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Assessment of spirituality and its relevance to addiction treatment

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Abstract

The prominence of Twelve-Step programs has led to increased attention on the putative role of spirituality in recovery from addictive disorders. We developed a 6-item Spirituality Self-Rating Scale designed to reflect a global measure of spiritual orientation to life, and we demonstrated here its internal consistency reliability in substance abusers on treatment and in nonsubstance abusers. This scale and the measures related to recovery from addiction and treatment response were applied in three diverse treatment settings: a general hospital inpatient psychiatry service, a residential therapeutic community, and methadone maintenance programs. Findings on these patient groups were compared to responses given by undergraduate college students, medical students, addiction faculty, and chaplaincy trainees. These suggest that, for certain patients, spiritual orientation is an important aspect of their recovery. Furthermore, the relevance of this issue may be underestimated in the way treatment is framed in a range of clinical facilities.

Keywords: Substance abuse treatment; Spirituality; Alcoholics Anonymous; Psychometric scale

1. Introduction

Alcoholics Anonymous (AA) has been described as "a spiritual program for living," as "there is no dogma, theology, or creed to be learned" (Miller & Kurtz, 1994). Dictionaries define spirituality with phrases such as "concerned with or affecting the soul" or "pertaining to God" (Berube, 2001). These connotations suggest that an approach to spirituality can be framed relative to addiction recovery, as understood by members of Twelve-Step programs.

To operationalize this construct for use in addiction treatment settings, we developed a scale designed to assess the degree to which a subject's views reflect this orientation. We have applied it to patients in a diverse group of treatment programs and to medical caregivers and chaplaincy trainees. These results were then examined in relation to subjects' views on substance abuse treatment and recovery. We present here the psychometric properties of this Spirituality Self-Rating Scale (SSRS), along with responses from these subject groups on their views on substance abuse treatment and recovery and their attitudes toward spirituality in relation to recovery from addiction. Our findings suggest that further attention needs to be paid to the importance of spirituality and its value to patients relative to their recovery in diverse settings where addicted people are treated.

There have been a number of studies on substance abusers' spiritual orientation whose findings reflect a positive relationship to recovery. Two were on methadone-maintained patients: Avants, Warburton, and Margolin (2001) found that a higher self-report rating on "spirituality or religious support" was an independent positive predictor of abstinence from illicit heroin and cocaine. Flynn, Joe, Broome, Simpson, and Brown (2003) found that patients who indicated religion or spirituality as a source of recovery support were almost twice as likely as those who did not to be free from heroin and cocaine at 5 years. Piedmont (2004) evaluated a group of abstinent drug abusers who had entered a spiritually oriented

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ambulatory program of 8 weeks' duration. Of those who completed the program, the ones who had higher pretreatment on spirituality had higher scores on well-being and less psychiatric symptomatology after completion (no indication of final drug-free status was given). Polcin and Zemore (2004) and Zemore and Kaskutas (2004) studied ambulatory patients who were predominantly drawn from AA meetings by applying a multidimensional measurement of religiousness/spirituality, and they found that those AA members who had longer periods of sobriety reported a greater level of spirituality at the time of evaluation. Magura et al. (2003) reported that responses on a 12-item Spirituality Well-Being scale were not associated with increased abstinence, but were associated with health-promoting behaviors such as "taking care of yourself" and "getting enough sleep."

Some studies on ambulatory patients on recovery, however, did not show a relationship between spiritual orientation and decreased use of drugs. Christo and Franey (1995) evaluated a sample of patients attending Narcotics Anonymous in London and found, on a 6-month follow-up, no relationship between scores on a spiritual belief questionnaire and abstinence. Murray, Malcarne, and Goggin (2003) studied members currently attending AA meetings and found no relationship between belief in God or in a higher power as a motivation to stop drinking and duration of sobriety. Clearly, there is a need for an operational definition for what investigators term "spirituality" relative to addiction recovery.

