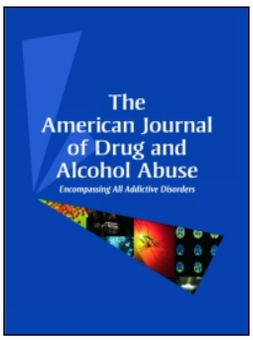

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ORIGINAL ARTICLES



# An empirical study on the construct of "God" in the Twelve Step process

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**ABSTRACT**

*Background*: The term God, included in 5 of the 12 Steps of Narcotics Anonymous (NA) and Alcoholics Anonymous (AA), self-designated spiritual fellowships, has not been studied empirically relative to members' experiences. A greater understanding of this can be clinically useful and can shed light on the 12 Step process of recovery.

*Objectives*: To determine how NA members understand the 12-step concept "God as we understood Him" and the relationship between their understanding of God and the intensity of their craving and depressive symptoms."

*Methods*: 450 (59% male) NA members completed a survey related to their experiences relative to their relationship with "God." The relationship among these variables and comparisons to the general population was analyzed. Craving and depressive symptoms were assessed by self-report.

*Results*: 98% of the NA participants believe in God explicitly or some other higher power (vs 89% of a probability sample of the US population), 67% believe that God determines what happens to them some or all of the time (vs 48%), 78% (vs 28%) report hearing God talking to them "in their mind"; and 37% report that God talks to them "out loud." Acceptance of 12 Step God-related variables inversely predicted a significant portion of the variance of scores on craving (7.5%) and depression (13.5%).

*Conclusions*: Respondents' understanding of God in NA varied considerably and was predictive of their depressive symptoms and craving intensity. These findings can serve as a basis for research into mechanisms underlying NA/AA recovery experiences and can also aid clinicians in how to employ these programs.

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## Introduction

Twelve Step fellowships like Narcotics Anonymous (NA) and Alcoholics Anonymous (AA) are widely available resources for clinicians to employ in their treatment of substance use disorders (SUDs). Narcotics Anonymous is oriented to abstinence from drugs of abuse, not only alcohol. It reports more than 70,000 group meetings in six continents that are held on a weekly basis, and of these, 27,677 are held in the United States (1). It owes its origins in the 1950s to an attempt by persons labeled as "heroin addicts" remanded to the United States Public Health Service Hospital in Lexington, Kentucky to adapt AA's 12 Step format to narcotic dependence (2).

Like its predecessor, AA, it is self-designated as spiritual, rather than religious. It describes the 12 Steps that members are expected to both study over time and to practice, in order to address their addiction and secure sobriety. They include issues such as powerlessness over addiction and carrying the message to other addicts. NA's orientation to the fellowship's philosophy and behavioral expectations is delineated NA's book *Narcotics Anonymous* (3). "God" is mentioned in five of the 12 Steps, but the fellowship is not theistic as such, as it only espouses God "as we understood Him," without guidelines that specify who or what members believe that their Higher Power actually is.

Spirituality has been found to be a mediator of positive outcome for members in the 12 Step fellowships (4,5). The experience of spiritual awakening in NA and AA has also been found to be associated with both a greater likelihood of diminished craving (6) and an abstinent outcome of professional treatment (7). Additionally, brain imaging has been employed to examine how the use of the 12 Step ritual can yield diminished craving in the face of stimuli associated with substance use (8).

The role of the term "God" embodied in 12 Step programs' spiritual orientation, however, has not been subjected to empirical investigation, even though it has an important role in the 12 Step fellowships. In addition, there are no empirical studies on the specific ways members define God for themselves, and the relationship between their personally framed definitions and their respective experiences in the fellowships. "God" is

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mentioned in five of the Twelve Steps, but the fellowship is without guidelines that specify who or what members believe that their Higher Power is. The term "member" is circumscribed, as the fellowships do not keep membership lists and have no dues or fees.

For research purposes, mechanisms underlying the effectiveness of psychosocial treatment have been considered to be heuristically useful, both for psychotherapy in general (9), and for behavioral treatments for SUD, in particular (10). The study of God in AA/NA may therefore shed light on mechanisms underlying 12 Step recovery. For the clinician, an understanding of the role that the construct of God plays in the 12 Step process can be helpful in approaching a given patient in deciding whether or not such referral is appropriate. We therefore undertook this study to determine how respective NA members understand "God as we understood Him" and to ascertain associated predictors of members' affective and cognitive states.

