/ Conceptual Framework**	**Design/ Method**	**Sample/ Setting**	**Major Variables & Definitions**	**Measurement/ Instrumentati on**	**Data Analysis (stats used)**	**Findings/ Results**	**Level/Quality of Evidence; Decision for practice/ application to practice**
Stevens & Jason. (2015) An exploratory investigation of important qualities and	Conjoint measurement theory	Additive conjoint model, cohort study **Purpose:** To	N=245 AAM n=117 F n=128 male. **Inclusion criteria**: Males and females	IV1: KL IV2: EL IV3: AL IV4: CL IV5: GSL IV6: SEX	Survey	Chi square test	Chi square = 20.493, df = 19. P= 0.365 Chi square = 22.929 Df = 19	Level III Strength: The sponsorship sections in this study has never been researched

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characteristics of Alcoholics Anonymous sponsors.. Funded by National Institute on Drug Abuse Bias: Selection bias USA		determine the qualities of character that make an effective AA sponsor.	in substance abuse recovery **Exclusion criteria**: Not adults and never had a sponsor	IV7: S/SP DVPWU			P=0.240	in the past. The survey successfully demonstrated the important quality of being a good sponsor. Weakness: The convenience sample was used with a cross – sectional, self-report design. The sample is associated with AA as well as communal OH.

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								There were no tested theories regarding the sponsorship mechanisms. Conclusion:

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Citation	Theory/ Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables & Definitions	Measurement/ Instrumentation	Data Analysis (stats used)	Findings/ Results	Level/Quality of Evidence; Decision for practice/ application to practice
Stevens & Jason (2015) Evaluating alcoholics anonymous sponsor attributes using conjoint analysis. Funded by	Cognitive Social Learning Theory	**Design**:: Conjoint method involving participants ranking hypothetical sponsors **Purpose**: To evaluate the	N=215 Female = 109 Male = 116 W = 163 African American = 41 Mean age = 40.9 SD = 10.7 College = 35.1% HS = 94.3% **Inclusion**	IV1: PR DV1: KL DV:-EL DV3:AL	Conjoint method,	conjoint analysis methods as implemented by SYSTAT, Kendall's tau	$\tau = 0.410$ $r^2 = .36$ pwu = 0.698 $p<0.001$	Level II Strength: Use of conjoint method enables the separation between the effective and ineffective sponsorship. Weakness: This research has

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DePaul University Bias: Selection bias USA		attributes of AA sponsors, and ascertain how these characteristics affect the sponsorship relationship.	**Criteria**: adults who have acted as a sponsor, sponsee, or both **Exclusion Criteria**: Not adults, never had a sponsor.					cross-sectional, self-report resign with a convenience sample. The samples are involved with Oxford Houses which are communal. Conclusion: The availability of the sponsorship has close ties with effective sponsorship. In

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								addition, the effective sponsors provide structures for the patients to progress in recovery.

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Witbrodt et al., (2012). Does sponsorship improve outcomes above alcoholics anonymous attendance? A latent class growth curve	Cognitive Social Learning Theory	Design: TA, CS **Purpose:** To construct AAA, sponsorship, and abstinence LC trajectories to test the added benefit	N=1598 n=926 ADP in public and private treatment programs n= 672 GP of ADP in AA **Inclusion Criteria**: ADP from public	IV-1: LOMA IV-2: LOS IV-3: A IV-4: REL IV-5: BS IV-6: G DV-1: TDA	Diagnostic Interview Schedule	latent class growth analyses, Block-entry (2 blocks) multinomial regression	DV: X^2=35.8, p<.001 High attendance OR = 3.9, Medium Attendance	Level II Strength: The hypothesis was tested and confirmed that being in a high sponsor class resulted in better abstinence compared to the low sponsor.

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analysis Funded by NIAAA Bias: Selection bias, Recall bias USA		of having a sponsor	and private TPS **Exclusion Criteria**: Non-alcohol-dependent individuals who are not in public or private treatment programs.				OR = 2.3 Low Attendance OR = 2.0	Weakness: The follow-ups occurred at 1,3,5,7 years the data was missing for the years 2,4,and 6. There is a possibility of deviation if all the data was collected. Conclusion: AA attendance and sponsorship have a close relationship. The sponsors should

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Citation	Theory/ Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables & Definitions	Measurement/ Instrumentation	Data Analysis (stats used)	Findings/ Results	Level/Quality of Evidence; Decision for practice/ application to practice
Young (2012). Alcoholics Anonymous sponsorship: characteristics of sponsored and sponsoring members. Funded by Department of	Cognitive Social Learning Theory	**Design:** Logit model, Crossectional data, CS **Purpose:** To investigate associations between background	N=254 n= 117 Sponsoring n=146 Not sponsoring **Inclusion Criteria**: Older than age 18 and self-identified as a member of AA. **Exclusion**	IV1: A IV3: R IV4: MAR IV5: BHG IV6: S IV7: IAAAAM IV8: IAATF IV9: IAASM IV10: IAAF IV11: IAACO IV12: IAACA	Survey method	Statitical Analysis Cohens d Two tailed t-test	DV: Power = 0.98 Two-tailed t- test (Cohen's d D=0.5, $p<0.05$) Age:	Level III Strength: Large sample size was conducted with random sampling. Also the multiple categories were tested on sponsor characters.

