Chapter

Revisiting 12-Step Approaches: An Evidence-Based Perspective

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Abstract

Alcoholics Anonymous (AA) is the longest-running mutual aid group for people with alcohol use disorders, and AA turned 85 years old in 2020. Though there has been much criticism regarding AA and other 12-step programs, there has been an equal amount of evidence to support their efficacy. This chapter explores the history of AA and other 12-step approaches, the foundational philosophy of the 12-steps, the key elements that support recovery, cultural considerations for special populations, and a review of the criticisms as well as strengths of 12-step approaches. The chapter concludes with recommendations for the integration of the approach into clinical practice.

Keywords: 12-steps, alcoholics anonymous, narcotics anonymous, substance use disorders, addiction, mutual aid groups, efficacy

1. Introduction

In 2020, the most rigorous scientific study to date regarding the efficacy of Alcoholics Anonymous (AA) and other 12 step approaches were published [1]. Soon after, a sweeping review of scientific studies relative to Narcotics Anonymous (NA) was released [2]. Outcomes gleaned from these publications suggests substantial benefit to members of AA and NA both as an adjunct to professional treatment and as a stand-alone intervention for substance use disorder (SUD). Although valid criticisms exist regarding 12-step approaches, for those whom 12-step approaches work, they appear to work quite well. While alternatives to 12-step approaches are increasing, scientific information is limited. Thus, this chapter focuses primarily on 12 step-approaches.

The chapter begins with an introduction presenting demographic data, history of 12-step programs, and the fundamental philosophy of the 12-steps. Because AA and NA are the largest and most studied 12-step programs, most of this discussion is drawn from literature specific to these two programs. Additionally, there is a dearth of scientific literature pertaining to 12-step approaches and behavioral addictions. At present, there is only one behavioral disorder included in the DSM’s classification of Substance-related and Addictive Disorders [3], gambling disorder, so the chapter’s focus is 12-step approaches relative to substance use disorders. An introduction to the most common 12-step programs associated with behavioral addictions is also presented.

Substance use disorder mutual aid recovery has an intricate and complex history. Many mark the year 1935 as the birth of the mutual aid recovery movement
as that is the year Alcoholics Anonymous was formed. According to White [4],
the mutual aid recovery movement began centuries before in the late 1700s with
Native American Recovery Circles. Section II presents a brief survey of the history
of mutual aid groups, followed by a more pointed examination of the histories of
AA and NA. A concise overview of common 12-step offshoots follows. The section
concludes with a look at how 12-step approaches became integrated into profes-
sional addiction treatment services.

In section III, the philosophical underpinnings of the 12 steps and recovery-
related activities associated with 12-step mutual aid recovery are described.
According to research, those who participate in 12-step activities such as
sponsorship, regular meeting attendance, and service have better outcomes
regarding sustained abstinence [5–9].

Section IV presents the evidence surrounding 12-step mutual aid recovery.
Beginning with an examination of several core elements that appear to support
recovery, the section explores the efficacy and strengths of 12-step approaches as
well as its criticisms and limitations.

The discussion continues in section V with a consideration of culture as it relates
to 12-step approaches. One size does not fit all, and the spiritual or religious under-
tone of the 12 steps is likely the most cited barrier for those who prefer a secular
approach to addiction recovery. In contrast, many are attracted to 12-step programs
because of the emphasis on spirituality and a Higher Power. This and several
additional cultural influences are explored.

Before the chapter concludes, recommendations are offered for integrating
12-step approaches into professional treatment services.

2. Demographics of 12-step membership

In 2011, there were 54 different 12-step programs [10]. Alcoholics Anonymous
and Narcotics Anonymous are by far the largest. A strength of 12-step programs
is their wide availability across the globe. Estimated membership in Alcoholics
Anonymous is 2,077,374 individual members and 125,557 groups as of 2019 [11].

A 2014 AA membership survey [12] reported the following demographic
information. Sixty-two percent of membership identified as male and 38%
identified as female. A large majority of membership identified as white, 89%, 4%
black, 3% Hispanic, 1% Native American, 1% Asian, and 2% identified as other. The
average age of AA members is estimated at 50 years.

Members are introduced to AA from a variety of sources. Thirty two percent of
members are introduced to AA by an AA member, and another 32% are introduced
by a treatment facility. Thirty percent of AA members report being self-motivated
to attend, and 27% are referred by a family member. Other referrals come through
the criminal justice system (14%), and medical and behavioral health professionals
(17%). Less common referrals include Al-anon/Alateen member, AA literature,
employer, or colleague, newspaper/magazine/radio/tv, clergy, and the internet. The
survey reported the average length of sobriety is 10 years, with a range between
less than one year (27%) and over 20 years (22%). On average, members attend 2.5
meetings per week, and 82% reported having a sponsor.

Narcotics Anonymous released a membership survey more recently [13]. They
report 77,000 meetings weekly in 144 countries across the globe. Compared to AA,
NA's membership is more diverse, with 70% identifying as White, 13% Black, 7%
Hispanic, 4% multiracial, 2% Asian, 1% Indigenous, and 1% as other. In terms of
gender, 58% identified as male and 42% as female. The average age of NA members
is 46 years, with a range between less than 21 (1%) and over 60 (15%). The mean number of years clean is 8.32 years, with a range between less than 1 year (8%) and over 20 years (25%).

Most members are referred through other NA members (49%) and treatment of counseling services (45%). Other referral sources include family members, NA literature or an NA service effort, and AA members.

NA members reported using a variety of substances. Alcohol was the most common substance reported (73%), followed by cannabis (62%), cocaine (52%), opiates (38%), stimulants (38%), crack (31%), opioids (26%), tranquilizers (25%), hallucinogens (25%), prescribed medications (23%), ecstasy (17%), methadone or buprenorphine (14%), inhalants (11%), and other (14%).

It is important to note that these two surveys are membership surveys and not designed for research. The purpose is to provide a snapshot of current membership rather than the general population of people with SUDs. Nonetheless, there exists important challenges to researchers who seek to study recovery via 12-step mutual aid programs. This is explored further in section 8.

