

Forgiveness and Alcohol Problems Among People Entering Substance Abuse Treatment

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ABSTRACT. Forgiveness is argued to be highly relevant to problematic substance use, yet supportive empirical evidence is lacking. Findings are presented from a longitudinal study exploring the relationship between religiousness and spirituality (RS) variables and alcohol use disorders. We examined forgiveness of self (ForSelf), of others (ForOthers), and by God (ByGod), hypothesizing positive relationships with RS and negative relationships with alcohol use and consequences, at both baseline (N = 157) and six-month follow-up (N = 126). ForSelf scores were significantly lower than ForOthers and ByGod scores, and ForOthers scores increased modestly over time. ByGod was most consistently associated with other RS variables. ForSelf and ForOthers were associated with alcohol-related variables at both time points, and baseline ForSelf and ForOthers were associated with fewer drinking consequences at follow-up, but not after controlling for other pertinent variables. ForSelf may be most difficult to achieve and thus most important to recovery, thereby preventing full recovery and fostering relapses. [Article copies available for a fee from The Haworth Document Delivery Service: 1-800-HAWORTH. E-mail address: <docdelivery@haworthpress.com> Website: <<http://www.HaworthPress.com>> © 2006 by The Haworth Press, Inc. All rights reserved.]

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INTRODUCTION

Religious and spiritual beliefs are important to many people throughout the world.¹ The 1998 International Social Survey Program found in 33 countries surveyed, in all but 4, most of the population believe in God. In some countries, such as the U.S., Poland, and the

Philippines, more than 90% reported a belief in God.^{2,3}

International prevalence rates for substance disorders vary as indicated by two recently published studies based on data collected by the World Health Organization. One study of five countries, using primarily *Diagnostic and Statistical Manual of Mental Disorders*, Third

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Edition, Revised (DSM-III-R)⁴ criteria, found a 12-month prevalence rate of 5.2% (Germany) to 11.5% (United States).⁵ The second study of 14 countries, using DSM-IV⁶ criteria, found a 12-month prevalence rate of 0.1% (Italy) to 6.4% (Ukraine).⁷

Accumulating evidence suggests that religiousness and spirituality (RS) play important mediating roles in both physical and mental health.⁸⁻¹³ In the study of addiction, religious/spiritual involvement is associated with less use of, and problems with, alcohol and other drugs;^{14,15} that is, those with little or no religious involvement are more likely to abuse substances. Religion and spirituality have also been found to be associated with recovery from alcohol and drug problems. Participation in Alcoholics Anonymous (AA), a spiritually focused mutual-help program (estimated to have more than 100,000 groups with more than 2 million members in 150 countries¹⁶), following treatment has been associated with better recovery outcomes.¹⁷⁻²⁰ Evidence of the association between meditation-based interventions and reductions in alcohol and drug use is accumulating.^{21,22} Nevertheless, while many studies support the salutary effect of RS variables in recovery from substance problems, few systematic efforts have explored the specific role of forgiveness during the course of recovery from substance use disorders.

Like other RS variables, forgiveness has been argued to be highly relevant to many medical and health related concerns, including problematic substance use.²³ Although it has been shown to be empirically related to many positive physical and mental health outcomes,²⁴⁻²⁸ forgiveness has been unexamined in the addiction recovery process.

Defining Forgiveness

This research defines forgiveness as the reduction of negative responses to an offender.^{29,30} The identity of the offender can take a variety of forms: others, self, God, society, the universe, etc. Forgiveness is an internal process, undertaken by the victim³¹ and does not require retribution,³² restitution,³³ reconciliation, or a return to vulnerability by the victim, and reserves the right to hold an offender accountable.³⁴ While the likelihood of forgiveness occurring

is increased through such factors as empathy, apology from the offender, relational closeness, and absence of rumination,³⁵ it involves the reduction of negative cognitive, emotional and behavioral responses,³⁶ irrespective of interpersonal interaction. Given the internal nature of the process and the connection between forgiveness and health, the deleterious effects of unforgiveness, or holding a grudge may be much more serious for the victim than for the offender.³⁷ The AA Big Book³⁸ states that "Resentment is the 'number one' offender. It destroys more alcoholics than anything else. From it stem all forms of spiritual disease . . ." (p. 64). To the extent that forgiveness is an antidote for resentment,^{39,40} then forgiveness can be hypothesized to be associated with a positive outcome of decreased drinking.