2. Method

2.1. Study samples

We conducted a series of cross-sectional studies on cohorts of substance abusers in recovery-oriented programs and on other cohorts not designated as substance abusers. In the instruments employed, we included a scale designed to assess their spiritual orientation and its relationship to attitudes toward addiction treatment, and their views on AA. Where specific procedures of subject selection and of the administration of structured questionnaires were reported previously, relevant references are cited below. Participation of all subjects was voluntary, and responses were recorded on answer sheets with identifiers removed for subsequent analysis.

Patients in the following treatment settings were studied:

Dually diagnosed (DD) psychiatric inpatients (n = 101; i.e., those who were diagnosed with both general psychiatric disorders and substance-use Axis I disorders) were interviewed. They had been admitted to an acute inpatient general psychiatric service at Bellevue Hospital because of their potential harmfulness to themselves or to others. Individuals in this sequential series of admissions were interviewed as soon as they were able to respond effectively to structured questionnaire items read to them (Goldfarb, Galanter, McDowell, Lifshutz, & Dermatis, 1996).

Therapeutic community (TC) residents (n = 210) of the Daytop Village Therapeutic Community Program at two sites (Swan Lake and Parksville, NY) were studied. A one-time cross-sectional survey adapted from our previous research (Dermatis, Guschwan, Galanter, & Bunt, 2004) was administered in a group setting at each site.

Patients on methadone maintenance (n = 110). Patient chart numbers were selected at random from the New York Bellevue Hospital Methadone Maintenance Clinic's roster of patients who were waiting to receive their methadone doses.

Methadone Anonymous members (n = 52) in New-York-City-based groups (Gilman, Galanter, & Dermatis, 2001) were studied. Methadone Anonymous is a recovery-oriented peer-led program for patients on methadone maintenance that is based on the Twelve-Step group format. It was established because many traditional Twelve-Step groups exclude active participation of patients on opiate replacement therapy.

Questionnaires were also administered to subjects who were not in substance abuse treatment programs:

Medical students in their first year and second year (n = 119) at New York University Medical School who volunteered for a survey on medical treatment: Subjects in this sample completed a questionnaire on attitudes toward spirituality and addiction treatment (Goldfarb et al., 1996).

Medical addiction faculty (n = 34) drawn from the New York University Medical Center and from an annual meeting of the American Society of Addiction Medicine: Members of this sample of convenience were asked to participate in a study on addiction treatment (Fazzio, Galanter, Dermatis, & Levounis, 2003).

Chaplaincy trainees (n = 19) at the Bellevue Interdenominational Clinical Pastoral Education Program: Trainees were drawn from diverse religious and ethnic backgrounds. All participants in the four sequential cycles of a 2-month full-time training were administered a written questionnaire.

University students (n = 180) presenting at New York University Counseling Service (UCS) for mental health consultation: This is clearly a clinical sample. Subjects completed the questionnaire as part of their intake assessment. This series of sequentially presenting students consisted of 95 (53%) undergraduate and 85 (47%) graduate students.

2.2. Instruments

Questionnaires administered to substance-abuser groups were designed to ascertain aspects of their abuse and

treatment, and were tailored to each treatment setting relative to the objectives of the respective studies. Subjects were told by the research staff that the survey was undertaken to improve the understanding of addiction treatment options; that responses were given anonymously, with no review of individual respondents' questionnaires by clinical or educational staff; and that participation was voluntary.

Each assessment battery that was administered to substance-abuser cohorts consisted of about 150 multiple-choice items and included demographic, drug use, employment, and treatment-related items, as well as self-rating items reflecting attitudes toward spirituality. In each assessment battery, the SSRS and additional spirituality-related items were administered following questions concerning sociodemographic characteristics, substance use, and prior treatment characteristics. Administration of each of the surveys for substance-abuser cohorts took an average of 30 minutes. Spirituality-related measures that are relevant to this report are described here. Questionnaires completed by nontreatment cohorts were briefer, contained the SSRS described below, and required no more than 10 minutes to complete.