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Veterans Affairs, Veterans Health Administration, Office of Research and Development, Health Services Research and Development, and the VA Midwest Rural Health Resource Center. Bias: Selection		variables and sponsorship roles	**Criteria:** Younger than age 18 and not self-identified as a member of AA.	IV13: IAAHCP IV14: IAAE/FW IV15: IAANAFN IV16: IAAAAM IV17: IAACF IV18: LOS IV19: PST IV20: SP IV21: EMP IV22: EDU IV23: ADS IV24: NDY IV25: DOC-A IV26: OTR IV27: AD IV28: AW			T =0.43 $p<0.001$ Sex: X^2=35.8 $p<0.01$ Race: X^2=12.09 $p<0.01$ Married: T = 0.61 NS Have a sponsor: X^2=4.2 $p<0.05$	Weakness: Sampling bias resulting in generalizability of the finding, The analytic methods precluded longitudinal analysis. Many t-tests results in increase in Type I Error Conclusion: The sponsors were significantly

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bias USA				IV29: SPR IV30: SC IV31:: PC IV32: MC IV33: PD IV34: HB IV35: MB IV36: LB DV1: UNS DV2: SPO DV3: MB DV4: NS DV5: SPON			Length of sobriety: X^2=84.7 3 p<0.01	older, married, and to be parents while being spiritually strong.

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Citation	Theory/ Conceptual Framework	Design/ Method	Sample/ Setting	Major Variables & Definitions	Measurement/ Instrumentation	Data Analysis (stats used)	Findings/ Results	Level/Quality of Evidence; Decision for practice/ application to practice
Young, L. B. (2013). Characteristics and Practices of Sponsored Members of Alcoholics Anonymous. Funding: Center for Comprehensive	Cognitive Social Learning Theory	40 survey questions **Purpose**: To compare the difference between sponsored and unsponsored members of AA.	N=264 US = 95.1% NE=22.3% SE=18.9% MW=19.3% W=34.5% Mean Age = 47.3 years SD = 11.5 MR=32.7% **Inclusion**	IV1 KL IV2: EL IV3: AL IV4 : CL IV5 GSL IV6 SEX IV7 S/SPDV-PWU	Survey questions	Pearson's chi-square test, Two tailed student's t-tests	Sobriety Average = 10.76 years P<0.05) Surrender Scale = 21.96 (p<0.001)	Level III Strength: Large amount of sample was obtained. In addition, the short term and long term sponsorship data was obtained and analyzed.

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Access & Delivery Research and Evaluation, Iowa City Veterans Affairs Health Care System Bias: Selection bias USA			**Criteria:** Unsponsored and sponsored AA members **Exclusion Criteria:** Non-AA members					Weakness: Biased sample selection which could have influenced in sample not being the representative of the populations. Unsponsored group is likely heterogeneous. Conclusion: Sponsorship is a vital part of the AA patients. The

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								article shows that the sponsorship does not depend on when they were introduced, but the frequent engagement, and high degree of spirituality.
Citation	**Conceptual Framework**	**Design/ Method**	**Sample/ Setting**	**Major Variables & Definitions**	**Measurement**	**Data Analysis**	**Findings**	**Decision for practice**
Zemore et al., (2013)	Cognitive Social Learning Theory	**Design:** LLA	N=508 n=196, no	IV-1:TD MA IV-2: US; SW	Survey assessing	Bivariate and multivariate	DV-1: [OR] =	Level of Evidence: II

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Involvement in 12-step activities and treatment outcomes Funded by NIAAA Bias: Selection bias, Recall bias USA		CS **Purpose:** To address the relative importance of specific 12-step activities to recovery, and how treatment affects participation in those activities.	MAAEZ P n=312, MAAEZP. **Inclusion Criteria:** RA entering and emerging from a TF **Exclusion Criteria:** NRA who are not emerging from a TF.	IV-3: RL IV-4: SIM IV-5: UHG IV-6: IMN IV-7: COS IV-8: BAS IV-9: TLOS. DV-1: TDA	participation in 12-step activities at time intervals; Brown-Peterson Recovery Progress Inventory.	regression.	1.22, P < .05 SI; OR = 2.07, P = .09 12-step members; OR = 2.41, P = .13 longer treatment duration	Strengths: Medium N. Multiple measurement points after baseline. Weaknesses: Unclear as to how results generalize across programs. Conclusions: Sponsorship and consistent meeting attendance is significant. Step

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							trended toward association with increased use of a home group (OR = 1.32, P = .12)	completion may not be significant. Harm: None Feasibility: High

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