3. History of mutual aid groups and 12-step programs

According to the addiction field’s leading historian, William White, the history of abstinence-based mutual aid recovery groups begins with the Native American recovery circles [4]. Between 1737 and 1840, Indigenous leaders such as Handsome Lake, Wagomend, and Paounhan had transformational experiences leading to sobriety. These transformations led to cultural and religious reformations, which included the rejection of alcohol. Spawned by the temperance movement, the 1800s saw a variety of mutual aid societies begin and end. These included the Washingtonians, The Red Ribbon Reform Club, the Drunkard’s Club, and several others. White further explicates that for those whose goal was moderation rather than abstinence, other groups formed such as Businessman’s Moderation Society in 1879. European temperance societies formed in the 1800s as well. For example, in 1851 the Order of Good Templars formed, and in 1877 Switzerland founded the Blue Cross. White also states that European culture, like American culture, formed mutual aid groups founded on moderate drinking rather than abstinence such as the German Order of Temperance, French Temperance Society, and the Irish New Ross Temperance Society.

In the early 1900s, many American mutual aid and treatment organizations failed, and this was partly influenced by prohibition. According to White, the absence of mutual aid groups in the early decades of the 20th century is notable, but in 1935, an historic meeting occurred between two self-defined hopeless alcoholics that revolutionized the treatment for people with alcohol use disorders and a host of other addictive behaviors across the globe [14]. Today, AA is the largest and longest running mutual aid group for alcohol use disorders in the world. Such a profound impact has been made by AA, that its co-founder, Bill Wilson, was recognized by Time Magazine as one of the most influential people of the Millennium [15]. A brief history of AA is provided next.

3.1 AA’s beginning

From the book Alcoholics Anonymous [16], affectionately known as the Big Book because of its over 500 pages, and the Alcoholics Anonymous’ website [17], Bill W’s story follows.
In 1934, Bill W. sat alone drinking at his kitchen table when the telephone rang. He was greeted by an old high school friend and drinking buddy, named Ebby T., whom he had not spoken to in quite some time. He had heard his old friend was institutionalized due to chronic alcoholism. Ebby T. asked if he could visit Bill, and later that day the two men sat reminiscing about old times. Bill offered Ebby a drink, but he refused and told Bill that he \textit{got religion}. Ebby shared his experience with spiritual principles and a process of change that required surrender to the alcoholic condition and acceptance of guidance from a Higher Power. Because Bill balked at the idea of organized religion and God, Ebby informed Bill that he could formulate his own conception of this power. The spiritual process described by Ebby also included a process of self-inventory, confession, and making amends to those whom he had harmed. Bill recognized a difference in his friend – something had changed. Though Bill did not stop drinking at this point, he opened his mind to the ideas presented by his friend for nothing else had helped him overcome the compulsion to drink.

According to Alcoholics Anonymous [16], the process described by Ebby T. was the foundation of the Oxford group. A mostly non-alcoholic, non-denominational, Christian group. Its fundamental principles and beliefs were later expanded and revised into what are now known as the 12-steps of Alcoholics Anonymous.

After that fateful meeting with Ebby T., Bill went on yet another drinking binge that eventually landed him in Towns Hospital in New York with delirium tremens. Remembering his friend’s spiritual directions, he proceeded to take the steps as outlined by Ebby T. In Towns Hospital, 1934, Bill W. experienced his famous white light experience, never to drink again.

What happened in the following six months formalizes the beginning of AA. Upon release from Towns Hospital, Bill joined the Oxford Group. He and Ebby embarked on a mission to share this spiritual process with as many alcoholics as possible. A profound lesson was learned, which is the bedrock of AA.

After several months, Bill W. became very disheartened because although they had shared the message of recovery with with every alcoholic they met, none were able to maintain sobriety. Bill was ready to abandon their effort when Ebby emphasized that even though none of their recruits remained sober, he and Bill did. This is the crux of AA - \textit{we can only keep what we have by giving it away}. Through helping other alcoholics, one could remain sober.

About six months after Bill’s spiritual experience in Towns Hospital, he went on a business trip to Akron Ohio, alone for the first time in his newfound sobriety. Bill walked through the lobby of the hotel, immediately spotting the hotel lounge. The old memories of drink ensued, and the familiar craving took root. He went to the lobby phone booth and found a church directory where he began frantically calling churches to see if one knew of an alcoholic with whom he could speak. At the end of the church directory, he found a possibility. A meeting was arranged by the wife of an Akron surgeon to speak with her husband as he was dying of alcoholism. Dr. Bob Smith had been a member of the Oxford Group where he had sought help for his alcoholism, but to no avail.

On June 10th, 1935, Bill W. and Dr. Bob Smith met for the first time. Bill shared his experience with a chronic and seemingly hopeless alcoholic condition (what it used to be like), the spiritual process that transformed him (what happened), and how his life unfolded moving forward (what it’s like now). The two men spoke for hours and agreed to work together to share their experience with other alcoholics who still suffered. From this point forward, Bill W. and Dr. Bob dedicated the rest of their lives to carrying the message of AA’s 12-steps to other alcoholics. After 2 and a half years of sobriety, in 1937 Ebby T. relapsed. He did regain sobriety and died sober in 1966.
With the publication of AA’s Big Book in 1939 and a flurry of articles published thereafter, AA’s growth blossomed. A defining moment in AA’s growth trajectory occurred in 1941 when Jack Alexander’s article, “Alcoholics Anonymous: Freed Slaves of Drink, Now They Free Others,” was published in the Saturday Evening Post. The AA office received countless inquiries after its publication, and by 1950 AA’s membership had reached over 100,000. The tireless dedication of Bill W. and Dr. Bob has resulted in millions of people helped worldwide, revolutionizing the way people with substance use disorders are treated.

3.2 Narcotics Anonymous

Because the only requirement for membership in AA is a desire to stop drinking, and drug addicts were often shunned by AA, Narcotics Anonymous was formed. Unlike AA’s beginnings, NA’s first few decades were tumultuous, experiencing several starts and stops, and more than one version of the program [18].

Addicts Anonymous held its first meeting in 1947, but the Narcotics Anonymous we know today began in earnest in 1953, but nearly died in 1959 [18]. When this happened, Jimmy K. and two others started what became today’s NA with the mother group, Architects of Adversity [18]. Though many members came and went, Jimmy K. was the mainstay in the early days of NA. Jimmy K’s tireless effort to keep NA alive in those tenuous times is why he is credited as the founding member of NA [18].