2.3. The SSRS

Our previous research (Goldfarb et al., 1996; McDowell, Galanter, Goldfarb, & Lifshutz, 1996) described the development of a seven-item spirituality measure reflecting an intrinsic (as opposed to a more external socially related) orientation to spirituality, based on factor analyses conducted in medical students and DD psychiatric inpatients. Subsequent factor analyses of this seven-item measure in the university, methadone clinic, and TC samples indicated a unipolar factor structure, with six items having loadings exceeding .35 in each of the three samples. These six items are listed in Appendix A, and the SSRS reported here consists of these six items. They were rated on a 5-point Likert-type rating from 1 = *strongly agree* to 5 = *strongly disagree*. The scale is scored by summing responses to the six items. The items are recoded before calculating the sum, with higher scores reflecting a higher level of spirituality (range, 6–30; i.e., Score 1 is redesignated as 5, and Score 2 is redesignated as 4). Cronbach's α coefficients for this six-item version of the scale ranged from .82 to .91 (see Table 1).

Table 1
Cronbach's α reliability coefficients of the six-item spirituality scale, by study sample

Study sample	*M*	*SD*	Cronbach's α
Medical students (n = 119)	17.23	6.03	.86
College/graduate students (n = 180)	17.61	6.33	.90
DD psychiatric inpatients (n = 101)	23.18	5.84	.87
Methadone clinic patients (n = 110)	23.34	5.66	.88
Methadone Anonymous attendees (n = 52)	21.90	5.49	.82
TC residents (n = 210)	22.20	5.86	.91
Chaplain trainees (n = 19)	27.63	1.57	NA

Note. NA = not assessed.

To evaluate the construct validity of the SSRS, on a preliminary basis, we assessed the relationship of spirituality to related constructs that are consistent with the Twelve-Step conceptualization of spirituality. Spirituality-related personal characteristics that were available in DD patients and medical students included one item drawn from a Gallup (2002) poll report on religion in Americans:

Do you believe that God or a universal spirit is:
(a) a heavenly father who can be reached by prayer?
(b) an idea, not a being?
(c) an impersonal creator?
(d) I don't know.

They also included one item that assessed the extent to which they believed in a power greater than themselves, which was rated on a 5-point Likert-type rating scale from 1 = *never* to 5 = *always*. Using the same Likert-type rating scale to assess attitudes toward treatment, DD patients were asked to rate the extent to which they wanted more groups focused on spirituality in their treatment, and the TC sample was asked to rate the extent to which they wanted spirituality featured more in the TC program.

2.4. Other clinical issues

The following additional measures were applied to assess treatment-related issues associated with spiritual orientation:

1. A 5-point Likert-type scale ranging from 1 = *not at all* to 5 = *very much* was used for evaluating the views of DD patients, TC residents, methadone clinic patients, Methadone Anonymous members, medical students, and addiction faculty members regarding the importance of four issues to recovery from addiction: spiritual orientation, AA meetings, job, and outpatient treatment.
2. Medical students' and faculty members' perceptions concerning their patients' views were determined by asking the medical students and the faculty to rate what they perceived was the importance of the four issues noted above to their patients.

3. Results

There was neither a significant difference in SSRS scores on an analysis of variance across the four groups of substance abusers (DD patients, TC residents, methadone maintenance patients, and Methadone Anonymous members) nor any significant difference between the mean scores of UCS students and medical students (see Table 1). Because of this, substance-abuser samples were combined

Table 2
The importance of issues to treatment: DD patients versus medical students and addiction faculty

	DD patients (n = 101)	Students (n = 119)		Faculty (n = 34)		ANOVA (df = 2, 251)	
	A	B	C	D	E		
Issue	Own view [M (SD)]	Own view [M (SD)]	Patients' view [M (SD)]	Own view [M (SD)]	Patients' view [M (SD)]	A × B × D	A × C × E
Spiritual orientation	4.48 (0.93)	2.95 (0.92)	3.03 (1.10)	3.38 (1.41)	2.65 (1.05)	F= 65.24**	F = 68.72**
AA meetings	4.61 (0.80)	2.86 (1.13)	4.10 (0.85)	3.94 (0.86)	3.0 (0.98)	F= 89.01**	F= 46.21**
Job	3.71 (1.56)	3.97 (1.15)	4.23 (0.92)	3.85 (0.91)	3.52 (1.23)	F= 1.082	F = 6.69**
Outpatient treatment	4.29 (1.02)	3.99 (0.92)	4.30 (0.67)	4.45 (0.83)	3.16 (0.92)	F= 4.32*	F = 24.47**