METHODS

This study examined the relationship between forgiveness, religiousness, spirituality, and problematic alcohol use among people entering outpatient treatment at baseline and 6 months later. It was hypothesized that at both time points, forgiveness would be positively associated with religiousness and spirituality (Hypothesis 1) and negatively associated with alcohol use and problems (Hypothesis 2).

Design and Participants

This study draws on data from a longitudinal study on the relationships among religiousness, spirituality, and alcohol-related variables in 157 adults with alcohol use disorders entering a community-based substance abuse treatment center in the American Midwest.⁴¹ A total of 240 people met criteria for the study; i.e., at least 18 years of age, at least 1 week of substance abuse treatment, and a clinical diagnosis of alcohol abuse or dependence. Of those 240, 157 were successfully recruited to the study (65.4%). Informed consent was obtained and respondents were paid for their participation. DSM-IV alcohol diagnoses were confirmed with the Structured Clinical Interview for DSM-IV Axis I Disorders.⁴² Data were collected from 157 participants at baseline and

from 126 at 6 months, for a follow-up rate of 80.3%.

Table 1 provides a summary of the demographic and clinical characteristics of the sample. Participants were 66% male, 81% white, and 15% African-American. The mean age was 39 years and mean years of education was 14. Over 70% of the sample had prior substance abuse treatment. More than 90% were diagnosed as alcohol dependent with a mean age of onset at 26 years.

TABLE 1. Demographic and Selected Clinical Characteristics

		Baseline (N = 157)	Follow-Up (N = 126)
Gender (%):	Male	66.2	65.9
	Female	33.8	34.1
Ethnicity (%):	White	81.5	81.0
	African-American	15.3	15.1
	Other	3.2	4.0
Age (M): (SD):		38.9 years (13.7)	38.6 years (13.8)
Education (M): (SD):		13.8 years (2.3)	13.9 years (2.2)
Alcohol Diagnosis (%):	Dependence	91.7	90.5
	Abuse	8.3	9.5
Marital Status (%):	Never Married	35.7	38.1
	Married	31.2	31.7
	Living Together	7.6	6.3
	Separated	7.0	5.6
	Divorced	15.9	15.9
	Widowed	2.5	2.4
Employment Status (%):	Full-Time	56.1	53.2
	Part-Time	15.3	15.9
	None	28.7	31.0
Age of Onset of Alcohol Diagnosis:	Dependence (M):	26.1	26.4
	(SD):	12.2	12.1
	Abuse (M):	18.7	18.2
	(SD):	3.0	2.6
History of Prior Treatment (%):		73.2	72.2
Percent Days Abstinent ^a (M):		69.4	91.2
	(SD):	27.1	19.7
Percent Heavy Drinking Days ^a (M):		26.3	5.2
	(SD):	27.0	14.2
Drinks per Drinking Day ^a (M):		8.3	3.2
	(SD):	6.1	8.8
Short Index of Problems (M):		20.2	6.8
	(SD):	12.3	10.1

^a in last 90 days.

Measures

Forgiveness, other religiousness and spiritual variables, and alcohol-related variables were assessed with standardized measures, entered into a statistical database (SPSS), and check-coded before creating scales. All variables were scored in a logical direction (i.e., higher numbers indicated higher levels of the variable). The reliability of the multi-item RS measures were found to be psychometrically adequate in this sample, in terms of either Cronbach's alpha (α) or the mean inter-item correlation (Mr).^{*} These statistics are presented below.

Forgiveness. Three single-item measures of forgiveness from the Brief Multidimensional Measure of Religiousness/Spirituality (BMMRS⁴³) were used in this study: forgiveness of self (ForSelf), forgiveness of others (ForOthers), and feeling forgiven by God (ByGod). The BMMRS is a 40-item multidimensional instrument developed by an expert panel of health and religion researchers assembled by the Fetzer Institute and the National Institute on Aging. Normative data for these items are available from a US national sample.⁴³

Perceptions of God were measured by the Loving and Controlling God Scales,⁴⁴ which are two 5-item semantic differential scales. The Loving God Scale showed adequate α values at baseline (.75) and follow-up (.78); and the Controlling God Scale showed marginal to low α values (< .66), but optimal Mr values at baseline (.28) and follow-up (.20).

Spiritual Experiences were assessed with the 16-item Daily Spiritual Experiences Scale developed by Underwood and Teresi.⁴⁵ This scale taps such dimensions as connection with the transcendent, sense of love and comfort from the transcendent, a sense of wholeness and awe, and a longing for the transcendent. Its α values were excellent at baseline (.94) and follow-up (.94).