## Methods

In order to address the experimental question, we sought out access to a large representative sample of 12 Step (NA) respondents. We selected key areas of the respondents' experience within the 12 Step process as it relates to (a) their conception of "God," and (b) their recovery process. We then developed a procedure for studying the relationship between these two sets of variables.

### Participants

We asked Narcotics Anonymous World Service Office (NAWSO), located in Chatsworth, California, to select NA meetings representative of the diversity of their members and their principal drugs of abuse for a survey on the meaning of God in NA, in order to best understand its role in the process of their long-term recovery from SUDs. NA group coordinators from survey estimated that 85% and 90% of those in attendance at the end of the meetings completed the survey. In order to avoid duplication, meeting attendees were instructed to not fill out a survey at a meeting if they had previously completed it.

### Method

Members of the NA Office of Public Relations designated 34 of its meetings in 9 states as representative of NA to participate in a questionnaire-based survey: Florida, Maryland, West Virginia, Virginia, California, New York, Washington D.C., Missouri, and Delaware. Meetings were selected by NAWSO staff for diversity of urban and non-urban sites and for US coastal and non-coastal regions.

On the basis of the prepared instructions, the coordinators explained to attendees that participation in the survey was both voluntary and anonymous, and that there was neither an expectation that a meeting attendee need participate, nor would their participation or choice not to do so have any impact on the nature of their membership in NA.

The procedure for collection was as follows: An empty carton was placed at the back of the meeting room in which questionnaire responses could be deposited. Coordinators were instructed to seal the carton without examining the contents, and then ship it to the NAWSO, whereupon they transshipped them to the investigators, without review of their contents. This study was approved by the human subjects institutional review board of Chestnut Health Systems as involving no more than minimal risk to subjects, with no consent form required.

### Survey instrument

The instrument given to the respondent sample consisted of 39 coded items. The topics addressed included demographics; primary drug choice; experience in NA, including attitude toward spirituality, God, church attendance, and the meaning of God for respondents. The depression experienced in the past week was assessed by a scale drawn from the Brief Symptom Inventory (11). The craving for drugs or alcohol was assessed by responses on a 0- to 10-point visual analog scale, similar to ones applied in our study and others on persons with SUDs (6,12). Spiritual and religious orientations were assessed by means of the items employed in surveys of the US national probability samples conducted by the Pew Research Center (13,14).

### Comparison to US probability sample

For purposes of comparing respondents to the general US population, certain variables for which comparable data were available were employed. These data are drawn from results of probability sampling by the Pew Research Center. The methodologies employed by the Center are described in detail involving sampling techniques, data weighting, and procedures for data analysis (15).

### Analysis

The Statistical Package for the Social Sciences, version 26 (SPSS, IBM Corporation, Armonk, New York), statistical software program was applied to conduct analyses. Bivariate associations between categorical variables and

continuous variables were assessed by either independent-samples *t* test or 1-way analysis of variance. The relationships between recovery processes and symptoms of craving and depression were examined in a correlation matrix using the nonparametric Spearman's rho correlation coefficient due to the ordinal nature of the categorical recovery process variables (16). Multiple linear regression analyses were conducted to determine the relationship of both NA-related experiences and God-related items. A Bonferroni adjustment was implemented, where a more conservative criterion for significance was used to control for multiple comparisons (17,18). Unless otherwise indicated, only results with a probability of $p$ <.001 are reported here. A notation of non-significance, however, only relates to a probability level of greater than $p < .05$.

## Results

### Respondent sample

Four hundred fifty NA members participated in the survey, with between 447 and 419 responding to the respective survey items. They were drawn from 34 NA groups that were located in 9 different States. Demographics and principal drug problems are given in Table 1. Rates of missing data ranged from 0.6% to 6.8%, and missing data were addressed by using a listwise deletion. If rates of missing data are less than 10% it is unlikely to be systematic and therefore unlikely to bias results (19,20).