In his historical presentation of NA, William White [4] describes Jimmy K’s addiction as one that progressed from sneaking tastes of paregoric and alter wine as a child to binging on whiskey and pills in adulthood. According to White, Jimmy K’s addiction “left him bankrupt physically, mentally, and spiritually, and an abject failure as a man, a husband, and a father” [4], p. 335. As a result, he began attending AA in 1950, introducing himself as an alcoholic and addict. He had a passion for helping those with multiple addictions. Jimmy befriended Dorothy S. in AA, who like Jimmy, had multiple addictions. Together, with the help from Danny C in New York, they worked to establish the NA we know today.

Narcotics Anonymous utilizes the same 12 steps and 12 traditions developed by AA, with several adaptations specific to addiction rather than alcoholism. For example, AA states: The only requirement for membership is the desire to stop drinking, and NA substitutes the word using for the word drinking. Additionally, AA’s first step reads We admitted we were powerless over alcohol—that our lives had become unmanageable, whereas NA states we were powerless over our addiction.

Another point from which NA diverges from AA is that NA is a program of abstinence from all drugs [19], and NA does not differentiate between substances of misuse. Further, NA clearly considers alcohol a drug. Though for some, this may be a barrier to participation in NA. In nearly every NA meeting this section from the NA Basic Text is read:

*The only way to keep from returning to active addiction is not to take that first drug. If you are like us, you know that one is too many and a thousand never enough. We put great emphasis on this, for we know that when we use drugs in any form, or substitute one for another, we release our addiction all over again.*

*Thinking of alcohol as different from other drugs has caused a great many addicts to relapse. Before we came to NA, many of us viewed alcohol separately, but we cannot afford to be confused about this. Alcohol is a drug. We are people with the disease of addiction who must abstain from all drugs in order to recover.* [19]
Alcoholics Anonymous and Narcotics Anonymous also have offshoots for family members. Al-Anon, Alateen, and Nar-anon operate under the 12 steps and 12 traditions but are designed for those who love people with substance use disorders.

Though Alcoholics Anonymous and Narcotics Anonymous are by far the largest of the 12 step fellowships, numerous other groups have formed modeled after the AA prototype. The following section briefly introduces a few of its more common descendants.

4. Other 12-step programs

Many twelve step programs have formed to treat both substance use disorders and behavioral addictions. In addition to AA and NA, several substance specific 12 step programs have followed: for example, Cocaine Anonymous, Heroin Anonymous, Marijuana Anonymous, and Nicotine Anonymous. Each AA derivative substitutes the word alcohol in the 12-step language for the substance or behavior the program addresses.

Although behavioral addiction is an unscientific term, many groups have formed to address a variety of compulsive behaviors. Gambling use disorder is the only exception and is classified in the DSM 5 as a Substance-Related or Other Addictive Disorder [3]. Gamblers Anonymous is one of the largest of the behavioral addiction 12 step programs. Gamblers Anonymous began in 1957 and “is a fellowship of men and women who share their experience, strength, and hope with each other that they may solve their common problem and help others to recovery from a gambling problem” [20].

Overeaters Anonymous formed to address a variety of compulsive eating behaviors. It is “a community of people who support each other in order to recover from compulsive eating and food behaviors. We welcome everyone who feels they have a problem with food” [21]. Overeaters Anonymous was founded in 1960 and currently has over 6500 groups in 75 countries, and an estimated 60,000 members worldwide.

Another well-known 12 step program is Codependents Anonymous program. “Codependents Anonymous (CoDA) is a 12 Step Fellowship for people seeking loving and healthy relationships” [22]. The concept of co-dependency has come under fire by feminist scholars. For example, Anderson [23] argued that the concept pathologizes and blames women. Yet, Melody Beattie’s 1986 bestseller, Co-dependent No More, has sold more than 5 million copies [24].

5. 12-step integration into professional treatment

The Minnesota Model, known as the fundamental philosophy of the well-known Hazelden Betty Ford Center, was born in 1949. It was one of the first facilities to provide therapeutic and human treatment for alcoholics and addicts [25]. Borrowing principles from Wilmar State Hospital and Alcoholics Anonymous, the model was replicated across the globe. So popular was the 12-step movement that by 1989, an estimated 90% of treatment facilities followed the Minnesota Model [26]. The core practices of the Minnesota Model included patient education on the 12 steps and the idea that addiction is a physical, mental, and spiritual disease [25]. Moreover, the model integrates the notion that alcoholics and addicts can stay sober best by helping one another as did Bill W. and Dr. Bob, the AA co-founders; thus, the beginnings of utilizing recovering alcoholics as lay counselors.
Before this section concludes, it is important to acknowledge one of the most utilized evidence-based models for addiction treatment, Twelve Step Facilitation Therapy or TSF. In the largest clinical trial of its kind, Project Match examined three of the most common evidence-based models for alcohol use disorder: cognitive behavioral therapy, motivational enhancement therapy, and TSF [27]. The purpose of the study was to learn if certain patients would have better outcomes with a specific therapeutic model compared to another. Overall, the study found that patient matching did not change outcomes and that all models were equally effective. Two exceptions should be noted. First, those with low levels of psychiatric comorbidities treated with TSF, experienced higher rates of days completely abstinent. Second, those who received TSF had higher rates of complete abstinence at year one. The next section will explore the 12-step philosophy, principles, and practices more fully.

6. 12 step philosophy

When describing 12-step philosophy several core elements are emphasized: the 12-steps, 12 traditions, sponsorship, meeting attendance, service, and spirituality.

No discussion on the application of 12-step principles is complete without the perspective of those with lived experience. In addition to the author’s voice, this section integrates the voices of those who identify as persons in recovery. The section begins with the 12-steps and 12 traditions of the program.

6.1 The 12 steps

1. We admitted we were powerless over alcohol—that our lives had become unmanageable.

2. Came to believe that a Power greater than ourselves could restore us to sanity.

3. Made a decision to turn our will and our lives over to the care of God as we understood Him.

4. Made a searching and fearless moral inventory of ourselves.

5. Admitted to God, to ourselves, and to another human being the exact nature of our wrongs.

6. Were entirely ready to have God remove all these defects of character.

7. Humbly asked Him to remove our shortcomings.

8. Made a list of all persons we had harmed and became willing to make amends to them all.

9. Made direct amends to such people wherever possible, except when to do so would injure them or others.

10. Continued to take personal inventory and when we were wrong promptly admitted it.
11. Sought through prayer and meditation to improve our conscious contact with God as we understood Him, praying only for knowledge of His will for us and the power to carry that out.

