



Identifying Mechanisms of Change in Alcoholics Anonymous

Key Takeaways From a Scoping Review and Mapping Study

Alcoholics Anonymous is a successful treatment for Alcohol Use Disorder, but the mechanisms by which AA works are not well understood.

Alcoholics Anonymous (AA) may be as effective for Alcohol Use Disorder (AUD) as other established treatments, such as cognitive behavioral therapy, and may be even more effective for enabling AA members to achieve abstinence goals. However, past research has provided limited explanation of how AA leads to reduced alcohol consumption. The current research aimed to identify the ingredients that explain the success of AA and map them to AA's 12 Steps. This study is valuable both for illuminating how AA works and for suggesting future research directions for other addictions, including Gambling Disorder.

Social networks accounted for the most variance in percentage of days with no drinking.

In our review, individual social network variables accounted for 16–23% of AA's help in reducing alcohol consumption. When AA members had a larger pro-abstinent network and a smaller pro-drinking network, they tended to drink less. One study found that when social network variables were combined, they explained 50% of AA's effects on the reduction of alcohol consumption. Social networks were found to map onto the following steps of AA: admitting one's wrongs to another (Step 5), identifying and making amends to those wronged (Steps 8 and 9), and carrying the message of AA to others (Step 12). Note: Steps have been paraphrased for brevity.

Self-efficacy robustly accounted for the AA–alcohol use outcomes relationship.

AA members' belief that they could avoid alcohol in social situations (social abstinence self-efficacy) and when they are experiencing undesirable emotions (negative affect self-efficacy) accounted for 17–43% of the relationship between AA attendance and reduced alcohol consumption. Self-efficacy was found to map onto the following steps: admitting powerlessness (Step 1), turning one's life over to God (Step 3), taking a moral inventory of oneself (Step 4), and continuing to take a personal inventory and admitting when one is wrong (Step 10).

Spirituality continued to explain the relationship between AA attendance and alcohol use outcomes even after controlling for social networks, self-efficacy, and other mediators.

AA participants' spirituality/religion accounted for 11–22% of AA's impact on alcohol use outcomes. Spirituality/religion was reflected in the following AA steps: coming to believe that a Higher Power could restore one to sanity (Step 2), becoming ready and asking God to remove one's character defects (Steps 6 and 7), and seeking to increase contact with God (Step 11).

Spirituality and social support may be interconnected in AA.

Researchers have theorized ways that spirituality and social support may be connected in AA. Dossett and Metcalf theorized that AA may foster a “sacralization of social relationships” (2019, p. 97), with social support/relationship-building becoming a form of spirituality. The author of the current paper has suggested that in AA, spirituality and community are intricately linked to the extent that they may be the same variable, the same ingredient. This possibility has found theoretical justification within the theistic relational model of spirituality (Davis et al., 2018). If this suggestion has merit, then the spirituality of AA may need to be reconceptualized as a relational spirituality, opening the doors to a new understanding of AA-specific spirituality, which may resolve a long-standing debate surrounding the empirical explanations for AA’s success. Overall, our review found that AA participation led to increased self-efficacy, larger pro-abstinent and smaller pro-drinking social networks, and increased spirituality, which in turn led to reduced alcohol consumption.

Action Steps to Consider

This study identified several ingredients in AA that may explain its effects on the reduction of alcohol use. Future research could explore whether these mechanisms may inform treatment for other addictions, such as gambling disorder. Specifically, future research could explore these areas:

- Evaluate the impact of various types of social support for reducing gambling behavior (e.g., increased pro-abstinent social support, decreased pro-gambling social network, Gamblers Anonymous, peer support).
- Explore how the mechanisms behind AA’s success, including spirituality and social support, could be leveraged to develop a model for post-treatment support groups for people who have Gambling Disorder.
- Evaluate the theistic relational model of spirituality within AA and across 12-step groups to determine whether spirituality and community may work synergistically to improve addiction outcomes.

If we better understand mechanisms of change related to spirituality and social support in AA, then we can draw on these insights to inform treatment models for Gambling Disorder as well as post-treatment support.

If you or someone you know is experiencing harm as a result of their alcohol use, in Tennessee you can contact the Redline at [1-800-889-9789](tel:1-800-889-9789) or find a nearby AA meeting by visiting aa.org/find-aa. For harm related to gambling, you can contact The Gambling Clinic at [1-833-842-8600](tel:1-833-842-8600) or tgc@memphis.edu.

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This brief is based on a scoping review and mapping study involving 18 studies which assessed mechanism of change in Alcoholics Anonymous through formal mediation analyses.

Hjelle, R. J., Anderson, N. S., Ginley, M. K., Razzak, J. S. (2025, Oct. 18).
Mapping review of mechanisms of change in Alcoholics Anonymous.
Tennessee Psychological Association Convention, Franklin, TN.

Hjelle, R. J., Anderson, N. S., Razzak, J. S., & Ginley, M. K. (2026, May).
Future directions in gambling treatment research: Lessons from a scoping review of mechanisms of change in Alcoholics Anonymous [Paper Presentation].
International Conference on Gambling & Risk Taking, Las Vegas, NV.

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