Meaning, Values, and Beliefs. Participants' religious and spiritual meaning, values, and beliefs were measured by a 6-item scale from the

^{*}While α values $\geq .80$ are considered excellent, values $> .70$ are usually acceptable.⁶⁷ However, as the value of α depends on the number of items, we will report the Mr when there were less than 10 items in a scale and the α value was less than .70.⁶⁸ Briggs and Cheek⁶⁹ propose an optimal Mr range of .2 to .4, as $< .1$ may reflect excessive complexity in the scale and $> .5$ may reflect redundancy and specificity problems in the scale.

BMMRS, which showed adequate α values at baseline (.79) and follow-up (.74).

Religious Beliefs and Practices. Three dimensions of participants' religious beliefs and practices were measured using the Religious Background and Behavior questionnaire.⁴⁶ Religious practices for the last year, a 6-item subscale, showed excellent α values at baseline (.81) and follow-up (.82). Lifetime religious practices, also a 6-item subscale, showed marginal α values (< .69) but optimal *Mr* values at baseline (.26) and follow-up (.29). Additionally, belief in God and practice of religion were assessed with a single-item, with response options ranging from types of unbelief in God to belief with and without practicing religion.

Positive and Negative Religious Coping. Items from the Brief RCOPE⁴⁷ and the BMMRS were used to assess positive and negative religious coping. Positive religious coping (PRC) measures such coping strategies as a secure relationship with God, a belief that there is meaning in life, and a sense of spiritual connectedness to others. Negative religious coping (NRC) reflects a less secure and trusting relationship with God, an ominous view of the world and one's place in it and in God's eyes, and a struggle for significance and meaning. Although labeled religious coping, many of the items are not tied to a particular religious institution or orthodoxy, for example, "Looked to God for strength, support and guidance." PRC, a 10-item scale, showed excellent α values at baseline (.93) and follow-up (.94), as did NRC, an 8-item scale (.83, at both time points).

Purpose in Life. Participants' sense of meaning or "ontological significance of life" was measured with the Purpose in Life (PIL) Scale.⁴⁸ This 20-item measure was developed within Viktor Frankl's existential perspective⁴⁹ that all people have a basic striving to find and fulfill meaning and purpose, a "will to meaning." PIL showed excellent α values at baseline (.88) and follow-up (.87).

Alcohol Problems. The adverse consequences of drinking alcohol were assessed using the Short Index of Problems (SIP)^{50,51}, a 15-item scale that showed excellent α values at baseline (.94) and follow-up (.97).

Alcohol Use, including quantity and frequency, was assessed using the Timeline Follow-Back interview.^{52,53} Baseline and follow-

up data from the past 90 days provided percent days abstinent (PDA), percent heavy drinking days (HDD; 5 or more drinks in a day for men and 4 or more drinks for women), and drinks per drinking day (DDD).

For the purpose of this paper, the phrase "alcohol-related variables" refers to both alcohol problems and alcohol use variables.

RESULTS

Paired sample t-tests, bivariate correlations, and regression analyses were conducted to examine the relationships among demographic, forgiveness, other RS variables, and alcohol-related variables. Specifically, paired sample t-tests were used to examine differences between types of forgiveness first at baseline and then at follow-up. Paired sample t-tests were also used to examine changes over time from baseline to follow-up for each type of forgiveness. Pearson correlation coefficients (*r*) were calculated to examine the zero-order correlations between all variables. Finally, hierarchical and logistic regression analyses were conducted to examine the predictive cross-sectional and longitudinal relationships between forgiveness and alcohol variables.

Types of Forgiveness

Significant cross-sectional differences were observed between types of forgiveness at both baseline and follow-up (Table 2). At baseline and again at follow-up, values for each type of forgiveness were significantly different from the others. ByGod scores were highest, followed by ForOthers and ForSelf, in succession.

TABLE 2. Levels of Forgiveness at Baseline (n = 155-157), Follow-Up (n = 120-126), and from 1998 GSS

Forgiveness	Level M (SD)		1998 GSS M (SD)
	Baseline	Follow-Up	
of Self	2.8 _{ab} (.79)	3.0 _{de} (.75)	3.2 (.88)
of Others	3.2 _{acg} (.67)	3.3 _{dig} (.60)	3.3 (.81)
by God	3.5 _{bc} (.91)	3.5 _{ef} (.77)	3.6 (.77)
Total	9.5 _h (1.70)	9.9 _h (1.53)	--

Like subscripts denote significant differences at $p < .01$, except g at $p < .05$

Only ForOthers increased significantly from baseline to follow-up, although the increase was only 0.1 on a 4-point scale. When the three forgiveness scales were summed, Total Forgiveness increased significantly over time by 0.4 on a 10-point scale ranging from 3 to 12. The last column in the table provides means and standard deviations on these items from a national sample of the U.S. population (the General Social Survey, 1998). Although there is a similar hierarchy in types of forgiveness, the study sample has notably lower ForSelf scores.