12. Having had a spiritual awakening as the result of these steps, we tried to carry this message to alcoholics, and to practice these principles in all our affairs [28].

The program is described as “a set of principles written so simply that we can follow them in our daily lives” [19], p. 9. A simple translation of the 12-step process is provided by a woman who attends both AA and NA:

For me, steps 1-3 are about developing a relationship with a power greater than myself; steps 4-7 are about healing the relationship with myself, and steps 8-12 are about healing and supporting my relationships with others. I don’t do this by myself. My sponsor’s main role is to guide and support me through working the steps. (Anonymous 12-step group member, personal communication, November 23, 2020).

6.2 The 12 traditions

Eddy G., a long-time member of NA, describes the purpose of the 12-traditions this way:

If the 12-steps are how the program works, the 12-traditions are why the program works. The traditions keep the focus of the fellowship on helping each other. They teach us how to help each other while maintaining the integrity of the fellowship and the principles that drive it. (Eddy G., personal communication, December 30, 2020)

1. Our common welfare should come first; personal recovery depends upon A.A. unity.

2. For our group purpose there is but one ultimate authority—a loving God as He may express Himself in our group conscience. Our leaders are but trusted servants; they do not govern.

3. The only requirement for A.A. membership is a desire to stop drinking.

4. Each group should be autonomous except in matters affecting other groups or A.A. as a whole.

5. Each group has but one primary purpose—to carry its message to the alcoholic who still suffers.

6. An A.A. group ought never endorse, finance, or lend the A.A. name to any related facility or outside enterprise, lest problems of money, property, and prestige divert us from our primary purpose.

7. Every A.A. group ought to be fully self-supporting, declining outside contributions.
8. Alcoholics Anonymous should remain forever nonprofessional, but our service centers may employ special workers.

9. A.A., as such, ought never be organized; but we may create service boards or committees directly responsible to those they serve.

10. Alcoholics Anonymous has no opinion on outside issues; hence the A.A. name ought never be drawn into public controversy.

11. Our public relations policy is based on attraction rather than promotion; we need always maintain personal anonymity at the level of press, radio, and films.

12. Anonymity is the spiritual foundation of all our Traditions, ever reminding us to place principles before personalities [28].

6.3 Sponsorship

Sponsorship and carrying the message to the person who still suffers (step 12) are fundamental practices in 12-step communities. Sponsorship is the tradition of a more experienced, sober member of the program supporting a newer member along their recovery journey. “The heart of NA beats when two addicts share their recovery” [29].

Though the following sponsorship guidelines are not required, they are suggested. In general, sponsors and sponsees should be same sexed as to avoid romantic distraction. A limitation here is the assumption that all members are heterosexual. There is not an established guideline for those who identify as LGBTQ. Additionally, the sponsor should have experience in working the steps and have attained stable recovery. There is not a written standard in terms of length of sobriety or how far along in the step process a sponsor should be.

Dekkers, Vos, and Vanderplasschen [30] discovered mutual understanding facilitates connection, and connection was identified as a key theme supporting recovery in their qualitative study of NA members. A large study of over 1800 veterans showed that having a sponsor was one element that helped mediate positive outcomes among participants of 12-step programs [7]. According to NA, “the two-way street of sponsorship is a loving, spiritual, and compassionate relationship that helps both the sponsor and sponsee” [29]. Sponsorship may be considered analogous to the therapeutic alliance [31]. Contact with a sponsor and a strong sponsorship relationship contribute to increased 12-step participation and abstinence.

6.4 Meeting attendance

One often hears the maxim, 90 meetings in 90 days, suggested to newcomers in the program. A substantial scholarly literature shows that regular 12-step meeting attendance supports positive substance use outcomes [5, 6, 8, 9, 29]. For example, results from a large National Institute of Drug Abuse funded project show that weekly or more frequent attendance at 12-step groups support alcohol and other drug (AOD) abstinence [32]. Similar findings are reported by Greene and colleagues in a national sample of recovering addiction professionals [6]. Those attending meetings weekly had the lowest rates of relapse compared to those who attended less frequently.
The value of meeting attendance is best described by an anonymous member of AA and NA.

The 12-step fellowship provides immediate access to a pro-recovery support system. All my friends were using buddies. I didn’t have anyone in my life that didn’t use drugs and alcohol, and I was young when I entered recovery. I needed a social network. I never would have been able to stay sober had I not attended so many meetings.

(Anonymous 12-step member, personal communication, November 29, 2020)

It is important to note that research also indicates 12-step meeting attendance alone may be insufficient for the maintenance of recovery. Participation in activities such as sponsorship, service work, working the steps, etc. appears to increase positive benefits compared to meeting attendance alone. In a study of 303 young adults, 12 step meeting attendance and active participation in the program lead to positive substance use outcomes [33]. Interestingly, for meeting attendance alone positive effects diminished over time, but positive effects increased over time with active involvement.

6.5 Service

As noted in the previous section, positive recovery outcomes increase with the addition of other recovery activities to meeting attendance, and service is one of the foundational elements of 12-step programs.

One long-term NA member described service in NA as follows.

Service in NA, in the beginning, is a way for me become accountable to a group of people that I’ve come to trust, and it allows me to build trust within the group. Later in recovery, it becomes a way to reverse self-centered fear because the opposite of self-centered fear is selfless service. It’s pure volunteer. I don’t get paid for any of it. Now that I’ve been given the gift of recovery, it’s my responsibility to give it back. It’s the 12th step. The only way I can keep the gift of recovery is to give it away.

(NA member, personal communication, November 28, 2020)

Service work in 12 step programs encompasses a variety of activities. The more common tasks, other than sponsorship, include, opening and closing the meeting; setting up and putting away chairs; making coffee; holding positions such as group chairperson, treasurer, or secretary. Service may also include activities such as taking meetings into facilities where clients are unable to attend in the community. Treatment centers, jail and prison facilities are the most common. Service commitments might extend all the way to the level of world service. In keeping with the fundamental tenets of the program, all service positions are unpaid. According to the traditions of the 12-step programs, there are no dues or fees for memberships, there are no leaders, groups are self-supporting and autonomous, and 12 step mutual aid groups do not accept outside contributions. So entrenched are these principles, that guests attending an NA group are often explicitly asked not to contribute when the donation basket is passed at the meeting.