* $p < .05$.
** $p < .001$.

into one group, and medical students and UCS students (a clinical sample in effect) were combined into another group for the following analysis. An independent t test was then conducted to compare the two groups on the SSRS. The substance abusers (M = 22.63, SD = 5.8) were significantly more spiritual than were the students (M = 17.49, SD = 6.2; t = 11.78, df = 770, $p < .001$). The distribution of spirituality scores in the chaplain sample was restricted to the extremely high end of the range (M = 27.63, SD = 1.57), reflecting strong spiritual orientation.

3.1. Relationship of SSRS scores to spiritually related beliefs/attitudes

Respondents who believed that God is an entity reachable by prayer had SSRS scores higher than the scores of those who did not view God this way, in both DD patients (M = 24.71, SD = 4.59 vs. M = 20.03, SD = 6.9; t = 3.55, df = 46, $p < .001$) and medical students (M = 21.42, SD = 4.91 vs. M = 15.75, SD = 5.70; t = 15.75, df = 117, $p < .001$). Similarly, respondents who believed in a higher power had a greater level of spirituality than those who did not, in both DD patients (M = 24.58, SD = 4.99 vs. M = 18.43, SD = 6.11; t = 4.92, df = 99, $p < .0001$) and medical students (M = 20.52, SD = 5.38 vs. M = 14.84, SD = 5.33; t = 5.71, df = 117, $p < .0001$). SSRS scores were significantly correlated with DD patients' preference for more group treatment sessions focused on spirituality (r = .440, $p < .0001$), and with TC patients' preference for more spirituality to be featured in their program (r = .550, $p < .0001$).

3.2. Attitudes toward treatment

Paired t test analyses were carried out to ascertain the degree to which DD patients considered two types of experiences to be valuable for their recovery: spiritual issues relative to nonspiritual ones. As seen in Table 2, both "spiritual orientation" and "AA" were scored as more valuable than "a job" (paired t test = 4.04, df = 100, $p < .0001$; paired t test = 5.02, df = 100, $p < .0001$, respectively), and "AA" was rated higher than outpatient treatment (paired t test = 2.66, df = 100, $p < .01$).

Medical students, DD patients, and addiction faculty were polled as to how valuable they thought each of the same four issues was to a substance abuser's recovery. As shown in Table 2, the three groups differed in their attitudes concerning the importance of spiritual orientation (F = 65.24, df = 2,251, $p < .001$) and AA meetings (F = 89.01, df = 2,251, $p < .001$). Scheffe post hoc tests at the .05 level of significance indicated that both the students and the addiction faculty rated spirituality and AA meetings as significantly less valuable than did DD patients. The students and faculty were also asked to indicate what rating they thought substance-abusing patients would give for each of these issues. Student and faculty ratings of substance abusers' perceptions of the importance placed on spiritual orientation (F = 68.72, df = 2,251, $p < .001$) and AA meetings (F = 46.21, df = 2,251, $p < .001$) were significantly different from ratings made by DD patients. Scheffe post hoc tests indicated that medical students and faculty members underestimated the value that DD patients placed on spiritual orientation and AA meetings. Significant differences in group perceptions concerning the importance of a job (F = 6.69, df = 2,251, $p < .05$) and outpatient treatment (F = 24.47, df = 2,251, $p < .001$) were obtained with Scheffe post hoc tests indicating the following: (1) medical students overestimated the importance that patients placed on a job, and (2) faculty members underestimated the importance that patients placed on outpatient treatment.