Bivariate Analyses

Several significant cross-sectional bivariate associations were observed between forgiveness and the demographic, religious, and spiritual variables at both baseline and follow-up (Table 3). Specifically, employment was negatively associated with ForSelf (-.286) and ByGod (-.230), such that lower levels of these types of forgiveness were associated with unemployment. ForOthers was not related to any demographic variables at baseline. At follow-up, significant relationships with forgiveness

were observed among employment, age, and gender. Lower levels of ForSelf were again associated with unemployment (-.214). ForOthers was associated with gender, such that higher levels were associated with female gender (.246). ByGod was positively associated with age (.235).

Significant relationships among the RS variables and forgiveness variables were observed across forgiveness types at both baseline and follow-up (Table 3). At baseline, all RS variables were associated with ByGod, in a positive direction (.274 to .603), except for the Controlling God scale and NRC, which were negative as expected (-.182 and -.167, respectively). ForSelf and ForOthers were only associated with PIL (.327 and .247, respectively). At follow-up, very similar significant bivariate associations were observed, with the addition of many significant associations between ForOthers and RS variables, but not for ForSelf. At six-months, ForOthers was related to all the religious and spiritual variables (.202 to .273), except the Controlling God scale score and NRC, for which the relationships were not significant. ByGod, while no longer negatively related to

TABLE 3. Bivariate Correlations Between Forgiveness, Demographic, and Religious/Spirituality Variables at Baseline (n = 150-157) and Follow-Up (n = 119-126)

	Forgiveness of Self		Forgiveness of Others		Forgiven by God	
	Baseline by Baseline	Follow-Up by Follow-Up	Baseline by Baseline	Follow-Up by Follow-Up	Baseline by Baseline	Follow-Up by Follow-Up
Gender ^a	-.044	.121	.038	.246 **	.095	.144
Age	-.113	-.068	-.029	.101	.024	.235 **
Education	.077	-.040	.052	-.065	-.115	.077
Employment ^b	-.286 **	-.214 *	-.121	-.127	-.230 **	.048
Ethnicity ^c	-.056	-.081	.117	-.069	-.137	-.048
Marital Status ^d	.035	.076	.049	.080	.138	-.030
Loving God	-.033	.104	.135	.244 **	.520 *	.603 **
Controlling God	.091	.039	.074	-.015	-.182 *	-.277 **
Daily Spiritual Experiences	.078	.172	-.014	.263 **	.454 **	.555 **
Meaning, Values & Beliefs	.065	.123	-.012	.249 **	.475 **	.528 **
Religious Belief ^e	.066	.108	.005	.269 **	.603 **	.624 **
Religious Beliefs & Practices—past year	.022	.087	-.021	.202 *	.405 **	.503 **
Religious Beliefs & Practices—lifetime	.005	.137	.007	.232 **	.422 **	.461 **
Positive Religious Coping	.057	.145	-.019	.273 **	.536 **	.610 **
Negative Religious Coping	-.132	-.115	-.060	-.122	-.167 *	-.066
Purpose in Life	.327 **	.275 **	.247 **	.226 *	.274 **	.214 *

^a1 = male, 2 = female; ^b1 = full/part-time employment, 2 = unemployed; ^c1 = black, 2 = white (Baseline N = 152; Follow-Up N = 121); ^d1 = married/living together, 2 = others; ^e1 = atheist, 2 = agnostic, 3 = unsure, 4 = spiritual, 5 = religious
* = p < .05; ** = p < .01

NRC, remained negatively related to the Controlling God scale score ($-.277$) and positively related to all other RS variables (.214 to .624). The only religious or spirituality variable associated with each type of forgiveness at both time periods was PIL.

Significant cross-sectional and longitudinal bivariate associations were observed between the forgiveness and alcohol-related variables (Table 4). At baseline, ForSelf was positively associated with PDA (.172) and negatively associated with HDD ($-.263$), DDD ($-.244$), and the SIP ($-.370$). ForOthers was positively associated with PDA (.226) and negatively associated with HDD ($-.188$) and the SIP ($-.318$). ByGod was positively associated with PDA (.197) and negatively associated with HDD ($-.214$) and DDD ($-.228$). In sum, at baseline, all types of forgiveness were associated with PDA and HDD, all but ForOthers were associated with DDD, and all types except ByGod were associated with the SIP. All relationships were in the hypothesized direction.