### Characterizing respondents' experience in the process of NA-based recovery

Respondents reported that they attended their first 12 Step meeting at 28.5 (SD 10.4) years of age and had attended a mean number of 166.7 (SD 186.2) meetings in the last year. A majority (52.6%) had worked all of the 12 Steps, and only 6.9% had worked none of them. Overall, they had sponsored 11.6 (SD 24.7) members.

Effective acculturation into NA is reflected in that a large majority reported "extremely" (4 on a scale of 1–4) to accepting statements illustrative of the 12 Steps, e.g., for admitting "powerlessness over drugs" (90%), and that they "decided to turn my will and my life over to the care of God as I understood Him" (73.2%); 91.2% reported having experienced a spiritual awakening, a process indicated in the Twelfth Step. Almost all (95.5.%) reported feeling "a strong sense of gratitude" (a key aspect of recovery, as designated in the 12 Step culture). On balance, the large majority (70.9%) felt that their personal spirituality and the support of other NA members were equally important in maintaining their abstinence. The benefit that members apparently experienced from their time in the fellowship is reflective of the portion (82%) of those who reported a mean score of craving 0.97 (SD 2.32) during the previous week (on a scale of 0 to 10), as compared to their retrospective scoring of 6.69 (SD 3.98) on the same scale for the period right before joining the fellowship.

**Table 1.** Characteristics of the respondent population.

| | | |
|---|---|---|
| | Male | 58.5% |
| | Employed or Student | 70% |
| | Mean Age | 49.2 (SD 14) |
| Ethnicity | | |
| | Caucasian | 67.4% |
| | Black | 21.8% |
| | Hispanic | 4.4% |
| | Other | 6.4% |
| Biggest Drug Problem | | |
| | Heroin | 30.7% |
| | Other Opiates | 14.2% |
| | Cocaine (or Crack Cocaine) | 28.4% |
| | "Crystal Meth" | 10.2% |
| | Stimulant medications | 1.4% |
| | Marijuana | 6.1% |
| | Alcohol | 9.0% |
| Hospitalized for Alcohol or Other Drugs | | 65% |

### Respondents' respective beliefs in "God" and their "Higher Power"

The Second Step of NA entails accepting "a Power greater than ourselves," commonly referred to as a member's "Higher Power," and referred to as "God as we understood Him" in subsequent Steps. There is a distinction across respondents as to how they defined God for themselves. The most common responses did not refer to Him as "God" per se, but rather as something other than God. Their perceptions of this construct can be divided into three categories, God in NA defined as "God" explicitly (45.1%), or not as "God" explicitly, but as another entity (54%); and not believing in "God" (0.9%). The specific responses are given in Table 2. In contrast to these responses, however, a sizable number of the total respondent group, when queried in a separate item, designated themselves as agnostic (17.4%) or atheist (3.5%).

There was no significant difference between those respondents who indicated that their Higher Power was "God" explicitly and those who endorsed that it was another entity for the following key aspects of NA membership, such as "a universal spirit," or the NA fellowship overall: The number of meetings they had attended the previous year, whether they had worked all 12 Steps of the fellowship, the number of years since their spiritual awakening, and how many members they had sponsored.

**Table 2.** View of God relative to God determining and God talking to me (N = 435).

| | God Determines What Happens to Me[a] | | Talks to God[b] | | |
|---|---|---|---|---|---|
| View of God | Yes | Never | And He Talks to Me | He Doesn't Talk to Me | I Don't Talk to God |
| As God per se (45.2%) | 96.0% | 4.0% | 81.3% | 16.7% | 2.0% |
| The God of Christianity (29.5%) | | | | | |
| The God of a religion other than Christianity (3.9%) | | | | | |
| A God recognized by all people worldwide (11.8%) | | | | | |
| Something other than God (54%) | 81.4% | 18.6% | 62.4% | 22.6% | 15.0% |
| A universal spirit (35.8%) | | | | | |
| My NA group (2.5%) | | | | | |
| The NA fellowship overall (8.6%) | | | | | |
| Mankind's humanity (3.9%) | | | | | |
| Art and/or nature (3.2%) | | | | | |
| Don't believe in God (0.9%) | 0.0% | 100.0% | 0.0% | 0.0% | 100.0% |

(a) $\chi^2$ (2) = 41.85, $p$ <.001. Post hoc comparison of 'As God per se' versus 'Something other than God' $\chi^2$ (1) = 21.62, $p$ <.001.
(b) $\chi^2$ (4) = 54.24, $p$ <.001. Post hoc comparison of 'As God per se' versus 'Something other than God' $\chi^2$ (2) = 27.21, $p$ <.001.