Why is service such an important component of 12-step programs? Two theoretical ideas are proposed: the helper therapy principle and the wounded healer archetype [34]. These theories suggest that one’s experience with addiction might be reduced through helping others. Further, by having addiction oneself, it may render the individual with special knowledge and insight that can be shared to help a person still struggling with addiction. This provides a logical segue into the final section of 12-step philosophy, spirituality.
7. Spirituality and 12-step programs

While religion tends to be associated with an organized set of beliefs, practices, rules, and doctrines [35], 12-step programs’ clearly state the program “should remain forever non-professional... ought never be organized” [19], pp. 69–70, and is “not connected with any sect, denomination, politics, organization or institution” [36]. Yet, 12-step programs are unapologetically spiritual in nature. A common axiom cited in AA and NA meetings asserts there is no chemical solution to a spiritual problem.

An entire chapter in AA Big Book is devoted to those who may struggle with organized religion and the concept of God – it is titled We Agnostics [16]. The fundamental premise is that spirituality is subjective and defined by each member individually. Written in 1952, a companion text to the original AA Big Book, The Twelve Steps and Twelve Traditions, says AA does not demand that you believe anything ... I must quickly assure that AAs tread innumerable paths in their quest for faith ... You can if you wish, make AA itself your ‘higher power’ ... [37], pp. 25-27.

The AA Big Book encourages readers to develop their own conception of God, and further states “don’t let any prejudice you may have against spiritual terms deter you from asking yourself what they mean to you” [16], p. 47.

If 12 step programs are not religious but rather spiritual programs, what exactly is spirituality and how does it support recovery? Spirituality is described as a creative and universal part of the human experience. Subjective in nature, it is about one’s connection to self, others, social groups, communities, and traditions. It can be experienced as an inner and/or transcendent personal relationship, which may exist beyond the self. Fundamental to this definition is the notion that spirituality is concerned with human values, truth, and experiences that provide meaning and purpose in life. Given the earlier discussion of 12-step philosophy’s core elements, its fit within this definition of spirituality is undeniable [38].

No academic endeavor is complete, however, without a critical examination. The next section will do just that.

8. Strengths and limitations of 12-step programs

While millions of people worldwide have found recovery from addiction through 12-step programs, millions more have found the program unhelpful. The science of addiction and recovery provides empirical evidence of the efficacy of 12-step approaches, but it equally shows there are multiple efficacious paths to recovery. One size does not fit all.

This section begins with the counterargument to the last section on spirituality. Likely the most frequently cited criticism to 12-step programs is its religious undertone. As noted in the history section of the chapter, AA and the 12-steps were birthed from a non-denominational Christian organization, the Oxford Group. Osten and Switzer argue that for those who identify as atheist, agnostic, or a non-Christian faith, 12-step programs might be challenging [39]. For example, multiple references to God, using the male pronoun, are found in the in 12-step literature. Step 3 of the 12-steps suggests we turned our will and our lives over to the care of God as we understood Him. Further, the recitation of the Lord’s Prayer is common in many AA meetings, and many, if not most, 12-step meetings are held in churches.

Building on this criticism, feminist writers have named several barriers to accepting the 12-step path for women and people of color [40, 41]. Not the least of which is the reference to God using the male pronoun in steps 3, 7, and 11, and
throughout the AA literature. For women, there is a long and painful history of patriarchy, oppression, and subjugation. Thus, the idea of turning one’s life over to a male God may feel reminiscent of this history for some. Additionally, concepts of surrender, powerlessness, and turning one’s life over are not only difficult for some women to accept but may also be challenging for ethnic minorities. For groups who have experienced the horrors of genocide and slavery, such as Native Americans and African Americans, these ideas may be particularly difficult.

One anonymous 12-step member, a middle-aged woman in long-term recovery, understands this criticism and has experienced discrimination and oppression in a male-dominated, patriarchal society, but states she has not experienced the 12-step community as such (Anonymous NA member, personal communication, December 1st, 2020). She shared that the terms powerless and surrender are not used in the same context as oppression and subjugation associated with slavery and a discriminatory and patriarchal culture. In fact, the 12-step process of recovery is experienced by many as an empowering process that leads to freedom from dependence on substances [42]. Alcoholics Anonymous asserts that through dependence upon a power greater than oneself, an individual becomes more personally independent [37]. Yet, it is important to acknowledge the era in which the original texts were written. Alcoholics Anonymous was founded by White, middle-class men in 1935, so the language of the time may create a barrier for many. Though the literature has been slightly updated, Alcoholics Anonymous has not conducted a major revision to the original literature for historical reasons. The biased language in AA’s primary texts, written in 1939 and 1952, may impede AA’s growth, particularly for women [43] and people of color.

Another criticism regarding language in AA and NA is related to stigma. Critics say that the tradition of introducing oneself in meetings as an “addict” or “alcoholic” places a negative label on the individual and perpetuates stigma and stereotypical views of people who have SUDs. Additionally, identifying oneself as their disorder is contradictory to strength-based and person-centered philosophies. A differing perspective is offered in Greene’s article:

In some marginalized groups, words that were historically pejorative have been reclaimed as a label of power, pride, and history—for example, the use of the term queer in some LGBTQ communities. Speaking for myself as a person in long-term recovery, the labels of “alcoholic” or “addict” serve, in a sense, as a badge of honor because I have survived a potentially fatal illness—and also thrive as a result. I feel a sense of pride and gratitude when I say, “Hi, my name is _____, and I’m an alcoholic.” [44], p 11-12

For those who have difficulty adapting to the language in AA’s original literature, NA language may be more relevant to the present day, particularly newer NA publications and the latest edition of the NA Basic Text. However, the language of the 12-steps remains as originally written. Substitutes can be made in the language. For example, the male pronoun used in reference to God, may be substituted by a gender-neutral term. For example, dropping the male pronoun in the 11th step reads as follows: We sought through prayer and meditation to improve our conscious contact with God as we understood God, praying only for knowledge of God’s will for us and the power to carry that out.