It is striking that at follow-up, only ForSelf was related to the SIP ($-.300$), the measure of alcohol problems. And only two correlations between these variables from baseline to follow-up generated significant associations. From baseline forgiveness to follow-up alcohol outcomes, the only significant relationships ob-

served were ForSelf and ForOthers with the SIP ($-.240$ and $-.200$, respectively). Therefore, the relationships at follow-up between forgiveness of self and others and alcohol outcomes, and across time, i.e., between baseline forgiveness and follow-up outcomes, were observed only with alcohol problems, rather than with quantity and frequency of alcohol use. They were also not found with forgiveness by God.

Regression Analyses

A series of cross-sectional and longitudinal regression analyses were used to examine the predictive relationships between forgiveness and each of the four alcohol-related variables (PDA, HDD, DDD, and SIP).

The first set of regression analyses used baseline forgiveness data to predict baseline alcohol-related variables, controlling for demographic variables. Each of these analyses involved entering two blocks of data. The first block included demographic variables: age and education were entered as continuous variables; entered as dichotomous dummy variables were gender, employment status, marital status (1 = married or living with a partner, 2 = all others), and ethnicity (1 = black, 2 = white). The second block included the above demographic variables and the three baseline forgiveness variables (ForSelf, ForOthers, and ByGod). Results, presented in Table 5, revealed significant predictive relationships for each alcohol variable, in which all variables accounted for 15-24% of the variance, with forgiveness responsible for 6-14% of the variance. Baseline PDA was predicted by ForOthers and education, baseline HDD was predicted by ForSelf and education, baseline DDD was predicted by ForSelf and male gender, and baseline SIP was predicted by ForSelf and ForOthers. In summary, at baseline, ForSelf predicted HDD, DDD, and the SIP; and ForOthers predicted PDA and the SIP, all as hypothesized. It is notable that ByGod did not predict any alcohol variables at baseline.

The second set of regression analyses used follow-up forgiveness data to predict follow-up alcohol-related variables. Follow-up alcohol-related data were skewed, because many participants were no longer consuming alcohol. Therefore, all follow-up alcohol-related vari-

TABLE 4. Bivariate Correlations Between Forgiveness Variables and Alcohol Related Variables at and Between Baseline (n =149-157) and Follow-Up (n =118-126)

Forgiveness		SIP	PDA	HDD	DDD
of Self	Base/Base	-.370 **	.172 *	-.263 **	-.244 **
	FU/FU	-.300 **	.088	-.112	-.092
	Base/FU ^a	-.240 **	.093	-.081	.069
of Others	Base/Base	-.318 **	.226 **	-.188 *	-.128
	FU/FU	-.113	.074	-.053	.018
	Base/FU ^a	-.200 *	.119	-.086	.076
by God	Base/Base	-.136	.197 *	-.214 **	-.228 **
	FU/FU	-.174	.162	-.095	-.067
	Base/FU ^a	-.053	-.061	.077	.066

^a Baseline forgiveness variable by follow-up alcohol related variable (n = 119-126)

* = $p < .05$; ** = $p < .01$

SIP = Short Index of Problems

PDA = Percent Days Abstinent in last 90 days

HDD = Percent Heavy Drinking Days in last 90 days

DDD = Drinks per Drinking Day in last 90 days

TABLE 5. Regression Analyses of the Cross-Sectional Relationship Between Forgiveness and Alcohol Variables at Baseline (n = 151-152)

Baseline Forgiveness Predicting Baseline Alcohol Variables ¹														
SIP						PDA								
Model	R ² Δ		R ²		B	r	R ² Δ		R ²		B	r		
	.141	***	.242	***			.079	**	.152	**				
Self					-4.02	**	-.256					3.44		.097
Others					-4.19	**	-.239					7.99	*	.198
by God					-.28		-.022					3.34		.110
						Education					-2.66	**	-.218	
HDD						DDD								
Model	R ² Δ		R ²		B	r	R ² Δ		R ²		B	r		
	.099	**	.192	***			.062	*	.149	**				
Self					-7.31	*	-.208					-1.44	*	-.177
Others					-5.56		-.143					-.47		-.052
by God					-3.36		-.114					-.83		-.121
						Education					2.75	**	.230	
						Gender					-2.91	**	-.227	