### *Respondents' views on their relationship with "God"*

The majority (73.2%) responded "extremely" (4 of 1–4), when queried how strongly they accepted turning "[their] will and [their] lives over to God as we understood Him" (Step 3), but there was no significant distinction in the latter variable between those who believe that their Higher Power was God, as such, or as something other than God as such. Additionally, the majority indicated that they believe that God determines what happens to them all (46.6%) or most (20.4%) of the time.

The large portion report that on most or all days they pray to God (84.9%), and feel His presence at least most or all days (72%). These answers stand in contrast to the degree of respondents' acceptance of conventional religious practice, as the majority (64.6%) report participating seldom or never in church or worship services.

The nature of respondents' communication with God in terms of verbal exchange is notable: 91.6% talk to God in their minds, and 78.1% do this "out loud." More notable is their experience that God talks to them: 75% in their minds, and 37.1% "out loud." Members sampled on interview (Jane @ NA.org, phone conversations, April 20, 22, 2020) were sampled responding hearing God's voice, but not like someone outside their heads speaking to them. As in Table 2, those who designated "God" as their Higher Power (rather than something other than God) were more likely to experience God talking to them and determining what happens to them.

### *The relationship between the recovery process and symptoms of craving and depression*

As indicated in Table 3, four antecedent experiences were significantly inversely correlated with both their current craving and depression scores. Neither craving nor depression, however, was significantly associated with the following four antecedent variables: whether they defined the term God as "God" or as something else; the items related to talking with God; whether or not God determines what happens to them; or whether they are either atheist or agnostic. As indicated in Table 4, "Decided to turn our will and our life over to God" and "how many of the 12 Steps they worked," collectively predicted 13.5% of the variance in depression scores, and "decided to turn our will and our lives over to God" alone independently predicted 7.5% of the variance in craving scores.

**Table 3.** Relationship between antecedent 12-step items relative to the depression and craving scores (Spearman's rho correlations).

| | BSI Depression | | Cravings | |
|---|---|---|---|---|
| | Correlation | N | Correlation | N |
| How many 12 step sworked | −.266* | 427 | −.229* | 431 |
| Decided to turn life over to God | −.290* | 427 | −.258* | 431 |
| Higher power restore sanity | −.208* | 429 | −.181* | 434 |
| Years since spiritual awakening | −.247* | 423 | −.299* | 427 |

*Correlation is significnat at the.001 level (2-tailed).

## Discussion

This study is novel, in that (a) members in the 12 Step groups (NA here) are typically inaccessible for study because the fellowships are based on anonymity; (b) the concept of "God, as we understood Him" in the fellowships has been difficult to access empirically, although it plays a major role in these "spiritually oriented" fellowships; and (c) an empirically based approach is applied to clarifying the mechanisms that underlie a major psychosocially oriented resource.

This study was undertaken on a nationally distributed sample of US members of NA to lend clarity on the nature of NA members' experience of God, a key component of the 12 Step process. A lack of clarity on the issue of God in the Steps leaves many clinicians, as well as members of the general public, reluctant to refer to NA or AA, viewing

**Table 4.** Multiple regression for dependent measures BSI depression scale and past week drug cravings.

| | Unstandardized Coefficients | | Standardized Coefficients | | |
|---|---|---|---|---|---|
| | B | Std. Error | Beta | *t* | *p* |
| BSI Depression Scale (N = 419) | | | | | |
| Decided to turn life over to God | −0.60 | 0.21 | −0.19 | −2.83 | 0.005 |
| How many 12 steps worked | −0.76 | 0.24 | −0.16 | −3.11 | 0.002 |
| Years since spiritual awakening | −0.02 | 0.01 | −0.07 | −1.33 | 0.185 |
| Higher power restore sanity | −0.28 | 0.29 | −0.07 | −0.99 | 0.321 |
| Past Week Drug Cravings (N = 423) | | | | | |
| Years since spiritual awakening | −0.02 | −0.01 | −0.09 | −1.63 | 0.105 |
| Decided to turn life over to God | −0.56 | −0.18 | −0.22 | −3.15 | 0.002 |
| How many 12 steps worked | −0.29 | −0.20 | 0.08 | −1.43 | 0.154 |
| Higher power restore sanity | −0.16 | −0.24 | 0.05 | −0.66 | 0.510 |