Although the residential TC program was neither oriented toward spirituality nor included Twelve-Step meetings, more than half of the respondents in the TC sample (111 of 210; 53%) indicated that they wanted spirituality to be featured in the program a lot or very much (Scores 4 and 5). Furthermore, an appreciable portion of TC respondents also gave scores of 4 or 5 on how much they wanted the Daytop program to feature more Twelve-Step meetings (96 of 210; 46%). Both the members of Methadone Anonymous and the patients in the methadone clinic cohort were asked to rate the degree to which they regarded Twelve-Step programs as integral to their recovery, and a large portion of these patients (33 of 52 [62%] and 41 of 110 [37%], respectively) indicated that they regarded the programs as a lot integral or very much

integral (Score 4 or 5) or fairly integral (Score 3) (14 of 52 [27%] and 33 of 110 [30%], respectively).

4. Discussion

4.1. Connotations of spirituality

The scale we developed was designed to draw on connotations of this construct that are typically reflected in AA members' views (Galanter, 2005). We did not include certain connotations employed in other studies that were not oriented toward substance abusers, such as mystical experiences (like a "loss of self" or "distortion of time and space") (Hood, Morris, & Watson, 1993), items reflecting divine intervention in one's daily life (Hall & Brokaw, 1995), aspects of religious rituals such as prayer (Saur & Saur, 1993), provision of heavenly rewards (Moberg, 1980), and appreciation of natural beauty (Galek, Flannelly, Vane, & Galek, 2005). Additionally, the SSRS is different from scales designed to assess AA involvement and affiliation, but not spirituality as such (Humphreys, Kaskutas, & Weisner, 1998; Morgenstern, Kahler, Frey, & Labouvie, 1996; Tonigan, Connors, & Miller, 1996).

We were mindful, however, of the mention of God in the Twelve Steps, as embodied in the words of the AA cofounder Bill W., who experienced an epiphany in 1935 heralding the beginning of AA. This was expressed when his plea for redemption from alcoholism was answered by "a wind not of air, but of spirit . . . so this is the God of the preachers!" (Alcoholics Anonymous, 1975; Chappel, 1993). Three years later, the Twelve Steps were modified to add a phrase following the term God (God "as we understood him"), respecting the fact that members may define spirituality as separate from denominational religion.

4.2. Relevance to treatment readiness

Spirituality is not generally assessed in studies related to engagement and progress in treatment; issues such as self-efficacy and desire for help (Joe, Broome, Rowan-Szal, & Simpson, 2002), or acknowledgement of one's problem (Prochaska & Diclemente, 1986) is more often considered. "Patient attributes," as an overall entity, may be considered as a nonspecific term within an overall conceptual framework for treatment, as employed by Simpson (2004) in a model he developed. Nonetheless, spiritual orientation may play a unique role in promoting an attitude that facilitates some patients' openness to change, particularly in the context of programs that draw heavily on Twelve-Step groups. It may also be influential in a patient's choice of a given treatment program or in promoting adherence to the program's behavioral expectations. Additionally, a low level of spirituality may suggest relatively better acceptance of a program that is not heavily oriented toward Twelve-Step recovery when referral is considered. Further investigation is needed to ascertain if this applies in a useful way to abstinence after treatment.

In our substance-abuser samples, spiritual orientation to recovery was apparently considered relatively important. Vocational training is often considered as a means of improving clinical outcome for patients, but limited empirical evidence validating this assumption has been reported, at least in studies on methadone maintenance programs (Staines, Blankertz, Magura, Cleland, & Bali, 2005). Indeed, our DD patients rated spiritual orientation as more important to their recovery than a job. They also rated AA meetings as more important than outpatient treatment. They further indicated that they had wanted greater emphasis on spirituality and Twelve-Step programs in their treatment. Many of the residents of the TC we studied also indicated a preference for more of a spiritually oriented approach in their treatment. Altogether, these findings support the view that some substance-abusing patients in treatment programs would prefer more activities associated with spiritual aspects of recovery than are provided.