¹ Two Block Hierarchical Regression Analyses (HRA) entering demographic variables first and forgiveness variables second. Note: R²D = R²Δ between blocks 1 & 2; R² = Full Model R²; B = unstandardized Beta (at Block 2 in HRAs); r = partial r at Block 2. * = p < .05; ** = p < .01; *** = p < .001

ables were dichotomized into dummy variables (SIP: 0 = none, 1 = any; PDA: 0 = < 100%, 1 = 100%; HDD: 0 = 0%, 1 = > 0%; DDD: 0 = none, 1 = any) and examined using hierarchical regression analysis. These analyses involved entering demographic (control) variables, followed by the forgiveness variables. With these analyses, we found no significant predictive relationships between follow-up forgiveness and alcohol-related variables, and thus specific results are not presented in table format. However, age was positively related to follow-up abstinence; for each year of increased age subjects were more likely to be abstinent (B = .035; p < .05; OR = 1.036; 95% C. I. = 1.000 to 1.073). Using stepwise regression analyses to explore further, follow-up ForSelf was found to negatively predict follow-up SIP and HDD. For each incremental increase in ForSelf at follow-up, participants were almost twice as likely (OR = 1.9) to have no alcohol problems and no heavy drinking days at follow-up.

The third set of regression analyses examined longitudinal relationships between baseline forgiveness variables and follow-up alcohol outcomes, while hierarchically controlling for demographics and respective baseline alcohol-related variables. No significant predictive relationships between baseline forgiveness variables and follow-up alcohol related out-

come variables were observed, and thus specific results are not presented. However, follow-up SIP was predicted by unemployment, such that an unemployed participant at baseline was about 3 times more likely to have alcohol problems at follow-up (B = 1.053; p < .05; OR = 2.87; 95% C. I. = 1.056 to 7.780). Also, baseline SIP predicted follow-up SIP in a positive direction.

DISCUSSION

Evidence was found to support each of our hypotheses: (1) that forgiveness would be positively associated with religiousness and spirituality variables, and (2) that forgiveness would be negatively associated with alcohol use and alcohol problem outcome variables at baseline and follow-up. However, the relationships varied depending on the type of forgiveness and types of RS and alcohol-related variables considered.

Types and Levels of Forgiveness

At both baseline and follow-up, levels of ByGod were highest, followed by ForOthers and ForSelf, in succession. While we cannot be sure, this may indicate that feeling forgiven by

God is easiest for an alcoholic to experience, followed by forgiving others, with forgiveness of self being the most difficult. Also, levels of all three types of forgiveness appear to be fairly stable over time with significant, albeit small, changes observed in ForOthers and Total Forgiveness only. These findings on types, levels and longitudinal changes in forgiveness suggest a hierarchical quality, with ForSelf being most difficult to achieve. A similar hierarchy was observed in the US national sample data (see Table 2), in which ForSelf was lowest and ByGod highest. Our sample and the national sample appear to have similar levels of ForOthers and ByGod, but ForSelf scores are noticeably lower in our sample of treated alcoholics.

Forgiveness and Religiousness/Spirituality

While forgiveness is commonly associated with religion and spirituality, evidence suggests that this is not always the case and that some of its dimensions may exist outside of or be distinct from religiousness and spirituality. This phenomenon is reflected in our data. ForSelf, at both baseline and follow-up, was only related to one religiousness and spirituality variable, Purpose in Life (PIL). Similarly, ForOthers was related to only PIL at baseline. However, at follow-up, ForOthers was related to all of the religiousness and spirituality variables, except the Controlling God scale score and Negative Religious Coping (NRC). While ForSelf appears to be stable in its relationship with religiousness and spirituality and largely unrelated, ForOthers appears to be less stable with evidence suggesting a shift in its relationships to religiousness and spirituality. As related to religiousness and spirituality and in the context of alcohol use, it may be that ForSelf is more of a trait variable whereas ForOthers is more of a state-dependent variable. ByGod was related to all religiousness and spirituality variables at baseline and to all but NRC at follow-up. This stands to reason as ByGod, by definition, includes a relationship to the transcendent, typically mediated through religious or spiritual content and context.

Lastly, it appears that PIL may have the most robust association with forgiveness as it was found to be associated with all types of forgive-

ness at and between all time points. As such, it may be that a perception of purpose in one's life allows one to let go of hurt and resentment and work towards fulfilling a larger purpose, rather than focusing on negative feelings toward others or oneself.