For those who do not identify as Christian, the word God may be substituted with Allah, Jehovah, Yahweh, the generic phrase Higher Power, or whatever is true for the individual. It is important to understand that 12-tep programs do not require a belief in God. In fact, many agnostic and atheist AA groups exist and are growing rapidly. In AA, one might hear GOD referred to as a Group Of Drunks, while a
group of sober alcoholics might be considered a higher power for whom to turn to for help. An interesting finding by Tonigan and colleagues found that belief in God is not necessary to experience benefit from AA, but those who identify as atheist or agnostic are less likely to attend meetings [45].

Another criticism should be highlighted. Some have found the language of the 12-steps reflects a tearing down rather than a building up process that emphasizes moral inventory and examination of one’s character flaws. Steps 4 through 7 best show this critique. These steps recommend critical self-examination, admission to the exact nature of wrongs to God and another person, followed by a willingness to let go of, and have God remove, such character defects and shortcomings. When asked about these criticisms, an NA member had this to say.

> Well, I can certainly understand the criticisms because when you look at the steps as written without further guidance and instruction from a sponsor, it looks that way. It's important to understand a foundation is laid in steps 1-3, with the guidance of a sponsor, in preparation for working steps 4-7. Another important process to understand is that it's not only about wrongs committed, but also an inventory of assets and liabilities. We must self-examine in order to know what qualities and behaviors we want to nurture and what behavior patterns are unhealthy and need to be eliminated. If we don't change in a positive direction, we're likely to continue using. (NA member, personal communication, December 4, 2020)

A major criticism is related to research. The tradition of anonymity in 12-step mutual aid recovery groups is an important aspect that attracts many to the program who otherwise may not attend. However, the lack of organization, anonymity, and the voluntary participation of members create methodological barriers to research. Additionally, survey research has inherent methodological flaws, particularly when studying members of 12-step programs. Self-selection bias is unavoidable, and this is particularly problematic as the voices of those who have not done well via 12-step mutual aid recovery may be missing and the voices of those doing well may be over-represented. Twelve-step attendees often come and go many times before they commit to sobriety or leave permanently. When evaluating the research literature, this criticism should not be overlooked.

Although 12-step meetings are more plentiful than alternative mutual aid recovery groups, availability is variable depending on geographic location. Meetings may be scant in rural areas and in some countries other than the U.S. Additionally, specialty meetings such as gender specific groups, LGBT groups, groups for adolescents, and groups for those who identify as atheist or agnostic are not available in all areas.

Depending upon which lens through which one views 12-step programs (member or researcher), the program’s 12 traditions are both strengths and limitations. From a members’ perspectives the traditions, as Eddy G. noted uphold the integrity of the program. But for researchers, anonymity, group autonomy, lack of professionalism and organizational structure, and their commitment to hold no opinion on outside issues, makes studying the program difficult. There is tremendous variability in how groups run and how one works the steps, for example.

This section ends with two additional strengths of 12-step programs – the first is cost. Membership in 12-step mutual aid programs is free. There are no membership dues or fees, no professionals, and the only requirement for membership is a desire to stop drinking or using [19]. The program is totally self-supported by its members’ contributions collected at each meeting. A dollar or two is typical, but not required. Newcomers and those who do not identify as members are usually asked not to contribute. Finally, healthcare costs are substantially reduced for those who participate.
in 12-step programs. In their systematic review, Kelley and colleagues demonstrated higher healthcare cost savings for individuals treated with AA or Twelve Step Facilitation (TSF) compared to those treated in an outpatient facility utilizing CBT, or no AA/TSF exposure [1]. Further, for those with a poor prognosis, AA/TSF had higher cost savings compared to Motivational Enhancement Therapy.

The final and maybe most important strength of the program discussed here concerns science. Several 12-step activities are supported by research. Though provision of a comprehensive review is not possible here, two empirically supported activities are highlighted. The first, helping others, is the primary purpose of the 12-step programs and is underscored in Tradition five, “Each group has but one primary purpose—to carry its message to the alcoholic who still suffers.” Supported by a substantial scientific literature, personal well-being is enhanced by helping behaviors [46–49], and 12-step mutual aid recovery is founded on the principle of service. A common evidence-based practice for SUDs, contingency management [50], where rewards and incentives are provided to help reinforce abstinence and other health promoting behaviors, is exemplified in nearly every 12-step meeting. Through the chip system in AA or the key tag system often used in NA, members are recognized with a different colored chip or key tag for each marker of recovery, typically followed by a round of applause from the group. For example, if an NA member achieves 30 days of continued abstinence, they receive an orange key tag, 60 days is green, 90 days is red, blue is for 6-months, green for 9-months, and a glow in the dark key tag is awarded for one year clean. For members who attain multiple years of recovery, they often receive a special medallion.

9. Cultural considerations and the 12-steps

Culture has been defined as “a community or society. It structures the way people view the world. It involves the particular set of beliefs, norms, and values concerning the nature of relationships, the way people live their lives, and the way people organize their environments” [51], p.11. Additionally, culture includes the many cultural identities one holds in terms of ethnicity, gender, sexual orientation, age, socioeconomic status, geographic region, etc. Narcotics Anonymous is one of the most culturally diverse mutual aid programs, and this seems to be generalizable across the globe [2]. An important question to consider is this: Are there cultural considerations relative to 12-step philosophy and who may, and may not, fare well with the approach?

9.1 Spirituality as a cultural element

A key element of cultural beliefs, values, and norms is spirituality. In addition to examining spirituality as cultural element, this discussion provides a contradictory view of a primary criticism of 12-step programs, the religious and spiritual undertones. Abraham Maslow, noted psychologist and theorist, said “the spiritual life is part of the human essence. It is a defining characteristic of human nature, without which human nature is not fully human.” In a large survey conducted by the Pew Research Center, nearly 90% of survey respondents reported belief in God or a Universal Spirit [52]. Spirituality and religion seem to be in the fabric of many cultures. Based on data from the Higher Power Project, Dossett suggests that helping professionals need not be wary of referring individuals and families to 12-step programs, and in fact may want to consider supporting individuals and families in seeking recovery through 12-step programs [53]. Participants in the
HHP consistently report the notion of “autonomous and personal construction of a Higher Power which works for them” [53], p. 380. Koenig [35] underscores the importance of allowing individuals to define spirituality for themselves. Findings consistently show that those who attend 12-step meetings regularly and actively participate in the program have better substance use and quality of life outcomes [53, 54].