4.3. Limitations

The six-item SSRS was found to have a unidimensional factor structure within the university, methadone, and TC samples and an acceptable internal consistency reliability for all samples. Preliminary support for the validity of the measure was limited to the nature of significant correlations with spirituality-related beliefs (i.e., belief in God as an entity reachable by prayer, belief in a higher power, and preference for spirituality in treatment, as well as high scores demonstrated by the chaplain sample). Due to constraints in the length of the assessment battery, other spirituality measures, which could have strengthened the evidence for the concurrent validity of the measure, were not included. Further evaluation will be needed to ascertain the scale's validity by making use of established markers of spirituality.

There are a number of limitations as to whether our findings can be generalized to diverse populations with substance-use disorders and as to the degree to which they can be applied in framing clinical management. Substance abusers may experience spirituality in different ways relative to their recovery, given their respective life experiences, cultural backgrounds, and religious affiliations. We attempted to frame a scale that was sufficiently general in nature to address this diversity, but specific individuals may differ from each other on this count. In addition, the literature cited above on the role of spirituality in the maintenance of abstinence is certainly not conclusive.

Our subjects were recruited in the greater New York area and may not be representative of patient and nonpatient groups in other parts of the country. For example, Bellevue Hospital serves a relatively indigent urban population, and New York University may attract students whose orientation is different from that of some other educational institutions.

The substance abusers studied may also reflect the particular populations of the programs from which they were drawn, but not other programs of similar designation. Thus, although Daytop Village's regimen is largely in conformity with classical descriptions of TC (De Leon, 1997), other programs may have somewhat different orientations. Some do employ, or at least encourage, Twelve-Step attendance.

Finally, not all the patients self-identified themselves with high scores on the SSRS, and a demand characteristic of any addiction treatment setting may be to promote unduly positive responses to a spirituality measure. Given all this, care must be taken not to alienate or even compromise some patients who would be distressed if more activities related to spirituality were included in their treatment programs. Clearly, no patients should be pressed to participate in such exercises if they prefer not to do so.

4.4. AA and remission from chronic disease

McLellan, Lewis, O'Brien, and Kleber (2000) have pointed out similarities between drug dependence and chronic general medical illnesses, based on issues of its duration, problems in treatment adherence, and possibility of relapse. They emphasized the need for the availability of long-term support for the maintenance of remission in all such illnesses. Given current constraints on medical expenditure, however, it is important that approaches to maintaining stable remission should be relatively low in cost if they are to be adopted. Options that employ patients' own spiritual orientation may therefore be useful for certain patients. In such cases, an underlying Twelve-Step philosophy, with its nondenominational spiritual orientation, may be beneficial for sustaining recovery-oriented behaviors. These programs provide acculturation into an approach to abstinence associated with peer support, a positively oriented philosophy based on enhanced personal meaning, and an altruistic orientation toward helping other addicted people. In this latter regard, a secondary analysis of Project MATCH data showed that recovering substance abusers who helped other substance abusers maintain sobriety were better able to sustain their own (Pagano, Friend, Tonigan, & Stout, 2004).

Motivation for recovery from addictive illness based on Twelve-Step involvement is therefore a subject of interest for some investigators. In a 1-year follow up on a 28-day, Twelve-Step-based, Minnesota model inpatient program, Isenhart (1997) found that affiliation with AA and acceptance of an AA sponsor (independent of scores on the SOCRATES scale for motivational readiness) were found to be predictive of a subsequent decrease in the quantity and frequency of alcohol consumption. Ouimette, Moos, and Finney (1998) found that self-selection for participation in Twelve-Step ambulatory aftercare groups was also associated with improved outcome at 1-year follow-up. Humphreys and Moos (2001) contrasted between patients attending programs that emphasized Twelve-Step treatment and those oriented toward cognitive–behavioral approaches; the former required less subsequent inpatient hospitalization than those in the latter treatment programs. AA may also be useful as a model for approaches to promoting recovery that are not grounded on spiritual philosophy, such as a peer support program (e.g., Rational Recovery; Galanter, Egelko, & Edwards, 1993). To draw on the benefits of mutual support for abstinence, we developed a secularly grounded peer-based approach applied in ambulatory care. This draws on behavioral modeling familiar to many patients from Twelve-Step groups, and this approach is not embedded in a spiritually grounded philosophy (Dermatis et al., in press; Galanter, 2002). In some settings, Twelve-Step-based rehabilitation programs employ alumni groups that draw on an AA spiritually oriented format that sustains recovery-oriented behaviors after discharge.