Forgiveness and Alcohol-Related Variables

Bivariate Relationships. Forgiveness was associated with almost all alcohol-related variables (10 of 12) in a salutary fashion at baseline, i.e., at treatment entry, suggesting a fairly robust relationship at baseline. It may be that higher levels of forgiveness are associated with motivation to enter treatment. However, at follow-up only one cross-sectional relationship remained; a salutary association between ForSelf and problems with alcohol (SIP). The reduction in significant associations at follow-up may have been caused in part by the limited range and skewness of the alcohol-related outcome variables due to the fact that many participants were no longer drinking. Similarly, across time, only baseline forgiveness of self and others were associated with the negative consequences of alcohol use (SIP), rather than quantity/frequency measures. It is notable that while many were no longer drinking after six-months, participants were still experiencing negative consequences from their prior drinking and those that had higher levels of forgiveness experienced fewer negative consequences.

Multivariate Relationships. At baseline and consistent with the bivariate correlational analyses, forgiveness was found in the regression analyses to predict many alcohol-related variables, although these relationships were only observed among ForSelf and ForOthers. ForSelf had modest, moderate, and moderately strong salutary effects on quantity, negative consequences, and frequency of drinking, respectively, and ForOthers had moderate and moderately strong salutary effects on negative consequences and frequency of drinking, respectively. Additionally, further exploration with stepwise regression revealed that ForSelf, at follow-up, continued to have a salutary effect, albeit modest, on negative consequences and frequency of drinking. It is reasonable to speculate that greater ForSelf and ForOthers

are indicative of less resentment towards self and others, which, consistent with the Big Book of Alcoholics Anonymous, should be associated with more abstinence and less problems with alcohol, as we observed at baseline.³⁸ As "resentment is the 'number one' offender" (p. 64) this is promising news.³⁸

Demographic Associations. At the bivariate level, important associations were observed between forgiveness and several demographic variables. Female gender was associated with higher levels of ForOthers at follow-up, suggesting that women may forgive others more easily than men after a period in treatment. Age was positively associated with ByGod at follow-up but not at baseline, suggesting that after a period in treatment these older patients more easily experienced forgiveness by God than younger patients. Unemployment was associated with lower levels of ForSelf at baseline and follow-up and with lower levels of ByGod at baseline. It is possible that patients blamed themselves and God for their unemployment.

At the multivariate level, several demographic variables made significant contributions to the prediction of alcohol-related variables when the role of forgiveness was incorporated in the analysis. Male gender predicted increased number of drinks per drinking day at baseline as would be expected. However, it was unexpected to find that higher levels of education predicted less days abstinent and more heavy drinking days at baseline, although education has also been associated with lower rates of abstinence in the general US population.⁵⁴ Increasing age predicted longer abstinence at follow-up. Baseline unemployment increased alcohol problems at follow-up by a factor of 3. These demographic findings for age and gender are consistent with other studies.⁵⁵⁻⁵⁹

CONCLUSIONS

Forgiveness was found to have a salutary effect on alcohol-related variables among people entering substance abuse treatment. Nevertheless, its relationships were mostly cross-sectional and dependent on the type of forgiveness, with significant relationships being observed with forgiveness of self and forgiveness of others, but not feeling forgiven by God. The most

consistent associations between forgiveness and alcohol-related outcomes were the negative relationships between forgiveness of self and forgiveness of others and adverse consequences of alcohol consumption across time points. Although baseline levels of forgiveness of self and forgiveness of others were *associated* with less drinking consequences at follow-up, they did not *predict* drinking outcomes after controlling for other variables.

Unfortunately, forgiveness of self may be the most difficult type of forgiveness to develop, given that it was lower than both forgiveness of others and feeling forgiven by God at both time-points. This dynamic, the overall importance of forgiveness of self to decreased problems with alcohol, juxtaposed with forgiveness of self being the lowest among the types of forgiveness we measured (and lower than ForSelf levels in the normative sample), suggests that forgiveness of self may be especially problematic for the patient embarking on recovery. For example, when considering forgiveness in recovery, it may be that a fuller level of recovery may not be possible until one forgives oneself, although this process may be quite difficult and prolonged and thus be associated with relapses. Alternatively, it may be that lower levels of ForSelf among alcoholic individuals are associated with treatment seeking. Comparing ForSelf levels between treatment seeking and non-seeking alcoholics would be informative.