While much of the criticism of 12-step programs surrounds language that may be interpreted as oppressive, a substantial literature exists that contradicts the criticisms. Though a comprehensive cultural review is not possible here, the following discussion highlights several population groups that have historically experienced oppression or may experience unique issues in terms of SUD recovery. The author would be remiss to fail to mention that culture is subjectively experienced, and there are substantial differences within groups as well as between groups. Maintaining cultural humility [55] is always recommended. The discussion that follows highlights several special population groups and associated findings relative to 12-step recovery: African Americans, Native Americans, women, adolescents, and LGBTQ populations.

9.2 African Americans and 12-step models

In general, African American communities highly value spirituality and religion. Consequently, the topic of spirituality provides a smooth transition into the examination of the African American culture relative to 12-step programs. Peavy, Garret, Doyle, and Donovan compared outcomes of 12-step facilitation treatment between African American and Caucasian stimulant users and found treatment was equally effective for both groups [56]. One study found that African Americans were just as likely to attend and benefit from 12-step group attendance as their White counterparts and were slightly more likely to remain abstinent [57]. Another study explored spirituality among African American men attending a methadone maintenance program. The group of 25 men all reported a group focused on spirituality would be preferable to treatment as usual [58]. Given the spiritual foundation of 12-step programs, African American individuals with SUDs may derive great benefit from AA/NA.

9.3 Women and 12-step models

While valid criticisms exist relative to women and 12-step programs, there is also substantial literature to support the efficacy of 12-step approaches for women. As highlighted in the introduction, women make up approximately 42% of NA membership and 38% of AA’s membership. According to some authors, 12-step programs are equally effective for women and people of color compared to their European-Male counterparts. For example, Hillhouse and Fiorentine found that women were just as likely to attend 12-step groups and recover as their White male counterparts [57]. Data were analyzed from the Los Angeles Target Cities Evaluation Project (n = 356), inclusive of 26 outpatient programs. Participants were followed for 2-years. At each of three follow-up points in the study, over 50% of participants identified as female, and no statistically significant differences were found between men and women. Moreover, approximately 35% of women reported weekly attendance at a 12-step meeting, and 30% of men reported weekly attendance. Men and women were equally likely to be abstinent at the 2-year follow-up, but women were slightly more likely to be abstinent from alcohol than were men; however, this finding was not statistically significant. Further, women and men were equally likely
to dropout, 33.1% and 33.2% respectively. As a bridge into the next section, gender difference was compared among a sample of urban Native American individuals with SUDs as well, and none were found. Men and women in this sample experienced AA-related benefits equally, and 12-step meeting attendance helped to explain increased abstinence for both groups. For those who prefer gender specific 12-step meetings, there is availability in many areas.

9.4 Native Americans and 12-step models

There are more than 566 recognized Native American tribes in the U.S., and as a cultural group, Native Americans have experienced significant historical trauma and harms relative substance use and addiction. Some of the highest rates of substance use disorders are found among this population group. For example, SAMHSA reports that American Indian/Native Alaskans have the highest rates of alcohol misuse compared to other cultural groups [51]. Because a frequently cited value of this community is spirituality, 12-step mutual aid groups may be effective for Native Americans with SUDs [26]. However, research is quite limited specific to the efficacy of 12-step programs among Indigenous populations.

Although there has been speculation that cultural factors may render 12-step programs less effective for Native Americans, some studies have contradicted that assumption. One study, longitudinal in design, compared 12-step group attendance, attrition, and abstinence outcomes between urban Native Americans and White Americans [59]. The authors found no significant differences between meeting attendance and abstinence outcomes at 3-, 6-, and 9-month follow-ups. Decreased drinking intensity and increased abstinence was associated with greater meeting attendance for both groups. Interestingly, Native American participants were less likely to decrease meeting attendance. A more recent study relative to benefits experienced by urban Native Americans who attended AA also found benefit for those who attended 12-step groups relative to positive drinking outcomes [60].

Before concluding this section, the Wellbriety Movement deserves mention. It is described as “a sustainable grassroots movement that provides culturally based healing for the next seven generations of Indigenous people” [61]. Though an oversimplification, Wellbriety is an integration of traditional 12-step philosophy and Native cultural practices, such as the Medicine Wheel. Currently, an estimated 175 Wellbriety meetings exist in the U.S.

9.5 Adolescents and 12-step models

As a cultural group, adolescents with SUDs likely have the strongest need for social connection, and one benefit of 12-step program involvement is just that - mutual aid group communities provide instant access to sober social support. Multiple studies show that adolescents benefit from 12-step program involvement [5, 33, 62–64]. Because teens are more susceptible to peer influence and identification, they appear to benefit more from youth-focused 12-step groups, and like adults, teens seem to have improved SUD outcomes with increased participation in 12-step-activities [64, 65]. There are several barriers for adolescents noted in the literature: lack of transportation, resistance to the 12-steps, and the idea of powerlessness [65]. Kingston, Knight, Williams, and Gordon build on ideas set forth by Nash: adolescents may not only reject the notion of powerlessness but also the idea of a Higher Power [66]. Overall, however, there is substantial research to support the consideration of 12-step models for treating adolescents with SUDs [1, 2, 65, 67].
9.6 LGBTQ populations

Given the fact that as a cultural group, sexual minorities have high rates of substance misuse and SUDs, it is surprising that so little research exists specific to this population and 12 step recovery programs. In fact, SAMHSA suggests this cultural group has about a 30% prevalence rate of SUDs [68]. As a cultural group, sexual minorities tend to be highly stigmatized, which may contribute to higher rates of SUDs. For this reason, 12-step groups specific to the LGBTQ population are steadily increasing. For clients wishing to attend an LGBTQ specific AA group, Gay and Lesbian AA (GaL-AA) is an excellent resource and provides a meeting list for all LGBTQ AA meetings nationwide [69]. Narcotics Anonymous does not have an equivalent resource, but an internet search will locate LGBTQ NA meetings.

9.7 Co-occurring disorders and 12-step groups

Nearly half of people with an SUD also have a co-morbid psychiatric condition [70]. According to SAMHSA, people with SUDs are twice as likely than the general population to experience mood and anxiety disorders, and anti-social and conduct disorders [71]. Further, about 50% of those diagnosed with schizophrenia will develop an SUD over their lifetime. So, how do those with co-occurring disorders fare in 12-step programs? According to Project Match, those with more psychiatric severity did less well in 12-step approaches compared to cognitive behavioral interventions [27].