4.5. Outside the spiritually oriented treatment community

The institutional settings studied here, where a large portion of addicted people are treated, do not typically focus on spiritual renewal. Methadone maintenance is built around a pharmacological agent complemented by counseling over pragmatic issues, such as job training and avoidance of secondary drug use. Therapeutic communities emphasize the "community as method" (De Leon, 1997) for promoting character change, although some TCs do employ Twelve-Step groups or encourage attendance. Additionally, on general psychiatric units, although the comorbidity of substance use and mental illness is quite high, the emphasis is on psychopharmacological treatment and maintenance of adaptive behaviors. Programs that are medically grounded, ranging from HMOs (Mertens, Lu, Parthasarathy, Moore, & Weisner, 2003) to state hospitals (Haugland, Siegel, Alexander, & Galanter, 1991), also encounter large numbers of patients with substance-use disorders. Recognition by clinical staff of the importance of spirituality in any such settings may therefore have clinical utility.

It has also been shown that individual physicians can play an important role in addressing alcohol-use disorders in their patients in office practice with brief educational interventions (Fleming, Barry, Manwell, Johnson, & London, 1997). When we compared the attitudes of both medical students and teachers of addiction medicine to those of DD patients, we found that these two medical cohorts regarded spiritual orientation toward recovery as relatively less important than the pragmatic issues of a job and outpatient treatment. The patients, however, indicated otherwise in their responses. Equally important, the two medical cohorts underestimated the degree to which the patients would rate spiritual orientation and AA as important to recovery. This is significant relative to the strong orientation toward religion and spirituality, as noted in the aforementioned polling data drawn from the general population (Gallup, 2002). These findings suggest that there

is a need for further attention to enhancing physician understanding of the relevance of spirituality to substance-abusing patients.

In conclusion, spirituality, however difficult to define in operational terms, likely constitutes an important motivator for recovery for some (perhaps many) substance-dependent people. More clarity is needed on how patients experience it and the degree to which it can constructively be given voice in their course toward recovery in conventional treatment settings. It does appear, however, that many of the patients we studied ascribed importance to it and that they were apparently desirous of its playing a larger role in their treatment. Clearly, more study is needed regarding how this construct affects certain patients' acceptance of sobriety and not others', and how it may play relative to treatment outcome in a field where evidence for therapeutic modalities is essential.

Appendix A. Spirituality Self-Rating Scale

Below is a list of statements. Using the following rating scale, indicate the number that best indicates your agreement with the statement.

Strongly agree								Strongly disagree
1	—	2	—	3	—	4	—	5

1. It is important for me to spend time in private spiritual thought and meditation. ( )
2. I try hard to live my life according to my religious beliefs. ( )
3. The prayers or spiritual thoughts that I say when I am alone are as important to me as those said by me during services or spiritual gatherings. ( )
4. I enjoy reading about my spirituality and/or my religion. ( )
5. Spirituality helps to keep my life balanced and steady in the same ways as my citizenship, friendships, and other memberships do. ( )
6. My whole approach to life is based on my spirituality. ( )

Scoring instructions: Prior to computing the sum, each of the items is recoded, with higher scores indicating greater endorsement of the item (i.e., a score of 5 becomes 1; 2 becomes 4; and so forth). Responses to the six items are then summed to yield a total score for spiritual orientation. The higher is the total for the six items, the higher is the level of spiritual orientation, with a scoring range of 6–30.

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