The process of forgiveness involves affective, behavioral, and cognitive components,³⁶ but the specific wording of each forgiveness item may have measured one of these components more than another. For example, the ForSelf and ForOthers items, respectively, read: "I *have* forgiven myself for things that I have done wrong" and "I *have* forgiven those who have hurt me" (italics added), suggesting forgiveness on a behavioral level. The ByGod item reads, "I *know* that God forgives me" (italics added), suggesting forgiveness on a cognitive level. In the context of marriage, Gordon, Baucom, and Snyder⁶⁰ describe a three-stage model of forgiveness that hypothesizes that the process of forgiveness is related to a progression from affective to cognitive to behavioral experiences. Webb and Toussaint (unpublished⁶¹) have found evidence in support of this

relationship, in that forgiving feelings may precede forgiving thoughts and behaviors. Although our study was not related to forgiveness in the context of marriage, a similar process may very well be reflected in the ordering of levels from cognitive ByGod to behavioral ForOthers and ForSelf found in our results. It may be that people cognitively or intellectually know that they are forgiven, particularly by God from a dogmatic or theological standpoint, but it may be more difficult to behaviorally offer it to others, let alone one's self. Behavioral forgiveness may be the culmination of the process, thus being the most difficult, such that full forgiveness may be manifest only when it is experienced behaviorally. Particular difficulties in forgiveness of self may occur as one may judge the self more critically than others. Certainly problems in forgiving oneself are highly congruent with the issues of guilt and shame found among many alcoholics.⁶²

Limitations and Future Directions

There were a number of limitations to this study which are important to acknowledge. First, the method of measuring forgiveness in this study consisted of three single-item scales: forgiveness of self, forgiveness of others, and feeling forgiven by God. These items were chosen because of their inclusion in the Brief MMRS.⁴³ However, more elaborate and psychometrically sophisticated measures of forgiveness are available^{36,63} that would likely prove more sensitive to detecting effects. Also, each item used here includes the word, *forgive*, which may distort responses depending on the individuals' own history with the term *forgiveness* and with familial and religious teachings on the concept, as well as common misconceptions about it. As such, it would be helpful to use more robust measures of forgiveness based on indirect or definition-related wording rather than direct wording. Lastly, it may be worthwhile to consider other types of forgiveness and their role in addiction and recovery, such as community forgiveness,⁶⁴ pseudoforgiveness,⁶⁵ unforgiveness,²³ forgiveness of God, and feeling forgiven by others.

Generalizations are also limited by the sample. The data were collected from one treatment center in the American Midwest and are not

representative of all alcoholics entering outpatient treatment. Also, self-selection bias may be present as potential participants were explicitly aware that the focus of the study was on religiousness and spirituality. While studying the interplay between spirituality and substance disorders, including the role of Alcoholics Anonymous, is appropriate at an international level, the precise nature of these relationships may vary. In particular, the process of forgiveness can vary from culture to culture.⁶⁶ Lastly, this study's follow-up period is quite short, given typical relapse rates. A 6-month follow-up period is probably not long enough to detect the relationship between alcohol variables, forgiveness, and other spiritual/religious variables, given the high rates of short-term abstinence.

Finally, while the fact remains that all of the participants in this study had problems with alcohol and were seeking substance abuse treatment, increased levels of forgiveness were related to decreased alcohol use and problems, when analyzed at a cross-sectional level. The bivariate data also suggest that longitudinal relationships between baseline forgiveness and alcohol-related outcome variables may be important, even though these findings did not remain with multivariate analyses. Further work on the role of forgiveness in recovery is needed that employs additional measures of forgiveness, longer follow-up periods, and larger and more diverse samples.

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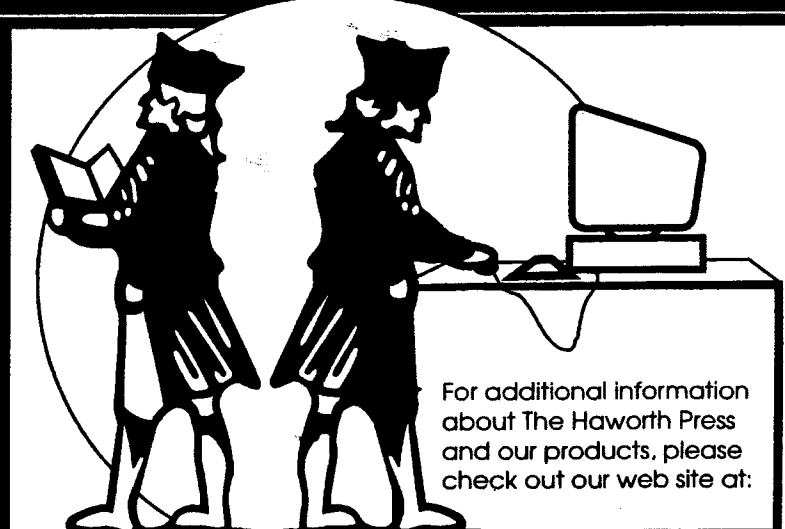
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