Mutual aid groups utilizing the 12-step framework and specific to those with co-occurring SUDs and mental health disorders are becoming more common. One such group, Double Trouble in Recovery (DTR), seems to provide an extra layer of comfort and emotional safety for members when sharing about both conditions, SUD, and mental illness [72–74]. Dual Recovery Anonymous (DRA) is a similar program that also follows the 12-steps. There are meetings located in each of the United States as well as Australia, Canada, Iceland, India, and New Zealand [75]; yet there is an absence of scholarly literature relative to its efficacy. The factors that appear to support recovery via 12-step affiliation for those with co-morbid conditions are identification, emotional safety, social support, and increased abstinence [72–74]. Because this group tends to have higher rates of relapse [76], referral to these specialty groups in addition to traditional 12-step groups is suggested.

10. Recommendations for integrating 12-step mutual aid programs

With such a strong literature supporting the efficacy of 12-step programs for individuals with SUDs, inclusion of 12-step approaches in the menu of therapeutic options for clients is warranted. From their comprehensive review on Narcotics Anonymous, White and colleagues underscore three salient findings [2]:

1. Much like Duncan and colleagues describe allegiance to a therapeutic model as an important factor influencing therapeutic outcomes [77], clinicians’ beliefs regarding 12-step recovery matters, and may influence client participation and outcomes.

2. Successful linkage is crucial. Utilize assertive connection strategies rather than passive ones.

3. When clients are linked with 12-step groups while in treatment, their post-treatment attendance and participation increases.
10.1 Eight recommendations for integrating 12-step approaches

1. Integrate 12-step recovery as a topic for psychoeducation in group or individual sessions.

2. Clinicians should educate themselves about 12-step programs, not just via academic literature, but attendance at several 12-step groups and via interviews with those in long-term recovery.

3. Reach out to local AA and NA communities and coordinate to bring a meeting to your facility, or to locate individual members willing to come in and speak to clients and patients at your facility.

4. Place 12-step literature and meetings lists in the waiting area of your facility or in your office.

5. As appropriate, integrate 12-step group attendance into the change plan.

6. Utilize Twelve Step Facilitation (TSF) in your agency among other evidence-based models.

7. Monitor mutual aid group attendance as a relapse prevention technique rather than a punitive strategy.

8. With individuals for whom 12-step approaches are not a good fit, refer to alternative mutual aid groups (SMART, Women for Sobriety, Moderation Management, Dharma Recovery, and many others). Though the empirical evidence is still lacking for 12-step alternatives, similar mechanisms of action are likely at work.

11. Conclusion

As the chapter closes, it ends where it began, with the most rigorous scientific studies to date, and the main findings are presented here. Kelley and colleagues [1] examined 12-step mutual aid groups and professional therapeutic models based on 12-step philosophy, such as Twelve Step Facilitation (TSF), and their impact on SUD-related outcomes: “abstinence, reduced drinking intensity, reduced alcohol-related consequences, alcohol addiction severity, and healthcare cost offset” [1], p. 1. Twenty-seven studies and 10,536 study participants are included in the review.

The main findings for manualized AA/TSF intervention groups follow. Compared to the clinical intervention groups (e.g., CBT), AA/TSF participants demonstrated higher rates of complete abstinence, and this effect held over time. Further, AA/TSF interventions performed equally to the clinical intervention relative to percentage of days abstinent, but at 24 months performed better. AA/TSF appears to be equally effective to comparison groups in terms of longest period of abstinence. Another equal comparison was shown regarding intensity of drinking and number of drinks per drinking day. For alcohol-related consequences, AA/TSF does just as well as comparison groups, and may also perform equally in terms of reducing alcohol use severity, with one study showing better outcomes for AA/TSF.

Findings for non-manualized 12-step interventions are just as good. At 3 to 9 months follow-up, AA/TSF appears to perform as well as comparison groups in terms of the proportion of individuals completely abstinent but may perform
slightly better than the clinical intervention for percentage of days abstinent. Regarding drinking intensity and percentage of heavy drinking days, AA/TSF also performed as well as the clinical intervention.

The review conducted by White and colleagues asked, “what is known about Narcotics Anonymous from the standpoint of science?” [2], p. 3. Included in their review were 232 studies. Though the scientific literature on NA needs more rigorous and methodologically sound study, so far it appears to mirror the evidence of AA’s efficacy. Researchers from this review concluded that participation in NA contributes to increased abstinence and decreased substance use. Physical, mental, and spiritual health is improved, and improvement in overall social functioning seems to occur for many members. Decreased healthcare costs, increased self-esteem, improved coping, increased pro-recovery social networks, and decreased depression and anxiety are also benefits experienced by some NA members. Additionally, participation in activities such as reading NA literature, working the steps, service, and sponsorship appear to extend the benefits. According to the review, diverse sub-groups of people with SUDs may also benefit from NA; in particular, people of color, women, adolescents, and those with co-occurring mental health conditions.

The evidence for the efficacy of 12-step interventions is compelling. Not only is the research compelling, but 12-step programs also have an interesting history. Millions of individuals have experienced addiction recovery through 12-step pathways and have intimately experienced its transformational power. Organizations are unsustainable without leaders, structure, organization, funding, profits, or grants. Yet, the 12 traditions include ideas such as these: the program should have no leaders, no initiation dues, or fees; the program should remain forever non-professional; and, the program ought never be organized. Even so, and for over 85 years, 12-step programs across the globe have helped millions of people achieve recovery. It is unfathomable the 12-step movement has thrived without a traditional organizational structure. The 12-step organizational structure is built on spiritual principles, 12-steps, and the fundamental idea of one addict/alcoholic helping another. The 12-step movement revolutionized professional treatment services and has been tested across numerous populations. Scientific literature consistently demonstrates 12-step interventions to be equal in efficacy compared to common evidence-based models, and sometimes they perform even better than the intervention for which they are compared. 12-step groups can serve as an adjunctive service to professional addiction treatment to extend treatment benefits; and for some, 12-step groups may be the primary mode of intervention. In addition to its demonstrated efficacy, 12-step meetings are abundant, making accessibility a minimal concern. Finally, because 12-step meetings are free, it is quite cost-effective. In closing, clinicians should consider adding 12-step interventions to their clinical toolbox if they have not already done so. The science is out.
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