For the Brief Symptom Inventory (BSI) depression model the total $R^2$ was.14, and for the drug craving model the total $R^2$ was.08.

them as religious or cult-like (21–23). Our results illustrated a diversity in how members defined the construct of God for themselves, how they communicate with it, and how it relates to their recovery experience. This also allows for comparison to spiritually related experiences in the general population.

We consider the issue of spirituality here, as it provides the overarching context in which the construct of "God" is to be understood. The role of spirituality in 12 Step membership has been found to be associated with a positive outcome of SUD treatment (4,5,24), and as a mediator of the positive outcome associated with 12 Step recovery (25–27). Additionally, as noted above, the self-reported experience of "spiritual awakening," referred to in the last (12$^{th}$) Step, has been found to be associated with both decreased craving among established 12 Step members (28) and leading to an increased likelihood of abstinent outcome following treatment (7,29,30).

## *Diversity in the belief in God*

Approximately half of respondents defined God as mentioned in the Steps as "God" per se, and the other half defined "Him" otherwise. The former respondents were neither significantly more likely to have completed all 12 Steps, nor to attend more 12 Step meetings, nor sponsored more NA members. They were, however, more likely to respond: that God determines what happens in their lives, that they talk with God, and experienced Him talking to them. Apparently, those respondents who personify their Higher Power as God as such (rather than as something other than God) see Him as a more animated figure in their lives.

In many respects, views among these committed NA members' relationship with "God, as we understood Him" as their Higher Power reflects a considerable latitude available in this regard within a 12 Step-based adaptation. In fact, our respondents are similar in many respects to a significant portion of the American public as determined in probability sampling (13,14,31). The majority of Americans (89%) answer affirmatively that they believe in God or some higher power or spiritual force, whereas 91% of our respondents do. Like our respondents, many Americans indicate that they believe that God determines what happens to them all or most of the time (67% of our respondents vs 48%, respectively).

The fact that our respondents were more likely to self-designate themselves atheists or agnostics than members of the probability sample of the general public (21% vs 7%) (13) indicates a disjunction between self-designation as agnostic or atheist and acceptance of the NA construct of "God as we understood Him" for members in the fellowship.

Furthermore, there was no significant difference in drug craving for respondents who were either atheist or agnostic as compared to those who were not, suggesting that atheists or agnostics may find a comfortable adaptation within NA. Although not addressed in previous studies on 12 Step members, many of our respondents' relationships with their Higher Power are characterized by both speaking to God (92%), and hearing back from him (75%) "in their minds." This is similar to a notable portion of the probability sampling of Americans overall of whom 75% report talking to God, and 28% reporting that God talks back to them. These findings also suggest the capacity of strongly accultured NA members to acquire a substantial relationship with their Higher Power while in recovery, thereby achieving in Him an active "partner" in supporting their sobriety.

Over a third of our respondents, however, report hearing from Him "out loud," (but not defined as external to them) a phenomenon for which data are not available from the general population and may differ from actual audible speech. There are probability samples available for the U.S. general public for hearing God's voice, but data are not available for distinguishing whether people hear God's voice "in their minds" or "out loud." In order to clarify responses regarding

hearing God's voice, communication was undertaken with NAWSO staff regarding verbal clarification by members. They reported that "out loud" did not report hearing it as a voice external to them. (Jane @ NA.org, phone conversations, April 18 and 20, 2020).

Lurhmann reported on one American evangelical congregation, where speaking with God was common. She described how its members also heard God speaking with them, often out loud, as if it were external speech (32). She distinguished hearing voices in that setting from psychotic phenomena. Indeed, our respondents also do not likely manifest either delusional thinking, disorganized speech or behavior, or negative symptoms, all of which would be reflective of psychosis, adapting as they do to a socially grounded program in which members attend NA meetings with frequency and play an active role in the fellowship's format of members sponsoring other members in open communication.

### *Relation to psychiatric symptoms*

Neither craving nor depression scores were significantly associated with whether respondents designated their Higher Power as "God" as such or as something else, indicating that neither of the two views of "God" was differentially associated with the experience of the symptoms of craving or depression. Indeed, even respondents' indicating that they were atheist or agnostic did not differentiate their scores on these items. The finding that there was no difference in certain key variables across respondents suggests a broad bandwidth of tolerance and accommodation to varying viewpoints.

Four 12 Step-related variables, rated retrospectively by the respondents, were found to be significantly predictive of the magnitude of their craving and their depression scores at the time of survey administration. "Decided to turn our will and our lives over to God" was independently inversely predictive of scores on both of the symptoms. This suggests that respondents' intensity of commitment to their Higher Power, i.e., God as they understood Him, was associated with less craving and depressive symptoms. It further suggests that research on the role of belief in God among NA members merits further investigation, in terms of mechanisms underlying long-term members' sobriety and affective status. For non-12 Step people in addiction recovery, there may be corresponding cognitive and personal variables that merit investigation as to how they may help with stabilizing abstinence.

### *Limitations*

A study dealing with subjectively held beliefs is of necessity limited by a format that uses terms like "God as we understood Him," speaking to God, and a numerical measure of subjectively defined craving. It is clear that the survey instrument employed here cannot capture the full complexity of the subjective meaning of such terms for each respective member. Additionally, there were practical limitations in the length of the survey and time available for respondent participation. Because of this, certain variables (such as craving, multiple drug use, and personal spirituality), had to be queried more briefly (even with 1-item responses) than is optimal. This is a practical limitation that would have been obviated in a much lengthier survey instrument.

There are also issues of sampling that arise in such a survey study, although NAWSO staff attempted to select meetings for diversity of urban and non-urban sites and for US coastal and non-coastal regions. There are also limitations in the degree to which representation of the full diversity of the US membership could be assured. At a given meeting, the portion of members who chose to frequently attend NA meetings is of necessity greater than that of the infrequent attendees, meaning that high attenders are over-represented. Additionally, since participation in the survey is voluntary, less committed attendees were more likely to leave the meeting early, and less likely to complete the survey. These circumstances delimit inferences on how the issues studied may bear on newer attendees less stable in achieving long-term abstinence. There is also no independent corroboration of the respondents' reports, leaving their responses subject to retrospective distortion.

## Conclusion: applicability in clinical care and in research

Spiritually oriented treatment for addiction in the US is quite common, as 73% of formally designated US addiction programs are reported to include some spirituality-based elements; these stand in addition to 130,000 reported religiously based SUD recovery programs (33). In fact, the large majority (79%) of primary care physicians surveyed indicated that they were likely to refer a patient to a faith-based program (34).

Many clinicians may therefore be making less use of 12 Step groups than they might, witness the fact that 65% of the respondents had been hospitalized for SUDs, but only 37% of them had been referred to NA by a health-care professional. The cost-free resource of 12 Step groups may be potentially useful to clinicians as adjuncts to care if they can assure their patients that there is a diversity of options in how members define God, particularly given the growth of secular wings within 12 Step fellowships created by and for atheists

and agnostics (35). On the other hand, clinical phenomena such as those described here may raise potential referral problems unless a patient is adequately prepared to understand what many 12 Step members believe and experience.

With regard to research, it has been suggested that there is value in studying potential psychological mechanisms underlying interventions that can promote improvement in SUDs (9,10), just as an understanding of the pharmacologic mechanisms of medications applied in treatment has clearly proved to be valuable. Findings reported here may also have utility relative to the role of members' experience of how belief in a Higher Power may operate in 12 Step-based recovery. Research has already been carried out on issues of spirituality (4–6), craving (12,28), and depression (30) in that process. An understanding of the specifics of belief in God ("as we understood Him") may provide a better understanding of the 12 Step recovery process and other aspects of SUD recovery.

## Disclosure statement

The authors report no disclosures of conflict.

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